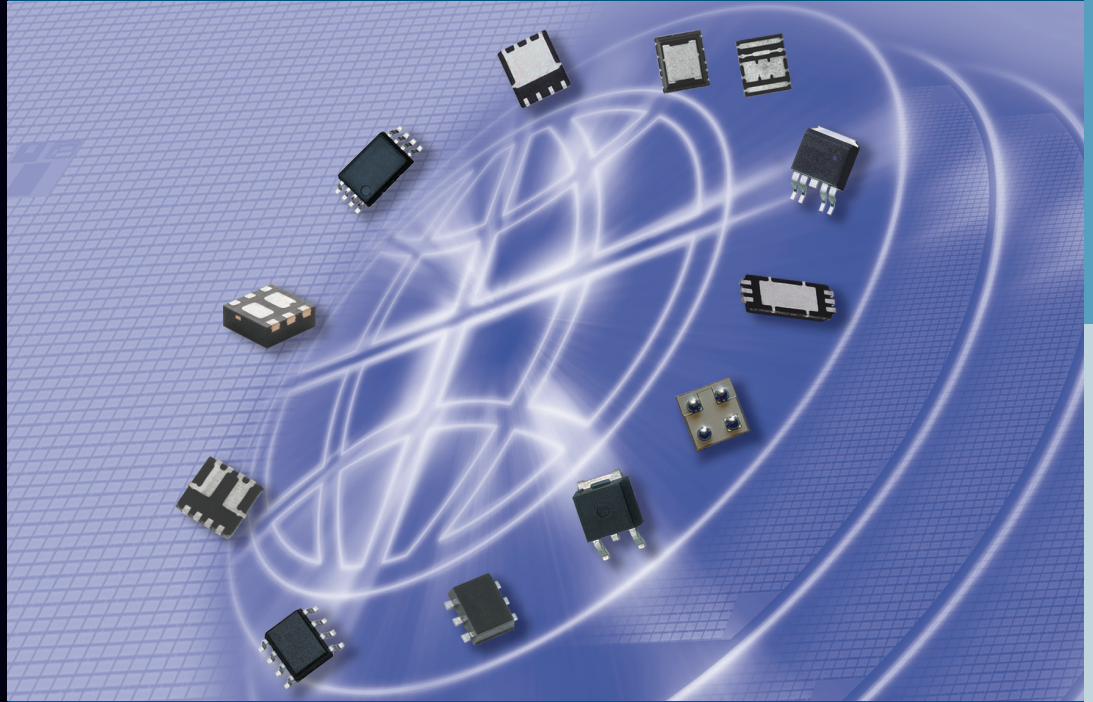




VISHAY INTERTECHNOLOGY, INC.



MOSFETS

SELECTOR GUIDE

LOW-VOLTAGE POWER MOSFETS

LITTLE FOOT®

LITTLE FOOT® *Plus*

TrenchFET®

SkyFET®

TurboFET®

ChipFET®

PowerPAK®

PolarPAK®

PowerPAIR™

SEMICONDUCTORS

RECTIFIERS

- Schottky (single, dual)
- Standard, Fast, and Ultra-Fast Recovery (single, dual)
- Bridge
- Superrectifier®
- Sinterglass Avalanche Diodes

HIGH-POWER DIODES AND THYRISTORS

- High-Power Fast-Recovery Diodes
- Phase-Control Thyristors
- Fast Thyristors

SMALL-SIGNAL DIODES

- Schottky and Switching (single, dual)
- Tuner/Capacitance (single, dual)
- Bandswitching
- PIN

ZENER AND SUPPRESSOR DIODES

- Zener (single, dual)
- TVS (TRANSZORB®, Automotive, ESD, Arrays)

FETs

- Low-Voltage TrenchFET® Power MOSFETs
- High-Voltage TrenchFET® Power MOSFETs
- High-Voltage Planar MOSFETs
- JFETs

OPTOELECTRONICS

- IR Emitters and Detectors, and IR Receiver Modules
- Optocouplers and Solid-State Relays
- Optical Sensors
- LEDs and 7-Segment Displays
- Infrared Data Transceiver Modules
- Custom Products

ICs

- Power ICs
- Analog Switches
- RF Transmitter and Receiver Modules
- ICs for Optoelectronics

MODULES

- Power Modules (contain power diodes, thyristors, MOSFETs, IGBTs)
- DC/DC Converters

PASSIVE COMPONENTS

RESISTIVE PRODUCTS

- Foil Resistors
- Film Resistors
 - Metal Film Resistors
 - Thin Film Resistors
 - Thick Film Resistors
 - Metal Oxide Film Resistors
 - Carbon Film Resistors
- Wirewound Resistors
- Power Metal Strip® Resistors
- Chip Fuses
- Variable Resistors
 - Cermet Variable Resistors
 - Wirewound Variable Resistors
 - Conductive Plastic Variable Resistors
- Networks/Arrays
- Non-Linear Resistors
 - NTC Thermistors
 - PTC Thermistors
 - Varistors

MAGNETICS

- Inductors
- Transformers

CAPACITORS

- Tantalum Capacitors
 - Molded Chip Tantalum Capacitors
 - Coated Chip Tantalum Capacitors
 - Solid Through-Hole Tantalum Capacitors
 - Wet Tantalum Capacitors
- Ceramic Capacitors
 - Multilayer Chip Capacitors
 - Disc Capacitors
- Film Capacitors
- Power Capacitors
- Heavy-Current Capacitors
- Aluminum Capacitors
- Silicon RF Capacitors

STRAIN GAGE TRANSDUCERS AND STRESS ANALYSIS SYSTEMS

- PhotoStress®
- Strain Gages
- Load Cells
- Force Transducers
- Instruments
- Weighing Systems
- Specialized Strain Gage Systems

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix

2201 Laurelwood Road
Santa Clara, CA 95056
Phone: +1 408 988 8000
Fax: +1 408 567 8950

www.vishay.com

DISCLAIMER All product specifications and data are subject to change without notice. Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained herein or in any other disclosure relating to any product. Vishay disclaims any and all liability arising out of the use or application of any product described herein or of any information provided herein to the maximum extent permitted by law. The product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein, which apply to these products. No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. The products shown herein are not designed for use in medical, life-saving, or life-sustaining applications unless otherwise expressly indicated. Customers using or selling Vishay products not expressly indicated for use in such applications do so entirely at their own risk and agree to fully indemnify Vishay for any damages arising or resulting from such use or sale. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications. Product names and markings noted herein may be trademarks of their respective owners.



Table of Contents

Introduction.....	6
Products by Function	11
Single Plus Integrated Diode	11
PowerPAK SC-70.....	11
Single Plus Integrated Schottky	11
PowerPAK SO-8.....	11
PolarPAK	11
SO-8	11
PowerPAK 1212-8.....	11
TSOP-6.....	11
PowerPAK ChipFET	12
1206-8 ChipFET	12
PowerPAK SC-70.....	12
PowerPAK SC-75.....	12
Dual Plus Integrated Schottky (Asymmetric).....	12
PowerPAK SO-8.....	12
SO-14	12
SO-8	13
Dual N (Asymmetric).....	13
PowerPAK SO-8.....	13
SO-8	13
PowerPAIR 6 x 3.7	13
PowerPAK 1212-8.....	14
Level Shift	14
TSOP-6.....	14
SC70-6	14
PowerPAK SC-70.....	14
SC89-6	14
Common Drain.....	14
TSSOP-8	14
PowerPAK 1212-8.....	14
PowerPAK 2x5	14
MICRO FOOT.....	14
Singles and Duals	16
Single N-Channel.....	16
TO-220	16
D ² PAK (TO-263)	16
DPAK (TO-252).....	17
PowerPAK SO-8.....	18
PowerPAK SO-8L.....	20
PolarPAK	20
SO-8	21
TSSOP-8	22
PowerPAK 1212-8.....	22
TSOP-6.....	23
SOT-23	24
PowerPAK ChipFET	24
1206-8 ChipFET	24

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

SC70.....	24
PowerPAK SC-70.....	25
SC75A	25
PowerPAK SC-75.....	25
SC89-6	26
MICRO FOOT 1.6 x 1.6.....	26
SOT-923	26
Dual N Channel.....	26
PowerPAK SO-8.....	26
PowerPAK SO-8L.....	26
SO-8	27
TSSOP-8	27
PowerPAK 1212-8.....	27
TSOP-6.....	28
PowerPAK ChipFET	28
1206-8 ChipFET	28
SC70-6	28
PowerPAK SC-70.....	28
PowerPAK SC-75.....	28
SC89-6	29
Single P Channel	30
TO-220	30
D ² PAK (TO-263)	30
DPAK (TO-252).....	30
TO-92	30
PowerPAK SO-8.....	30
SO-8	31
TSSOP-8	32
PowerPAK 1212-8.....	32
TSOP-6.....	33
SOT-23	33
PowerPAK ChipFET	34
1206-8 ChipFET	34
SC70.....	34
PowerPAK SC-70.....	35
SC75A	35
PowerPAK SC-75.....	35
SC89.....	35
MICRO FOOT.....	36
Dual P Channel.....	36
PowerPAK SO-8.....	36
SO-8	36
TSSOP-8	37
PowerPAK 1212-8.....	37
TSOP-6.....	37
PowerPAK ChipFET	37
1206-8 ChipFET	37
SC70-6	37
PowerPAK SC-70.....	38
PowerPAK SC-75.....	38
SC89-6	38



N & P Channel	39
DPAK (TO-252-4)	39
PowerPAK SO-8.....	39
SO-8.....	39
TSSOP-8	39
PowerPAK 1212-8.....	40
TSOP-6.....	40
PowerPAK ChipFET	40
1206-8 ChipFET	40
SC70-6	41
PowerPAK SC-70.....	41
SC89-6	41
Packaging Information	42
Alphanumeric Index	44

Introduction

Vishay Siliconix Power MOSFETs – Compact and Efficient

Vishay Siliconix leads the industry in the development of power MOS silicon and packaging technologies that boost power management and power conversion efficiency and greatly reduce the board area required for MOSFETs in computers, laptops, notebooks, servers, PDAs, cellular phones, consumer electronics and many other systems.

Vishay Siliconix continually innovates to meet the increasing demands of applications such as dc-to-dc conversion and load switching. For example, our TrenchFET® Gen III power MOSFET silicon technology enables on maximum resistance down to just 1.2 mΩ while improving gate charge. In another breakthrough, SkyFET® monolithic MOSFET and plus Schottky diode devices lower on-resistance compared to co-packaged devices and reduce power losses linked to the body diode of the MOSFET. The P-Channel TrenchFET Gen III family of power MOSFETs offers a reduction in on-resistance compared with the previous state-of-the-art and

signifies a new opportunity to reduce system power. The Vishay Siliconix portfolio also contains devices with on-resistance ratings down to 1.2 V to reduce the need for level shift circuitry, saving space and power.

Vishay Siliconix packaging innovations include the small outline LITTLE FOOT®, the thermally enhanced PowerPAK®, offered in footprint areas from the SO-8 down to the SC-75, PolarPAK® with double sided-cooling in standard, easy-to-use packaging, and chip-scale MICRO FOOT® families. PowerPAIR™ reduces space while still obtaining low on-resistance and high current comparable to two discretes. Each of these package types provides designers with a range of surface-mount options to ensure efficient use of space in power management, power conversion, and other power MOSFET applications.

ThermaSim® is First On-Line Thermal Simulation Tool to Use Finite Element Analysis Models for Increased Accuracy

- Available on <http://www.vishay.com/thermal-modelling> with exhaustive library of Vishay Siliconix MOSFET models
- Can include effects of other heat dissipating components
- Allows user to configure:
 - Power dissipation profiles
 - Heat sink size, material, and attachment method
 - PCB size, layers, material, copper spreading, vias, etc.
 - Component placements and solder quality
 - System temperature and air flow
- Simulation results are emailed directly to the designer and can be downloaded into Excel.

Vishay's new ThermaSim is a free tool that helps designers speed time to market by allowing detailed thermal simulations of Vishay Siliconix power MOSFETs to be performed before prototyping. Applicable to any power MOSFET application, ThermaSim will be especially useful in high-current, high-temperature applications such as automotive, fixed telecom, desktop and laptop computers, and industrial systems.

Simulation results are emailed directly to the designer and can be downloaded into Excel. Multiple results with varying product, package, or other input data can be merged within Excel to compare and examine trends. Thermal images are provided, and a MPEG video clip of the thermal image with transient simulation is also available. Simulations can be saved for modifications at a later date.





Getting the Most Out of Your Selection and Design Process

This Selector Guide is organized by functionality, packaging (largest to smallest), breakdown voltage, and on-resistance ($r_{DS(on)}$ at 4.5 V). There is also an alphanumerically ordered listing with specifications. Although this Selector Guide is a convenient way to view the entire Vishay Siliconix Power MOSFET portfolio, we highly recommend that you visit our website, that is refreshed at least weekly, for the most up to date information.

Additionally, the power of the web allows us to enhance your selection and design-in process. Besides being able to click on the function, key specifications and size of MOSFET that you are looking for, there is also a parametric search engine. Either will give you a list of possible datasheets

integrated with a table of key specifications. From here you can click on any of the datasheets and “bundle” it with the related documents and drawings that you will need such as package, tape and reel and pad drawings, SPICE models, reliability information, and part marking.

Other web information includes application notes, a list of technical papers, and Selector Guides. Further, samples can be ordered and technical questions can be asked through the website.

Please take the time to review our web features and visit <http://www.vishay.com/mosfets>.

Overview of Website

Check out <http://www.vishay.com/mosfets>:

- New features
- More content
- Refreshed weekly

One of the world's largest manufacturers of discrete semiconductors and passive components

VISHAY PRODUCTS

Products A-Z > MOSFETs (103)

Selectors and datasheets for latest products

Co-packaged MOSFETs reduce space, comparable specs to two discretes

- High- and low-side MOSFETs in one 6 mm x 3.7 mm package
 - On-resistance down to 5.8 mΩ
 - Maximum current up to 17A
- Lowers solution space and cost over two discrete MOSFETs
- Simplifies layout, reduces parasitic inductance from PCB

More Info Datasheet: PowerPAIR™
More featured products

Parametric Search
On-line datasheet search engine by user-customized parameters

Start a customized parametric search or find a datasheet by using the links below.

Drain-to-source voltage (V _{DS})	Package	Type and configuration
N-channel (731)	MICRO FOOT® (20)	Single (818)
5 V to 20 V (129)	New SOT-923 (1)	Dual (125)
21 V to 30 V (151)	SC-89 (26)	N & P pair (44)
31 V to 80 V (138)	SC-75A (7)	SkyFET (11)
81 V to 250 V (159)	PowerPAK® SC-75 (16)	MOSFET + Schottky Combo (39)
251 V to 400 V (26)	SC-70 (44)	
401 V to 500 V (82)	PowerPAK® SC-70 (33)	

Special applications

Drain-to-source voltage (V _{DS})	Package	Latest technology
5 V to 20 V (159)	PowerPAK® MicroFET (19)	TrenchFET® Gen III (74)
21 V to 30 V (55)	PowerPAK® 2x5 (2)	TrenchFET® Gen III
31 V to 80 V (63)	PowerPAK® 1212-8 (56)	TurboFET™ (4)
81 V and up (54)	TSSOP-8 (22)	TrenchFET® Gen III P-Channel (7)
	SO-8 (126)	
	PowerPAK® SO-8 (95)	
	New PowerPAK® SO-8L (2)	
	PolarPAK® (18)	
	New PowerPAIR™ 6 x 3.7 (2)	
	SOT-223 (8)	
	SO-14 and SO-16 (2)	
	TO-92 (3)	
	PowerPAK® TO-252 (61)	
	TO-251 (1)	
	D2PAK (TO-263) (96)	
	TO-220 (111)	
	TO-220 FullPAK (65)	
	TO-247 (60)	
	Super-247TM (5)	
	Package size	
	SOT-23 and smaller (151)	
	SOT-23 to TSSOP-8 (205)	
	PowerPAK 1212-8 to PowerPAK SO-8 (317)	
	PowerPAK SO-8 and larger (379)	

Enhanced Process Flows

- Automotive MOSFETs (71)
- Medical MOSFETs (10)

Related drawings and documents

Related Documents (3966):

- Application Note (29)
- Markings (14)
- Package Drawing (43)
- Pad Guidelines (43)
- RC Thermal Models (647)
- Reel Info (1)
- Reliability Data (49)
- Selector Guide (1)
- Support Tools (2)
- Tape Info (48)
- Technical Note (128)
- Promotional Material (1)
- SPICE (2960)

PowerPAK - Advancing Thermal Conductivity by an Order of Magnitude

Products A-Z
Company Info · Press · Investors · Contacts · More...
Privacy & Legal · Your Account



Sample Datasheet List

One of the world's largest manufacturers of discrete semiconductors and passive components

Part or keyword
Inventory & quote

VISHAY PRODUCTS
COMPANY INFO
APPLICATIONS

Products A-Z > MOSFETs > 1.2 V rated on-resistance (11 datasheets)

MOSFETs With $V_{GS} = 1.2\text{V}$ On-Resistance Rating - Industry's First

- Industry's first power MOSFETs with guaranteed on-resistance ratings at $V_{GS} = 1.2\text{V}$ enable safer, more reliable designs
 - Driven directly from 1.2-V buses, MOSFET turn-on voltage is brought into alignment with the 1.2-V and 1.3-V operating voltages of digital ICs
 - Eliminates the need for an extra conversion stage in systems with a core voltage lower than 1.5 V
- Ultra-low on-resistance ratings at 1.2 V and 1.5 V reduce power consumption, extending battery usage time in portable applications
- Single n- and p-channel device options
- Ultra-small package options:
 - PowerPAK® SC-70 (2 mm x 2 mm)
 - PowerPAK SC-75 (1.6 mm x 1.6 mm)
 - ChipScale MICRO FOOT® (1.5 mm x 1.5 mm)
 - SC-70 (2 mm x 2 mm)

MOSFETs: 1.2 V rated on-resistance

Configuration	SINGLE
V_{GS} (V)	5
Brand	Vishay Siliconix

Reset table to default Undo last action

All 11 datasheets shown. Click the buttons to sort and filter the table.

Part number	Package	Channel	V_{DS} (V)	$r_{DS(on)}$ @ 4.5 V (Ohms)	$r_{DS(on)}$ @ 2.5 V (Ohms)	$r_{DS(on)}$ @ 1.8 V (Ohms)	$r_{DS(on)}$ @ 1.5 V (Ohms)	$r_{DS(on)}$ @ 1.2 V (Ohms)	Q_g @ 4.5 V (nC)	Q_{gs} (nC)	Q_{gd} (nC)	I_D Max. (A)	
SIB445DB	MICRO FOOT 1.2 x 1	P	-20	0.084	0.1	0.12	0.155	0.495	9.5	0.9	2.2	9.8	
SIB441DB	MICRO FOOT 1.5 x 1	P	-20	0.08	0.102	0.128	0.198	0.6	7.7	0.85	1.6	10.5	
SIB429DB	MICRO FOOT 1.6 x 1.6	P	-8	0.035					21	1.8	3.7	11.7	
SIB424DB	MICRO FOOT 1.6 x 1.6	N	8	0.031					20	3.5	1.8	12.2	
5IA419DJ	PowerPAK SC-70	P	-20	0.03	0.039	0.051	0.066	0.113	17.5	2.1	5.2	12	
5IA417DJ	PowerPAK SC-70	P	-8	0.023	0.031	0.04	0.058	0.095	19	2.2	5	12	
5IA414DJ	PowerPAK SC-70	N	8	0.011	0.013	0.016	0.022	0.041	19	2.5	6.5	12	
SIB417DK	PowerPAK SC-70	P	-20	0.022	0.025	0.03	0.038	0.06	0.222	7.78	0.99	2.11	9
SIB417EDK	PowerPAK SC-70	P	-8	0.025	0.028	0.035	0.045	0.07	0.25	7.3	0.95	1.35	9
SIB414DK	PowerPAK SC-70	N	8	0.009	0.011	0.014	0.018	0.03	0.089	8.6	0.53	2.78	9
5I1499DH	SC70-6	P	-8	0.078	0.095	0.115	0.153	0.424	10.5	1.3	1.9	1.6	

Product Support

Contact Information for:
Distributors
Sales Representatives
Sales Offices

Related Information

Related Documents (85):
Markings (2)
Package Drawing (3)
Pad Guidelines (5)
RC Thermal Models (11)
Reel Info (1)
Reliability Data (7)
Tape Info (11)
SPICE (45)

Press Releases

Products A-Z

Company Info: [Press](#) · [Investors](#) · [Contacts](#) · [More...](#)

Privacy & Legal · [Your Account](#)

www.vishay.com/mosfets

8

For technical support, contact pmstechsupport@vishay.com

Document Number: 70972
Revision 10-28-09



Sample of Datasheet with Related Documents

One of the world's largest manufacturers of discrete semiconductors and passive components

VISHAY PRODUCTS COMPANY INFO

Products A-Z » MOSFETs » SOT-23 and smaller packages » Advanced TrenchFET® P-Channels » Si2303BDS

Si2303BDS product information
P-Channel 30-V (D-S) MOSFET
Si2303BDS datasheet

Documents

- Datasheet
- Si2303BDS
- Technical Note**
- Specification Comparison: - Si2303BDS vs. Si2303DS
- Specification Comparison: - Si2303BDS vs. Si2303ADS
- Reliability Data**
- Silicon Technology Reliability - P-Channel Accelerated Operating Life Test Result
- Package Reliability - Environmental and Package Testing Data For SSOT-23
- Package Drawing**
- S479 - TO-236 (SOT-23)
- Markings**
- PART MARKING - SOT-23
- Reel Info**
- 93-5211-x - LOK Reel
- Tape Info**
- 91-5209-x - Tape Drawing for SOT-23 (T1 and T2 Methods)
- Pad Guidelines**
- SOT-23 - Recommended Minimum PAD Pattern
- AN807 - Mounting LITTLE FOOT SOT-23 Power MOSFETs
- Spice Model (pdf)**
- Si2303BDS-DS - DS-Spice Model for Si2303BDS
- P-Spice Model**
- Si2303BDS-P - P-Spice Model for Si2303BDS
- I-Spice Model**
- Si2303BDS-I - I-Spice Model for Si2303BDS
- H-Spice Model**
- Si2303BDS-H - H-Spice Model for Si2303BDS
- Check all PDF documents

Product support

Pricing and Availability
Distributors
Sales Representatives
Sales Offices

Sample Request
Currently only available in the US and Canada. If you are outside the US and Canada, contact one of our representatives.
If you haven't already registered, you must register to submit a request.
Quantity * Si2303BDS
Project name
Est. annual use

Order samples

Technical Questions
Vishay engineers can answer questions about product quality, performance, and specifications.
If you haven't already registered, you must register to submit a request.
Subject *
Message *

Ask a technical question

One PDF with all documents

Products A-Z
Company Info: Press · Investors · Contacts · More...
Privacy & Legal · Your Account

ALL PRODUCTS

Example of Parametric Search

One of the world's largest manufacturers of discrete semiconductors and passive components

VISHAY PRODUCTS COMPANY INFO

Products A-Z » MOSFETs » SOT-23 and smaller packages » Parametric Search Setup » Search

Specify values to narrow results at right

Q_g Typ.
To select multiple values, Ctrl-click or click-drag
25
40
40.5
71
90
170
172
Reset

V_{DS}
To select multiple values, Ctrl-click or click-drag
30
20
40
Reset

Q_g @ 4.5 V
To select multiple values, Ctrl-click or click-drag
25
35
37
40
40.5
50
80
Reset

Channel
To select multiple values, Ctrl-click or click-drag
N
Reset

Q_g @ 10 V
To select multiple values, Ctrl-click or click-drag
55
71
88
90
170
172
200
Reset

I_D Max.
To select multiple values, Ctrl-click or click-drag
23
25
29
70
85
110
Reset

V_{GS} Rating
To select multiple values, Ctrl-click or click-drag
10
4.3
Reset

r_{D(on)}
Type a min. or max. value, then press Update
Minimum: mOhms
Maximum: 5 mOhms
Update
Available values
Lowest: 2.5 mOhms
Highest: 4.5 mOhms
Reset

P_D Max.
To select multiple values, Ctrl-click or click-drag
3.5
5.4
88
120
166
242
375
Reset

Q_{gd}
To select multiple values, Ctrl-click or click-drag
9.7
10.5
16
22
30
Reset

10 products:
 SI3473DV
 SI4416DY
 SI4429EDY
 SI4431BDY
 SI4433DY
 SI4842DY
 SI4882DY
 SI9934DY
 SUM60ND8-07C
 SUM70ND3-09CP
[compare results »](#)

1. Select desired parameters

2. Go to list of datasheets with key specification table

Products A-Z Company Info: Press · Investors · Contacts · More... Privacy & Legal · Your Account

ALL PRODUCTS go



Products by Function

Part Number	Ch	V _{DS} (V)	V _{GS} (V)	V _F (V)	I _F (A)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
						V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SINGLE PLUS INTEGRATED DIODE																
PowerPAK SC-70																
SiA850DJ		190	16	1.2	1		3.8		4.2	17		1	3	1.4	7	
SINGLE PLUS INTEGRATED SCHOTTKY																
PowerPAK SO-8																
Si7758DP		30	20			0.0029	0.0038					60	105	46	104	
Si7742DP		30	20			0.0035	0.0045					60	75	34	83	
Si7748DP		30	20			0.0048	0.0066					50	61	27.8	56	
Si7772DP		30	20			0.013	0.0165					36	18.5	8.3	30	
PolarPAK																
SiE726DF		30	20			0.0024	0.0033					175	105	50	125	
SO-8																
Si4628DY		30	20			0.003	0.0038					38	58	27.5	7.8	
Si4638DY		30	20			0.0065	0.008					22	66.5	27.5	5.9	
Si4636DY		30	16	0.4	2	0.0085	0.0105					17	40	18.8	4.4	
Si4396DY		30	20	0.4	2	0.0115	0.016					16	29.6	13.3	5.4	
Si4712DY		30	20			0.013	0.0165					15	18.5	8.3	5	
Si4812BDY		30	20	0.5	1	0.016	0.021				b	9.5		8.5	2.5	
Si4620DY		30	20	0.5	3	0.035	0.052					7.5	8.6	4.2	3.1	
Si4621DY		- 20	20			0.054	0.094					6.2	8.7	4.5	3.1	
Si4823DY		- 20	12	0.6	1		0.108		0.175			4.1	8	4	2.8	
Si4829DY		- 20	12	0.4	1		0.215		0.32			2	5.2	2.6	3.1	
Si4831BDY		- 30	20			0.042	0.065					6.6	17	7.8	3.3	
Si4833ADY		- 30	20			0.072	0.11					4.6	9.8	4.6	2.8	
PowerPAK 1212-8																
Si7726DN		30	20			0.0095	0.0125					35	28.5	12.5	52	
Si7720DN		30	20			0.0125	0.015					12	30	13.7	52	
Si7703EDN		- 20	12				0.048		0.068	0.09		6.3		12	2.8	
TSOP-6																
Si3812DV		20	20	1.1	2		0.125		0.2			2.4		2.1	1.2	

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Products By Function, continued

Part Number	Ch	V _{DS} (V)	V _{GS} (V)	V _F (V)	I _F (A)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
						V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
TSOP-6, continued																
Si3879DV		- 20	12	0.5	1		0.07		0.105			t	5	9.7	4.5	3.3
Si3805DV		- 20	12	0.5	1	0.084	0.108		0.175				3.3	8	4	1.4
Si3851DV		- 30	20			0.2	0.36						1.8		2.4	1.2
PowerPAK ChipFET																
Si5858DU		20	8	0.4	1		0.039		0.045	0.055			6		6	8.3
Si5857DU		- 20	12	0.4	1		0.058		0.1				6	11	5.5	10
1206-8 ChipFET																
Si5856DC		20	8				0.04		0.045	0.052			5.9		5	2.1
Si5853DDC		- 20	8	0.5	1		0.105		0.143	0.188			4		4.7	3.1
Si5913DC		- 20	12	0.5	1	0.084	0.108		0.175				4	8	4	3.1
Si5855CDC		- 20	8	0.4	1		0.144		0.18	0.222			3.7	1.5	4.1	2.8
PowerPAK SC-70																
SiA810DJ		20	8				0.053		0.063	0.077			4.5		4.1	6.5
SiA814DJ		30	12	0.6	1	0.061	0.072		0.11				4.5	7	3.2	6.5
SiA813DJ		- 20	8	0.5	1		0.094		0.131	0.185			4.5		4.9	6.5
SiA811ADJ		- 20	8	0.5	1		0.116		0.155	0.205			4.5		4.9	6.5
PowerPAK SC-75																
SiB800EDK		20	6				0.225		0.27	0.345	0.96		1.5		1.1	3.1
Asymmetric DUAL PLUS INTEGRATED SCHOTTKY																
PowerPAK SO-8																
Si7980DP	1	20	16			0.022	0.025						8	17.5	8	20
	2	20	16			0.015	0.019						8	22.5	10.3	22
Si7872DP	1	30	20			0.022	0.03						10		7	3.5
	2	30	12	0.5	1	0.022	0.028						10		11.5	3.5
Si7842DP		30	20	0.5	1	0.022	0.03						10	13		3.5
SO-14																
Si4340CDY	1	20	20			0.0094	0.0125						14	21	9.6	3
	2	20	16			0.008	0.0095						20	31	14.1	5.4

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Products By Function, continued

Part Number	Ch	V _{DS} (V)	V _{GS} (V)	V _F (V)	I _F (A)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
						V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SO-8																
Si4670DY	1	25	16			0.023	0.028						8	12	5.5	2.8
	2	25	16	0.4	1	0.023	0.028						8	12	5.5	2.8
Si4622DY	1	30	20			0.016	0.0186						8	40	19	3.3
	2	30	16			0.0264	0.029						8	13.2	6	3.1
Si4618DY	1	30	16			0.017	0.0195						8	29	12.5	2
	2	30	16			0.01	0.0115						15	39	17	4.2
Si4650DY	1	30	20			0.018	0.022						8	25.5	10.5	3.1
	2	30	20	0.4	1	0.018	0.022						8	25.5	10.5	3.1
Si4816BDY	1	30	20			0.0185	0.0225					b, k	6.8		7.8	1.4
	2	30	20	0.5	1	0.0115	0.016					b, k	11		11.6	2.4
Si4916DY	1	30	20			0.018	0.023						10		6.6	3.3
	2	30	20	0.5	1	0.018	0.022						11		8.9	3.5
Si4388DY	1	30	20			0.016	0.024						11	18	8	3.3
	2	30	12	0.4	2	0.015	0.017						11	41	19	3.5
Si4834CDY	1	30	20	0.5	1	0.02	0.025						8	16.5	7.3	2.9
	2	30	20			0.02	0.025						8	16.5	7.3	2.9
Si4830CDY	1	30	20	0.5	1	0.02	0.025						8	16.5	7.3	2.9
	2	30	20			0.02	0.025						8	16.5	7.3	2.9
Si4914BDY	1	30	20			0.021	0.027						8.4		6.7	2.7
	2	30	20			0.02	0.025						8		7	3.1
Asymmetric DUAL N																
PowerPAK SO-8																
Si7998DP	1	30	20			0.0093	0.0124						25	17	8.2	22
	2	30	20			0.0053	0.007						30	32	15.3	40
SO-8																
Si4972DY	1	30	20			0.0145	0.0195						11	18.5	8.3	3.1
	2	30	20			0.0265	0.036						7.2	9.6	4	2.5
PowerPAIR 6 x 3.7																
SiZ700DT	1	20	16			0.0086	0.0108						16	20	9.5	2.4
	2	20	16			0.0058	0.0066						16	55	27	2.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Products By Function, continued

Part Number	Ch	V _{DS} (V)	V _{GS} (V)	V _F (V)	I _F (A)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
						V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
PowerPAIR 6 x 3.7, continued																
SiZ704DT	1	30	20			0.024	0.03						12	8	3.8	20
	2	30	20			0.0135	0.017						16	15.4	7.3	30
PowerPAK 1212-8																
SiZ224DN	1	30	16			0.035	0.042						6	9.5	4.5	18
	2	30	20			0.028	0.035						6	12	5.5	23
LEVEL SHIFT																
TSOP-6																
Si3865CDV		- 12					0.06		0.095	0.13			2.8			0.8
Si3861BDV		- 20	8			0.075	0.145						2.3			0.8
SC70-6																
Si1869DH		- 20	8				0.165		0.222	0.303			1.2			1
PowerPAK SC-70																
SiA777EDJ		20	6				0.225		0.27	0.345	0.96		1.5		1.1	5
		- 12	8				0.057		0.077	0.115	0.2		4.5		5	7.8
SC89-6																
Si1040X		- 8					0.625		0.89	1.25			0.4			0.2
COMMON DRAIN																
TSSOP-8																
Si6968BEDQ		20	12				0.022		0.03				6.5		12	1.5
Si6924AEDQ		28	14				0.033	0.038	0.042			e	4.6		6.5	1.3
PowerPAK 1212-8																
Si7900AEDN		20	12				0.026		0.03	0.036			8.5		10.5	3.1
PowerPAK 2 x 5																
SiF902EDZ		20	12				0.022	0.026	0.028			j	10		9.1	3.5
SiF912EDZ		30	12				0.019	0.022	0.027			j	11		9.8	3.5
MICRO FOOT																
MICRO FOOT 4 x 2																
Si8900EDB		20	12				0.012	0.013	0.017	0.02		c, f	7			1.8
MICRO FOOT 2.4 x 1.6																
Si8902EDB		20	12				0.0225	0.024	0.0285	0.036		c, f	5			1.7

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Products By Function, continued

Part Number	Ch	V _{DS} (V)	V _{GS} (V)	V _F (V)	I _F (A)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
						V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
MICRO FOOT, continued																
Si8904EDB		30	12				0.0225		0.03			c	4.9			1.7
Si8901EDB		-20	12				0.03		0.04	0.0525		c	4.4			1.7

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

N-Channel

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SINGLE N																
TO-220																
SUP60N02-4m5P	20	20		0.0045	0.0065								60		33	120
SUP90N03-03	30	20		0.0029	0.0033								90	171	81.5	187
SUP70N03-09BP	30	20		0.009	0.013								70		15.5	93
SUP85N04-03	40	20		0.003	0.005								85	165		250
SUP90N06-5m0P	60	20		0.005									90	105		300
SUP90N06-6m0P	60	20		0.006									90	78.5		272
SUP60N06-12P	60	20		0.012									60	33		100
SUP90N08-4m8P	75	20		0.0048	0.0085							d	90	105		300
SUP90N08-6m8P	75	22		0.0068									90	75		272
SUP90N08-7m7P	75	20		0.0077									90	69		208
SUP90N08-8m2P	75	20		0.0082									90	58		150
SUP90N10-8m8P	100	20		0.0088									90	97		300
SUP85N10-10P	100	20		0.01									85	77		227
SUP60N10-18P	100	20		0.0183	0.023							r	60	48		150
SUP40N10-30	100	20		0.03	0.034							d	40	35		107
SUP90N15-18P	150	20		0.018									90	64		375
SUP28N15-52	150	20		0.052	0.06							d	28	33		120
SUP57N20-33	200	20		0.033									57	90		300
SUP36N20-54P	200	25		0.054								s	36	57		166
SUP40N25-60	250	30		0.06	0.064							d	40	95		300
D²PAK (TO-263)																
SUM60N02-3m9P	20	20		0.0039	0.0052								60		33	120
SUM40N02-12P	20	20		0.012	0.026								40		7.5	83
SUM90N03-2m2P	30	20		0.0022	0.0027								90	171	81.5	250
SUM110N03-04P	30	20		0.0042	0.0065								110		40	120
SUM85N03-06P	30	20		0.006	0.009								85	48		100
SUM70N03-09CP	30	20		0.0095	0.014								70	31		93

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
D ² PAK (TO-263), continued																
SUM110N04-2m1P	40	20		0.0021	0.0024								110	240		312
SUM110N04-05H	40	20		0.0053									110	95		150
SUM70N04-07L	40	20		0.0074	0.011								70	50		107
SUM110N06-3m4L	60	20		0.0034	0.0041								110	200		375
SUM90N06-4m4P	60	20		0.0044									90	105		300
SUM90N06-5m5P	60	20		0.0055									90	78.5		272
SUM75N06-09L	60	20		0.0093	0.0135								75	47		125
SUM90N08-4m8P	75	20		0.0048	0.0085							d	90	105		300
SUM90N08-6m2P	75	20		0.0062									90	75		272
SUM110N08-07P	75	20		0.007									110	69		208
SUM90N08-7m6P	75	20		0.0076									90	58		150
SUM90N10-8m2P	100	20		0.0082									90	97		300
SUM60N10-17	100	20		0.0165	0.019							d	60	65		150
SUM40N10-30	100	20		0.03	0.034							d	40	35		107
SUM75N15-18P	150	20		0.018									75	64		313
SUM40N15-38	150	20		0.038	0.042							d	40	38		166
SUM23N15-73	150	20		0.073	0.077							d	23	22		100
SUM65N20-30	200	20		0.03									65	90		375
SUM36N20-54P	200	25		0.054								s	36	57		166
SUM27N20-78	200	20		0.078	0.083							d	27	40		150
SUM09N20-270	200	20		0.27	0.3							d	9	11		60
SUM45N25-58	250	30		0.058	0.062							d	45	95		375
SUM18N25-165	250	20		0.165									18	30		150
DPAK (TO-252)																
SUD40N02-3m3P	20	20		0.0033	0.0044								40	105	50	79

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
DPAK (TO-252), continued																
SUD50N02-04P	20	20		0.0043	0.006								34		40	136
SUD50N02-06P	20	20		0.006	0.0095								50		19	65
SUD50N02-09P	20	20		0.0095	0.017								20		10.5	39.5
SUD50N03-06AP	30	20		0.0057	0.0078								90	62	30	83
SUD50N03-12P	30	20		0.012	0.0175								47		13	46.8
SUD50N03-16P	30	20		0.016	0.024								37		8.5	40.8
SUD50N04-8m8P	40	20		0.0088	0.0105								50	37	16	48.1
SUD50N06-07L	60	20		0.0074	0.0088								96	96		136
SUD23N06-31	60	20		0.031	0.045								21.4	11	6.5	31.3
SUD40N08-16	80	20		0.016									40	42		136
SUD50N10-18P	100	20		0.0185									50	48		136
SUD35N10-26P	100	20		0.026									35	31		83
SUD50N10-34P	100	20		0.034	0.04							d	20	24		56
SUD06N10-225L	100	20		0.2	0.225								6.5		2.7	20
SUD25N15-52	150	20		0.052	0.06								d	25	33	136
SUD15N15-95	150	20		0.095	0.1								d	15	20	62
SUD19N20-90	200	20		0.09	0.105								d	19	34	136
SUD17N25-165	250	20		0.165										17	30	136
PowerPAK SO-8																
SIR494DP	12	20		0.0012	0.0017								60	98	50	104
SIR492DP	12	8			0.0038		0.0047						40		41	36
SIR404DP	20	12		0.0016	0.0018		0.00225						60		64.5	104
SIR440DP	20	20		0.00155	0.002								60	100	43.5	104
SIR866DP	20	20		0.0019	0.0026								60	71	35.3	83
SIR890DP	20	20		0.0029	0.004								50	42	20	50
SIR496DP	20	20		0.0042	0.0058								35	28	13.2	27.7
SIR410DP	20	20		0.0048	0.0063								35	27	16.7	36
SIR424DP	20	20		0.0055	0.0074								30	22	9.6	41.7
SIR484DP	20	20		0.0083	0.0115								20	15	7.1	29.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω							Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 1.2 V	V _{GS} = 10 V		V _{GS} = 4.5 V
PowerPAK SO-8, continued															
SiR438DP	25	20		0.0018	0.0023							60	70	32.6	83
SiR844DP	25	20		0.0028	0.0038							50	60	29.5	50
SiR892DP	25	20		0.0032	0.0042							50	40	20	50
SiR406DP	25	20		0.0038	0.0048							40	33	15.8	48
SiR436DP	25	20		0.0046	0.0062							40	31	13	50
SiR408DP	25	20		0.0063	0.008							21.5	21.5	9.3	4.8
SiR850DP	25	20		0.007	0.009							30	19	8.4	41.7
SiR412DP	25	20		0.012	0.015							20	10.7	4.9	15.6
SiR158DP	30	20		0.0018	0.0023							60	87	41.5	83
Si7658ADP	30	20		0.0022	0.0028							60	74	34	83
SiR164DP	30	20		0.0025	0.0032							50	82	40.6	69
SiR466DP	30	20		0.0035	0.0051							40	42.5	21.5	54
Si7892BDP	30	20		0.0042	0.0057							25		27	5
SiR168DP	30	20		0.0044	0.0059							40	49.5	24.5	34.7
SiR460DP	30	20		0.0047	0.0061							40	36	16.8	48
Si7634BDP	30	20		0.0054	0.007							40	45.5	21.5	48
SiR468DP	30	20		0.0057	0.0076							40	29	13.8	50
SiR402DP	30	20		0.006	0.008							50	28	12	36
Si7784DP	30	20		0.006	0.0082							35	30	13.7	27.7
SiR428DP	30	20		0.0075	0.0095							30	21	9.5	22.7
SiR462DP	30	20		0.0079	0.01							30	20	8.8	41.7
SiR172DP	30	20		0.0089	0.0124							20	19.5	9.8	29.8
SiR472DP	30	20		0.012	0.015						b	20	15	6.8	29.8
SiR470DP	40	20		0.0023	0.0027							60	102	45.5	104
SiR414DP	40	20		0.0028	0.0032							50	78	38	83
SiR416DP	40	20		0.0038	0.0042							50	59	28.2	69
SiR418DP	40	20		0.005	0.006							40	50	24	39
SiR422DP	40	20		0.0066	0.008							40	32	16.1	34.7
SiR426DP	40	20		0.0105	0.0125							30	20.5	9.3	41.7
Si7164DP	60	20		0.00625								60	49.5		104
Si7478DP	60	20		0.0075	0.0088							20	105		5.4
Si7460DP	60	20		0.0096	0.012							18	65		5.4

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
PowerPAK SO-8, continued															
Si7850DP	60	20		0.022	0.031							10.3	18		4.5
Si7174DP	75	20		0.007								60	47.5		104
Si7186DP	80	20		0.0125								32	46		64
Si7852ADP	80	20		0.017	0.021						r	30	30.5		62.5
SiR846DP	100	20		0.0078	0.0085						w	60	47.5		104
Si7456DP	100	20		0.025	0.028						d	9.3	36		5.2
SiR432DP	100	20		0.0306	0.0327						w	28.4	21		54
Si7738DP	150	20		0.038								30	35		96
Si7430DP	150	20		0.045	0.047						r	26	28.5		64
Si7898DP	150	20		0.085	0.095						d	4.8	17		5
Si7172DP	200	20		0.07	0.076						d, q	25	51	34	96
Si7450DP	200	20		0.08	0.09						d	5.3	34		5.2
Si7462DP	200	20		0.13	0.142						d	4.1	20		4.8
Si7464DP	200	20		0.24	0.26						d	2.8	12		4.2
Si7190DP	250	20		0.118	0.124						d, q	18.4	48	32	96
Si7434DP	250	20		0.155	0.162						d	3.8	34		5.2
PowerPAK SO-8L															
SiJ400DP	30	20		0.004	0.005							32	100	45	69.4
SiJ800DP	40	20		0.0095	0.0115							20	37	16	35.7
PolarPAK															
SiE874DF	20	20		0.00117	0.0016							258	95	45	125
SiE810DF	20	12		0.0014	0.0016		0.0027					221	200	90	125
SiE820DF	20	12			0.0035		0.0064					136	95	43	104
SiE822DF	20	20		0.0034	0.0055							138	52	24	104
SiE882DF	25	20		0.0014	0.0018							229	96	46	125
SiE878DF	25	20		0.0052	0.0068							45	24	11.2	25
SiE848DF	30	20		0.0016	0.0022							211	92	43	125
SiE860DF	30	20		0.0021	0.0028							178	70	34	104
SiE862DF	30	20		0.0032	0.0041							134	48	23	104
SiE844DF	30	20		0.007	0.01							44.5	29	13.1	25

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
PolarPAK, continued																
SiE868DF	40	20		0.0023	0.0029								169	95	45	125
SiE832DF	40	20		0.0055	0.007								103	51	25	104
SiE876DF	60	20		0.0061									110	51		125
SiE818DF	75	20		0.0095	0.0125								79	63	33	125
SiE854DF	100	20		0.0142									64	50		125
SiE804DF	150	20		0.038	0.04						d, q	37	70	46	125	
SiE836DF	200	30		0.13								18.3	27		104	
SO-8																
Si4838BDY	12	8			0.0027		0.0032	0.004					34		56	5.7
Si4866BDY	12	8			0.0053		0.006	0.0074					21.5		52	4.45
Si4136DY	20	20		0.002	0.0025		0.0042						46	73	34	7.8
Si4186DY	20	20		0.0026	0.0032								35.8	60	28.7	6
Si4114DY	20	16		0.006	0.007								20	62	27.5	5.7
Si4630DY	25	16		0.0027	0.0032								40	107.5	49	7.8
Si4654DY	25	16		0.004	0.005								28.6	63	29	5.9
Si4660DY	25	16		0.0058	0.007								23.1	30	17	5.6
Si4116DY	25	12		0.0086	0.0095		0.0115						18	37	17.5	5
Si4778DY	25	16		0.023	0.028								8	12	5.5	5
Si4126DY	30	20		0.00275	0.0034								39	70	30	7.8
Si4164DY	30	20		0.0032	0.0039								30	62	26.5	6
Si4166DY	30	20		0.0039	0.0055								30.5	42.5	21.5	6.5
Si4160DY	30	20		0.0049	0.0063								25.4	36	16.8	5.7
Si4634DY	30	20		0.0052	0.0067								24.5	45.5	21.5	5.7
Si4168DY	30	20		0.0057	0.0076								24	29	13.8	5.7
Si4156DY	30	20		0.006	0.008								24	28	12	6
Si4162DY	30	20		0.0079	0.01								19.3	20	8.8	5
Si4174DY	30	20		0.0095	0.013								17	18	8	5
Si4172DY	30	20		0.012	0.015						b	15	15	6.8	4.5	
Si4890BDY	30	25		0.012	0.016								16	22	10	5.7
Si4134DY	30	20		0.014	0.0175								14	15.4	7.3	5
Si4128DY	30	20		0.024	0.03								10.9	8	3.8	5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
S0-8, continued																
Si4154DY	40	20		0.0033	0.0039								36	70	32.5	7.8
Si4122DY	40	25		0.0045	0.006								27.2	62	29	6
Si4124DY	40	20		0.0075	0.009								20.5	51	21	5.7
Si4840BDY	40	20		0.009	0.012								19	33	15	6
Si4446DY	40	12		0.04	0.045								5.2		8	2
Si4470EY	60	20		0.011	0.013							d	12.7	46		3.75
Si4850EY	60	20		0.022	0.031								8.5	18		3.3
Si4436DY	60	20		0.036	0.043								8	21	10.5	5
Si4108DY	75	20		0.0098									20.5	36		7.8
Si4110DY	80	20		0.013									17.3	35		7.8
Si4896DY	80	20		0.0165	0.022							d	9.5	34		3.1
Si4480DY	80	20		0.035	0.04							d	6	30		2.5
Si4486EY	100	20		0.025	0.028							d	7.9	36		3.8
Si4484EY	100	20		0.034	0.04							d	6.9	24		3.8
Si4100DY	100	20		0.063	0.084							d, q	6.8	13.5	9	6
Si4104DY	100	20		0.105									4.6	8.5		5
Si4102DY	100	20		0.158	0.175							d, q	3.8	7.1	4.6	4.8
Si4472DY	150	20		0.045	0.047							r	7.7	28.5		5.9
Si4488DY	150	20		0.05									5	30		3.1
Si4848DY	150	20		0.085	0.095							d	3.7	17		3
Si4490DY	200	20		0.08	0.09							d	4	34		3.1
Si4418DY	200	20		0.13	0.142							d	3	20		2.5
Si4464DY	200	20		0.24	0.26							d	2.2	12		2.5
Si4462DY	200	20		0.48	0.51							d	1.5	6		2.5
Si4434DY	250	20		0.155	0.162							d	3	34		3.1
TSSOP-8																
Si6410DQ	30	20		0.014	0.021								7.8		22.5	1.5
PowerPAK 1212-8																
Si7102DN	12	8			0.0038		0.0047						35		41	52
SiS426DN	20	20		0.0042	0.0058								35	28	13.2	52

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω							Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 1.2 V	V _{GS} = 10 V		V _{GS} = 4.5 V
PowerPAK 1212-8, continued															
SiS410DN	20	20		0.0048	0.0063							35	27	16.7	5.2
SiS424DN	20	20		0.0064	0.0089							35	20	9.5	39
SiS438DN	20	20		0.0095	0.0125							16	15	7.3	27.7
SiS430DN	25	20		0.0051	0.0069							35	26.5	13	52
SiS436DN	25	20		0.0105	0.013							16	14.3	6.7	27.7
SiS402DN	30	20		0.006	0.008							50	28	12	5.2
Si7114ADN	30	20		0.0075	0.0098							35	21	10.2	39
SiS406DN	30	25		0.011	0.0145							14	18.2	8.4	3.7
Si7716ADN	30	20		0.0135	0.0165							16	15.4	7.3	27.7
SiS412DN	30	20		0.024	0.03							12	8	3.8	15.6
SiS434DN	40	20		0.0076	0.0092							35	25	12.5	52
Si7120DN	60	20		0.019	0.028							10	30		3.8
Si7414DN	60	20		0.025	0.036							8.7	16		3.8
Si7308DN	60	20		0.058	0.072							6	13	6	19.8
Si7812DN	75	20		0.037	0.046							16	16	8	52
Si7322DN	100	20		0.058								18	13		52
Si7818DN	150	20		0.135	0.142						d	3.4	20		3.8
Si7820DN	200	20		0.24	0.25						d	2.6	12.1		3.8
Si7802DN	250	20		0.435	0.445						d	1.95	14		3.8
TSOP-6															
Si3460BDV	20	8			0.027		0.032	0.04				8		9	3.5
Si3446ADV	20	12			0.037		0.065					6	13	5.6	3.2
Si3442BDV	20	12			0.057		0.09					4.2		3	1.67
Si3410DV	30	20		0.0195	0.023							8	21.8	9.2	4.1
Si3424BDV	30	20		0.028	0.038							8	13.05	6.2	2.98
Si3456DDV	30	20		0.04	0.05							6.3	6	2.8	2.7
Si3438DV	40	20		0.0355	0.0425							7.4	11.7	5.3	3.5
Si3458BDV	60	20		0.1	0.128							4.1	7.1	3.5	3.3
Si3430DV	100	20		0.17	0.185						d	2.4	5.5		2
Si3440DV	150	20		0.375	0.4						d	1.5	5.4		2

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SOT-23															
Si2312BDS	20	8			0.031		0.037	0.047				5		7.5	1.25
Si2302GDS	20	8			0.057		0.075					2.9		3.5	0.86
TN0200K	20	8			0.4		0.5					0.73		1.4	0.35
TN0201K	20	20		1	1.4							0.42	1		0.35
Si2306BDS	30	20		0.047	0.065						b	4		3	1.25
Si2304DDS	30	20		0.06	0.075							3.6	4.5	2.1	1.7
Si2318DS	40	20		0.045	0.058							3.9	10		1.25
Si2308BDS	60	20		0.156	0.192							2.3	4.5	2.3	1.66
2N7002K	60	20		2	4							0.3		0.4	0.35
2N7002E	60	20		3	4							0.25	0.4		0.35
Si2328DS	100	20		0.25								1.5	3.3		1.25
TN2404K	240	20		4	4		6					0.2	4.87		0.36
PowerPAK ChipFET															
Si5456DU	20	20		0.01	0.0135							12	20	9.8	31
Si5486DU	20	8			0.015		0.017	0.021				12		21	31
Si5484DU	20	12			0.016		0.021					12	35.5	16.5	31
Si5418DU	30	20		0.0145	0.0185							12	20	9.5	31
Si5458DU	30	20		0.041	0.051							6	6	2.8	10.4
Si5410DU	40	20		0.018	0.021							12	21	10	31
Si5476DU	60	20		0.034	0.041							12	21	10.5	31
1206-8 ChipFET															
Si5406CDC	12	8			0.02		0.023	0.027				6		11.5	5.7
Si5414DC	20	12			0.017		0.022					6	27	12.5	6.3
Si5432DC	20	12			0.02		0.025					6	22	10	6.3
Si5440DC	30	20		0.019	0.024							6	19	9	6.3
Si5424DC	30	25		0.024	0.03							6	21	11	9
Si5468DC	30	20		0.028	0.034							6	8	3.8	5.7
Si5402BDC	30	20		0.035	0.042							6.7	10		2.5
SC70															
Si1450DH	8	5			0.047		0.051	0.058	0.069			6.04		4.24	2.78
Si1488DH	20	8			0.049		0.056	0.065				6.1		6	2.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SC70, continued															
Si1406DH	20	8			0.065		0.075	0.096				3.9		4.9	1.56
Si1410EDH	20	12			0.07		0.08	0.1				3.7		5.6	1.56
Si1400DL	20	12			0.15		0.235					1.7		2.1	0.63
Si1300BDL	20	8			0.85		1.08					0.4		0.56	0.2
Si1470DH	30	12			0.066		0.095					5.1		4.85	2.8
Si1472DH	30	20		0.057	0.082							5.6	7	3.3	2.8
Si1426DH	30	20		0.075	0.115							3.6		1.9	1.6
Si1304BDL	30	12			0.29		0.385					0.9		1.8	0.37
Si1302DL	30	20		0.48	0.7							0.64	0.86		0.31
Si1330EDL	60	20		2.5	3	8					e	0.25		0.4	0.31
PowerPAK SC-70															
SiA414DJ	8	5			0.011		0.013	0.016	0.022	0.041		12		19	19
SiA406DJ	12	8			0.0198		0.0222	0.0264				4.5		13.7	19
SiA430DJ	20	20		0.0135	0.0185							12	12	5.3	19.2
SiA426DJ	20	12		0.0236	0.0263		0.0361					4.5	17.5	7.9	19
SiA438EDJ	20	12			0.046		0.063					6	7.5	3.5	11.4
SiA432DJ	30	20		0.02	0.024							12	13	5.6	19.2
SiA408DJ	30	12		0.036	0.039		0.053					4.5	16	7	17.9
SiA456DJ	200	16			1.38		1.5	3.5				2.6	9.5	5	19
SC75A															
Si1046R	20	8			0.42		0.501	0.66				0.61		0.92	0.25
Si1012R	20				0.7		0.85	1.25				0.5		0.75	0.15
Si1032R	20				5		7	9				0.14		0.75	0.2
Si1022R	60			1.25	3							0.33			0.25
PowerPAK SC-75															
SiB414DK	8	5			0.026		0.03	0.037	0.052	0.089		9		8.6	13
SiB422EDK	20	8			0.03		0.041	0.057	0.082			9		6	13
SiB412DK	20	8			0.034		0.04	0.054				9		6.14	13
SiB406EDK	20	12			0.046		0.063					6	7.5	3.5	10
SiB408DK	30	20		0.04	0.05							7	6.2	2.9	13

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
PowerPAK SC-75, continued															
SiB452DK	190	16			2.4		2.6	6				1.5	4.3	2.3	13
SC-89															
Si1050X	8	5			0.086		0.093	0.102	0.12			1.34		7.1	0.24
Si1054X	12	8			0.095		0.104	0.114				1.32		5.25	0.24
Si1056X	20	8			0.089		0.098	0.121				1.32		5.2	0.24
Si1058X	20	12			0.091		0.124					1.3		3.51	0.24
Si1046X	20	8			0.42		0.501	0.66				0.61		0.92	0.25
Si1012X	20				0.7		0.85	1.25				0.5		0.75	0.25
Si1032X	20				5		7	9				0.14		0.75	0.2
Si1070X	30	12			0.099		0.14					1.2		3.5	0.24
Si1072X	30	20		0.093	0.129							1.3	5.5	2.7	0.24
MICRO FOOT 1.6 x 1.6															
Si8424DB	8	5			0.031		0.033	0.035	0.043	0.077		12.2		20	6.25
Si8402DB	20	8			0.037		0.039	0.043				7.3		17	2.77
SOT-923															
SiM400	60	20		3.9	4.8	8					v	0.35	0.68	0.325	1.9
DUAL N															
PowerPAK SO-8															
Si7234DP	12	12			0.0034		0.005					60	80	37	46
Si7236DP	20	12			0.0052		0.007					60	68	31	46
Si7994DP	30	20		0.0056	0.007							60	52	24	46
Si7272DP	30	20		0.0093	0.0124							25	17	8.2	22
Si7938DP	40	20		0.0058	0.007							60	43	21	46
Si7960DP	60	20		0.021	0.025							9.7	49		3.5
Si7942DP	100	20		0.049	0.06						d	5.9	16		3.5
Si7956DP	150	20		0.105	0.115						d	4.1	17		3.5
Si7946DP	150	20		0.15	0.168						d	3.3	12.6		3.5
PowerPAK SO-8L															
SiJ900DP	30	20		0.011	0.0135							30	44.5	19.2	46

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
S0-8															
Si9926CDY	20	12			0.018		0.022					8	22	10	3.1
Si4226DY	25	12			0.0195		0.026					8	24	11	3.2
Si4952DY	25	16		0.023	0.028							8	12	5.5	2.8
Si4932DY	30	20		0.015	0.017							8	32	14.7	3.2
Si4922BDY	30	12		0.016	0.018		0.024					8	41	19	3.1
Si4214DDY	30	20		0.0195	0.023							8.5	14.5	7.1	3.1
Si4230DY	30	20		0.0205	0.026							8	16.5	7.3	3.2
Si4804CDY	30	20		0.022	0.027							8	15.4	7	3.1
Si4210DY	30	20		0.0355	0.044							6.5	8	3.7	2.7
Si4936CDY	30	20		0.04	0.05							5.8	6	2.8	2.3
Si4904DY	40	16		0.016	0.019							8	56	26	3.25
Si4910DY	40	16		0.027	0.032							7.6	21	9.6	3.1
Si4906DY	40	16		0.039	0.05							6.6	14.4	6.6	3.1
Si4946BEY	60	20		0.041	0.052						b	6.5	17	9.2	3.7
Si9945BDY	60	20		0.058	0.072							5.3	13	6	3.1
Si4992EY	75	20		0.048	0.062							4.8	14		2.4
TSSOP-8															
Si6926ADQ	20	8			0.03	0.033	0.035	0.043			e	4.5		7.5	1
Si6925ADQ	20	12			0.045	0.055	0.065				e	3.9		4	1.13
Si6928DQ	30	20		0.035	0.05							4		9	1
Si6954ADQ	30	20		0.053	0.075							3.4	8		1
PowerPAK 1212-8															
Si7232DN	20	8			0.0164		0.02	0.024				25		12	23
Si7904BDN	20	8			0.03		0.036	0.045				6		9	17.8
Si7228DN	30	20		0.02	0.025							26	8.5	4.1	23
Si7212DN	30	12		0.036	0.039							6.8		7	2.6
Si7216DN	40	20		0.032	0.039							6	12.5	5.5	20.8
Si7222DN	40	12		0.042	0.047							6	19	8	17.8
Si7220DN	60	20		0.06	0.075							4.8	13		2.6
SiS902DN	75	20		0.186	0.228							4	3.9	2.1	15.4

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
PowerPAK 1212-8, continued															
Si7922DN	100	20		0.195	0.23						d	2.5	5.2		2.6
TSOP-6															
Si3900DV	20	12			0.125		0.2					2.4		2.1	1.15
Si3948DV	30	20		0.105	0.175							2.5		2.1	1.15
PowerPAK ChipFET															
Si5938DU	20	8			0.039		0.045	0.055				6		6	8.3
Si5906DU	30	20		0.031	0.04							6	5.7	2.9	10.4
Si5944DU	40	20		0.112	0.171							6	4.4	2.2	10
1206-8 ChipFET															
Si5920DC	8	5			0.032		0.036	0.045	0.054			8.4		7.3	3.12
Si5908DC	20	8			0.04		0.045	0.052				5.9		5	2.1
Si5904DC	20	12			0.075		0.134					4.2		4	2.1
Si5902BDC	30	20		0.065	0.1							4	4.5	2	3.12
SC70-6															
Si1988DH	20	8			0.168		0.2	0.25				1.3		1.6	1.25
Si1958DH	20	12			0.205		0.34					1.3	2.5	1.2	1.25
Si1912EDH	20	12			0.28		0.36	0.45				1.28		0.65	0.74
Si1902DL	20	12			0.385		0.63					0.7		0.8	0.3
Si1972DH	30	20		0.19	0.344							1.3		0.91	1.25
Si1926DL	60	20		1.4	3							0.37	0.9	0.5	0.51
PowerPAK SC-70															
SiA912DJ	12	8			0.04		0.048	0.063				4.5		4.5	6.5
SiA906EDJ	20	12			0.046		0.063					4.5	7.5	3.5	7.8
SiA914DJ	20	8			0.053		0.063	0.077				4.5		4.1	6.5
SiA950DJ	190	16			3.8		4.2	17				0.95	3	1.4	7
PowerPAK SC-75															
SiB914DK	8	5			0.113		0.138	0.19	0.28	0.48		1.5		1.5	3.1
SiB912DK	20	8			0.216		0.268	0.375				1.5		1.2	3.1
SiB900EDK	20	6			0.225		0.27	0.345	0.96			1.5		1.1	3.1

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SC89-6															
Si1024X	20				0.7		0.85	1.25				0.5		0.75	0.25
Si1034X	20				5		7	9				0.14		0.75	0.2
Si1026X	60			1.4	3							0.33		0.6	0.25

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

P-Channel

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SINGLE P															
TO-220															
SUP75P03-07	- 30	20		0.007	0.01							75	160		187
SUP90P06-09L	- 60	20		0.0093	0.0118							90	160		250
SUP53P06-20	- 60	20		0.0195	0.025							53	76	38	104
SUP40P10-43	- 100	20		0.043	0.048							36	106	54	125
D²PAK (TO-263)															
SUB75P03-07	- 30	20		0.007	0.01							75	160		187
SUM110P04-05	- 40	20		0.005								110	185		375
SUM110P06-08L	- 60	20		0.008	0.0105							110	160		272
SUM55P06-19L	- 60	20		0.019	0.025							55	76		125
SUM110P08-11L	- 80	20		0.0112	0.0145							110	180	85	375
SUM90P10-19L	- 100	20		0.019	0.021							90	217	97	375
DPAK (TO-252)															
SUD45P03-10	- 30	20		0.01	0.018							15	90		70
SUD50P04-09L	- 40	20		0.0094	0.0145							50	102		136
SUD50P04-13L	- 40	20		0.013	0.022							60	63		93.7
SUD50P04-40P	- 40	20		0.04	0.05							8	38.5	17	24
SUD50P06-15	- 60	20		0.015	0.02							50	110		113
SUD19P06-60	- 60	20		0.06	0.077							18.3	26		38.5
SUD08P06-155L	- 60	20		0.155	0.28							8.4	12.5		25
SUD50P08-25L	- 80	20		0.0252	0.029							50	105	55	136
SUD50P10-43L	- 100	20		0.043	0.048							37.1	106	54	136
TO-92															
TP0610KL	- 60	20		6	10						a	0.27	1.7		0.8
BS250KL	- 60	20		6	10						a	0.27	1.7		0.8
PowerPAK SO-8															
Si7137DP	- 20	12		0.00195	0.0025		0.0039					60	390	188	104
Si7633DP	- 20	20		0.0033	0.0055							60	173	85	104
Si7635DP	- 20	16		0.0049	0.0075							40	95.3	46.5	54

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
PowerPAK SO-8, continued															
Si7145DP	- 30	20		0.0026	0.0038							60	275	129	104
Si7135DP	- 30	20		0.0039	0.0062							60	167	78	104
Si7139DP	- 30	20		0.0055	0.009							40	97	49.5	48
Si7149DP	- 30	25		0.0052	0.0094							50	98	51	69
Si7463DP	- 40	20		0.0092	0.014							18.6	121		5.4
Si7461DP	- 60	20		0.0145	0.019							14.4	121		5.4
Si7465DP	- 60	20		0.064	0.08							5	26		3.5
Si7469DP	- 80	20		0.025	0.029							28	105	55	83
Si7489DP	- 100	20		0.041	0.047							28	106	54	83
Si7439DP	- 150	20		0.09	0.095						d	5.2	88		5.4
Si7431DP	- 200	20		0.174	0.18						d	3.8	88		5.4
SO-8															
Si4465ADY	- 8	8			0.009		0.011	0.016				13.7		55	3
Si4477DY	- 20	12			0.0062		0.0105					26.6	125	59	6.6
Si4463BDY	- 20	12		0.011	0.014		0.02					13.7		37	3
Si4403BDY	- 20	8			0.017		0.023	0.032			b	9.9		33	2.5
Si9424BDY	- 20	9			0.025		0.033					7.1		24	2
Si9433BDY	- 20	12			0.04	0.06					h	6.2		8.8	2.5
Si4803DY	- 20	12			0.065		0.105					5	9.7	4.5	3
Si4459ADY	- 30	20		0.005	0.0078							29	129	61	7.8
Si4427BDY	- 30	12		0.0105	0.0125		0.0195					12.6		47.2	2.5
Si4483ADY	- 30	25		0.0088	0.0153							19.2	90	44.8	5.9
Si4425DDY	- 30	20		0.0098	0.0165							19.7	53	27	5.7
Si4825DDY	- 30	25		0.0125	0.0205							14.9	57	29.5	5
Si4835DDY	- 30	25		0.018	0.03							13	43	22	5.6
Si4435DDY	- 30	20		0.024	0.035							11.4	32	15	5
Si4431CDY	- 30	20		0.032	0.049							9	25	13	4.2
Si4485DY	- 30	20		0.042	0.072							6	13.6	7	5
Si4401BDY	- 40	20		0.014	0.021						b	10.5		40	2.9
Si4447DY	- 40	16		0.054	0.072							4.5		9	2

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
S0-8, continued																
Si9407BDY	- 60	20		0.12	0.15								4.7	14.5	8	5
Si4455DY	- 150	20		0.295	0.315							d, q	2.8	27.5	23.2	5.9
Si4409DY	- 150	20		1.2	1.3							d	1.3	7.7	4.8	4.6
TSSOP-8																
Si6423DQ	- 12	8			0.0085		0.0106	0.014				b	9.5		74	1.5
Si6467BDQ	- 12	8			0.0125		0.0155	0.02					8		46	1.5
Si6433BDQ	- 12	8			0.04		0.07						4.8		10	1.5
Si6463BDQ	- 20	8			0.015		0.02	0.027					7.4		40	1.5
Si6443DQ	- 30	20		0.012	0.019								8.8		38	1.5
Si6415DQ	- 30	20		0.019	0.03								6.5	47		1.5
Si6435ADQ	- 30	20		0.03	0.055								5.5		15	1.5
Si6459BDQ	- 60	20		0.115	0.15								2.7	14.5		1.5
PowerPAK 1212-8																
Si7405BDN	- 12	8			0.013		0.017	0.024					16		46	33
Si7615DN	- 20	12		0.0039	0.0055		0.0098						35	122	62	52
Si7123DN	- 20	8			0.0106		0.0136	0.0189					25		57	52
Si7613DN	- 20	16		0.0087	0.014								35	58	28.1	52.1
Si7411DN	- 20	8			0.019		0.025	0.034					11.4		27	3.6
Si7403BDN	- 20	8			0.074		0.11						8		5.6	9.6
Si7129DN	- 30	20		0.0114	0.02								35	47.5	24.6	52.1
Si7617DN	- 30	25		0.0123	0.0222								35	39	20.5	52
Si7121DN	- 30	25		0.018	0.0305								16	43	22	52
Si7611DN	- 40	20		0.025	0.033								18	41	21	39
Si7415DN	- 60	20		0.065	0.11								5.7	15		3.8
Si7309DN	- 60	20		0.115	0.146								8	14.5	7.5	19.8
Si7113DN	- 100	20		0.113	0.145								13.2	35	16.5	52
Si7115DN	- 150	20		0.295	0.315							d	8.9	27.5	23.2	52
Si7117DN	- 150	20		1.2	1.3							d	2.17	7.7		12.5
Si7119DN	- 200	20		1.05	1.1							d	3.8	16.2	10.6	52

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
TSOP-6															
Si3499DV	- 8	5			0.023		0.029	0.036	0.045			7		28	2
Si3473CDV	- 12	8			0.022		0.028	0.036				8		26	4.2
Si3447CDV	- 12	8			0.036		0.05	0.068				7.8		12	3
Si3495DV	- 20	5			0.024		0.03	0.038	0.047			7		25	2
Si3407DV	- 20	12			0.024		0.0372					8	42	21	4.2
Si3493BDV	- 20	8			0.0275		0.034	0.045				8		26.2	2.97
Si3433BDV	- 20	8			0.038		0.046	0.06				6		18	3.3
Si3867DV	- 20	12			0.051	0.067	0.1					5.1		7	2
Si3469DV	- 20	20		0.03	0.051							6.7	20		2
Si3443CDV	- 20	12			0.06		0.1					5.97		7.53	3.2
Si3441BDV	- 20	8			0.09		0.13					2.9		5.2	1.25
Si3467DV	- 20	20		0.054	0.094							5	8.7		2
Si3483CDV	- 30	20		0.034	0.053							8	22	11.5	4.2
Si3457CDV	- 30	20		0.074	0.113							5.1	10	5.1	3
Si3459BDV	- 60	20		0.216	0.288							2.9	7.7	4.4	3.3
Si3437DV	- 150	20		0.75	0.79						d	1.4	12.2	8	3.2
Si3475DV	- 200	20		1.61	1.65						d	0.95	11.7	7.8	3.2
SOT-23															
Si2305CDS	- 8	8			0.035		0.048	0.065				5.8		12	1.7
Si2333CDS	- 12	8			0.035		0.045	0.059				7.1		15	2.5
Si2323DS	- 20	8			0.039		0.052	0.068				4.7		12.5	1.25
Si2367DS	- 20	8			0.066		0.086	0.13				3.8		9	1.7
Si2301CDS	- 20	8			0.112		0.142					3.1		5.5	1.6
Si2351DS	- 20	12			0.115		0.205					2.8		3.2	2.1
TP0101K	- 20	8			0.65		0.85					0.58		1.4	0.35
Si2343DS	- 30	20		0.053	0.086							4	14		1.25
Si2307CDS	- 30	20		0.088	0.138							3.5		4.1	1.8
Si2303CDS	- 30	20		0.19	0.33							2.7	4	2	2.3
TP0202K	- 30	20		1.4	3.5							0.39	1		0.35
Si2319DS	- 40	20		0.082	0.13							3	11.3		1.25

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SOT-23, continued															
Si2309CDS	- 60	20		0.345	0.45							1.6		2.7	1.7
TP0610K	- 60	20		5	10							0.4	1.2		0.25
Si2337DS	- 80	20		0.27	0.303						d, q	2.2	11	7	2.5
Si2325DS	- 150	20		1.2	1.3						d	0.69	7.7		1.25
Si2327DS	- 200	20		2.35	2.45						d	0.49	8		1.25
PowerPAK ChipFET															
Si5481DU	- 20	8			0.022		0.029	0.041				12		20	17.8
Si5485DU	- 20	12			0.025		0.042					12		14	31
Si5459DU	- 20	12			0.052		0.082					8	17	8	10.9
Si5419DU	- 30	20		0.02	0.033							12	30	15.5	31
1206-8 ChipFET															
Si5499DC	- 8	5			0.036		0.045	0.056	0.077			6		14	6.2
Si5475DDC	- 12	8			0.032		0.04	0.052				6		20	5.7
Si5471DC	- 20	12			0.02		0.028	0.062				6	64	30	6.3
Si5433BDC	- 20	8			0.037		0.05	0.07				6.7		15	2.5
Si5441BDC	- 20	12			0.045	0.052	0.08					6.1		11.5	2.5
Si5463EDC	- 20	12			0.062		0.085	0.12				5.1		9.7	2.3
Si5403DC	- 30	20		0.03	0.044							6	28	15	6.3
Si5435BDC	- 30	20		0.045	0.08							5.9	16		2.5
SC70															
Si1499DH	- 8	5			0.078		0.095	0.115	0.153	0.424		1.6		10.5	2.78
Si1405BDH	- 8	8			0.112		0.16	0.21				1.6		3.67	2.27
Si1305DL	- 8	8			0.28		0.38	0.53				0.92		2.6	0.34
Si1417EDH	- 12	12			0.085		0.115	0.16				3.3		5.8	1.56
Si1307EDL	- 12	8			0.29		0.435	0.58				0.91		3.2	0.34
Si1467DH	- 20	8			0.09		0.115	0.15				1.6		9	2.78
Si1469DH	- 20	12		0.08	0.1		0.155					1.6		5.5	2.78
Si1413EDH	- 20	12			0.115		0.155	0.22				2.9		5.6	1.56
Si1403BDL	- 20	12			0.15	0.175	0.265				p	1.5		2.9	0.63
Si1303DL	- 20	12			0.43	0.48	0.7					0.72		1.7	0.34

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SC70, continued																
Si1471DH	- 30	12		0.1	0.12			0.175				1.6		6.5	2.78	
Si1473DH	- 30	20		0.1	0.145							1.6		4.1	2.78	
Si1411DH	- 150	20		2.6	2.7						d	0.52	4.2		1.56	
Si1419DH	- 200	20		5	5.1						d	0.38	4.1		1.56	
PowerPAK SC-70																
SiA417DJ	- 8	5			0.023			0.031	0.04	0.058	0.095		12		19	19
SiA413DJ	- 12	8			0.029			0.034	0.044	0.1			12		23	19
SiA431DJ	- 20	8			0.025			0.031	0.041	0.07			12		24	19
SiA419DJ	- 20	5			0.03			0.039	0.051	0.066	0.113		12		17.5	19
SiA415DJ	- 20	12			0.035			0.051					12	31	15	19
SiA443DJ	- 20	8			0.045			0.063	0.088				9		9	15
SiA421DJ	- 30	20		0.035	0.056								12	19	10	19
SC75A																
Si1013R	- 20				1.2			1.6	2.7				0.37		1.5	0.25
Si1031R	- 20				8			12	15				0.14		1.5	0.25
Si1021R	- 60			5	10							a	0.17	1.7		0.25
PowerPAK SC-75																
SiB417EDK	- 8	5			0.058			0.08	0.1	0.13	0.25		9		7.3	13
SiB419DK	- 12	8			0.06			0.082	0.114				9		7.15	13.1
SiB457EDK	- 20	8			0.035			0.049	0.072	0.13			9	22	13	13
SiB431EDK	- 20	12			0.08			0.149					9	8	3.9	13
SiB415DK	- 30	20		0.087	0.158								9	6.7	3.5	13
SC-89																
Si1051X	- 8	5			0.122			0.141	0.168	0.198			1.2		5.91	0.24
Si1065X	- 12	8			0.13			0.158	0.205				1.18		6.7	0.24
Si1067X	- 20	8			0.15			0.166	0.214				1.06		6	0.24
Si1069X	- 20	12			0.184			0.268					0.94		4.23	0.24
Si1013X	- 20				1.2			1.6	2.7				0.4		1.5	0.3

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SC89-6, continued															
Si1071X	- 30	12		0.167	0.188		0.244					0.96	8.87	4.43	0.24
Si1073X	- 30	20		0.173	0.243							0.98	6.3	3.25	0.24
MICRO FOOT															
MICRO FOOT 2.4 x 1.6															
Si8407DB	- 20	8			0.027		0.032	0.045				8.2		32	2.9
MICRO FOOT 1.6 x 1.6															
Si8429DB	- 8	5			0.035		0.042	0.052	0.069	0.098		11.7		21	6.25
Si8415DB	- 12	8			0.037		0.046	0.06				7.3		19	2.77
Si8435DB	- 20	5			0.041		0.048	0.058	0.075			10		22	6.25
Si8413DB	- 20	12			0.048		0.063					6.5		14	2.77
Si8401DB	- 20	12			0.065		0.095					4.9		11	2.77
Si8409DB	- 30	12			0.046		0.065					6.3		17	2.77
MICRO FOOT 1.5 x 1															
Si8447DB	- 20	12			0.075		0.105	0.26			u	11	15	7.5	13
Si8441DB	- 20	5			0.08		0.102	0.128	0.198	0.6		10.5		7.7	13
Si8451DB	- 20	8			0.08		0.1	0.126	0.2			10.8		10	13
MICRO FOOT 1.2 x 1															
Si8445DB	- 20	5			0.084		0.1	0.12	0.155	0.495		9.8		9.5	11.4
MICRO FOOT 1 x 1															
Si8461DB	- 20	8			0.1		0.118	0.14	0.205			3.7		9.5	1.8
Si8465DB	- 20	12			0.104		0.148					3.8	12	6	1.8
DUAL P															
PowerPAK SO-8															
Si7945DP	- 30	20		0.02	0.031							10.9	49		3.5
Si7949DP	- 60	20		0.064	0.08							5	26		3.5
SO-8															
Si4931DY	- 12	8			0.018		0.022	0.028				8.9		34.5	2
Si9934BDY	- 12	8			0.035		0.056					6.4		13	2
Si4913DY	- 20	8			0.015		0.019	0.024				9.4		43	2
Si4943CDY	- 20	20		0.0192	0.033							8	41	20	3.1

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SO-8, continued															
Si9933CDY	- 20	12			0.058		0.094					4	17	8	3.1
Si4925DDY	- 30	20		0.029	0.041							8	32	15	5
Si4953ADY	- 30	20		0.053	0.09							4.9	15		2
Si4947ADY	- 30	20		0.08	0.135							3.9		5.8	2
Si4948BEY	- 60	20		0.12	0.15							3.1	14.5		2.4
TSSOP-8															
Si6913DQ	- 12	8			0.021		0.028	0.037				5.8		18.5	1.14
Si6943BDQ	- 12	8			0.08		0.105					2.5		5.7	1.1
Si6981DQ	- 20	8			0.031		0.041	0.058				4.8		15	1.14
Si6963BDQ	- 20	12			0.045		0.08					3.9		8.6	1.13
Si6993DQ	- 30	20		0.031	0.048							4.7		13	1.14
PowerPAK 1212-8															
Si7913DN	- 20	8			0.037		0.048	0.066				7.4		15.3	2.8
Si7911DN	- 20	8			0.051		0.067	0.094				5.7		9.5	2.5
Si7923DN	- 30	20		0.047	0.075							6.4	14		2.8
Si7905DN	- 40	20		0.06	0.089							6	20	11	20.8
TSOP-6															
Si3951DV	- 20	12			0.115		0.205					2.7		3.2	2
Si3981DV	- 20	8			0.185		0.26	0.385				1.9		3.2	1.08
Si3993DV	- 30	20		0.133	0.245							2.2		3.1	1.15
PowerPAK ChipFET															
Si5947DU	- 20	12			0.058		0.1					6	11	5.5	10.4
1206-8 ChipFET															
Si5915BDC	- 8	8			0.07		0.086	0.145				4		5	3.1
Si5935CDC	- 20	8			0.1		0.12	0.156				4		6.2	3.1
Si5933CDC	- 20	8			0.144		0.18	0.222				3.7		4.1	2.8
Si5903DC	- 20	12			0.155	0.18	0.26					2.9		3	2.1
SC70-6															
Si1905BDH	- 8	8			0.542		0.798	1.2				0.63		1	0.36

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



P-Channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SC70-6, continued															
Si1917EDH	- 12	12			0.37		0.575	0.8				1.15		1.3	0.73
Si1965DH	- 12	8			0.39		0.535	0.71				1.3		1.7	1.25
Si1967DH	- 20	8			0.49		0.64	0.79				1.3		1.6	1.25
Si1903DL	- 20	12			0.995	1.19	1.8					0.44		1.2	0.3
PowerPAK SC-70															
SiA913DJ	-12	8			0.07		0.1	0.14				4.5		5	6.5
SiA921EDJ	- 20	12			0.059		0.098	0.185				4.5	15	7.1	7.8
SiA911EDJ	- 20	8			0.101		0.141	0.192				4.5		4.2	7.8
SiA917DJ	- 20	12			0.11		0.185					4.5	6	3	6.5
SiB911ADJ	- 20	8			0.116		0.155	0.205				4.5		4.9	6.5
PowerPAK SC-75															
SiB911DK	- 20	8			0.295		0.42	0.56				2.6		1.6	3.1
SC89-6															
Si1023X	- 20				1.2		1.6	2.7				0.4		1.5	0.3
Si1025X	- 60			4	8						a	0.2	1.7		0.28

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



N & P Channel

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
DPAK (TO-252-4)													
SUD50NP04-77P	40	20	0.037	0.046						8	11.7	5.3	10.8
	-40	20	0.04	0.05						8	38.5	17	24
PowerPAK SO-8													
Si7540DP	12	8		0.017		0.025				11.8		11.5	3.5
	-12	8		0.032		0.053				8.9		13	3.5
Si7530DP	60	20	0.075	0.1						4.6	12		3.3
	-60	20	0.064	0.08						5	26		3.5
SO-8													
Si4501ADY	30	20	0.018	0.027						8.8		11.5	2.5
	-8	8		0.042		0.06				5.7		13.5	2.5
Si4511DY	20	16	0.0145	0.017						9.6		11.5	2
	-20	12		0.033		0.05				6.2		17	2
Si4500BDY	20	12		0.02		0.03				9.1		11	2.5
	-20	12		0.06		0.1				5.3		6	2.5
Si4532CDY	30	20	0.047	0.065						6	6	2.75	2.78
	-30	20	0.089	0.14						4.3	7.8	4.1	2.78
Si4563DY	40	16	0.016	0.019						8	56	26	3.25
	-40	16	0.025	0.032						8	52	25.5	3.25
Si4561DY	40	20	0.0355	0.0425						6.8	11.7	5.3	3
	-40	20	0.035	0.047						7.2	38.5	17	3.3
Si4599DY	40	20	0.0355	0.0425						6.8	11.7	5.3	3
	-40	20	0.045	0.062						5.8	25	11.8	3.1
Si4567DY	40	16	0.06	0.07						5	8	3.7	2.75
	-40	16	0.085	0.122						4.4	12	6	2.95
Si4559ADY	60	20	0.058	0.072						5.3	13	6	3.1
	-60	20	0.12	0.15						3.9	14.5	8	3.4
TSSOP-8													
Si6562CDQ	20	12		0.022		0.036				6.7	15	6.7	1.6
	-20	12		0.03		0.045				6.1	34	17	1.7

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

N & P-channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
TSSOP-8, continued													
Si6544BDQ	30	20	0.032	0.046						4.3	9.5	1.14	
	-30	20	0.043	0.073						3.8	16	1.14	
PowerPAK 1212-8													
Si7501DN	30	20	0.035	0.05						7.7	9	3.1	
	-30	25	0.051	0.075					d	6.4	12.5	3.1	
TSOP-6													
Si3586DV	20	8		0.06		0.07	0.1			3.4		4.1	1.15
	-20	8		0.11		0.145	0.22			2.5		5	1.15
Si3588DV	20	8		0.08		0.1	0.128			3		5	1.15
	-20	8		0.145		0.2	0.3			2.2		5	1.15
Si3585DV	20	12		0.2		0.34				2.4		2.1	1.15
	-20	12		0.125		0.2				1.8		2.7	1.15
Si3850ADV	20	12		0.3		0.41				1.4		0.95	1.08
	-20	12		0.64		0.98				0.96		1.1	1.08
Si3590DV	30	12		0.077		0.12				3		3	1.15
	-30	12		0.17		0.3				2		3.8	1.15
Si3552DV	30	20	0.105	0.175						2.5		2.1	1.15
	-30	20	0.2	0.36						1.8		2.4	1.15
PowerPAK ChipFET													
Si5519DU	20	12		0.036		0.063				6	11.65	5.4	10.4
	-20	12		0.064		0.095				6	11.7	6	10.4
Si5517DU	20	8		0.039		0.045	0.055			6		6	8.3
	-20	8		0.072		0.1	0.131			6		5.5	8.3
1206-8 ChipFET													
Si5515CDC	20	8		0.036		0.041	0.05			4		6.5	3.1
	-20	8		0.1		0.12	0.156			4		6.2	3.1
Si5509DC	20	12		0.052		0.084				6.1		3.8	4.5
	-20	12		0.09		0.16				4.8		3.9	4.5
Si5513CDC	20	12		0.055		0.085				4		2.6	3.1
	-20	12		0.15		0.255				3.7		3.6	3.1
Si5511DC	30	12		0.055		0.09				4		4.2	3.1
	-30	12		0.15		0.256				3.6		3.8	2.6

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)
























N & P-channel, continued

Part Number	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω						Footnote	I _D (A)	Q _g (nC)		P _D (W)
			V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
1206-8 ChipFET, continued													
Si5504BDC	30	20	0.065	0.1						4	4.5	2	3.12
	-30	20	0.14	0.235						3.7	4.5	2.2	3.1
SC70-6													
Si1555DL	20	12		0.385		0.63				0.7		0.8	0.3
	-8	8		0.6		0.85	1.2			0.6		1.5	0.3
Si1563DH	20	8		0.28		0.36	0.45			1.28		1.25	0.74
	-20	8		0.49		0.75	1.1			1		1.2	0.3
Si1563EDH	20	12		0.28		0.36	0.45			1.28		0.65	0.74
	-20	12		0.49		0.75	1.1			1		1.2	0.3
Si1553DL	20	12		0.385		0.63				0.7		0.8	0.3
	-20	12		0.995		1.8				0.44		1.2	0.3
Si1551DL	20	12		1.9		4.2				0.3		0.72	0.3
	-20	12		0.995		1.8				0.44		0.52	0.3
Si1539DL	30	20	0.48	0.7						0.63	0.86		0.3
	-30	20	0.94	1.7						0.45	0.9		0.3
PowerPAK SC-70													
SiA517DJ	12	8		0.029		0.034	0.044	0.065		4.5		5.6	6.5
	-12	8		0.061		0.081	0.115	0.17		4.5		8.2	6.5
SiA519EDJ	20	12		0.04		0.065				4.5	7.7	3.7	7.8
	-20	12		0.09		0.137				4.5	10.5	5.3	7.8
SiA513DJ	20	12		0.06		0.092				4.5	7.5	3.5	6.5
	-20	12		0.11		0.185				4.5	6	3	6.5
SC89-6													
Si1016X	20			0.7		0.85	1.25			0.5		1.5	0.3
	-20			1.2		1.6	2.7			0.4		0.75	0.3
Si1035X	20			5		7	9			0.14		0.75	0.2
	-20			8		12	15			0.16		1.5	0.3
Si1029X	60		1.25	3						0.33		0.75	0.25
	-60		5	10						0.16		1.7	0.3






- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Packaging Information

Power MOSFET Packages*	Max Length (mm)	Max Width (mm)	Max Footprint Area (mm ²)	Max Height (mm)	Max Current (A)	Max Temp (°C)	R _{th,JF} or R _{th,JC} (°C/W)
T0-220 	10.41	4.7	48.93	29.71	85	175	0.6
T0-262 	10.41	4.7	48.93	25.27	85	175	0.6
D ² PAK 	15.88	10.41	165.37	4.83	110	175	0.4
D ² PAK-5 					85	175	0.6
DPAK 					60	175	0.5
T0-92/T0-92S 	4.7	3.68	17.30	19.94	0.67	150	1.2
PolarPAK 	6.3	5.31	33.45	0.85	45	150	1.0 + 1.0
PowerPAK SO-8 	6.2	5.26	32.61	1.2	29	150	1.5
PowerPAK SO-8L 	6.25	5.25	32.81	1.14	26	150	1.8
SO-16 	10	6.2	62.00	1.75	13.5	150	20
SO-8 	5	6.2	31.00	1.75	25	150	16
PowerPAIR 6 x 3.7 	6.08	3.81	23.16	0.8	16	150	4.6
TSSOP-8 	3.1	6.6	20.46	1.2	11	150	52
PowerPAK 1212-8 	3.4	3.4	11.56	1.2	14.4	150	2.4
PowerPAK 2 x 5 	5.10	2.15	10.97	0.84	7	150	6
TSOP-6 	3.1	2.98	9.24	1.1	6.8	150	30
PowerPAK ChipFET 	3.08	1.98	6.10	0.85	11.6	150	4
ChipFET 1206-8 	3.1	1.915	5.58	1.1	9.5	150	20
SOT-23 	3.04	2.64	8.03	1.12	4.9	150	50
PowerPAK SC-70 	2.15	2.15	4.62	0.8	12	150	6.5
SC-70 	2.2	2.4	5.28	1.1	3.9	150	45



Packaging Information, continued

Power MOSFET Packages*		Max Length (mm)	Max Width (mm)	Max Footprint Area (mm ²)	Max Height (mm)	Max Current (A)	Max Temp (°C)	R _{thJF} or R _{thJC} (°C/W)
SOT-923		1.1	0.65	0.715	0.43	0.35	150	65
MICRO FOOT		See individual datasheet			0.65	7	150	20
PowerPAK SC-75		1.7	1.7	2.89	0.8	8	150	9.5
SC-75A		1.6	1.7	2.72	0.8	0.5	150	
SC-89		1.7	1.7	2.89	0.6	0.5	150	



Alphanumeric Index

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
2N7002E	SINGLE N	SOT-23	60	20		3	4							0.25	0.4		0.35
2N7002K	SINGLE N	SOT-23	60	20		2	4							0.3		0.4	0.35
BS250KL	SINGLE P	TO-92	- 60	20		6	10						a	0.27	1.7		0.8
Si1012R	SINGLE N	SC75A	20				0.7		0.85	1.25				0.5		0.75	0.15
Si1012X	SINGLE N	SC89-3	20				0.7		0.85	1.25				0.5		0.75	0.25
Si1013R	SINGLE P	SC75A	- 20				1.2		1.6	2.7				0.37		1.5	0.25
Si1013X	SINGLE P	SC89-3	- 20				1.2		1.6	2.7				0.4		1.5	0.3
Si1016X	N&P PAIR N	SC89-6	20				0.7		0.85	1.25				0.5		1.5	0.3
	N&P PAIR P		- 20				1.2		1.6	2.7				0.4		0.75	0.3
Si1021R	SINGLE P	SC75A	- 60			5	10						a	0.17	1.7		0.25
Si1022R	SINGLE N	SC75A	60			1.25	3							0.33			0.25
Si1023X	DUAL P	SC89-6	- 20				1.2		1.6	2.7				0.4		1.5	0.3
Si1024X	DUAL N	SC89-6	20				0.7		0.85	1.25				0.5		0.75	0.25
Si1025X	DUAL P	SC89-6	- 60			4	8						a	0.2	1.7		0.28
Si1026X	DUAL N	SC89-6	60			1.4	3							0.33		0.6	0.25
Si1029X	N&P PAIR N	SC89-6	60			1.25	3							0.33		0.75	0.25
	N&P PAIR P		- 60			5	10							0.16		1.7	0.3
Si1031R	SINGLE P	SC75A	- 20				8		12	15				0.14		1.5	0.25
Si1032R	SINGLE N	SC75A	20				5		7	9				0.14		0.75	0.2
Si1032X	SINGLE N	SC89-3	20				5		7	9				0.14		0.75	0.2
Si1034X	DUAL N	SC89-6	20				5		7	9				0.14		0.75	0.2
Si1035X	N&P PAIR N	SC89-6	20				5		7	9				0.14		0.75	0.2
	N&P PAIR P		- 20				8		12	15				0.16		1.5	0.3
Si1040X	LEVEL SHIFT P	SC89-6	- 8			0.625		0.89	1.25					0.43			0.174
Si1046R	SINGLE N	SC75A	20	8		0.42		0.501	0.66					0.606		0.92	0.25
Si1046X	SINGLE N	SC89-3	20	8		0.42		0.501	0.66					0.606		0.92	0.25
Si1050X	SINGLE N	SC89-6	8	5		0.086		0.093	0.102	0.12				1.34		7.1	0.236
Si1051X	SINGLE P	SC89-6	- 8	5		0.122		0.141	0.168	0.198				1.2		5.91	0.236
Si1054X	SINGLE N	SC89-6	12	8		0.095		0.104	0.114					1.32		5.25	0.236
Si1056X	SINGLE N	SC89-6	20	8		0.089		0.098	0.121					1.32		5.2	0.236
Si1058X	SINGLE N	SC89-6	20	12		0.091		0.124						1.3		3.51	0.236
Si1065X	SINGLE P	SC89-6	- 12	8		0.13		0.158	0.205					1.18		6.7	0.236
Si1067X	SINGLE P	SC89-6	- 20	8		0.15		0.166	0.214					1.06		6	0.236

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si1069X	SINGLE P	SC89-6	- 20	12			0.184		0.268					0.94		4.23	0.236
Si1070X	SINGLE N	SC89-6	30	12			0.099		0.14					1.2		3.5	0.236
Si1071X	SINGLE P	SC89-6	- 30	12		0.167	0.188		0.244					0.96	8.87	4.43	0.236
Si1072X	SINGLE N	SC89-6	30	20		0.093	0.129							1.3	5.5	2.7	0.236
Si1073X	SINGLE P	SC89-6	- 30	20		0.173	0.243							0.98	6.3	3.25	0.236
Si1300BDL	SINGLE N	SC70-3	20	8			0.85		1.08					0.4		0.56	0.2
Si1302DL	SINGLE N	SC70-3	30	20		0.48	0.7							0.64	0.86		0.31
Si1303DL	SINGLE P	SC70-3	- 20	12			0.43	0.48	0.7					0.72		1.7	0.34
Si1304BDL	SINGLE N	SC70-3	30	12			0.29		0.385					0.9		1.8	0.37
Si1305DL	SINGLE P	SC70-3	- 8	8			0.28		0.38	0.53				0.92		2.6	0.34
Si1307EDL	SINGLE P	SC70-3	- 12	8			0.29		0.435	0.58				0.91		3.2	0.34
Si1330EDL	SINGLE N	SC70-3	60	20		2.5	3	8					e	0.25		0.4	0.31
Si1400DL	SINGLE N	SC70-6	20	12			0.15		0.235					1.7		2.1	0.625
Si1403BDL	SINGLE P	SC70-6	- 20	12			0.15	0.175	0.265				p	1.5		2.9	0.625
Si1405BDH	SINGLE P	SC70-6	- 8	8			0.112		0.16	0.21				1.6		3.67	2.27
Si1406DH	SINGLE N	SC70-6	20	8			0.065		0.075	0.096				3.9		4.9	1.56
Si1410EDH	SINGLE N	SC70-6	20	12			0.07		0.08	0.1				3.7		5.6	1.56
Si1411DH	SINGLE P	SC70-6	- 150	20		2.6	2.7						d	0.52	4.2		1.56
Si1413EDH	SINGLE P	SC70-6	- 20	12			0.115		0.155	0.22				2.9		5.6	1.56
Si1417EDH	SINGLE P	SC70-6	- 12	12			0.085		0.115	0.16				3.3		5.8	1.56
Si1419DH	SINGLE P	SC70-6	- 200	20		5	5.1						d	0.38	4.1		1.56
Si1426DH	SINGLE N	SC70-6	30	20		0.075	0.115							3.6		1.9	1.6
Si1450DH	SINGLE N	SC70-6	8	5			0.047		0.051	0.058	0.069			6.04		4.24	2.78
Si1467DH	SINGLE P	SC70-6	- 20	8			0.09		0.115	0.15				1.6		9	2.78
Si1469DH	SINGLE P	SC70-6	- 20	12		0.08	0.1		0.155					1.6		5.5	2.78
Si1470DH	SINGLE N	SC70-6	30	12			0.066		0.095					5.1		4.85	2.8
Si1471DH	SINGLE P	SC70-6	- 30	12		0.1	0.12		0.175					1.6		6.5	2.78
Si1472DH	SINGLE N	SC70-6	30	20		0.057	0.082							5.6	7	3.3	2.8
Si1473DH	SINGLE P	SC70-6	- 30	20		0.1	0.145							1.6		4.1	2.78
Si1488DH	SINGLE N	SC70-6	20	8			0.049		0.056	0.065				6.1		6	2.8
Si1499DH	SINGLE P	SC70-6	- 8	5			0.078		0.095	0.115	0.153	0.424		1.6		10.5	2.78
Si1539DL	N&P PAIR N	SC70-6	30	20		0.48	0.7							0.63	0.86		0.3
	N&P PAIR P		- 30	20		0.94	1.7								0.45	0.9	

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si1551DL	N&P PAIR N	SC70-6	20	12			1.9		4.2					0.3		0.72	0.3
	N&P PAIR P		- 20	12			0.995		1.8					0.44		0.52	0.3
Si1553DL	N&P PAIR N	SC70-6	20	12			0.385		0.63					0.7		0.8	0.3
	N&P PAIR P		- 20	12			0.995		1.8					0.44		1.2	0.3
Si1555DL	N&P PAIR N	SC70-6	20	12			0.385		0.63					0.7		0.8	0.3
	N&P PAIR P		- 8	8			0.6		0.85	1.2				0.6		1.5	0.3
Si1563DH	N&P PAIR N	SC70-6	20	8			0.28		0.36	0.45				1.28		1.25	0.74
	N&P PAIR P		- 20	8			0.49		0.75	1.1				1		1.2	0.3
Si1563EDH	N&P PAIR N	SC70-6	20	12			0.28		0.36	0.45				1.28		0.65	0.74
	N&P PAIR P		- 20	12			0.49		0.75	1.1				1		1.2	0.3
Si1869DH	LEVEL SHIFT	SC70-6	- 20	8			0.165		0.222	0.303				1.2			1
Si1902DL	DUAL N	SC70-6	20	12			0.385		0.63					0.7		0.8	0.3
Si1903DL	DUAL P	SC70-6	- 20	12			0.995	1.19	1.8					0.44		1.2	0.3
Si1905BDH	DUAL P	SC70-6	- 8	8			0.542		0.798	1.2				0.63		1	0.357
Si1912EDH	DUAL N	SC70-6	20	12			0.28		0.36	0.45				1.28		0.65	0.74
Si1917EDH	DUAL P	SC70-6	- 12	12			0.37		0.575	0.8				1.15		1.3	0.73
Si1926DL	DUAL N	SC70-6	60	20		1.4	3							0.37	0.9	0.5	0.51
Si1958DH	DUAL N	SC70-6	20	12			0.205		0.34					1.3	2.5	1.2	1.25
Si1965DH	DUAL P	SC70-6	- 12	8			0.39		0.535	0.71				1.3		1.7	1.25
Si1967DH	DUAL P	SC70-6	- 20	8			0.49		0.64	0.79				1.3		1.6	1.25
Si1972DH	DUAL N	SC70-6	30	20		0.19	0.344							1.3		0.91	1.25
Si1988DH	DUAL N	SC70-6	20	8			0.168		0.2	0.25				1.3		1.6	1.25
Si2301CDS	SINGLE P	SOT-23	- 20	8			0.112		0.142					3.1		5.5	1.6
Si2302CDS	SINGLE N	SOT-23	20	8			0.057		0.075					2.9		3.5	0.86
Si2303CDS	SINGLE P	SOT-23	- 30	20		0.19	0.33							2.7	4	2	2.3
Si2304DDS	SINGLE N	SOT-23	30	20		0.06	0.075							3.6	4.5	2.1	1.7
Si2305CDS	SINGLE P	SOT-23	- 8	8			0.035		0.048	0.065				5.8		12	1.7
Si2306BDS	SINGLE N	SOT-23	30	20		0.047	0.065						b	4		3	1.25
Si2307CDS	SINGLE P	SOT-23	- 30	20		0.088	0.138							3.5		4.1	1.8
Si2308BDS	SINGLE N	SOT-23	60	20		0.156	0.192							2.3	4.5	2.3	1.66
Si2309CDS	SINGLE P	SOT-23	- 60	20		0.345	0.45							1.6		2.7	1.7
Si2312BDS	SINGLE N	SOT-23	20	8			0.031		0.037	0.047				5		7.5	1.25
Si2318DS	SINGLE N	SOT-23	40	20		0.045	0.058							3.9	10		1.25

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si2319DS	SINGLE P	SOT-23	- 40	20		0.082	0.13								3	11.3		1.25
Si2323DS	SINGLE P	SOT-23	- 20	8			0.039		0.052	0.068					4.7		12.5	1.25
Si2325DS	SINGLE P	SOT-23	- 150	20		1.2	1.3							d	0.69	7.7		1.25
Si2327DS	SINGLE P	SOT-23	- 200	20		2.35	2.45							d	0.49	8		1.25
Si2328DS	SINGLE N	SOT-23	100	20		0.25									1.5	3.3		1.25
Si2333CDS	SINGLE P	SOT-23	- 12	8			0.035		0.045	0.059					7.1		15	2.5
Si2337DS	SINGLE P	SOT-23	- 80	20		0.27	0.303							d, q	2.2	11	7	2.5
Si2343DS	SINGLE P	SOT-23	- 30	20		0.053	0.086								4	14		1.25
Si2351DS	SINGLE P	SOT-23	- 20	12			0.115		0.205						2.8		3.2	2.1
Si2367DS	SINGLE P	SOP-23	- 20	8			0.066		0.086	0.13					3.8		9	1.7
Si3407DV	SINGLE P	TSOP-6	- 20	12			0.024		0.0372						8	42	21	4.2
Si3410DV	SINGLE N	TSOP-6	30	20		0.0195	0.023								8	21.8	9.2	4.1
Si3424BDV	SINGLE N	TSOP-6	30	20		0.028	0.038								8	13.05	6.2	2.98
Si3430DV	SINGLE N	TSOP-6	100	20		0.17	0.185							d	2.4	5.5		2
Si3433CDV	SINGLE P	TSOP-6	- 20	8			0.038		0.046	0.06					6		18	3.3
Si3437DV	SINGLE P	TSOP-6	- 150	20		0.75	0.79							d	1.4	12.2	8	3.2
Si3438DV	SINGLE N	TSOP-6	40	20		0.0355	0.0425								7.4	11.7	5.3	3.5
Si3440DV	SINGLE N	TSOP-6	150	20		0.375	0.4							d	1.5	5.4		2
Si3441BDV	SINGLE P	TSOP-6	- 20	8			0.09		0.13						2.9		5.2	1.25
Si3442BDV	SINGLE N	TSOP-6	20	12			0.057		0.09						4.2		3	1.67
Si3443CDV	SINGLE P	TSOP-6	- 20	12			0.06		0.1						5.97		7.53	3.2
Si3446ADV	SINGLE N	TSOP-6	20	12			0.037		0.065						6	13	5.6	3.2
Si3447CDV	SINGLE P	TSOP-6	- 12	8			0.036		0.05	0.068					7.8		12	3
Si3456DDV	SINGLE N	TSOP-6	30	20		0.04	0.05								6.3	6	2.8	2.7
Si3457CDV	SINGLE P	TSOP-6	- 30	20		0.074	0.113								5.1	10	5.1	3
Si3458BDV	SINGLE N	TSOP-6	60	20		0.1	0.128								4.1	7.1	3.5	3.3
Si3459BDV	SINGLE P	TSOP-6	- 60	20		0.216	0.288								2.9	7.7	4.4	3.3
Si3460BDV	SINGLE N	TSOP-6	20	8			0.027		0.032	0.04					8		9	3.5
Si3467DV	SINGLE P	TSOP-6	- 20	20		0.054	0.094								5	8.7		2
Si3469DV	SINGLE P	TSOP-6	- 20	20		0.03	0.051								6.7	20		2
Si3473CDV	SINGLE P	TSOP-6	- 12	8			0.022		0.028	0.036					8		26	4.2
Si3475DV	SINGLE P	TSOP-6	- 200	20		1.61	1.65							d	0.95	11.7	7.8	3.2

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si3483CDV	SINGLE P	TSOP-6	- 30	20		0.034	0.053							8	22	11.5	4.2
Si3493BDV	SINGLE P	TSOP-6	- 20	8			0.0275		0.034	0.045				8		26.2	2.97
Si3495DV	SINGLE P	TSOP-6	- 20	5			0.024		0.03	0.038	0.047			7		25	2
Si3499DV	SINGLE P	TSOP-6	- 8	5			0.023		0.029	0.036	0.045			7		28	2
Si3552DV	N&P PAIR N	TSOP-6	30	20		0.105	0.175							2.5		2.1	1.15
	N&P PAIR P		- 30	20		0.2	0.36							1.8		2.4	1.15
Si3585DV	N&P PAIR N	TSOP-6	20	12			0.2		0.34					2.4		2.1	1.15
	N&P PAIR P		- 20	12			0.125		0.2					1.8		2.7	1.15
Si3586DV	N&P PAIR N	TSOP-6	20	8			0.06		0.07	0.1				3.4		4.1	1.15
	N&P PAIR P		- 20	8			0.11		0.145	0.22				2.5		5	1.15
Si3588DV	N&P PAIR N	TSOP-6	20	8			0.08		0.1	0.128				3		5	1.15
	N&P PAIR P		- 20	8			0.145		0.2	0.3				2.2		5	1.15
Si3590DV	N&P PAIR N	TSOP-6	30	12			0.077		0.12					3		3	1.15
	N&P PAIR P		- 30	12			0.17		0.3					2		3.8	1.15
Si3805DV	SINGLE PLUS INTEGRATED SCHOTTKY P	TSOP-6	- 20	12		0.084	0.108		0.175					3.3	8	4	1.4
Si3812DV	SINGLE PLUS INTEGRATED SCHOTTKY P	TSOP-6	20	20			0.125		0.2					2.4		2.1	1.15
Si3850ADV	N&P PAIR N	TSOP-6	20	12			0.3		0.41					1.4		0.95	1.08
	N&P PAIR P		- 20	12			0.64		0.98					0.96		1.1	1.08
Si3851DV	SINGLE PLUS INTEGRATED SCHOTTKY P	TSOP-6	- 30	20		0.2	0.36							1.8		2.4	1.15
Si3861BDV	LEVEL SHIFT P	TSOP-6	- 20	8		0.075	0.145							2.3			0.83
Si3865CDV	LEVEL SHIFT P	TSOP-6	- 12				0.06		0.095	0.13				2.8			0.83
Si3867DV	SINGLE P	TSOP-6	- 20	12			0.051	0.067	0.1					5.1		7	2
Si3879DV	SINGLE PLUS INTEGRATED SCHOTTKY P	TSOP-6	- 20	12			0.07		0.105				t	5	9.7	4.5	3.3
Si3900DV	DUAL N	TSOP-6	20	12			0.125		0.2					2.4		2.1	1.15
Si3948DV	DUAL N	TSOP-6	30	20		0.105	0.175							2.5		2.1	1.15
Si3951DV	DUAL P	TSOP-6	- 20	12			0.115		0.205					2.7		3.2	2
Si3981DV	DUAL P	TSOP-6	- 20	8			0.185		0.26	0.385				1.9		3.2	1.08
Si3993DV	DUAL P	TSOP-6	- 30	20		0.133	0.245							2.2		3.1	1.15

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si4100DY	SINGLE N	S0-8	100	20		0.063	0.084							d, q	6.8	13.5	9	6
Si4102DY	SINGLE N	S0-8	100	20		0.158	0.175							d, q	3.8	7.1	4.6	4.8
Si4104DY	SINGLE N	S0-8	100	20		0.105									4.6	8.5		5
Si4108DY	SINGLE N	S0-8	75	20		0.0098									20.5	36		7.8
Si4110DY	SINGLE N	S0-8	80	20		0.013									17.3	35		7.8
Si4114DY	SINGLE N	S0-8	20	16		0.006	0.007								20	62	27.5	5.7
Si4116DY	SINGLE N	S0-8	25	12		0.0086	0.0095		0.0115						18	37	17.5	5
Si4122DY	SINGLE N	S0-8	40	25		0.0045	0.006								27.2	62	29	6
Si4124DY	SINGLE N	S0-8	40	20		0.0075	0.009								20.5	51	21	5.7
Si4126DY	SINGLE N	S0-8	30	20		0.0028	0.0034								39	70	30	7.8
Si4128DY	SINGLE N	S0-8	30	20		0.024	0.03								10.9	8	3.8	5
Si4134DY	SINGLE N	S0-8	30	20		0.014	0.0175								14	15.4	7.3	5
Si4136DY	SINGLE N	S0-8	20	20		0.002	0.0025								46	73	34	7.8
Si4154DY	SINGLE N	S0-8	40	20		0.0033	0.0039								36	70	32.5	7.8
Si4156DY	SINGLE N	S0-8	30	20		0.006	0.008								34	28	12	6
Si4160DY	SINGLE N	S0-8	30	20		0.0049	0.0063								25.4	36	16.8	5.7
Si4162DY	SINGLE N	S0-8	30	20		0.0079	0.01								19.3	20	8.8	5
Si4164DY	SINGLE N	S0-8	30	20		0.0032	0.0039								30	62	26.5	6
Si4166DY	SINGLE N	S0-8	30	20		0.0039	0.0055								30.5	42.5	21.5	6.5
Si4168DY	SINGLE N	S0-8	30	20		0.0057	0.0076								24	29	13.8	5.7
Si4172DY	SINGLE N	S0-8	30	20		0.012	0.015							b	15	15	6.8	4.5
Si4174DY	SINGLE N	S0-8	30	20		0.0095	0.013								17	18	8	5
Si4186DY	SINGLE N	S0-8	20	20		0.0026	0.0032								35.8	60	28.7	6
Si4210DY	DUAL N	S0-8	30	20		0.0355	0.044								6.5	8	3.7	2.7
Si4214DDY	DUAL N	S0-8	30	20		0.0195	0.023								8.5	14.5	7.1	3.1
Si4226DY	DUAL N	S0-8	25	12			0.0195		0.026						8	24	11	3.2
Si4230DY	DUAL N	S0-8	30	20		0.0205	0.026								8	16.5	7.3	3.2
Si4340CDY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-14	20	20		0.0094	0.0125								14.1	21	9.6	3
			20	16		0.008	0.0095								20	31	14.1	5.4
Si4388DY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.016	0.024								10.7	18	8	3.3
			30	12		0.015	0.017								11.3	41	19	3.5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si4396DY	SINGLE PLUS INTEGRATED SCHOTTKY N	SO-8	30	20		0.0115	0.016							b	16	29.6	13.3	5.4
Si4401BDY	SINGLE P	SO-8	- 40	20		0.014	0.021							b	10.5		40	2.9
Si4403BDY	SINGLE P	SO-8	- 20	8			0.017			0.023	0.032			b	9.9		33	2.5
Si4409DY	SINGLE P	SO-8	- 150	20		1.2	1.3							d	1.3	7.7	4.8	4.6
Si4418DY	SINGLE N	SO-8	200	20		0.13	0.142							d	3	20		2.5
Si4425DDY	SINGLE P	SO-8	- 30	20		0.098	0.0165								19.7	53	27	5.7
Si4427BDY	SINGLE P	SO-8	- 30	12		0.0105	0.0125			0.0195					12.6		47.2	2.5
Si4431CDY	SINGLE P	SO-8	- 30	20		0.032	0.049								9	25	13	4.2
Si4434DY	SINGLE N	SO-8	250	20		0.155	0.162							d	3	34		3.1
Si4435DDY	SINGLE P	SO-8	- 30	20		0.024	0.035								11.4	32	15	5
Si4436DY	SINGLE N	SO-8	60	20		0.036	0.043								8	21	10.5	5
Si4446DY	SINGLE N	SO-8	40	12		0.04	0.045								5.2		8	2
Si4447DY	SINGLE P	SO-8	- 40	16		0.054	0.072								4.5		9	2
Si4455DY	SINGLE P	SO-8	- 150	20		0.295	0.315							d, q	2.8	27.5	23.2	5.9
Si4459ADY	SINGLE P	SO-8	- 30	20		0.005	0.0078								29	129	61	7.8
Si4462DY	SINGLE N	SO-8	200	20		0.48	0.51							d	1.5	6		2.5
Si4463BDY	SINGLE P	SO-8	- 20	12		0.011	0.014			0.02					13.7		37	3
Si4464DY	SINGLE N	SO-8	200	20		0.24	0.26							d	2.2	12		2.5
Si4465ADY	SINGLE P	SO-8	- 8	8			0.009			0.011	0.016				13.7		55	3
Si4470EY	SINGLE N	SO-8	60	20		0.011	0.013							d	12.7	46		3.75
Si4472DY	SINGLE N	SO-8	150	20		0.045	0.047							r	7.7	28.5		5.9
Si4477DY	SINGLE P	SO-8	- 20	12			0.0062			0.0105					26.6	125	59	6.6
Si4480DY	SINGLE N	SO-8	80	20		0.035	0.04							d	6	30		2.5
Si4483ADY	SINGLE P	SO-8	- 30	25		0.0088	0.0153								19.2	90	44.8	5.9
Si4484EY	SINGLE N	SO-8	100	20		0.034	0.04							d	6.9	24		3.8
Si4485DY	SINGLE P	SO-8	- 30	20		0.042	0.072								6	13.6	7	5
Si4486EY	SINGLE N	SO-8	100	20		0.025	0.028							d	7.9	36		3.8
Si4488DY	SINGLE N	SO-8	150	20		0.05									5	30		3.1
Si4490DY	SINGLE N	SO-8	200	20		0.08	0.09							d	4	34		3.1
Si4500BDY	N&P PAIR N	SO-8	20	12			0.02			0.03					9.1		11	2.5
	N&P PAIR P		- 20	12			0.06				0.1				5.3		6	2.5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si4501ADY	N&P PAIR N	SO-8	30	20		0.018	0.027							8.8		11.5	2.5
	N&P PAIR P		- 8	8			0.042		0.06					5.7		13.5	2.5
Si4511DY	N&P PAIR N	SO-8	20	16		0.0145	0.017							9.6		11.5	2
	N&P PAIR P		- 20	12			0.033		0.05					6.2		17	2
Si4532CDY	N&P PAIR N	SO-8	30	20		0.047	0.065							6	6	2.75	2.78
	N&P PAIR P		- 30	20		0.089	0.14							4.3	7.8	4.1	2.78
Si4559ADY	N&P PAIR N	SO-8	60	20		0.058	0.072							5.3	13	6	3.1
	N&P PAIR P		- 60	20		0.12	0.15							3.9	14.5	8	3.4
Si4561DY	N&P PAIR N	SO-8	40	20		0.0355	0.0425							6.8	11.7	5.3	3
	N&P PAIR P		- 40	20		0.035	0.047							7.2	38.5	17	3.3
Si4563DY	N&P PAIR N	SO-8	40	16		0.016	0.019							8	56	26	3.25
	N&P PAIR P		- 40	16		0.025	0.032							8	52	25.5	3.25
Si4567DY	N&P PAIR N	SO-8	40	16		0.06	0.07							5	8	3.7	2.75
	N&P PAIR P		- 40	16		0.085	0.122							4.4	12	6	2.95
Si4599DY	N&P PAIR N	SO-8	40	20		0.0355	0.0425							6.8	11.7	5.3	3
	N&P PAIR P		- 40	20		0.045	0.062							5.8	25	11.8	3.1
Si4618DY	DUAL PLUS INTEGRATED SCHOTTKY N	SO-8	30	16		0.017	0.0195							8	29	12.5	1.98
			30	16		0.01	0.0115							15.2	39	17	4.16
Si4620DY	SINGLE PLUS INTEGRATED SCHOTTKY N	SO-8	30	20		0.035	0.052							7.5	8.6	4.2	3.1
Si4621DY	SINGLE PLUS INTEGRATED SCHOTTKY P	SO-8	- 20	20		0.054	0.094							6.2	8.7	4.5	3.1
Si4622DY	DUAL PLUS INTEGRATED SCHOTTKY (SkyFET) N	SO-8	30	20		0.016	0.0186							8	40	19	3.3
			30	16		0.0264	0.029							8	13.2	6	3.1
Si4628DY	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	SO-8	30	20		0.003	0.0038							38	58	27.5	7.8
Si4630DY	SINGLE N	SO-8	25	16		0.0027	0.0032							40	107.5	49	7.8
Si4634DY	SINGLE N	SO-8	30	20		0.0052	0.0067							24.5	45.5	21.5	5.7

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si4636DY	SINGLE PLUS INTEGRATED SCHOTTKY N	S0-8	30	16		0.0085	0.0105							17	40	18.8	4.4
Si4638DY	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	S0-8	30	20		0.0065	0.008							22.4	66.5	27.5	5.9
Si4650DY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.018	0.022							8	25.5	10.5	3.1
			30	20		0.018	0.022							8	25.5	10.5	3.1
Si4654DY	SINGLE N	S0-8	25	16		0.004	0.005							28.6	63	29	5.9
Si4660DY	SINGLE N	S0-8	25	16		0.0058	0.007							23.1	30	17	5.6
Si4670DY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	25	16		0.023	0.028							8	12	5.5	2.8
			25	16		0.023	0.028							8	12	5.5	2.8
Si4712DY	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	S0-8	30	20		0.013	0.0165							14.6	18.5	8.3	5
Si4778DY	SINGLE N	S0-8	25	16		0.023	0.028							8	12	5.5	5
Si4803DY	SINGLE P	S0-8	-20	12			0.065		0.105					5	9.7	4.5	3
Si4804CDY	DUAL N	S0-8	30	20		0.022	0.027							8	15.4	7	3.1
Si4812BDY	SINGLE PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.016	0.021						b	9.5		8.5	2.5
Si4816BDY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.0185	0.0225						b, k	6.8		7.8	1.4
			30	20		0.0115	0.016						b, k	11.4		11.6	2.4
Si4823DY	DUAL PLUS INTEGRATED SCHOTTKY P	D0-8	- 20	12			0.108		0.175					4.1	8	4	2.8
Si4825DDY	SINGLE P	S0-8	- 30	25		0.0125	0.0205							14.9	57	29.5	5
Si4829DY	SINGLE PLUS INTEGRATED SCHOTTKY P	S0-8	- 20	12			0.215		0.32					2	5.2	2.6	3.1
Si4830CDY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.02	0.025							8	16.5	7.3	2.9
			30	20		0.02	0.025							8	16.5	7.3	2.9

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si4831BDY	SINGLE PLUS INTEGRATED SCHOTTKY P	S0-8	- 30	20		0.042	0.065								6.6	17	7.8	3.3
Si4833ADY	SINGLE PLUS INTEGRATED SCHOTTKY P	S0-8	- 30	20		0.072	0.11								4.6	9.8	4.6	2.75
Si4834CDY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.02	0.025								8	16.5	7.3	2.9
			30	20		0.02	0.025								8	16.5	7.3	2.9
Si4835DDY	SINGLE P	S0-8	- 30	25		0.018	0.03								13	43	22	5.6
Si4838BDY	SINGLE N	S0-8	12	8			0.0027		0.0032	0.004					34		56	5.7
Si4840BDY	SINGLE N	S0-8	40	20		0.009	0.012								19	33	15	6
Si4848DY	SINGLE N	S0-8	150	20		0.085	0.095						d	3.7	17			3
Si4850EY	SINGLE N	S0-8	60	20		0.022	0.031								8.5	18		3.3
Si4866BDY	SINGLE N	S0-8	12	8			0.0053		0.006	0.0074					21.5		52	4.45
Si4890BDY	SINGLE N	S0-8	30	25		0.012	0.016								16	22	10	5.7
Si4896DY	SINGLE N	S0-8	80	20		0.0165	0.022						d	9.5	34			3.1
Si4904DY	DUAL N	S0-8	40	16		0.016	0.019								8	56	26	3.25
Si4906DY	DUAL N	S0-8	40	16		0.039	0.05								6.6	14.4	6.6	3.1
Si4910DY	DUAL N	S0-8	40	16		0.027	0.032								7.6	21	9.6	3.1
Si4913DY	DUAL P	S0-8	- 20	8			0.015		0.019	0.024					9.4		43	2
Si4914BDY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.021	0.027								8.4		6.7	2.7
			30	20		0.02	0.025								8		7	3.1
Si4916DY	DUAL PLUS INTEGRATED SCHOTTKY N	S0-8	30	20		0.018	0.023								10		6.6	3.3
			30	20		0.018	0.022								10.5		8.9	3.5
Si4922BDY	DUAL N	S0-8	30	12		0.016	0.018		0.024						8	41	19	3.1
Si4925DDY	DUAL P	S0-8	- 30	20		0.029	0.041								8	32	15	5
Si4931DY	DUAL P	S0-8	- 12	8			0.018		0.022	0.028					8.9		34.5	2
Si4932DY	DUAL N	S0-8	30	20		0.015	0.017								8	32	14.7	3.2
Si4936CDY	DUAL N	S0-8	30	20		0.04	0.05								5.8	6	2.8	2.3
Si4943CDY	DUAL P	S0-8	- 20	20		0.0192	0.033								8	41	20	3.1
Si4946BEY	DUAL N	S0-8	60	20		0.041	0.052						b	6.5	17	9.2	3.7	
Si4947ADY	DUAL P	S0-8	- 30	20		0.08	0.135								3.9		5.8	2
Si4948BEY	DUAL P	S0-8	- 60	20		0.12	0.15								3.1	14.5		2.4

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si4952DY	DUAL N	SO-8	25	16		0.023	0.028							8	12	5.5	2.8
Si4953ADY	DUAL P	SO-8	- 30	20		0.053	0.09							4.9	15		2
Si4972DY	DUAL N N	SO-8	30	20		0.0145	0.0195							10.8	18.5	8.3	3.1
			30	20		0.0265	0.036							7.2	9.6	4	2.5
Si4992EY	DUAL N	SO-8	75	20		0.048	0.062							4.8	14		2.4
Si5402BDC	SINGLE N	1206-8 ChipFET	30	20		0.035	0.042							6.7	10		2.5
Si5403DC	SINGLE P	1206-8 ChipFET	- 30	20		0.03	0.044							6	28	15	6.3
Si5406CDC	SINGLE N	1206-8 ChipFET	12	8			0.02		0.023	0.027				6		11.5	5.7
Si5410DU	SINGLE N	PowerPAK ChipFET	40	20		0.018	0.021							12	21	10	31
Si5414DC	SINGLE N	1206-8 ChipFET	20	12			0.017		0.022					6	27	12.5	6.3
Si5418DU	SINGLE N	PowerPAK ChipFET	30	20		0.0145	0.0185							12	20	9.5	31
Si5419DU	SINGLE P	PowerPAK ChipFET	- 30	20		0.02	0.033							12	30	15.5	31
Si5424DC	SINGLE N	1206-8 ChipFET	30	25		0.024	0.03							6	21	11	9
Si5432DC	SINGLE N	1206-8 ChipFET	20	12			0.02		0.025					6	22	10	6.3
Si5433BDC	SINGLE P	1206-8 ChipFET	- 20	8			0.037		0.05	0.07				6.7		15	2.5
Si5435BDC	SINGLE P	1206-8 ChipFET	- 30	20		0.045	0.08							5.9	16		2.5
Si5440DC	SINGLE N	1206-8 ChipFET	30	20		0.019	0.024							6	19	9	6.3
Si5441BDC	SINGLE P	1206-8 ChipFET	- 20	12			0.045	0.052	0.08					6.1		11.5	2.5
Si5456DU	SINGLE N	PowerPAK ChipFET	20	20		0.01	0.0135		0.043	0.06				12	20	9.8	31
Si5458DU	SINGLE N	PowerPAK ChipFET	30	20		0.041	0.051		0.11	0.16				6	6	2.8	10.4
Si5459DU	SINGLE P	PowerPAK ChipFET	- 20	12			0.052		0.082					8	17	8	10.9

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si5463EDC	SINGLE P	1206-8 ChipFET	- 20	12			0.062		0.085	0.12				5.1		9.7	2.3
Si5468DC	SINGLE N	1206-8 ChipFET	30	20		0.028	0.034							6	8	3.8	5.7
Si5471DC	SINGLE P	1206-8 ChipFET	- 20	12			0.02		0.028	0.062				6	64	30	6.3
Si5475DDC	SINGLE P	1206-8 ChipFET	- 12	8			0.032		0.04	0.052				6		20	5.7
Si5476DU	SINGLE N	PowerPAK ChipFET	60	20		0.034	0.041							12	21	10.5	31
Si5481DU	SINGLE P	PowerPAK ChipFET	- 20	8			0.022		0.029	0.041				12		20	17.8
Si5484DU	SINGLE N	PowerPAK ChipFET	20	12			0.016		0.021					12	35.5	16.5	31
Si5485DU	SINGLE P	PowerPAK ChipFET	- 20	12			0.025		0.042					12		14	31
Si5486DU	SINGLE N	PowerPAK ChipFET	20	8			0.015		0.017	0.021				12		21	31
Si5499DC	SINGLE P	1206-8 ChipFET	- 8	5			0.036		0.045	0.056	0.077			6		14	6.2
Si5504BDC	N&P PAIR N	1206-8 ChipFET	30	20		0.065	0.1							4	4.5	2	3.12
	N&P PAIR P		- 30	20		0.14	0.235							3.7	4.5	2.2	3.1
Si5509DC	N&P PAIR N	1206-8 ChipFET	20	12			0.052		0.084					6.1		3.8	4.5
	N&P PAIR P		- 20	12			0.09		0.16					4.8		3.9	4.5
Si5511DC	N&P PAIR N	1206-8 ChipFET	30	12			0.055		0.09					4		4.2	3.1
	N&P PAIR P		- 30	12			0.15		0.256					3.6		3.8	2.6
Si5513CDC	N&P PAIR N	1206-8 ChipFET	20	12			0.055		0.085					4		2.6	3.1
	N&P PAIR P		- 20	12			0.15		0.255					3.7		3.6	3.1
Si5515CDC	N&P PAIR N	1206-8 ChipFET	20	8			0.036		0.041	0.05				4		6.5	3.1
	N&P PAIR P		- 20	8			0.1		0.12	0.156				4		6.2	3.1
Si5517DU	N&P PAIR N	PowerPAK ChipFET	20	8			0.039		0.045	0.055				6		6	8.3
	N&P PAIR P		- 20	8			0.072		0.1	0.131				6		5.5	8.3
Si5519DU	N&P PAIR N	PowerPAK ChipFET	20	12			0.036		0.063					6	11.65	5.4	10.4
	N&P PAIR P		- 20	12			0.064		0.095					6	11.7	6	10.4
Si5853DDC	SINGLE PLUS INTEGRATED SCHOTTKY P	1206-8 ChipFET	- 20	8			0.105		0.143	0.188				4		4.7	3.1

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si5855CDC	SINGLE PLUS INTEGRATED SCHOTTKY P	1206-8 ChipFET	- 20	8			0.144		0.18	0.222				3.7	4.5	4.1	2.8
Si5856DC	SINGLE PLUS INTEGRATED SCHOTTKY N	1206-8 ChipFET	20	8			0.04		0.045	0.052				5.9		5	2.1
Si5857DU	SINGLE PLUS INTEGRATED SCHOTTKY P	PowerPAK ChipFET	- 20	12			0.058		0.1					6	11	5.5	10.4
Si5858DU	SINGLE PLUS INTEGRATED SCHOTTKY N	PowerPAK ChipFET	20	8			0.039		0.045	0.055				6		6	8.3
Si5902BDC	DUAL N	1206-8 ChipFET	30	20		0.065	0.1							4	4.5	2	3.12
Si5903DC	DUAL P	1206-8 ChipFET	- 20	12			0.155	0.18	0.26					2.9		3	2.1
Si5904DC	DUAL N	1206-8 ChipFET	20	12			0.075		0.134					4.2		4	2.1
Si5906DU	DUAL N	PowerPAK ChipFET	30	20		0.031	0.04							6	5.7	2.9	10.4
Si5908DC	DUAL N	1206-8 ChipFET	20	8			0.04		0.045	0.052				5.9		5	2.1
Si5913DC	SINGLE PLUS INTEGRATED SCHOTTKY P	1206-8 ChipFET	- 20	12		0.084	0.108		0.175					4	8	4	3.1
Si5915BDC	DUAL P	1206-8 ChipFET	- 8	8			0.07		0.086	0.145				4		5	3.1
Si5920DC	DUAL N	1206-8 ChipFET	8	5			0.032		0.036	0.045	0.054			8.4		7.3	3.12
Si5933CDC	DUAL P	1206-8 ChipFET	- 20	8			0.144		0.18	0.222				3.7		4.1	2.8
Si5935CDC	DUAL P	1206-8 ChipFET	- 20	8			0.1		0.12	0.156				4		6.2	3.1
Si5938DU	DUAL N	PowerPAK ChipFET	20	8			0.039		0.045	0.055				6		6	8.3
Si5944DU	DUAL N	PowerPAK ChipFET	40	20		0.112	0.171							6	4.4	2.2	10
Si5947DU	DUAL P	PowerPAK ChipFET	- 20	12			0.058		0.1					6	11	5.5	10.4
Si6410DQ	SINGLE N	TSSOP-8	30	20		0.014	0.021							7.8		22.5	1.5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si6415DQ	SINGLE P	TSSOP-8	- 30	20		0.019	0.03								6.5	47	1.5	
Si6423DQ	SINGLE P	TSSOP-8	- 12	8			0.0085		0.0106	0.014				b	9.5		74	1.5
Si6433BDQ	SINGLE P	TSSOP-8	- 12	8			0.04		0.07						4.8		10	1.5
Si6435ADQ	SINGLE P	TSSOP-8	- 30	20		0.03	0.055								5.5		15	1.5
Si6443DQ	SINGLE P	TSSOP-8	- 30	20		0.012	0.019								8.8		38	1.5
Si6459BDQ	SINGLE P	TSSOP-8	- 60	20		0.115	0.15								2.7	14.5		1.5
Si6463BDQ	SINGLE P	TSSOP-8	- 20	8			0.015		0.02	0.027					7.4		40	1.5
Si6467BDQ	SINGLE P	TSSOP-8	- 12	8			0.0125		0.0155	0.02					8		46	1.5
Si6544BDQ	N&P PAIR N	TSSOP-8	30	20		0.032	0.046								4.3	9.5		1.14
	N&P PAIR P		- 30	20		0.043	0.073								3.8	16		1.14
Si6562CDQ	N&P PAIR N	TSSOP-8	20	12			0.022		0.036						6.7	15	6.7	1.6
	N&P PAIR P		- 20	12			0.03		0.045						6.1	34	17	1.7
Si6913DQ	DUAL P	TSSOP-8	- 12	8			0.021		0.028	0.037					5.8		18.5	1.14
Si6924AEDQ	COMMON DRAIN N	TSSOP-8	28	14			0.033	0.038	0.042					e	4.6		6.5	1.3
Si6925ADQ	DUAL N	TSSOP-8	20	12			0.045	0.055	0.065					e	3.9		4	1.13
Si6926ADQ	DUAL N	TSSOP-8	20	8			0.03	0.033	0.035	0.043				e	4.5		7.5	1
Si6928DQ	DUAL N	TSSOP-8	30	20		0.035	0.05								4		9	1
Si6943BDQ	DUAL P	TSSOP-8	- 12	8			0.08		0.105						2.5		5.7	1.1
Si6954ADQ	DUAL N	TSSOP-8	30	20		0.053	0.075								3.4	8		1
Si6963BDQ	DUAL P	TSSOP-8	- 20	12			0.045		0.08						3.9		8.6	1.13
Si6968BEDQ	COMMON DRAIN N	TSSOP-8	20	12			0.022		0.03						6.5		12	1.5
Si6981DQ	DUAL P	TSSOP-8	- 20	8			0.031		0.041	0.058					4.8		15	1.14
Si6993DQ	DUAL P	TSSOP-8	- 30	20		0.031	0.048								4.7		13	1.14
Si7102DN	SINGLE N	PowerPAK 1212-8	12	8			0.0038		0.0047						35		41	52
Si7113DN	SINGLE P	PowerPAK 1212-8	- 100	20		0.113	0.145								13.2	35	16.5	52
Si7114ADN	SINGLE N	PowerPAK 1212-8	30	20		0.0075	0.0098								35	21	10.2	39
Si7115DN	SINGLE P	PowerPAK 1212-8	- 150	20		0.295	0.315							d	8.9	27.5	23.2	52
Si7117DN	SINGLE P	PowerPAK 1212-8	-150	20		1.2	1.3							d	2.17	7.7		12.5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si7119DN	SINGLE P	PowerPAK 1212-8	- 200	20		1.05	1.1						d	3.8	16.2	10.6	52
Si7120DN	SINGLE N	PowerPAK 1212-8	60	20		0.019	0.028							10	30		3.8
Si7121DN	SINGLE P	PowerPAK 1212-8	- 30	25		0.018	0.0305							16	43	22	52
Si7123DN	SINGLE P	PowerPAK 1212-8	- 20	8			0.0106		0.0136	0.0189				25		57	52
Si7129DN	SINGLE P	PowerPAK 1212-8	- 30	20		0.0114	0.02							35	47.5	24.6	52.1
Si7135DP	SINGLE P	PowerPAK SO-8	- 30	20		0.0039	0.0062							60	167	78	104
Si7137DP	SINGLE P	PowerPAK SO-8	- 20	12		0.002	0.0025		0.0039					60	390	188	104
Si7139DP	SINGLE P	PowerPAK SO-8	- 30	20		0.0055	0.0009							40	97	49.5	48
Si7145DP	SINGLE P	PowerPAK SO-8	- 30	20		0.0026	0.0038							60	275	129	104
Si7149DP	SINGLE P	PowerPAK SO-8	- 30	25		0.0052	0.0094							50	98	51	69
Si7164DP	SINGLE N	PowerPAK SO-8	60	20		0.0063								60	49.5		104
Si7172DP	SINGLE N	PowerPAK SO-8	200	20		0.07	0.076						d, q	25	51	34	96
Si7174DP	SINGLE N	PowerPAK SO-8	75	20		0.007								60	47.5		104
Si7186DP	SINGLE N	PowerPAK SO-8	80	20		0.0125								32	46		64
Si7190DP	SINGLE N	PowerPAK SO-8	250	20		0.118	0.124						d, q	18.4	48	32	95
Si7212DN	DUAL N	PowerPAK 1212-8	30	12		0.036	0.039							6.8		7	2.6
Si7216DN	DUAL N	PowerPAK 1212-8	40	20		0.032	0.039							6	12.5	5.5	20.8
Si7220DN	DUAL N	PowerPAK 1212-8	60	20		0.06	0.075							4.8	13		2.6
Si7222DN	DUAL N	PowerPAK 1212-8	40	12		0.042	0.047							6	19	8	17.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si7224DN	DUAL N N	PowerPAK 1212-8	30	16		0.035	0.042							6	9.5	4.5	17.8
			30	20		0.028	0.035								6	12	5.5
Si7228DN	DUAL N	PowerPAK 1212-8	30	20		0.02	0.025							26	8.5	4.1	23
Si7232DN	DUAL N	PowerPAK 1212-8	20	8			0.0164		0.02	0.024				25		12	23
Si7234DP	DUAL N	PowerPAK S0-8	12	12			0.0034		0.005					60	80	37	46
Si7236DP	DUAL N	PowerPAK S0-8	20	12			0.0052		0.007					60	68	31	46
Si7272DP	DUAL N	PowerPAK S0-8	30	20		0.0093	0.0124							25	17	8.2	22
Si7308DN	SINGLE N	PowerPAK 1212-8	60	20		0.058	0.072							6	13	6	19.8
Si7309DN	SINGLE P	PowerPAK 1212-8	- 60	20		0.115	0.146							8	14.5	7.5	19.8
Si7322DN	SINGLE N	PowerPAK 1212-8	100	20		0.058								18	13		52
Si7403BDN	SINGLE P	PowerPAK 1212-8	- 20	8			0.074		0.11					8		5.6	9.6
Si7405BDN	SINGLE P	PowerPAK 1212-8	- 12	8			0.013		0.017	0.024				16		46	33
Si7411DN	SINGLE P	PowerPAK 1212-8	- 20	8			0.019		0.025	0.034				11.4		27	3.6
Si7414DN	SINGLE N	PowerPAK 1212-8	60	20		0.025	0.036							8.7	16		3.8
Si7415DN	SINGLE P	PowerPAK 1212-8	- 60	20		0.065	0.11							5.7	15		3.8
Si7430DP	SINGLE N	PowerPAK S0-8	150	20		0.045	0.047						r	26	28.5		64
Si7431DP	SINGLE P	PowerPAK S0-8	- 200	20		0.174	0.18						d	3.8	88		5.4
Si7434DP	SINGLE N	PowerPAK S0-8	250	20		0.155	0.162						d	3.8	34		5.2
Si7439DP	SINGLE P	PowerPAK S0-8	- 150	20		0.09	0.095						d	5.2	88		5.4
Si7450DP	SINGLE N	PowerPAK S0-8	200	20		0.08	0.09						d	5.3	34		5.2

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si7456DP	SINGLE N	PowerPAK SO-8	100	20		0.025	0.028						d	9.3	36		5.2
Si7460DP	SINGLE N	PowerPAK SO-8	60	20		0.0096	0.012							18	65		5.4
Si7461DP	SINGLE P	PowerPAK SO-8	- 60	20		0.0145	0.019							14.4	121		5.4
Si7462DP	SINGLE N	PowerPAK SO-8	200	20		0.13	0.142						d	4.1	20		4.8
Si7463DP	SINGLE P	PowerPAK SO-8	- 40	20		0.0092	0.014							18.6	121		5.4
Si7464DP	SINGLE N	PowerPAK SO-8	200	20		0.24	0.26						d	2.8	12		4.2
Si7465DP	SINGLE P	PowerPAK SO-8	- 60	20		0.064	0.08							5	26		3.5
Si7469DP	SINGLE P	PowerPAK SO-8	- 80	20		0.025	0.029							28	105	55	83
Si7478DP	SINGLE N	PowerPAK SO-8	60	20		0.0075	0.0088							20	105		5.4
Si7489DP	SINGLE P	PowerPAK SO-8	- 100	20		0.041	0.047							28	106	54	83
Si7501DN	N&P PAIR N	PowerPAK 1212-8	30	20		0.035	0.05							7.7	9		3.1
	N&P PAIR P		- 30	25		0.051	0.075						d	6.4	12.5		3.1
Si7530DP	N&P PAIR N	PowerPAK SO-8	60	20		0.075	0.1							4.6	12		3.3
	N&P PAIR P		- 60	20		0.064	0.08							5	26		3.5
Si7540DP	N&P PAIR N	PowerPAK SO-8	12	8			0.017		0.025					11.8		11.5	3.5
	N&P PAIR P		- 12	8			0.032		0.053					8.9		13	3.5
Si7611DN	SINGLE P	PowerPAK 1212-8	- 40	20		0.025	0.033							18	41	21	39
Si7613DN	SINGLE P	PowerPAK 1212-8	- 20	16		0.0087	0.014							35	58	28.1	52.1
Si7615DN	SINGLE P	PowerPAK 1212-8	- 20	12		0.0039	0.0055		0.0098					35	122	62	52
Si7617DN	SINGLE P	PowerPAK 1212-8	- 30	25		0.0123	0.0222							35	39	20.5	52
Si7633DP	SINGLE P	PowerPAK SO-8	- 20	20		0.0033	0.0055							60	173	85	104
Si7634BDP	SINGLE N	PowerPAK SO-8	30	20		0.0054	0.007							40	45.5	21.5	48

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si7635DP	SINGLE P	PowerPAK SO-8	- 20	16		0.0049	0.0075								40	95.3	46.5	54
Si7658ADP	SINGLE N	PowerPAK SO-8	30	20		0.0022	0.0028								60	74	34	83
Si7703EDN	SINGLE PLUS INTEGRATED SCHOTTKY P	PowerPAK 1212-8	- 20	12			0.048		0.068	0.09					6.3		12	2.8
Si7716ADN	SINGLE N	PowerPAK 1212-8	30	20		0.0135	0.0165								16	15.4	7.3	27.7
Si7720DN	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK 1212-8	30	20		0.0125	0.015								12	30	13.7	52
Si7726DN	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK 1212-8	30	20		0.0095	0.0125								35	28.5	12.5	52
Si7738DP	SINGLE N	PowerPAK SO-8	150	20		0.038									30	35		96
Si7742DP	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK SO-8	30	20		0.0035	0.0045								60	75	34	83
Si7748DP	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK SO-8	30	20		0.0048	0.0066								50	61	27.8	56
Si7758DP	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK SO-8	30	20		0.0029	0.0038								60	105	46	104
Si7772DP	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PowerPAK SO-8	30	20		0.013	0.0165								35.6	18.5	8.3	29.8
Si7784DP	SINGLE N	PowerPAK SO-8	30	20		0.006	0.0082								35	30	13.7	27.7
Si7802DN	SINGLE N	PowerPAK 1212-8	250	20		0.435	0.445							d	1.95	14		3.8
Si7812DN	SINGLE N	PowerPAK 1212-8	75	20		0.037	0.046								16	16	8	52

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si7818DN	SINGLE N	PowerPAK 1212-8	150	20		0.135	0.142						d	3.4	20		3.8
Si7820DN	SINGLE N	PowerPAK 1212-8	200	20		0.24	0.25						d	2.6	12.1		3.8
Si7842DP	DUAL PLUS INTEGRATED SCHOTTKY N	PowerPAK SO-8	30	20		0.022	0.03							10	13		3.5
Si7850DP	SINGLE N	PowerPAK SO-8	60	20		0.022	0.031							10.3	18		4.5
Si7852ADP	SINGLE N	PowerPAK SO-8	80	20		0.017	0.021						r	30	30.5		62.5
Si7872DP	DUAL PLUS INTEGRATED SCHOTTKY N	PowerPAK SO-8	30	20		0.022	0.03							10		7	3.5
			30	12		0.022	0.028								10		11.5
Si7892BDP	SINGLE N	PowerPAK SO-8	30	20		0.0042	0.0057							25		27	5
Si7898DP	SINGLE N	PowerPAK SO-8	150	20		0.085	0.095						d	4.8	17		5
Si7900AEDN	COMMON DRAIN N	PowerPAK 1212-8	20	12			0.026		0.03	0.036				8.5		10.5	3.1
Si7904BDN	DUAL N	PowerPAK 1212-8	20	8			0.03		0.036	0.045				6		9	17.8
Si7905DN	DUAL P	PowerPAK 1212-8	- 40	20		0.06	0.089							6	20	11	20.8
Si7911DN	DUAL P	PowerPAK 1212-8	- 20	8			0.051		0.067	0.094				5.7		9.5	2.5
Si7913DN	DUAL P	PowerPAK 1212-8	- 20	8			0.037		0.048	0.066				7.4		15.3	2.8
Si7922DN	DUAL N	PowerPAK 1212-8	100	20		0.195	0.23						d	2.5	5.2		2.6
Si7923DN	DUAL P	PowerPAK 1212-8	- 30	20		0.047	0.075							6.4	14		2.8
Si7938DP	DUAL N	PowerPAK SO-8	40	20		0.0058	0.007							60	43	21	46
Si7942DP	DUAL N	PowerPAK SO-8	100	20		0.049	0.06						d	5.9	16		3.5
Si7945DP	DUAL P	PowerPAK SO-8	- 30	20		0.02	0.031							10.9	49		3.5

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
Si7946DP	DUAL N	PowerPAK SO-8	150	20		0.15	0.168						d	3.3	12.6		3.5
Si7949DP	DUAL P	PowerPAK SO-8	- 60	20		0.064	0.08							5	26		3.5
Si7956DP	DUAL N	PowerPAK SO-8	150	20		0.105	0.115						d	4.1	17		3.5
Si7960DP	DUAL N	PowerPAK SO-8	60	20		0.021	0.025							9.7	49		3.5
Si7980DP	DUAL PLUS INTEGRATED SCHOTTKY N	PowerPAK SO-8	20	16		0.022	0.025							8	17.5	8	19.8
			20	16		0.015	0.019							8	22.5	10.3	21.9
Si7994DP	DUAL N	PowerPAK SO-8	30	20		0.0056	0.007							60	52	24	46
Si7998DP	DUAL N N	PowerPAK SO-8	30	20		0.0093	0.0124							25	17	8.2	22
			30	20		0.0053	0.007							30	32	15.3	40
Si8401DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 20	12			0.065			0.095				4.9		11	2.77
Si8402DB	SINGLE N	MICRO FOOT 1.6 x 1.6	20	8			0.037			0.039	0.043			7.3		17	2.77
Si8407DB	SINGLE P	MICRO FOOT 2.4 x 1.6	- 20	8			0.027			0.032	0.045			8.2		32	2.9
Si8409DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 30	12			0.046			0.065				6.3		17	2.77
Si8413DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 20	12			0.048			0.063				6.5		14	2.77
Si8415DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 12	8			0.037			0.046	0.06			7.3		19	2.77
Si8424DB	SINGLE N	MICRO FOOT 1.6 x 1.6	8	5			0.031			0.033	0.035	0.043	0.077	12.2		20	6.25
Si8429DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 8	5			0.035			0.042	0.052	0.069	0.098	11.7		21	6.25

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
Si8435DB	SINGLE P	MICRO FOOT 1.6 x 1.6	- 20	5			0.041			0.048	0.058	0.075			10		22	6.25
Si8441DB	SINGLE P	MICRO FOOT 1.5 x 1	- 20	5			0.08			0.102	0.128	0.198	0.6		10.5		7.7	13
Si8445DB	SINGLE P	MICRO FOOT 1.2 x 1	- 20	5			0.084			0.1	0.12	0.155	0.495		9.8		9.5	11.4
Si8447DB	SINGLE P	MICRO FOOT 1.5 x 1	- 20	12			0.075			0.105	0.26			u	11	15	7.5	13
Si8451DB	SINGLE P	MICRO FOOT 1.5 x 1	- 20	8			0.08			0.1	0.126	0.2			10.8		10	13
Si8461DB	SINGLE P	MICRO FOOT 1 x 1	- 20	8			0.1			0.118	0.14	0.205			3.7		9.5	1.8
Si8465DB	SINGLE P	MICRO FOOT 1 x 1	- 20	12			0.104			0.148					3.8	12	6	1.8
Si8900EDB	COMMON DRAIN	MICRO FOOT 4 x 2	20	12			0.012	0.013	0.017	0.02				c, f	7			1.8
Si8901EDB	COMMON DRAIN P	MICRO FOOT 2.4 x 1.6	- 20	12			0.03			0.04	0.0525			c	4.4			1.7
Si8902EDB	COMMON DRAIN N	MICRO FOOT 2.4 x 1.6	20	12			0.0225	0.024	0.0285	0.036				c, f	5			1.7
Si8904EDB	COMMON DRAIN N	MICRO FOOT 2.4 x 1.6	30	12			0.0225		0.03					c	4.9			1.7
Si9407BDY	SINGLE P	SO-8	- 60	20		0.12	0.15								4.7	14.5	8	5
Si9424BDY	SINGLE P	SO-8	- 20	9			0.025		0.033						7.1		24	2
Si9433BDY	SINGLE P	SO-8	- 20	12			0.04	0.06						h	6.2		8.8	2.5
Si9926CDY	DUAL N	SO-8	20	12			0.018		0.022						8	22	10	3.1
Si9933CDY	DUAL P	SO-8	- 20	12			0.058		0.094						4	17	8	3.1
Si9934BDY	DUAL P	SO-8	- 12	8			0.035		0.056						6.4		13	2
Si9945BDY	DUAL N	SO-8	60	20		0.058	0.072								5.3	13	6	3.1

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(ON)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(ON)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(ON)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(ON)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(ON)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(ON)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(ON)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(ON)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(ON)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(ON)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SiA406DJ	SINGLE N	PowerPAK SC-70	12	8			0.098		0.0222	0.0264				4.5		13.7	19
SiA408DJ	SINGLE N	PowerPAK SC-70	30	12		0.036	0.039		0.053					4.5	16	7	17.9
SiA413DJ	SINGLE P	PowerPAK SC-70	-12	8			0.029		0.034	0.044	0.1			12		23	19
SiA414DJ	SINGLE N	PowerPAK SC-70	8	5			0.011		0.013	0.016	0.022	0.041		12		19	19
SiA415DJ	SINGLE P	PowerPAK SC-70	-20	12			0.035		0.051					12	31	15	19
SiA417DJ	SINGLE P	PowerPAK SC-70	-8	5			0.023		0.031	0.04	0.058	0.095		12		19	19
SiA419DJ	SINGLE P	PowerPAK SC-70	-20	5			0.03		0.039	0.051	0.066	0.113		12		17.5	19
SiA421DJ	SINGLE P	PowerPAK SC-70	-30	20		0.035	0.056							12	19	10	19
SiA426DJ	SINGLE N	PowerPAK SC-70	20	12		0.0236	0.0263		0.0361					4.5	17.5	7.9	19
SiA430DJ	SINGLE N	PowerPAK SC-70	20	20		0.0135	0.0185							12	12	5.3	19.2
Si431DJ	SINGLE P	PowerPAK SC-70	-20	8			0.025		0.031	0.041	0.07			12		24	19
SiA432DJ	SINGLE N	PowerPAK SC-70	30	20		0.02	0.024							12	13	5.6	19.2
Si438EDJ	SINGLE N	PowerPAK SC-70	20	12			0.046		0.063					6	7.5	3.5	11.4
SiA443DJ	SINGLE P	PowerPAK SC-70	-20	8			0.045		0.063	0.088				9		9	15
SiA456DJ	SINGLE N	PowerPAK SC-70	200	16			1.38		1.5	3.5				2.6	9.5	5	19
SiA513DJ	N&P PAIR N	PowerPAK SC-70	20	12			0.06		0.092					4.5	7.5	3.5	6.5
	N&P PAIR P		-20	12			0.11		0.185					4.5	6	3	6.5
SiA517DJ	N&P PAIR N	PowerPAK SC-70	12	8			0.029		0.034	0.044	0.065			4.5		5.6	6.5
	N&P PAIR P		-12	8			0.061		0.081	0.115	0.17			4.5		8.2	6.5
SiA519EDJ	N&P PAIR N	PowerPAK SC-70	20	12			0.04		0.065					4.5	7.7	3.7	7.8
	N&P PAIR P		-20	12			0.09		0.137					4.5	10.5	5.3	7.8
SiA777EDJ	N&P PAIR N	PowerPAK SC-70	20	6			0.225		0.27	0.345	0.96			1.5		1.1	5
	N&P PAIR P		-12	8			0.057		0.077	0.115	0.2			4.5		5	7.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SiA810DJ	SINGLE PLUS INTEGRATED SCHOTTKY N	PowerPAK SC-70	20	8			0.053		0.063	0.077				4.5		4.1	6.5
SiA811ADJ	SINGLE PLUS INTEGRATED SCHOTTKY P	PowerPAK SC-70	- 20	8			0.116		0.155	0.205				4.5		4.9	6.5
SiA813DJ	SINGLE PLUS INTEGRATED SCHOTTKY P	PowerPAK SC-70	- 20	8			0.094		0.131	0.185				4.5		4.9	6.5
SiA814DJ	SINGLE PLUS INTEGRATED SCHOTTKY N	PowerPAK SC-70	30	12		0.061	0.072		0.11					4.5	7	3.2	6.5
SiA850DJ	SINGLE PLUS INTEGRATED DIODE N	PowerPAK SC-70	190	16			3.8		4.2	17				0.95	3	1.4	7
SiA906EDJ	DUAL N	PowerPAK SC-70	20	12			0.046		0.063					4.5	7.5	3.5	7.8
SiA911ADJ	DUAL P	PowerPAK SC-70	- 20	8			0.116		0.155	0.205				4.5		4.9	6.5
SiA911EDJ	DUAL P	PowerPAK SC-70	- 20	8			0.101		0.141	0.192				4.5		4.2	7.8
SiA912DJ	DUAL N	PowerPAK SC-70	12	8			0.04		0.048	0.063				4.5		4.5	6.5
SiA913ADJ	DUAL P	PowerPAK SC-70	- 12	8			0.061		0.081	0.115				4.5		8.2	6.5
SiA914DJ	DUAL N	PowerPAK SC-70	20	8			0.053		0.063	0.077				4.5		4.1	6.5
SiA917DJ	DUAL P	PowerPAK SC-70	- 20	12			0.11		0.185					4.5	6	3	6.5
SiA921EDJ	DUAL P	PowerPAK SC-70	- 20	12			0.059		0.098					4.5	15	7.1	7.8
SiA950DJ	DUAL N	PowerPAK SC-70	190	16			3.8		4.2	17				0.95	3	1.4	7
SiB406EDK	SINGLE N	PowerPAK SC-75	20	12			0.046		0.063					6	7.5	3.5	10
SiB408DK	SINGLE N	PowerPAK SC-75	30	20		0.04	0.05							7	6.2	2.9	13
SiB412DK	SINGLE N	PowerPAK SC-75	20	8			0.034		0.04	0.054				9		6.14	13

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SiB414DK	SINGLE N	PowerPAK SC-75	8	5			0.026		0.03	0.037	0.052	0.089		9		8.6	13
SiB415DK	SINGLE P	PowerPAK SC-75	-30	20		0.087	0.158							9	6.7	3.5	13
SiB417EDK	SINGLE P	PowerPAK SC-75	-8	5			0.058		0.08	0.1	0.13	0.25		9		7.3	13
SiB419DK	SINGLE P	PowerPAK SC-75	-12	8			0.06		0.082	0.114				9		7.15	13.1
SiB422EDK	SINGLE N	PowerPAK SC-75	20	8			0.03		0.041	0.057	0.082			9		6	13
SiB431EDK	SINGLE P	PowerPAK SC-75	-20	12			0.08		0.149					9	8	3.9	13
SiB452DK	SINGLE N	PowerPAK SC-75	190	16			2.4		2.6	6				1.5	4.3	2.3	13
SiB457EDK	SINGLE P	PowerPAK SC-75	-20	8			0.035		0.049	0.072	0.13			9	22	13	13
SiB800EDK	SINGLE PLUS INTEGRATED SCHOTTKY N	PowerPAK SC-75	20	6			0.225		0.27	0.345	0.96			1.5		1.1	3.1
SiB900EDK	DUAL N	PowerPAK SC-75	20	6			0.225		0.27	0.345	0.96			1.5		1.1	3.1
SiB911DK	DUAL P	PowerPAK SC-75	-20	8			0.295		0.42	0.56				2.6		1.6	3.1
SiB912DK	DUAL N	PowerPAK SC-75	20	8			0.216		0.268	0.375				1.5		1.2	3.1
			20	8			0.216		0.268	0.375				1.5		1.2	3.1
SiB914DK	DUAL N	PowerPAK SC-75	8	5			0.113		0.138	0.19	0.28	0.48		1.5		1.5	3.1
SiE726DF	SINGLE PLUS INTEGRATED SCHOTTKY (SkyFET) N	PolarPAK	30	20		0.0024	0.0033										
SiE804DF	SINGLE N	PolarPAK	150	20		0.038	0.04						d, q	37	70	46	125
SiE810DF	SINGLE N	PolarPAK	20	12		0.0014	0.0016		0.0027					221	200	90	125
SiE818DF	SINGLE N	PolarPAK	75	20		0.0095	0.0125							79	63	33	125
SiE820DF	SINGLE N	PolarPAK	20	12			0.0035		0.0064					136	95	43	104
SiE822DF	SINGLE N	PolarPAK	20	20		0.0034	0.0055							138	52	24	104
SiE832DF	SINGLE N	PolarPAK	40	20		0.0055	0.007							103	51	25	104

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SiE836DF	SINGLE N	PolarPAK	200	30		0.13									18.3	27		104
SiE844DF	SINGLE N	PolarPAK	30	20		0.007	0.01								44.5	29	13.1	25
SiE848DF	SINGLE N	PolarPAK	30	20		0.0016	0.0022								211	92	43	125
SiE854DF	SINGLE N	PolarPAK	100	20		0.0142									64	50		125
SiE860DF	SINGLE N	PolarPAK	30	20		0.0021	0.0028								178	70	34	104
SiE862DF	SINGLE N	PolarPAK	30	20		0.0032	0.0041								134	48	23	104
SiE868DF	SINGLE N	PolarPAK	40	20		0.0023	0.0029								169	95	45	125
SiE874DF	SINGLE N	PolarPAK	20	20		0.0012	0.0016								258	95	45	125
SiE876DF	SINGLE N	PolarPAK	60	20		0.0061									110	51		125
SiE878DF	SINGLE N	PolarPAK	25	20		0.0052	0.0068								45	24	11.2	25
SiE882DF	SINGLE N	PolarPAK	25	20		0.0014	0.0018								229	96	46	125
SiF902EDZ	COMMON DRAIN N	PowerPAK 2 x 5	20	12			0.022	0.026	0.028					j	10.3		9.1	3.5
SiF912EDZ	COMMON DRAIN N	PowerPAK 2 x 5	30	12			0.019	0.022	0.027					j	10.7		9.8	3.5
SiJ400DP	SINGLE N	PowerPAK SO-8L	30	20		0.004	0.005								32	100	45	69.4
SiJ800DP	SINGLE N	PowerPAK SO-8L	40	20		0.0095	0.0115								20	37	16	35.7
SiJ900DP	DUAL N	PowerPAK SO-8L	30	20		0.011	0.0135								30	44.5	19.2	46
SiM400	SINGLE N	SOT-923	60	20		3.9	4.8	8						v	0.35	0.68	0.325	1.9
SiR158DP	SINGLE N	PowerPAK SO-8	30	20		0.0018	0.0023								60	87	41.5	83
SiR164DP	SINGLE N	PowerPAK SO-8	30	20		0.0025	0.0032								50	82	40.6	69
SiR168DP	SINGLE N	PowerPAK SO-8	30	20		0.0044	0.0059								40	49.5	24.5	34.7
SiR172DP	SINGLE N	PowerPAK SO-8	30	20		0.0089	0.0124								20	19.5	9.8	29.8
SiR402DP	SINGLE N	PowerPAK SO-8	30	20		0.006	0.008								50	28	12	36
SiR404DP	SINGLE N	PowerPAK SO-8	20	12		0.0016	0.0018		0.00225						60		64.5	104
SiR406DP	SINGLE N	PowerPAK SO-8	25	20		0.0038	0.0048								40	33	15.8	48

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SIR408DP	SINGLE N	PowerPAK S0-8	25	20		0.0063	0.008								21.5	21.5	9.3	4.8
SIR410DP	SINGLE N	PowerPAK S0-8	20	20		0.0048	0.0063								35	27	16.7	36
SIR412DP	SINGLE N	PowerPAK S0-8	25	20		0.012	0.015								20	10.7	4.9	15.6
SIR414DP	SINGLE N	PowerPAK S0-8	40	20		0.0028	0.0032								50	78	38	83
SIR416DP	SINGLE N	PowerPAK S0-8	40	20		0.0038	0.0042								50	59	28.2	69
SIR418DP	SINGLE N	PowerPAK S0-8	40	20		0.005	0.006								40	50	24	39
SIR422DP	SINGLE N	PowerPAK S0-8	40	20		0.0066	0.008								40	32	16.1	34.7
SIR424DP	SINGLE N	PowerPAK S0-8	20	20		0.0055	0.0074								30	22	9.6	41.7
SIR426DP	SINGLE N	PowerPAK S0-8	40	20		0.0105	0.0125								30	20.5	9.3	41.7
SIR428DP	SINGLE N	PowerPAK S0-8	30	20		0.0075	0.0095								30	21	9.5	22.7
SIR432DP	SINGLE N	PowerPAK S0-8	100	20		0.0306	0.0327							w	28.4	21		54
SIR436DP	SINGLE N	PowerPAK S0-8	25	20		0.0046	0.0062								40	31	13	50
SIR438DP	SINGLE N	PowerPAK S0-8	25	20		0.0018	0.0023								60	70	32.6	83
SIR440DP	SINGLE N	PowerPAK S0-8	20	20		0.0016	0.002								60	100	43.5	104
SIR460DP	SINGLE N	PowerPAK S0-8	30	20		0.0047	0.0061								40	36	16.8	48
SIR462DP	SINGLE N	PowerPAK S0-8	30	20		0.0079	0.01								30	20	8.8	41.7
SIR466DP	SINGLE N	PowerPAK S0-8	30	20		0.0035	0.0051								40	42.5	21.5	54
SIR468DP	SINGLE N	PowerPAK S0-8	30	20		0.0057	0.0076								40	29	13.8	50
SIR470DP	SINGLE N	PowerPAK S0-8	40	20		0.0023	0.0027								60	102	45.5	104

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
SiR472DP	SINGLE N	PowerPAK SO-8	30	20		0.012	0.015						b	20	15	6.8	29.8
SiR484DP	SINGLE N	PowerPAK SO-8	20	20		0.0083	0.0115							20	15	7.1	29.8
SiR492DP	SINGLE N	PowerPAK SO-8	12	8			0.0038		0.0047					40		41	36
SiR494DP	SINGLE N	PowerPAK SO-8	12	20		0.0012	0.0017							60	98	50	104
SiR496DP	SINGLE N	PowerPAK SO-8	20	20		0.0042	0.0058							35	28	13.2	27.7
SiR844DP	SINGLE N	PowerPAK SO-8	25	20		0.0028	0.0038							50	60	29.5	50
SiR846DP	SINGLE N	PowerPAK SO-8	100	20		0.0078	0.0085						w	60	47.5		104
SiR850DP	SINGLE N	PowerPAK SO-8	25	20		0.007	0.009							30	19	8.4	41.7
SiR866DP	SINGLE N	PowerPAK SO-8	20	20		0.0019	0.0026							60	71	35.3	83
SiR890DP	SINGLE N	PowerPAK SO-8	20	20		0.0029	0.004							50	42	20	50
SiR892DP	SINGLE N	PowerPAK SO-8	25	20		0.0032	0.0042							50	40	20	50
SiS402DN	SINGLE N	PowerPAK 1212-8	30	20		0.006	0.008							50	28	12	5.2
SiS406DN	SINGLE N	PowerPAK 1212-8	30	25		0.011	0.0145							14	18.	8.4	3.7
SiS410DN	SINGLE N	PowerPAK 1212-8	20	20		0.0048	0.0063							35	27	16.7	5.2
SiS412DN	SINGLE N	PowerPAK 1212-8	30	20		0.024	0.03							12	8	3.8	15.6
SiS424DN	SINGLE N	PowerPAK 1212-8	20	20		0.0064	0.0089							35	20	9.5	39
SiS426DN	SINGLE N	PowerPAK 1212-8	20	20		0.0045	0.0058							35	28	13.2	52
SiS430DN	SINGLE N	PowerPAK 1212-8	25	20		0.0051	0.0069							35	26.5	13	52
SiS434DN	SINGLE N	PowerPAK 1212-8	40	20		0.0076	0.0092							35	25	12.5	52

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SiS436DN	SINGLE N	PowerPAK 1212-8	25	20		0.0105	0.013								16	14.3	6.7	27.7
SiS438DN	SINGLE N	PowerPAK 1212-8	20	20		0.0095	0.0125								16	15	7.3	27.7
SiS902DN	DUAL N	PowerPAK 1212-8	75	20		0.186	0.228								4	3.9	2.1	15.4
SiZ700DT	DUAL N N	PowerPAIR 6 x 3.7	20	16		0.0086	0.0108								16	20	9.5	2.36
			20	16		0.0058	0.0066									16	55	27
SiZ704DT	DUAL N N	PowerPAIR 6 x 3.7	30	20		0.024	0.03								12	8	3.8	20
			30	20		0.0135	0.017									16	15.4	7.3
SUB75P03-07	SINGLE P	D2PAK (TO-263)	- 30	20		0.007	0.01								75	160		187
SUD06N10-225L	SINGLE N	DPAK (TO-252)	100	20		0.2	0.225								6.5		2.7	20
SUD08P06-155L	SINGLE P	DPAK (TO-252)	- 60	20		0.155	0.28								8.4	12.5		25
SUD15N15-95	SINGLE N	DPAK (TO-252)	150	20		0.095	0.1						d	15	20		62	
SUD17N25-165	SINGLE N	DPAK (TO-252)	250	20		0.165								17	30		136	
SUD19N20-90	SINGLE N	DPAK (TO-252)	200	20		0.09	0.105						d	19	34		136	
SUD19P06-60	SINGLE P	DPAK (TO-252)	- 60	20		0.06	0.077							18.3	26		38.5	
SUD23N06-31	SINGLE N	DPAK (TO-252)	60	20		0.031	0.045							21.4	11	6.	31.25	
SUD25N15-52	SINGLE N	DPAK (TO-252)	150	20		0.052	0.06						d	25	33		136	
SUD35N10-26P	SINGLE N	DPAK (TO-252)	100	20		0.026								35	31		83	
SUD40N02-3m3P	SINGLE N	DPAK (TO-252)	20	20		0.0033	0.0044							40	105	50	79	
SUD40N08-16	SINGLE N	DPAK (TO-252)	80	20		0.016								40	42		136	
SUD45P03-10	SINGLE P	DPAK (TO-252)	- 30	20		0.01	0.018							15	90		70	
SUD50N02-04P	SINGLE N	DPAK (TO-252)	20	20		0.0043	0.006							34		40	136	

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SUD50N02-06P	SINGLE N	DPAK (TO-252)	20	20		0.006	0.0095								50		19	65
SUD50N02-09P	SINGLE N	DPAK (TO-252)	20	20		0.0095	0.017								20		10.5	39.5
SUD50N03-06AP	SINGLE N	DPAK (TO-252)	30	20		0.0057	0.0078								90	62	30	83
SUD50N03-12P	SINGLE N	DPAK (TO-252)	30	20		0.012	0.0175								47		13	46.8
SUD50N03-16P	SINGLE N	DPAK (TO-252)	30	20		0.016	0.024								37		8.5	40.8
SUD50N04-8m8P	SINGLE N	DPAK (TO-252)	40	20		0.0088	0.0105								50	37	16	48.1
SUD50N06-07L	SINGLE N	DPAK (TO-252)	60	20		0.0074	0.0088								96	96		136
SUD50N10-18P	SINGLE N	DPAK (TO-252)	100	20		0.0185									50	48		136.4
SUD50N10-34P	SINGLE N	DPAK (TO-252)	100	20		0.034	0.04							d	20	24		56
SUD50NP04-77P	N&P PAIR N	DPAK (TO-252)	40	20		0.037	0.046								8	11.7	5.3	10.8
	N&P PAIR P		- 40	20		0.04	0.05								8	38.5	17	24
SUD50P04-09L	SINGLE P	DPAK (TO-252)	- 40	20		0.0094	0.0145								50	102		136
SUD50P04-13L	SINGLE P	DPAK (TO-252)	- 40	20		0.013	0.022								60	63		93.7
SUD50P04-40P	SINGLE P	DPAK (TO-252)	- 40	20		0.04	0.05								8	38.5	17	24
SUD50P06-15	SINGLE P	DPAK (TO-252)	- 60	20		0.015	0.02								50	110		113
SUD50P08-25L	SINGLE P	DPAK (TO-252)	- 80	20		0.0252	0.029								50	105	55	136
SUD50P10-43L	SINGLE P	DPAK (TO-252)	- 100	20		0.043	0.048								37.1	106	54	136
SUM09N20-270	SINGLE N	D ² PAK (TO-263)	200	20		0.27	0.3							d	9	11		60
SUM110N03-04P	SINGLE N	D ² PAK (TO-263)	30	20		0.0042	0.0065								110		40	120
SUM110N04-05H	SINGLE N	D ² PAK (TO-263)	40	20		0.0053									110	95		150

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SUM110N04-2m1P	SINGLE N	D ² PAK (TO-263)	40	20		0.0021	0.0024								110	240		312
SUM110N06-3m4L	SINGLE N	D ² PAK (TO-263)	60	20		0.0034	0.0041								110	200		375
SUM110N08-07P	SINGLE N	D ² PAK (TO-263)	75	20		0.007									110	69		208.3
SUM110P04-05	SINGLE P	D ² PAK (TO-263)	- 40	20		0.005									110	185		375
SUM110P06-08L	SINGLE P	D ² PAK (TO-263)	- 60	20		0.008	0.0105								110	160		272
SUM110P08-11L	SINGLE P	D ² PAK (TO-263)	- 80	20		0.0112	0.0145								110	180	85	375
SUM18N25-165	SINGLE N	D ² PAK (TO-263)	250	20		0.165									18	30		150
SUM23N15-73	SINGLE N	D ² PAK (TO-263)	150	20		0.073	0.077							d	23	22		100
SUM27N20-78	SINGLE N	D ² PAK (TO-263)	200	20		0.078	0.083							d	27	40		150
SUM36N20-54P	SINGLE N	D ² PAK (TO-263)	200	25	0.053	0.054								s	36	57		166
SUM40N02-12P	SINGLE N	D ² PAK (TO-263)	20	20		0.012	0.026								40		7.5	83
SUM40N10-30	SINGLE N	D ² PAK (TO-263)	100	20		0.03	0.034							d	40	35		107
SUM40N15-38	SINGLE N	D ² PAK (TO-263)	150	20		0.038	0.042							d	40	38		166
SUM45N25-58	SINGLE N	D ² PAK (TO-263)	250	30		0.058	0.062							d	45	95		375
SUM55P06-19L	SINGLE P	D ² PAK (TO-263)	- 60	20		0.019	0.025								55	76		125
SUM60N02-3m9P	SINGLE N	D ² PAK (TO-263)	20	20		0.0039	0.0052								60		33	120
SUM60N10-17	SINGLE N	D ² PAK (TO-263)	100	20		0.0165	0.019							d	60	65		150
SUM65N20-30	SINGLE N	D ² PAK (TO-263)	200	20		0.03									65	90		375
SUM70N30-09CP	SINGLE N	D ² PAK (TO-263)	30	20		0.0095	0.014								70	31		93

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide



Vishay Siliconix

Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SUM70N04-07L	SINGLE N	D ² PAK (TO-263)	40	20		0.0074	0.011								70	50		107
SUM75N06-09L	SINGLE N	D ² PAK (TO-263)	60	20		0.0093	0.0135								75	47		125
SUM75N15-18P	SINGLE N	D ² PAK (TO-263)	150	20		0.018									75	64		312.5
SUM85N03-06P	SINGLE N	D ² PAK (TO-263)	30	20		0.006	0.009								85	48		100
SUM90N03-2m2P	SINGLE N	D ² PAK (TO-263)	30	20		0.0022	0.0027								90	171	81.5	250
SUM90N06-4m4P	SINGLE N	D ² PAK (TO-263)	60	20		0.0044									90	105		300
SUM90N06-5m5P	SINGLE N	D ² PAK (TO-263)	60	20		0.0055									90	78.5		272
SUM90N08-4m8P	SINGLE N	D ² PAK (TO-263)	75	20		0.0048	0.0085							d	90	105		300
SUM90N08-6m2P	SINGLE N	D ² PAK (TO-263)	75	20		0.0062									90	75		272
SUM90N08-7m6P	SINGLE N	D ² PAK (TO-263)	75	20		0.0076									90	58		150
SUM90N10-8m2P	SINGLE N	D ² PAK (TO-263)	100	20		0.0082									90	97		300
SUM90P10-19L	SINGLE P	D ² PAK (TO-263)	- 100	20		0.019	0.021								90	217	97	375
SUP28N15-52	SINGLE N	TO-220	150	20		0.052	0.06							d	28	33		120
SUP36N20-54P	SINGLE N	TO-220	200	25		0.054								s	36	57		166
SUP40N10-30	SINGLE N	TO-220	100	20		0.03	0.034							d	40	35		107
SUP40N25-60	SINGLE N	TO-220	250	30		0.06	0.064							d	40	95		300
SUP40P10-43	SINGLE P	TO-220	- 100	20		0.043	0.048								36	106	54	125
SUP53P06-20	SINGLE P	TO-220	- 60	20		0.0195	0.025								53	76	38	104.2
SUP57N20-33	SINGLE N	TO-220	200	20		0.033									57	90		300

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)	
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V		
SUP60N02-4m5P	SINGLE N	TO-220	20	20		0.0045	0.0065								60		33	120
SUP60N06-12P	SINGLE N	TO-220	60	20		0.012									60	33		100
SUP60N10-18P	SINGLE N	TO-220	100	20		0.0183	0.023						r	60	48			150
SUP70N03-09BP	SINGLE N	TO-220	30	20		0.009	0.013							70		15.5		93
SUP75P03-07	SINGLE P	TO-220	- 30	20		0.007	0.01							75	160			187
SUP85N04-03	SINGLE N	TO-220	40	20		0.003	0.005							85	165			250
SUP85N10-10P	SINGLE N	TO-220	100	20		0.01								85	77			227
SUP90N03-03	SINGLE N	TO-220	30	20		0.0029	0.0033							90	171	81.5		187
SUP90N06-5m0P	SINGLE N	TO-220	60	20		0.005								90	105			300
SUP90N06-6m0P	SINGLE N	TO-220	60	20		0.006								90	78.5			272
SUP90N08-4m8P	SINGLE N	TO-220	75	20		0.0048	0.0085						d	90	105			300
SUP90N08-6m8P	SINGLE N	TO-220	75	20		0.0068								90	75			272
SUP90N08-7m7P	SINGLE N	TO-220	75	20		0.0077								90	69			208.3
SUP90N08-8m2P	SINGLE N	TO-220	75	20		0.0082								90	58			150
SUP90N10-8m8P	SINGLE N	TO-220	100	20		0.0088								90	97			300
SUP90N15-18P	SINGLE N	TO-220	150	20		0.018								90	64			375
SUP90P06-09L	SINGLE P	TO-220	- 60	20		0.0093	0.0118							90	160			250
TN0200K	SINGLE N	SOT-23	20	8			0.4		0.5					0.73		1.4		0.35
TN0201K	SINGLE N	SOT-23	20	20		1	1.4							0.42	1			0.35
TN2404K	SINGLE N	SOT-23	240	20		4	4		6					0.2	4.87			0.36
TP0101K	SINGLE P	SOT-23	- 20	8			0.65		0.85					0.58		1.4		0.35

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)
 - h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
 - i. Not used
 - j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
 - k. S1 and D2 connected
 - l. Not used
 - m. Schottky connected to channel 1
 - n. Half-bridge
 - o. Not used
 - p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
 - q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
 - r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
 - s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
 - t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

Low-Voltage Power MOSFETs Selector Guide

Vishay Siliconix



Alphanumeric Index, continued

Part Number	Configuration	Package	V _{DS} (V)	V _{GS} (V)	r _{DS(on)} Ω								Footnote	I _D (A)	Q _g (nC)		P _D (W)
					V _{GS} = 15 V	V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 3.3 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	V _{GS} = 1.2 V			V _{GS} = 10 V	V _{GS} = 4.5 V	
TP0202K	SINGLE P	SOT-23	- 30	20		1.4	3.5							0.385	1		0.35
TP0610K	SINGLE P	SOT-23	- 60	20		5	10							0.4	1.2		0.25
TP0610KL	SINGLE P	T0-92	- 60	20		6	10						a	0.27	1.7		0.8

- Notes:**
- a. Q_g @ V_{GS} = 15 V (vs. 10 V)
 - b. Q_g @ V_{GS} = 5 V (vs. 4.5 V)
 - c. r_{DS} = r_{SS}/2
 - d. r_{DS(on)} @ V_{GS} = 6 V (vs. 4.5 V)
 - e. r_{DS(on)} @ V_{GS} = 3 V (vs. 3.3 V)
 - f. r_{DS(on)} @ V_{GS} = 3.7 V (vs. 3.3 V)
 - g. r_{DS(on)} @ V_{GS} = 4.75 V (vs. 4.5 V)

- h. r_{DS(on)} @ V_{GS} = 2.7 V (vs. 2.5 V or 3.3 V)
- i. Not used
- j. r_{DS(on)} @ V_{GS} = 3.1 V (vs. 3.3 V)
- k. S1 and D2 connected
- l. Not used
- m. Schottky connected to channel 1

- n. Half-bridge
- o. Not used
- p. r_{DS(on)} @ V_{GS} = 3.6 V (vs. 3.3 V)
- q. Q_g @ V_{GS} = 6 V (vs. 4.5 V)
- r. r_{DS(on)} @ V_{GS} = 8 V (vs. 4.5 V)
- s. r_{DS(on)} @ V_{GS} = 15 V (vs. 10 V)
- t. r_{DS(on)} @ V_{GS} = 5 V (vs. 4.5 V)

SEMICONDUCTORS:

Rectifiers • High-Power Diodes and Thyristors • Small-Signal Diodes • Zener and Suppressor Diodes
• FETs • RF Transistors • Optoelectronics • ICs • Modules

PASSIVE COMPONENTS:

Resistive Products • Magnetics • Capacitors • Strain Gage Transducers and Stress Analysis Systems



One of the World's Largest Manufacturers of
Discrete Semiconductors and Passive Components

WORLDWIDE SALES CONTACTS

THE AMERICAS

UNITED STATES

VISHAY AMERICAS
ONE GREENWICH PLACE
SHELTON, CT 06484
UNITED STATES
PH: +1-402-563-6866
FAX: +1-402-563-6296

ASIA

SINGAPORE

VISHAY INTERTECHNOLOGY ASIA PTE LTD.
37A TAMPINES STREET 92 #07-00
SINGAPORE 528886
PH: +65-6788-6668
FAX: +65-6788-0988

P.R. CHINA

VISHAY TRADING (SHANGHAI) CO., LTD.
15D, SUN TONG INFOPORT PLAZA
55 HUAI HAI WEST ROAD
SHANGHAI 200030
P.R. CHINA
PH: +86-21-5258 5000
FAX: +86-21-5258 7979

JAPAN

VISHAY JAPAN CO., LTD.
MG IKENOHATA BLDG. 4F
1-2-18, IKENOHATA
TAITO-KU
TOKYO 110-0008
JAPAN
PH: +81-3-5832-6210
FAX: +81-3-5832-6260

EUROPE

GERMANY

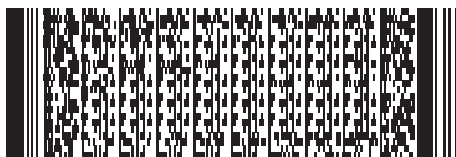
VISHAY ELECTRONIC GMBH
GEHEIMRAT-ROSENTHAL-STR. 100
95100 SELB
GERMANY
PH: +49-9287-71-0
FAX: +49-9287-70435

FRANCE

VISHAY S.A.
199, BLVD DE LA MADELEINE
06003 NICE, CEDEX 1
FRANCE
PH: +33-4-9337-2927
FAX: +33-4-9337-2926

UNITED KINGDOM

VISHAY LTD.
SUITE 6C, TOWER HOUSE
ST. CATHERINE'S COURT
SUNDERLAND ENTERPRISE PARK
SUNDERLAND SR5 3XJ
UNITED KINGDOM
PH: +44-191-516-8584
FAX: +44-191-549-9556



VMN-SG2127-0911

www.vishay.com