

Suggested Power MOSFET Switches for CompactPCI® Hot-Swap Controller ICs
N-Channel

Part Number	Manufacturer	$V_{(BR)DSS}$	$R_{DS(on)} @ V_{GS}=10V$	I_D cont. @ 25°C	Package
IRF7603	International Rectifier	30V	35 milliohms max	5.6A	Micro-8
IRF7413	International Rectifier	30V	11 milliohms max	12A	SO-8
Si4420DY	International Rectifier	30V	9 milliohms max	12.5A	SO-8
IRL3803S	International Rectifier	30V	6 milliohms max	140A	D2PAK
RFD20N03SM	Fairchild Semiconductor	30V	25 milliohms max	20A	DPAK
HUF76129D3S	Fairchild Semiconductor	30V	16 milliohms max	20A	DPAK
RF1S70N03SM	Fairchild Semiconductor	30V	10 milliohms max	70A	D2PAK
HUF76143S3S	Fairchild Semiconductor	30V	5.5 milliohms max	75A	D2PAK
HUF76145S3S	Fairchild Semiconductor	30V	4.5 milliohms max	75A	D2PAK
MTSF3N03HD	On Semiconductor	30V	40 milliohms max	3A	Micro-8
MMSF7N03HD	On Semiconductor	30V	28 milliohms max	7A	SO-8
MTD20N03HDL	On Semiconductor	30V	35 milliohms max	20A	DPAK
Si6434DQ	Vishay Siliconix	30V	28 milliohms max	5.6A	TSSOP-8
Si4412DY	Vishay Siliconix	30V	28 milliohms max	7A	SO-8
Si4416DY	Vishay Siliconix	30V	18 milliohms max	9A	SO-8
Si6410DQ	Vishay Siliconix	30V	14 milliohms max	7.8A	TSSOP-8

P-Channel

Part Number	Manufacturer	$V_{(BR)DSS}$	$R_{DS(on)} @ V_{GS}=10V$	I_D cont. @ 25°C	Package
IRF7606	International Rectifier	-30V	90 milliohms max	3.6A	Micro-8
IRF7416	International Rectifier	-30V	20 milliohms max	10A	SO-8
IRF7424	International Rectifier	-30V	13.5 milliohms max	11A	SO-8
MTSF2P03HD	On Semiconductor	-30V	90 milliohms max	2A	Micro-8
MMSF3P02HD	On Semiconductor	-20V	75 milliohms max	3A	SO-8
MTD20P03HDL	On Semiconductor	-30V	99 milliohms max	20A	DPAK
Si6435ADQ	Vishay Siliconix	-30V	90 milliohms max	5.5A	TSSOP-8
Si6415DQ	Vishay Siliconix	-30V	19 milliohms max	6.5A	TSSOP-8
Si4431ADY	Vishay Siliconix	-30V	30 milliohms max	7A	SO-8
Si4435DY	Vishay Siliconix	-30V	20 milliohms max	8A	SO-8

Suggested 100V Power MOSFET Switches for -48V Hot-Swap Controller ICs
N-Channel

Part Number	Manufacturer	$V_{(BR)DSS}$	$R_{DS(on)} @ V_{GS}=10V$	I_D cont. @ 25°C	Package
IRFR110	International Rectifier	100V	540 milliohms max	4.3A	DPAK
IRFR120	International Rectifier	100V	270 milliohms max	7.7A	DPAK
IRFR120N	International Rectifier	100V	210 milliohms max	9.1A	DPAK
IRF7490N	International Rectifier	100V	39 milliohms max	5.4A	SO-8
IRF3710S	International Rectifier	100V	25 milliohms max	57A	D2PAK
IRF7495N	International Rectifier	100V	22 milliohms max	7.3A	*SO-8
HUF75631SK8	Fairchild Semiconductor	100V	39 milliohms max	5.5A	*SO-8
HUF75637S3S	Fairchild Semiconductor	100V	30 milliohms max	44A	D2PAK
MTD6N10E	On Semiconductor	100V	400 milliohms max	6A	DPAK
MTD9N10E	On Semiconductor	100V	250 milliohms max	9A	DPAK
Si4482DY	Vishay Siliconix	100V	60 milliohms max	4.6A	*SO-8
IXFX180N10	IXYS	100V	8 milliohms max	180A	TO-247
IXFK180N10	IXYS	100V	8 milliohms max	180A	TO-264
STL35NF10	ST Microelectronics	100V	25 milliohms max	35A	*PowerFlat™

*Small Package

Suggested low $R_{DS(on)}$ N-Channel MOSFET Switches for Tracking/Sequencing Controller ICs
N-Channel

Part Number	Manufacturer	$V_{(BR)DSS}$	$R_{DS(on)} @ V_{GS}=10V$	$I_D @ 25^{\circ}C$	Package
IRLR8103V	International Rectifier	30V	7.9 milliohms max	91A	DPAK
IRF1404S	International Rectifier	40V	4.0 milliohms max	162A	D2PAK
IRF7832	International Rectifier	30V	4.0 milliohms max.	20A	*SO-8
IRF6603	International Rectifier	30V	3.9 milliohms max.	22A	*DirectFET™
IRF3713S	International Rectifier	30V	3.0 milliohms max	260A	D2PAK
IRF3703	International Rectifier	30V	2.8 milliohms max	210A	TO-220
IRF6618	International Rectifier	30V	2.2 milliohms max.	30A	*DirectFET™
HUF76143S3S	Fairchild Semiconductor	30V	5.5 milliohms max	75A	D2PAK
HUF76145S3S	Fairchild Semiconductor	30V	4.5 milliohms max	75A	D2PAK
FDS7788	Fairchild Semiconductor	30V	4.0 milliohms max	18A	*SO-8
FDZ5047N	Fairchild Semiconductor	30V	2.9 milliohms max	22A	*BGA
STL28NF3LL	ST Microelectronics	30V	5.5 milliohms max	28A	*PowerFlat™
STB80NF03L-04	ST Microelectronics	30V	4.0 milliohms max	80A	D2PAK
STS25NH3LL	ST Microelectronics	30V	3.5 milliohms max	25A	*SO-8
STV160NF03L ¹	ST Microelectronics	30V	2.8 milliohms max	160A	*Power SO-10
SUB75N04-05L	Vishay Siliconix	40V	5.5 milliohms max	55A	D2PAK
SUB75N03-04	Vishay Siliconix	30V	4.0 milliohms max	75A	D2PAK

*Small Package

Note 1 - The V_{GS} maximum for the ST Microelectronics devices is 15V. The VGATE output from the SMT4004 is typically 14V, but the data sheet maximum is 16V. In order to protect the MOSFET four 13V zener diodes (1N5243B) can be added from each VGATE pin to ground. Alternately, a single 15V zener diode (1N5245B) can be added from the VGG_CAP pin to ground to clamp all VGATE outputs. Use the 10V programmable VGATE option on the SMT4214 and SMT2002.

Suggested low $R_{DS(on)}$ P-Channel MOSFET Switches for Tracking/Sequencing Controller ICs
P-Channel

Part Number	Manufacturer	$V_{(BR)DSS}$	$R_{DS(on)} @ V_{GS}=10V$	$I_D \text{ cont. } @ 25^{\circ}C$	Package
FDZ208P	Fairchild Semiconductor	-30V	10.5 milliohms max	12.5A	*BGA
SUB75P03-07	Vishay Siliconix	-30V	7 milliohms max	75A	TO-263

*Small Package

Manufacturers Web sites:

<http://www.irf.com/>

<http://www.fairchildsemi.com/>

<http://www.onsemi.com/>

<http://www.vishay.com/brands/siliconix/>

<http://www.ixys.com/>

<http://eu.st.com/stonline/index.shtml>