



POWER MOSFETs

On-Resistance Ratings at $V_{GS} = 1.2\text{ V}$



Industry's First Load Switches Designed for On-Resistance Ratings at 1.2 V

KEY BENEFITS

- Optimized for use with the low-voltage core ICs in portable electronics systems
- Allow the driver voltage to turn on the switch from a lower output voltage than 1.8 V, reducing the need for level shift circuitry
- Low on-resistance ratings and level shift elimination help reduce power consumption and increase battery usage time
- Single n- and p-channel device options
- Choice of on-resistance and package options with footprints as small as 1.2 mm by 1 mm

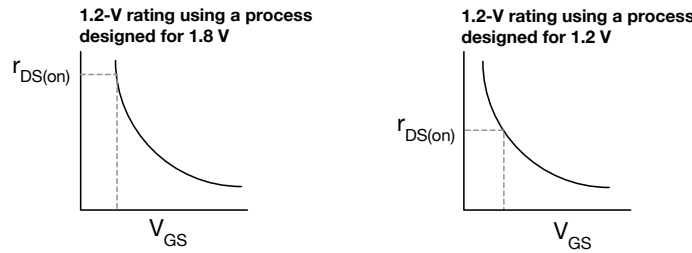
APPLICATIONS

- Load, power amplifier, and battery charger switching in cell phones, MP3 players, digital cameras, and other portable systems

Datasheets are available on our web site at www.vishay.com
<http://www.vishay.com/mosfets/12-rated-on-res/>



Power MOSFETs with On-Resistance Ratings at $V_{GS} = 1.2\text{ V}$



Vishay also has devices with V_{GS} ratings down to 1.5 V. Both families are included in the table below.

Part Number	Package	V_{DS} (V)	V_{GS} (V)	$R_{DS(on)}$ (Ω)					Samples
				$V_{GS} = 4.5\text{ V}$	$V_{GS} = 2.5\text{ V}$	$V_{GS} = 1.8\text{ V}$	$V_{GS} = 1.5\text{ V}$	$V_{GS} = 1.2\text{ V}$	
Single N-Channel									
SiA414DJ	PowerPAK [®] SC-70	8	5	0.011	0.013	0.016	0.022	0.041	Available
SiB414DK	PowerPAK SC-75	8	5	0.026	0.03	0.037	0.052	0.089	Available
SiB422EDK		20	8	0.03	0.041	0.057	0.082		Available
Si1050X	SC89-6	8	5	0.086	0.093	0.102	0.12		Available
Si8424DB	MICRO FOOT [®] 1.6 x 1.6	8	5	0.031	0.033	0.035	0.043	0.077	Available
Si8800EDB	MICRO FOOT 0.8 x 0.8	20	8	0.08	0.09	0.105	0.15		Available
Single N-Channel Plus Integrated Schottky									
SiB800EDK	PowerPAK SC-75	20	6	0.225	0.27	0.345	0.96		Available
Single P-Channel									
Si3499DV	TSOP-6	-8	5	0.023	0.029	0.036	0.045		Available
Si2377EDS	SOT-23	-20	8	0.061	0.08	0.11	0.165		Available
Si5499DC	1206-8 ChipFET [®]	-8	5	0.036	0.045	0.056	0.077		Available
Si1499DH	SC70-6	-8	5	0.078	0.095	0.115	0.153	0.424	Available
Si1401EDH		-12	10	0.034	0.046	0.07	0.11		Available
SiA417DJ	PowerPAK SC-70	-8	5	0.023	0.031	0.04	0.058	0.095	Available
SiA413DJ		-12	8	0.029	0.034	0.044	0.1		Available
SiA431DJ		-20	8	0.025	0.031	0.041	0.07		Available
SiA419DJ		-20	5	0.03	0.039	0.051	0.066	0.113	Available
SiB417EDK	PowerPAK SC-75	-8	5	0.058	0.08	0.1	0.13	0.25	Available
SiB455EDK		-12	10	0.027	0.039	0.069	0.165		Available
SiB457EDK		-20	8	0.035	0.049	0.072	0.13		Available
Si8429DB	MICRO FOOT 1.6 x 1.6	-8	5	0.035	0.042	0.052	0.069	0.098	Available
Si8451DB	MICRO FOOT 1.5 x 1	-20	8	0.08	0.1	0.126	0.2		Available
Si8445DB	MICRO FOOT 1.2 x 1	-20	5	0.084	0.1	0.12	0.155	0.495	Available
Si8461DB	MICRO FOOT 1 x 1	-20	8	0.1	0.118	0.14	0.205		Available
Dual N-Channel									
Si5920DC	1206-8 ChipFET	8	5	0.032	0.036	0.045	0.054		Available
SiA778DJ	PowerPAK SC-70	12	8	0.029	0.034	0.044	0.065		Available
		20	6	0.225	0.27	0.345	0.96		
SiB914DK	PowerPAK SC-75	8	5	0.113	0.138	0.19	0.28	0.48	Available
SiB900EDK		20	6	0.225	0.27	0.345	0.96		Available
N & P Pair									
SiA517DJ	PowerPAK SC-70	12	8	0.029	0.034	0.044	0.065		Available
		-12	8	0.061	0.081	0.115	0.17		
SiA533EDJ		12	8	0.034	0.04	0.05	0.07		Available
		-12	8	0.059	0.081	0.115	0.215		

For the latest list of devices, visit <http://www.vishay.com/mosfets/15-rated-on-res/>

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