



MOSFETs

TrenchFET® Gen III - P-Channel

Breakthrough P-Channel Technology Dramatically Cuts $R_{DS(on)}$



KEY BENEFITS

- Lowest on-resistance per area achieved for a p-channel MOSFET: down to half of previous industry best
- Down to below 2 mΩ in SO-8 footprint area
- Variety of package sizes, from PowerPAK® SO-8 down to 1.6 mm x 1.6 mm PowerPAK SC-75 and 0.8 mm x 0.8 mm chip-scale MICRO FOOT®
- Low conduction losses save power in battery operated systems

APPLICATIONS

- Load switching and hot swapping in industrial systems
- Adaptor, battery, and load switches in notebooks, laptops, and netbooks
- Load switches in charger circuits for portable and handheld devices such as smart phones, tablets, mobile computing, MP3 players, and DSCs

RESOURCES

- Datasheets: <http://www.vishay.com/mosfets/geniii-p/>
- For technical questions contact: pmostechsupport@vishay.com
- More featured products: <http://www.vishay.com/landingpage/tradeshows/powermanagement/2011/mosfets.html>





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Part Number	Package (largest to smallest)	V _{DS} (V)	V _{GS} (V)	R _{DS(ON)} (Ω)					Samples
				V _{GS} = 10 V	V _{GS} = 4.5 V	V _{GS} = 2.5 V	V _{GS} = 1.8 V	V _{GS} = 1.5 V	
SINGLE P-CHANNEL									
Si7157DP	PowerPAK® SO-8	-20	12	0.0016	0.002	0.0032			Available
Si7145DP		-30	20	0.0026	0.00375				Available
Si4497DY	SO-8	-30	20	0.0033	0.0046				Available
SiSS23DN	PowerPAK 1212-8S	-20	8		0.0045	0.0063	0.0115		Available
Si7655ADN		-20	12	0.0036	0.0048	0.0085			Available
SiSS27DN		-30	20	0.0056	0.009				Available
SiS443DN	PowerPAK 1212-8	-40	20	0.0117	0.016				Available
Si3421DV	TSOP-6	-30	20	0.0192	0.027				Available
Si2333DDS	SOT-23	-12	8		0.028	0.04	0.063	0.15	Available
Si2365EDS		-20	8		0.032	0.041	0.0675		Available
Si2371EDS		-30	12	0.045	0.053	0.08			Available
Si5411EDU	PowerPAK ChipFET®	-12	8		0.0082	0.0117	0.0206		Available
Si5415AEDU		-20	8		0.0096	0.0132	0.022		Available
Si1443EDH	SC70-6	-30	12	0.054	0.062	0.085			Available
SiA467EDJ	PowerPAK SC-70	-12	8		0.013	0.0195	0.04		Available
SiA447DJ		-12	8		0.0135	0.0194	0.0344	0.071	Available
SiA437DJ		-20	8		0.0145	0.0205	0.033	0.065	Available
SiA445EDJ		-20	12		0.0165	0.03			Available
SiA453EDJ		-30	12	0.0185	0.0235	0.0377			Available
SiB441EDK	PowerPAK SC-75	-12	8		0.0255	0.036	0.06	0.115	Available
SiB457EDK		-20	8		0.035	0.049	0.079	0.157	Available
Si1077X	SC89-6	-20	8		0.078	0.098	0.13	0.188	Available
Si8851EDB	Power MICRO FOOT® 2.4 x 2	-20	8		0.008	0.011	0.0185		Available
Si8425DB	MICRO FOOT 1.6 x 1.6	-20	10		0.023	0.027	0.04		Available
Si8487DB		-30	12	0.031	0.035	0.045			Available
Si8483DB	MICRO FOOT 1.5 x 1	-12	10		0.026	0.035	0.055	0.092	Available
Si8499DB		-20	12		0.032	0.046	0.12		Available
Si8497DB		-30	12		0.053	0.071			Available
Si8489EDB	MICRO FOOT 1 x 1	-20	12	0.044	0.054	0.082			Available
Si8817DB	MICRO FOOT 0.8 x 0.8	-20	8		0.076	0.1	0.145	0.32	Available
SINGLE P-CHANNEL PLUS INTEGRATED SCHOTTKY									
Si8817DB	PowerPAK SC-70	-30	12	0.065	0.08	0.125			Available
LEVEL SHIFT									
Si1865DDL	SC70-6	-12	8		0.2	0.3	0.508		Available
DUAL P-CHANNEL									
Si7997DP	PowerPAK SO-8	-30	20	0.0055	0.0078				Available
SiA923AEDJ	PowerPAK SC-70	-20	8		0.054	0.07	0.104	0.165	Available
SiA929DJ		-30	12	0.064	0.078	0.12			Available
N&P PAIR									
SiA527DJ	PowerPAK SC-70	12	8		0.029	0.034	0.044	0.065	Available
		-12	8		0.041	0.06	0.11	0.174	
SiA537EDJ		12	8		0.028	0.033	0.042		Available
		-20	8		0.054	0.07	0.104	0.165	

* Thin PowerPAK 1212-8

For a full and latest list of devices visit www.vishay.com/mosfets/geniii-p/