



Powerex, Inc., Hillis Street, Youngwood, Pennsylvania 15697 (412) 925-7272

Powerex Europe, S.A., 428 Avenue G. Durand, BP107, 72003 Le Mans, France (43) 72.75.15

Major Ratings and Characteristics at $T_c = 25^\circ\text{C}$ (T_J Maximum = 150°C)

MAXIMUM RATINGS							ELECTRICAL CHARACTERISTICS		
							Static		
Type	V_{DS} Volts	I_D^* Amperes	I_{DM} Amperes	P_T Watts	$R_{\theta JC}$ $^\circ\text{C/W}$	V_{RMS} Isolation Volts	I_D Amperes	$R_{DS(on)}$ Ω	$R_{DS(on)}$ @ 150°C Ω
FETMOD™ MOSFET Power Modules									
Single FETMOD™									
JS524575/JS525075	450/500	45	300	415	.3	2500	75	0.11	0.22
JS224510/JS225010	450/500	75	300	830	.15	2500	100	0.075	0.15
Dual FETMOD™									
JD221KA1	1000	15	45	330	.38	2500	15	0.7	1.4
JD224503/JD225003	450/500	20	90	250	.5	2500	30	0.3	0.6
JD224505/JD225005	450/500	30	150	310	.41	2500	50	0.2	0.32
JT2245050L	450	40	150	420	.35	2500	50	.11	.22
JD224505S	450	35	150	300	.41	2500	50	0.12	.24
Split-Dual FETMOD™									
JT224503/JT225003	450/500	25	90	250	.5	2500	30	0.2	0.4
JT224505/JT225005	450/500	40	150	420	.3	2500	50	0.12	0.24
JT220510	50	100	200	310	.35	2500	100	0.015	0.025
Quad-Mos FETMOD™									
JBF225A1/JBF230A1	250/300	15	45	125	1.0	2500	15	0.28	0.56
JBF245A1/JBF250A1	450/500	10	45	125	1.0	2500	15	0.6	1.2
Six-Mos FETMOD™									
JEE245B0/JEE250B0	450/500	6	24	78	1.6	2000	8	1	2
JEF225A1/JEF230A1	250/300	15	45	125	1.0	2500	15	0.28	0.56
JEF245A1/JEF250A1	450/500	10	45	125	1.0	2500	15	0.6	1.2
Chopper FETMOD™									
JQ224505/JQ225005	450/500	35	150	360	.35	2500	50	.15	.3
JR224505/JR225005	450/500	40	150	420	.3	2500	50	.14	.28
JR224575/JR225075	450/500	50	225	500	.25	2500	75	.093	.186
JR224510/JR225010	450/500	65	300	620	.2	2500	100	.07	.14

Hybrid IC for Driving FETMOD: M57918L, M57919L, M57924L.

* I_{DC} Maximum at $T_J = 150^\circ\text{C}$



T-39-27

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Tentative

					FREE WHEEL DIODE CHARACTERISTICS			MECHANICAL CHARACTERISTICS		
Dynamic								Weight	Outline Drawings	
$V_{GS} = 0V, V_{DS} = 10V, f = 1 \text{ Mhz}$					I_S Amperes Maximum	V_{SD} Volts	t_{rr} ns	Grams	Number	Page
C_{iss} pf	C_{oss} pf	C_{rss} pf	t_{on} ns	t_{off} ns						
20000	3500	1000	500	1500	45	2.5	300	90	68	38
24000	5000	2000	750	1600	70	2.5	200	210	69	38
9000	1200	700	400	1200	15	2.5	200	250	71	39
6000	1500	600	400	900	30	2.5	200	210	70	39
9000	2000	700	500	1300	50	2.5	200	250	71	39
9000	2500	1000	500	1300	40	2.5	1000	250	74	40
13200	2000	600	500	1900	35	2.5	200	250	72	39
7000	2000	800	500	1100	25	2.5	200	250	73	40
9000	2500	1000	500	1300	40	2.5	200	250	74	40
10000	8000	6000	350	350	100	2.5	500	250	74	40
3000	1500	600	400	600	15	2.5	180	—	75	40
3000	1500	250	500	900	10	2.5	170	—	75	40
2000	900	400	300	600	6	2.5	100	50	76	41
3000	1500	600	400	600	15	2.5	180	90	77	41
3000	1500	250	500	900	10	2.5	170	90	78	41
13000	2500	1000	500	900	50	1	150	250	79	42
9000	2500	1000	500	1300	5	1.2	150	250	80	42
20000	4500	1800	600	1900	7.5	1.2	180	250	80	42
27000	6000	2400	500	1900	10	1.2	180	260	80	42