Surface Mount General Purpose Rectifier

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction

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For use in general purpose rectification of power supplies, inverters, converters, and freewheeling diodes for consumer and telecommunication.

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Maximum Ratings (T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	M1	M2	M3	M4	M5	M6	M7
Device marking code			M1	M2	M3	M4	M5	M6	M7
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Average rectified output current @60Hz sine wave, Resistance load, TL (FIG.1)	I_O	A	1.0						
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I_{FSM}	A	30						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			60						
Current squared time @1ms≤t≤8.3ms Tj=25	I^2t	A^2s	3.7						
Storage temperature	T_{stg}		-55 ~ +150						
Junction temperature	T_j		-55 ~ +150						

■Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	M1	M2	M3	M4	M5	M6	M7
Maximum instantaneous forward voltage	V_F	V	I_{FM}=1- ∂			V				

■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	M1	M2	M3	M4	M5	M6	M7
Typical Thermal Resistance	$R_{\theta J-A}$(1)	/W	75						
	$R_{\theta J-L}$(1)	/W	25						
	$R_{\theta J-C}$(1)	/W	20						

Note

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

■Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
M1~M7	F1	Approximate 0.059	5000	/	80000	13” reel
M1~M7	F2	Approximate 0.059	7500	/	120000	13” reel
M1~M7	F3	Approximate 0.059	7500	/	60000	13” reel
M1~M7	F4	Approximate 0.059	1800	14400	57600	7” reel
M1~M7	F5	Approximate 0.059	2000	16000	64000	7” reel
M1~M7	F6	Approximate 0.059	5000	/	100000	13” reel

■ Characteristics (Typical)