

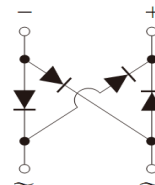
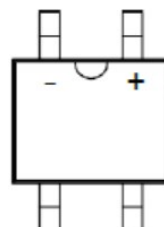


1.0A Surface Mount {0K2úú]è . нлРЭŜ Rectifiers - нлV~нрлV

PRIMARY CHARACTERISTICS

V_{RRM}	20V~250V
I_O	1.0A
V_F	0.55V,0.7V,0.85V,0.9V,0.92V
$T_{J,Max}$	150°C

SCHEMATIC DIAGRAM MD-L PACKAGE



FEATURES

- Low Power Loss,High Efficiency
- Ideally Suited for Automatic Assembly
- Surge Overload Rating to 30A Peak
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic,MD-L
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	MB 12F	MB 14F	MB 16F	MB 18F	MB 110F	MB 115F	MB 120F	MB 125F	UNITS
Peak Repetitive Reverse Voltage RMS Reverse Voltage DC Blocking Voltage	V _{RRM}	20	40	60	80	100	150	200	250	
	V _{R(RMS)}	14	28	42	56	70	105	140	175	V
	V _{DC}	20	40	60	80	100	150	200	250	
Average Rectified Output Current (Note1) @T _C = 100°C	I _{F(AV)}	1.0								A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	30								A
I ² t Rating for Fusing (t < 8.3ms)	I ² t	3.735								A ² s
Forward Voltage per element @I _F =1.0A	V _{FM}	0.55		0.7	0.85		0.90		0.92	V
Peak Reverse Current @T _A = 25°C At Rated DC Blocking Voltage @T _A = 100°C	I _{RM}	0.1			0.05					mA
		10			5					
Typical Junction Capacitance per leg	C _j	25								pF
Typical Thermal Resistance per leg	R _{θJL}	16								°C/W
Operating junction temperature range	T _J	-55 to +150								°C
Operating and Storage Temperature Range	T _{STG}	-55 to +150								°C

Note:

1. Mounted on aluminum substrate PC board with 1.3mm² solder pad.



FIG. 1- FORWARD CURRENT DERATING CURVE

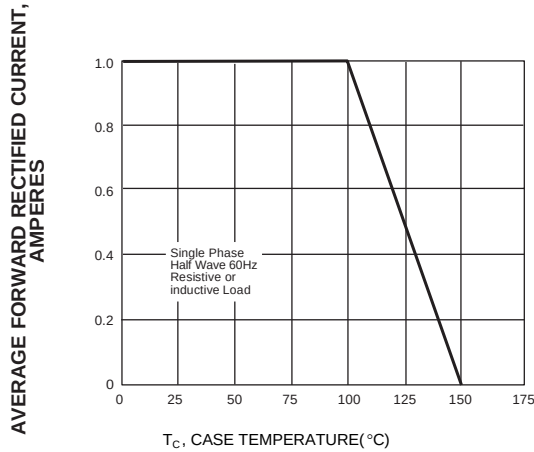


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

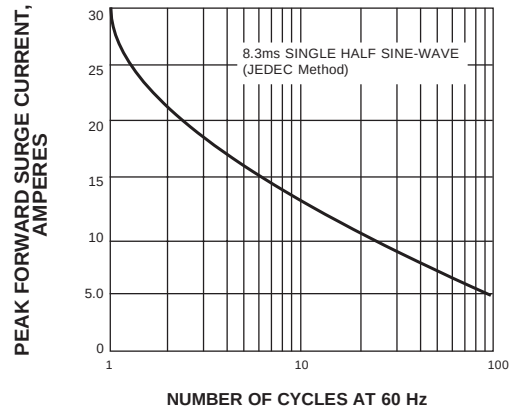


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

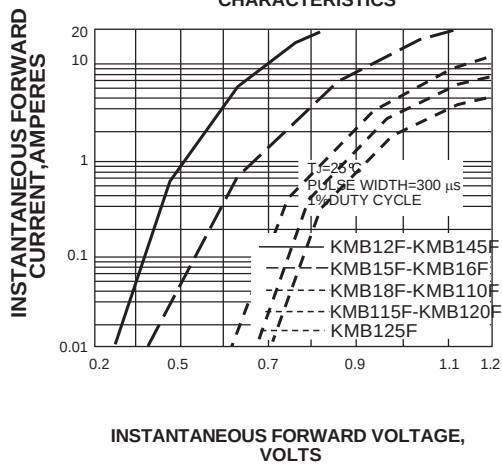


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

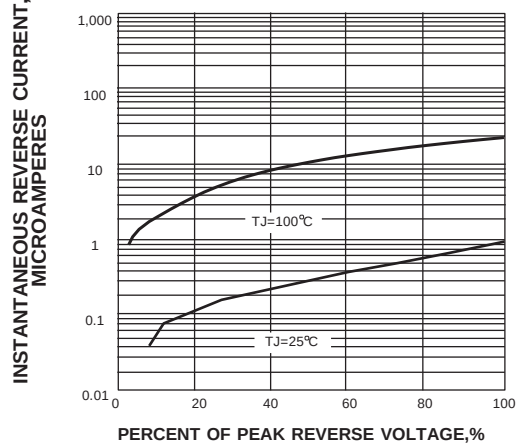
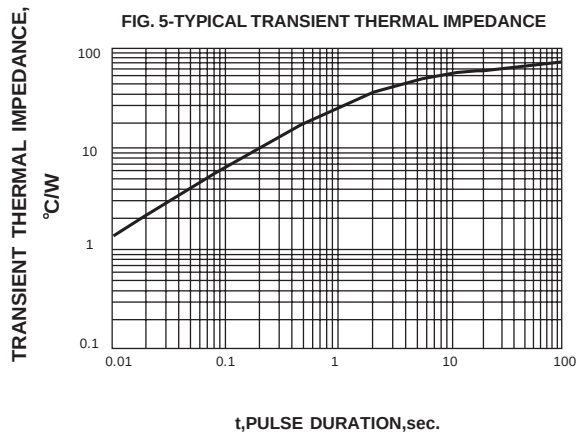
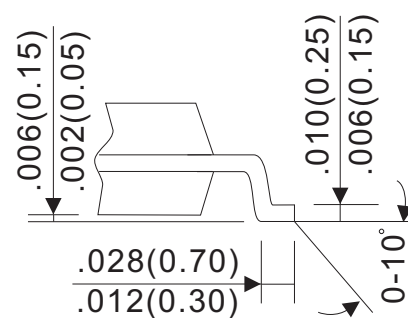
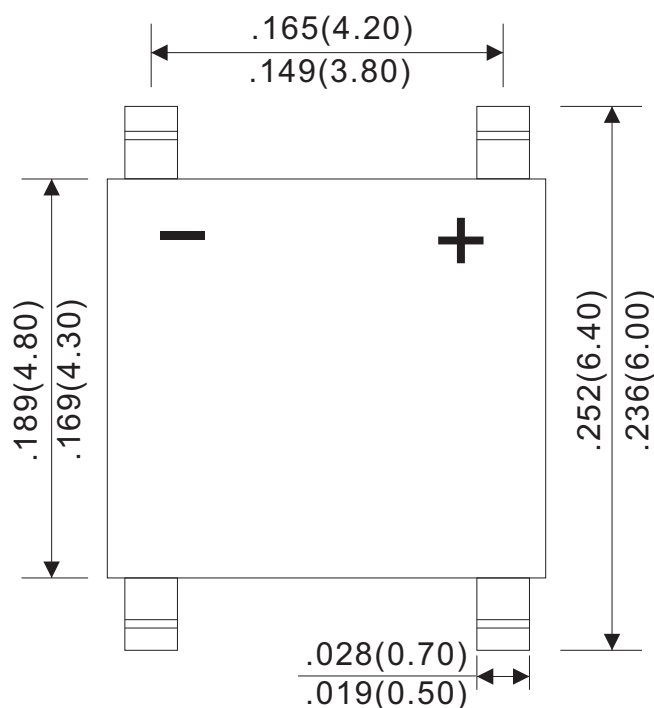


FIG. 5-TYPICAL TRANSIENT THERMAL IMPEDANCE

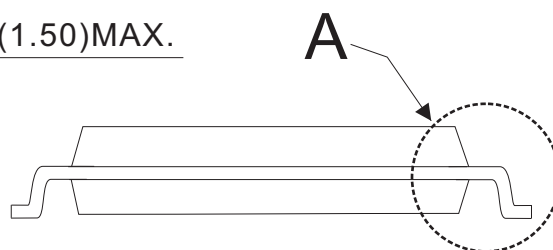
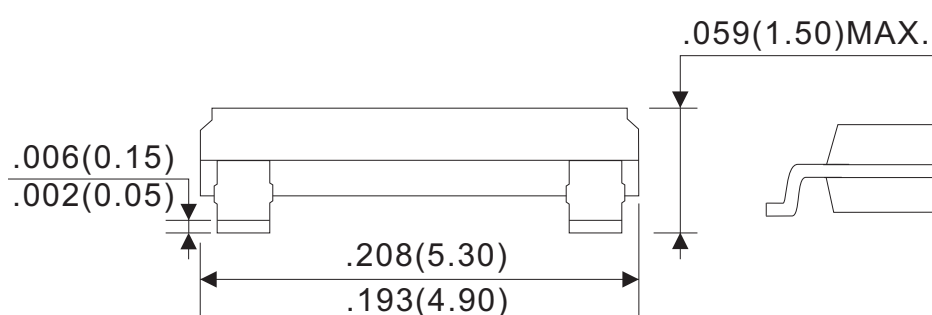


Outline Drawing

MD-L



DETAIL "A", SCALE=20/1



Dimensions in inches and (millimeters)

Rev.B

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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