RECTRON SEMICONDUCTOR
TECHNICAL SPECIFICATION

MB1F THRU MB10F

SINGLE-PHASE GLASS PASSIVATED SILICON BRIDGE RECTIFIER

VOLTAGE RANGE 100 to 1000 Volts CURRENT 0.8 Ampere

FEATURES

* Surge overload rating - 30 amperes peak
* Ideal for printed circuit board
* Reliable low cost construction utilizing molded
* Glass passivated device
* Polarity symbols molded on body
* Mounting position: Any

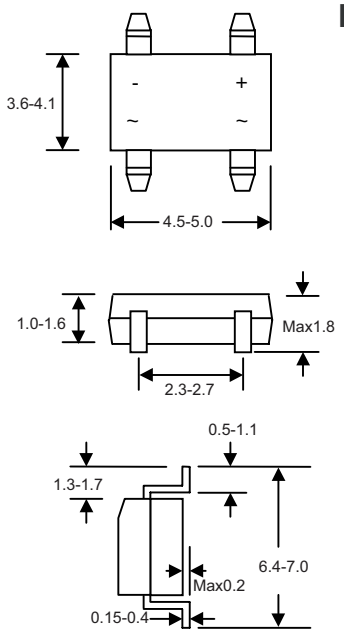
MECHANICAL DATA

* Epoxy: Device has UL flammability classification 94V-O

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.
resistive or inductive load.

MB-F



MAXIMUM RATINGS (At T_A = 25°C unless otherwise noted)

RATINGS		SYMBOL	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	100	200	400	600	800	1000	Volts
Maximum RMS Bridge Input Voltage		V_{RMS}	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current	T_A = 125 °C	I_O	0.5						Amps
	T_A = 110 °C		0.8						
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	30						Amps
Peak Forward Surge Current 10 ms single half sine-wave superimposed on rated load (JEDEC method)		I_{FSM}	27.3						Amps
Typical Current Squarad Time		I^2t	3.74						A^2 S
Typical ThermalResistance(Note2)		$R_{\theta JA}$	64						°C/W
		$R_{\theta JL}$	39						
Operating and Storage Temperature Range		T_J,T_{STG}	-55 to + 150						°C

ELECTRICAL CHARACTERISTICS (At T_A = 25°C unless otherwise noted)

CHARACTERISTICS		SYMBOL	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	UNITS
Maximum Forward Voltage Drop per Bridge Element at 0.8 A DC		V_F	1.1						Volts
Maximum Reverse Current at Rated DC Blocking Voltage per element	@T_A = 25°C	I_R	1.0						uAmps
	@T_A =150 °C		2						mAmps

NOTES:1.Typical Thermal Resistance : At 9.5mm lead lengths,PCB mounted.

2021-12/18
REV:G

RATING AND CHARACTERISTICS CURVES (MB1F THRU MB10F)

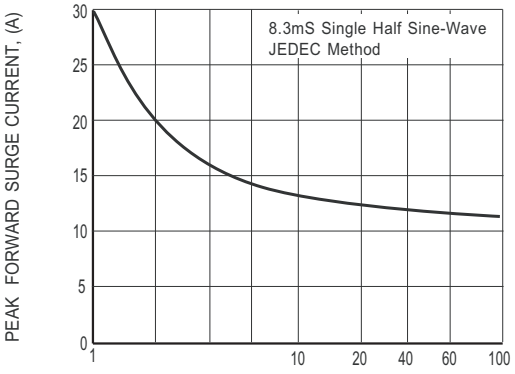


FIG. 1 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

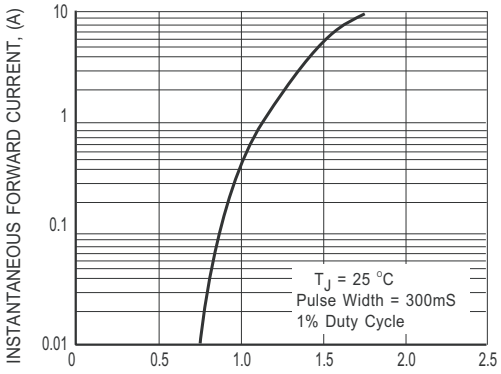


FIG.2 MAXIMUM INSTANTANEOUS FORWARD CHARACTERISTICS

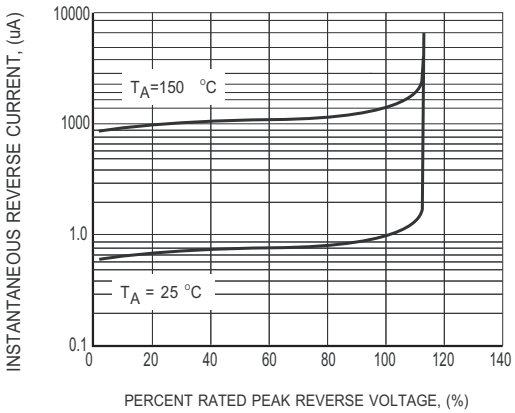


FIG.3 MAXIMUM REVERSE CHARACTERISTICS

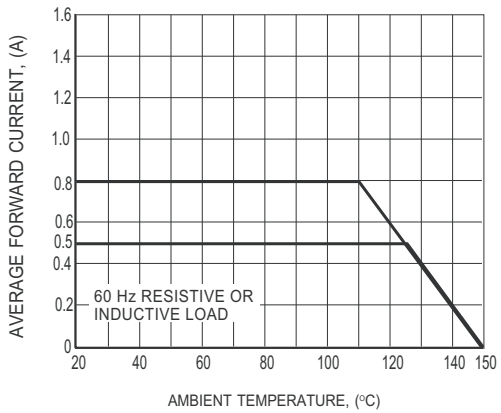
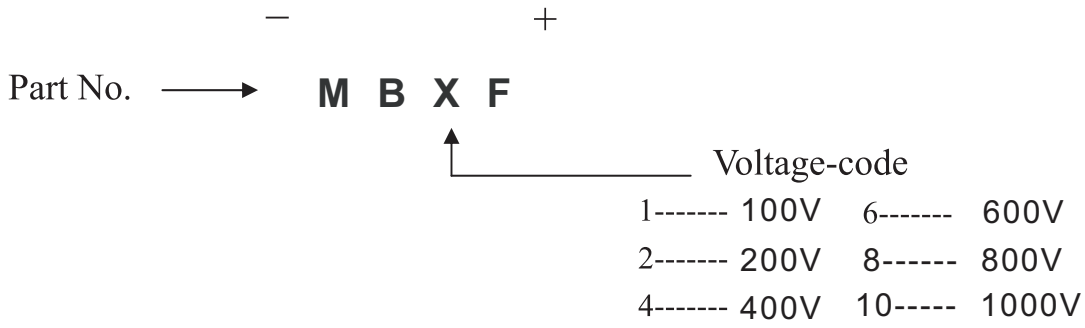
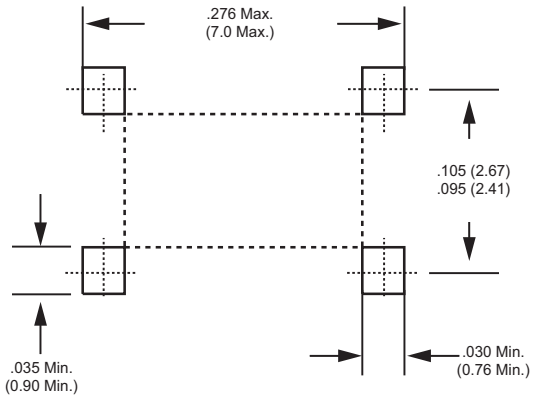


FIG.4 TYPICAL FORWARD CURRENT DERATING CURVE

Marking Description



Mounting Pad Layout



Dimensions in inches and (millimeters)

PACKAGING OF DIODE AND BRIDGE RECTIFIERS

REEL PACK

PACKAGE	PACKING CODE	EA PER REEL	EA PER INNER BOX	COMPONENT SPACE (mm)	TAPE SPACE (mm)	REEL DIA (mm)	CARTON SIZE (mm)	EA PER CARTON	GROSS WEIGHT(Kg)
MB-F	-W	5,000	10,000			330	360*335*360	80,000	25.83

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