

1.0A Single-Phase Bridges

FEATURES :

- Glass passivated chip junctions
- Low forward voltage drop L .
- High temperature soldering
260°C/10 seconds at terminals
- High surge current capability
- RoHS compliant.

MECHANICAL DATA :

- Case : MBF, Molded plastic body
- Terminals : Plated terminals solderable per MIL-STD-202E
method 208C
- Polarity : As marking on body


MAXIMUM RATINGS (Ratings at 25 °C ambient temperature unless otherwise specified)

Characteristic	Symbol	MB1F	MB2F	MB4F	MB6F	MB8F	MB10F	Unit
Peak Repetitive Reverse Voltage DC Blocking Voltage	V_{RRM} V_{DC}	100	200	400	600	800	1000	V
RMS Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectifier Forward Current at $T_A=40^\circ\text{C}$	$I_{(AV)}$	1.0						A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30						A
Maximum forward voltage at 1.0A DC	V_F	1.1						V
Maximum DC reverse current at rated DC blocking voltage ($T_A=25^\circ\text{C}$ / $T_A=125^\circ\text{C}$)	I_R	5.0 / 500						μA
Typical Junction Capacitance ⁽¹⁾	C_J	25						pF
Typical Thermal resistance	$R_{\theta JA}$	40						$^\circ\text{C/W}$
Typical Thermal resistance Junction to Lead	$R_{\theta JL}$	20						$^\circ\text{C/W}$
Operating Junction temperature	T_J	-55 ~ +150						$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 ~ +150						$^\circ\text{C}$

Note : 1.Measured at 1MHz and applied reverse voltage of 4.0V D.C

RATINGS AND CHARACTERISTICS CURVES

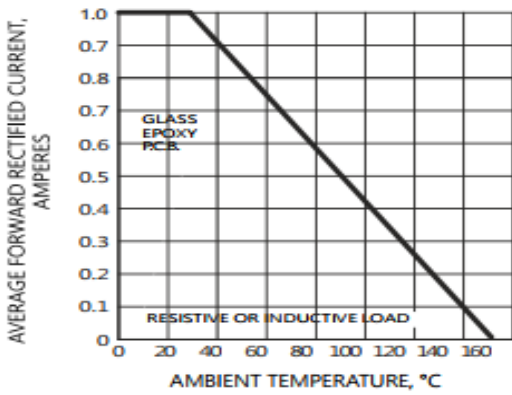


Figure 1. DERATING CURVE FOR OUTPUT AMBIENT TEMPERATURE, °C

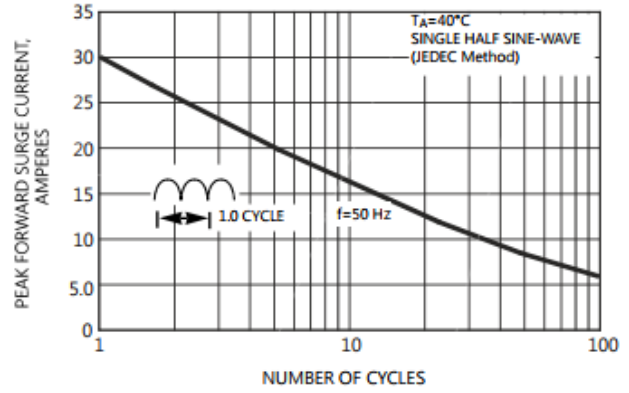


Figure 2. MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE

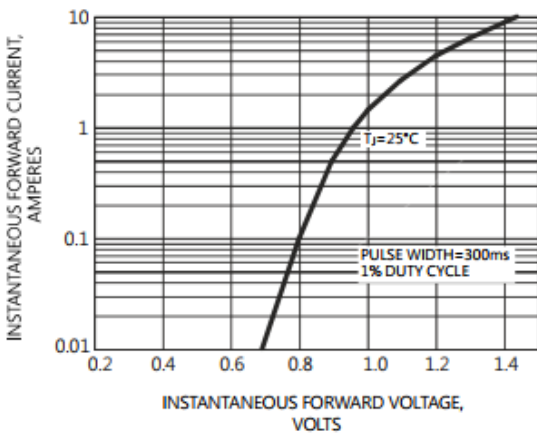


Figure 3. TYPICAL FORWARD VOLTAGE CHARACTERISTICS PER LEG

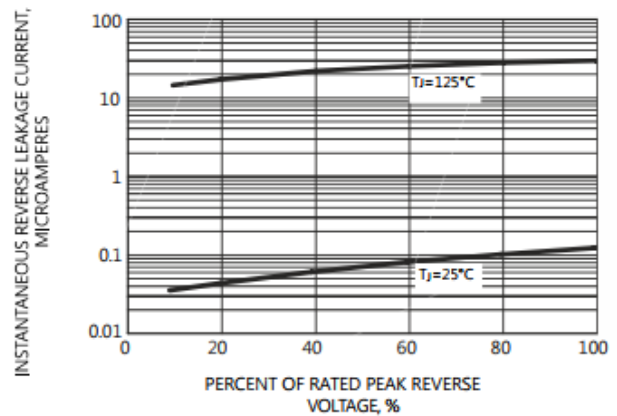


Figure 4. TYPICAL REVERSE LEAKAGE CHARACTERISTICS

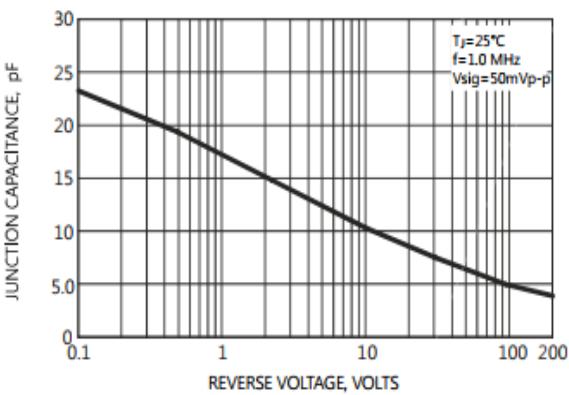
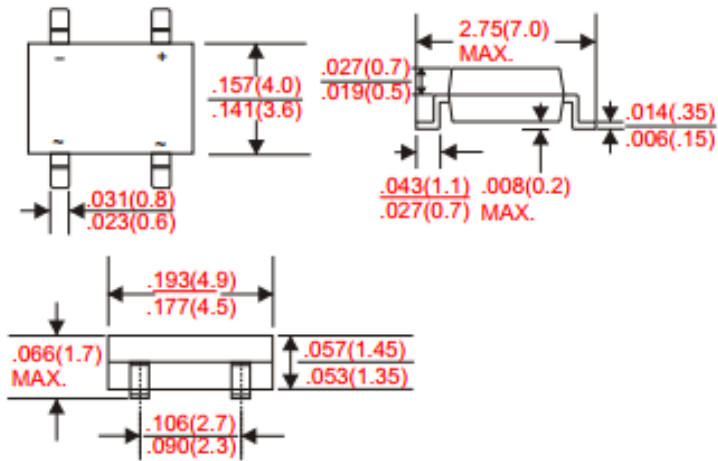


Figure 5. TYPICAL JUNCTION CAPACITANCE PER LEG

- Package outlines : Dimensions in inches (millimeters)



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