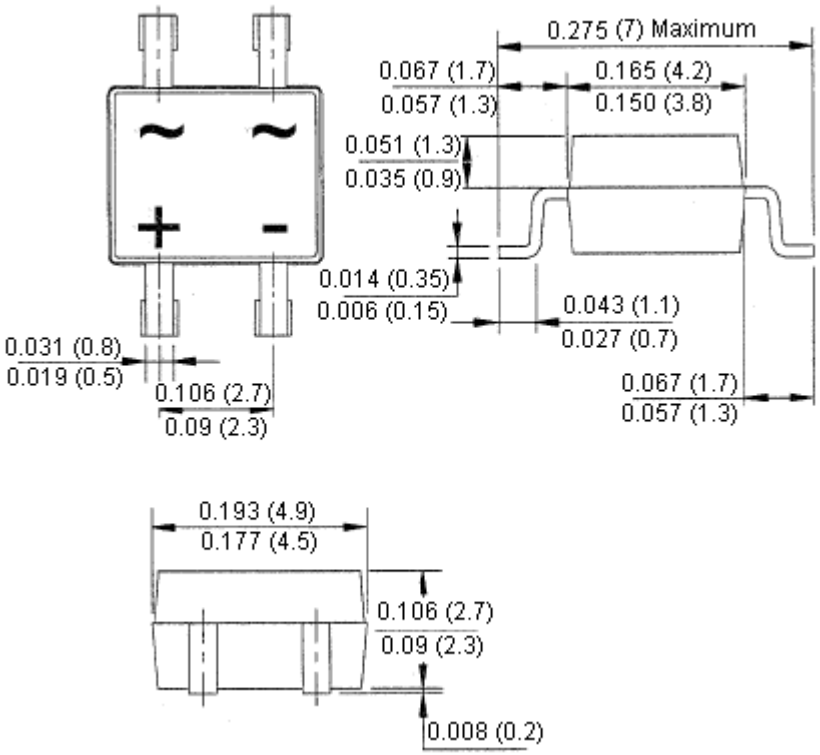
MB Series Bridge Rectifiers

Surface Mount

Features:

- Rating to 1,000 V PRV
- Ideal for printed circuit board
- Lead tin plated copper

Reverse Voltage - 50 to 1,000 Volts
Forward Current - 0.8 Ampere



Dimensions : Inches (Millimetres)

Mechanical Data

Polarity	: Symbol moulded on body
Weight	: 0.0044 oz, 0.125 g
Mounting position	: Any

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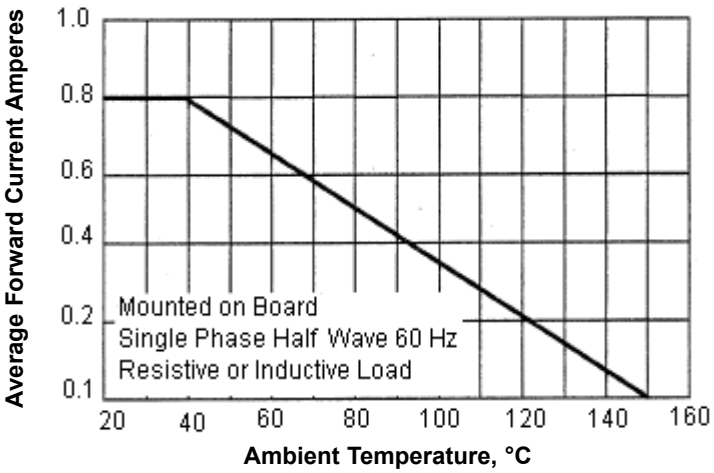
Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified
Single phase, half wave, 60 Hz, resistive or inductive load
For capacitive load, derate current by 20%

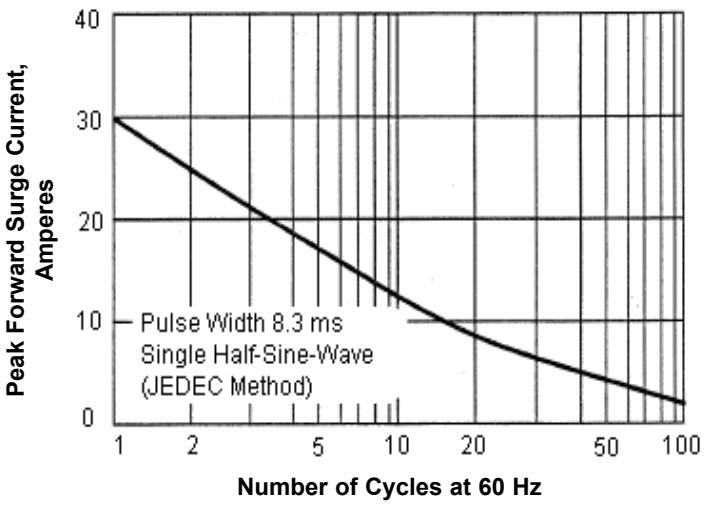
Characteristics	Symbol	MB05S	MB1S	MB2S	MB4S	MB6S	MB8S	MB10S	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1,000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1,000	
Maximum Average Forward Rectified Current (Note 1) at T_A = 40°C	$I_{(AV)}$	0.8							A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave	I_{FSM}	30							
Peak Forward Voltage at 0.8 A dc	V_F	1.1							V
Maximum DC Reverse Current at T_J = 25°C at Rated DC Blocking Voltage at T_J = 125°C	I_R	5 500							µA
Typical Junction Capacitance Per Element (Note 2)	C_J	15							pF
Typical Thermal Resistance (Note 3)	$R_{\theta JC}$	75							°C/W
Operating Temperature Range	T_J	-55 to +150							°C
Storage Temperature Range	T_{STG}								

Notes: 1. Mounted on P C board
2. Measured at 1 MHz and applied reverse voltage of 4 V dc
3. Thermal resistance junction to case

Forward Current Derating Curve



Maximum Non-Repetitive Surge Current



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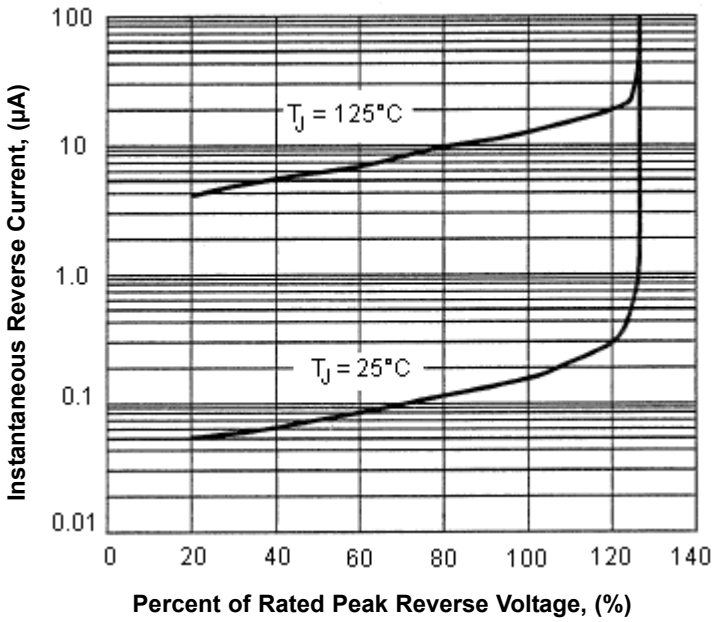
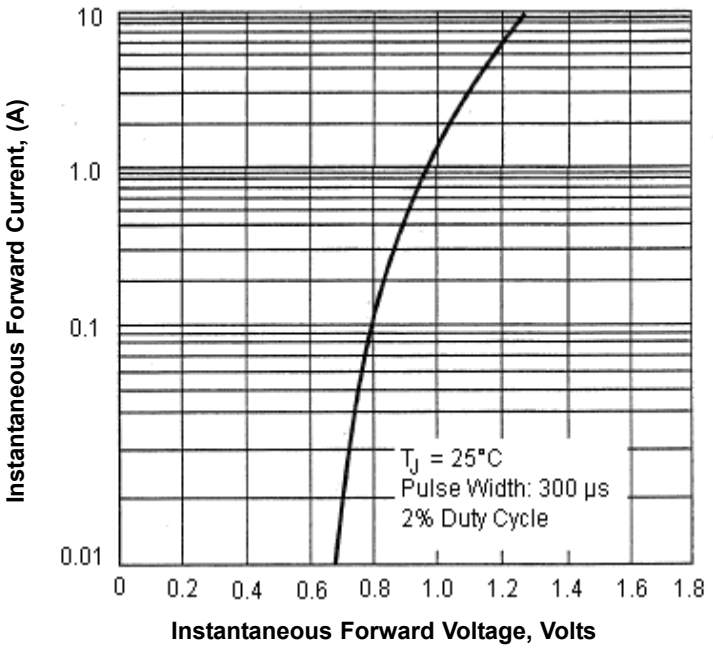
Typical Reverse Characteristics



Typical Forward Characteristics



Typical Junction Capacitance