

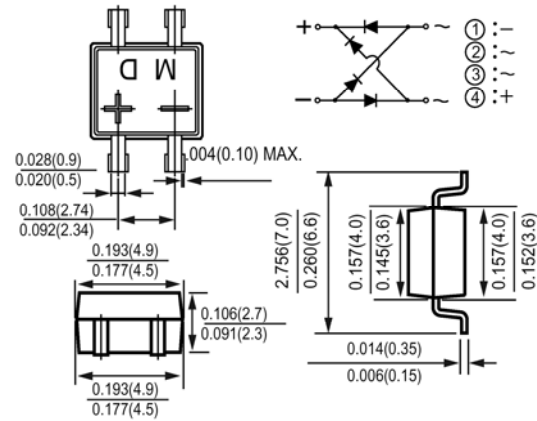
REVERSE VOLTAGE: 50 to 1000 VOLTS
FORWARD CURRENT: 0.5 AMPERE

Mechanical Data

- Case: Molded plastic, MD-S
- Epoxy: UL 94V-O rate flame retardant
- Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed
- Mounting position: Any
- Weight: 0.008ounce, 0.22gram

Product Features

- Surge overload rating: 30 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory
- Flammability Classification 94V-0
- Low leakage
- Reliable low cost construction utilizing molded



Package Dimensions in inches (mm)

Absolute Maximum Ratings

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

			MD1M	MD2M	MD3M	MD4M	MD5M	MD6M	MD7M	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}		50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}		35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}		50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current(see Fig. 1)	on glass-epoxy P.C.B (Note 2)	$I_{(AV)}$	0.5						Amp	
	on aluminum substrate (Note 3)		0.8							
Peak Forward Surge Current,8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}		30						Amp	
Maximum Forward Voltageat 0.4A DC and 25°C	V_F		1.0						Volts	
Maximum Reverse Currentat Rated DC Blocking Voltage	at TA=25°C	I_R	5.0						uAmp	
	TA=125°C		500							
Typical Junction Capacitance (Note 1)	C_J		13						pF	
Typical Thermal Resistance (Note 3)	$R_{\theta JA}$		70						°C/W	
Typical Thermal Resistance (Note 2)	$R_{\theta JL}$		20						°C/W	
Operating and Storage Temperature Range	T_J, T_{stg}		-55 to +150						°C	

Notes:

- 1- Measured at 1 MHZ and applied reverse voltage of 4.0 VDC.
- 2- On glass epoxy P.C.B. mounted on 0.05 x 0.05" (1.3 x 1.3mm) pads
- 3- On aluminum substrate P.C.B. with an area of 0.8" x 0.8" (20 x 20mm) mounted on 0.05 x 0.05" (1.3 x 1.3mm) solder pad

Ratings and Characteristic Curves

Fig. 1 - Derating Curve for Output Rectified Current

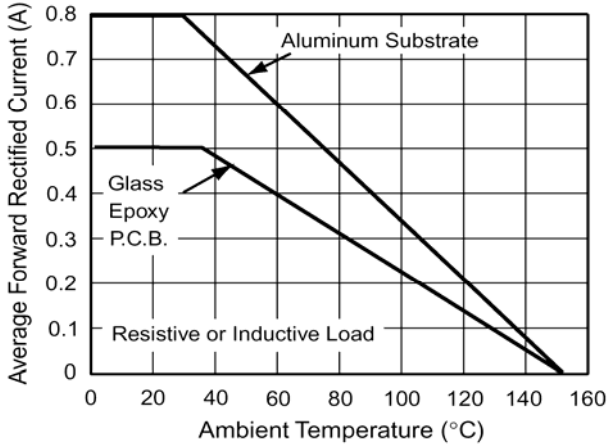


Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current Per Leg

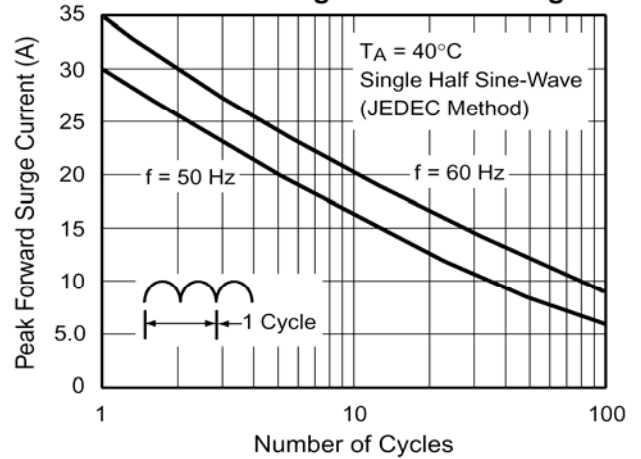


Fig. 3 - Typical Forward Voltage Characteristics Per Leg

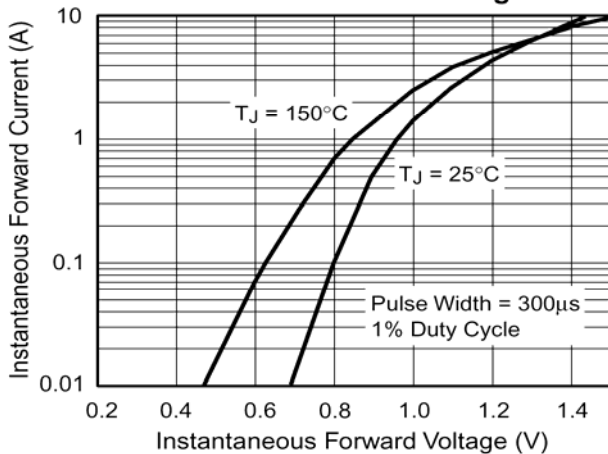


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

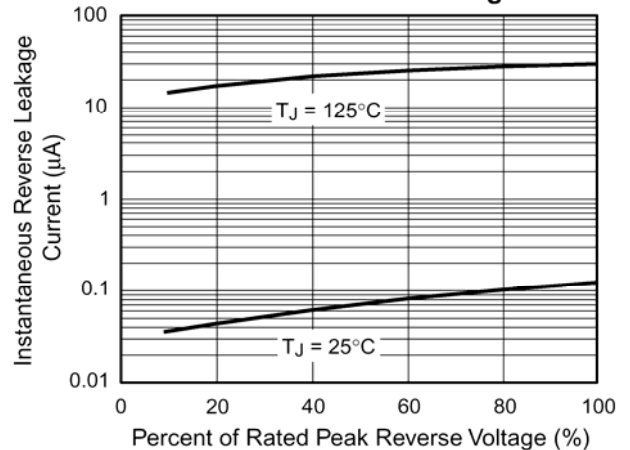
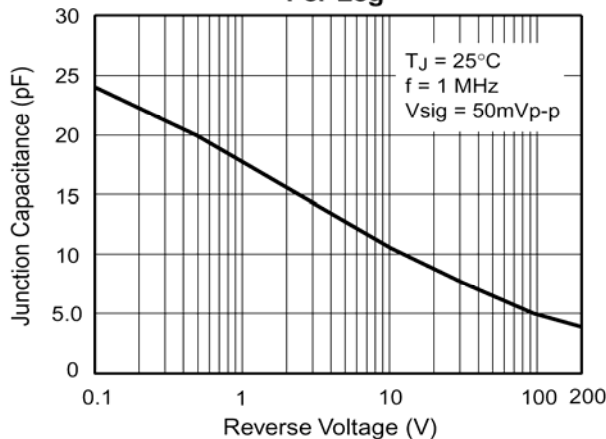


Fig. 5 - Typical Junction Capacitance Per Leg



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