

RMD1M THRU RMD7M

MINIATURE GLASS PASSIVATED FAST RECOVERY SINGLE-PHASE BRIDGE RECTIFIER



康比電子
HORNBY ELECTRONIC

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

FEATURES

- Surge overload rating: 25 amperes peak
- Ideal for printed circuit board
- Plastic material has Underwriters Laboratory Flammability Classification 94V-0
- Fast recovery, low switching loss
- Reliable low cost construction utilizing molded

MECHANICAL DATA

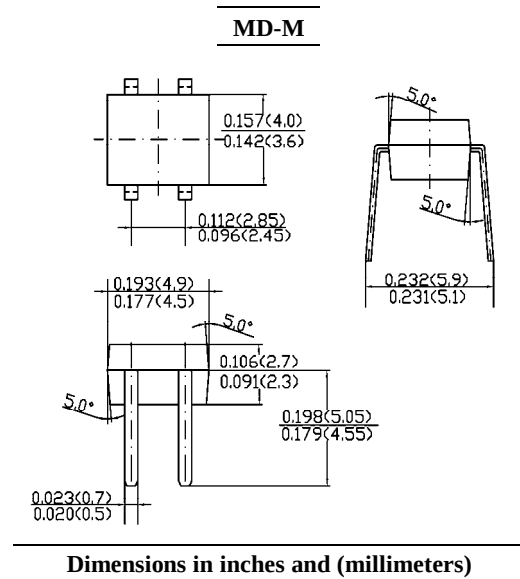
Case: Molded plastic, MD-M

Epoxy: UL 94V-0 rate flame retardant

Terminals: Leads solderable per MIL-STD-202, method 208 guaranteed

Mounting position: Any

Weight: 0.008ounce, 0.22gram



Maximum Ratings and Electrical Characteristics

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%.

	Symbols	RMD1M	RMD2M	RMD3M	RMD4M	RMD5M	RMD6M	RMD7M	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) on aluminum substrate (Note 3)	I _(AV)	0.5 0.8							Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	25							Amp
Maximum Forward Voltage at 0.4A DC and 25°C	V _F	1.25							Volts
Maximum Reverse Current at T _A =25°C at Rated DC Blocking Voltage T _A =125°C	I _R	5.0 500							uAmp
Typical Junction Capacitance (Note 1)	C _J	13							pF
Maximum Reverse Recovery Time (Note 4)	T _{RR}	150				250	500		nS
Typical Thermal Resistance (Note 3)	R _{θJA}	70							°C/W
Typical Thermal Resistance (Note 2)	R _{θJL}	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

4- Reverse Recovery Test Conditions: $I_F=5A$, $I_R=1A$, $I_{RR}=25A$.

RMD1M THRU RMD7M

MINIATURE GLASS PASSIVATED FAST RECOVERY SINGLE-PHASE BRIDGE RECTIFIER



康比電子
HORNBY ELECTRONIC

RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Maximum Forward Current Derating Curve

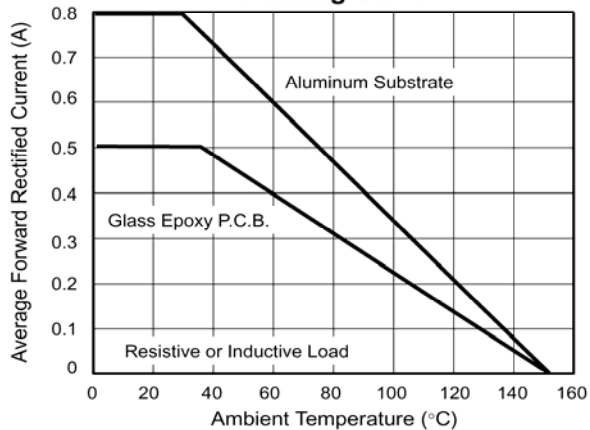


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

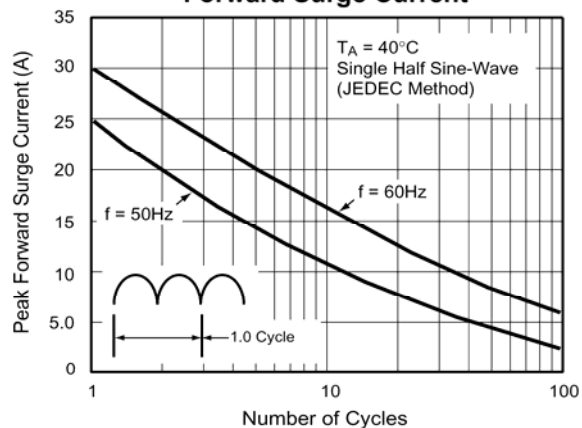


Fig. 3 – Typical Instantaneous Forward Characteristics

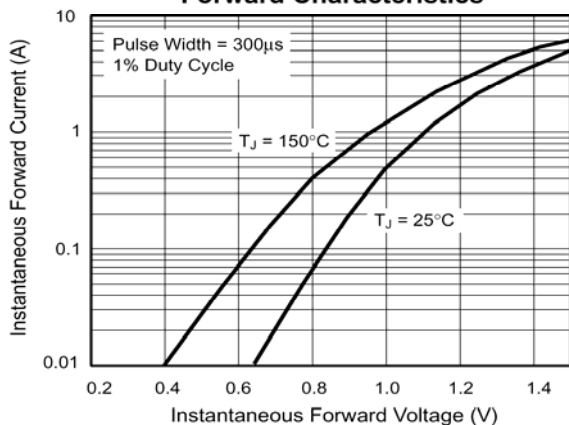


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

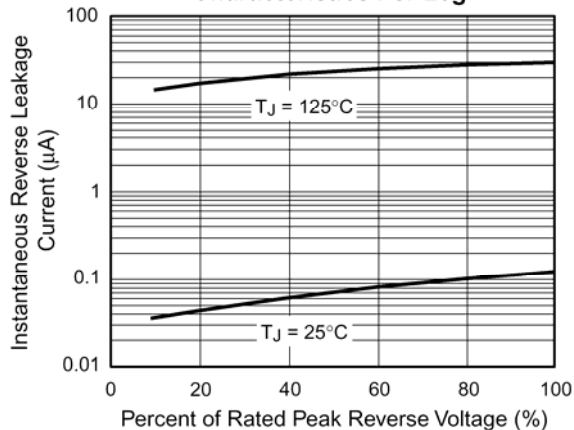


Fig. 5 - Typical Junction Capacitance Per Leg

