

# ***RMDXM SERIES***

**MINIATURE SINGLE-PHASE BRIDGE RECTIFIER**

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# 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

- Glass passivated chip junction
- Fast recovery, low switching loss
- High surge overload rating of 25 Amperes peak
- Ideal for printed circuit board
- High temperature soldering guaranteed:  
260°C for 10 seconds

## MECHANICAL DATA

Case: Molded plastic, MD-M

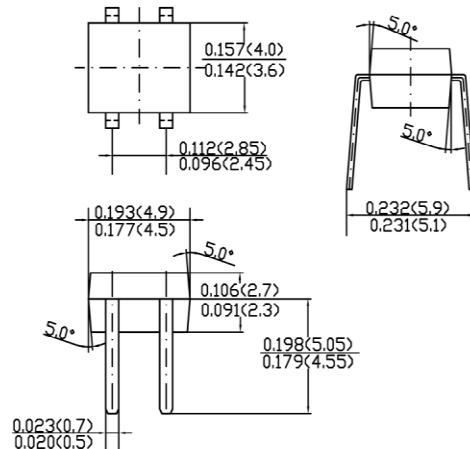
Epoxy: UL 94V-O rate flame retardant

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

Mounting position: Any

Weight: 0.008ounce, 0.22gram

## MD-M



Dimensions in inches and (millimeters)

## Maximum Ratings and Electrical Characteristics

Ratings at 25° 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
<b>Maximum Recurrent Peak Reverse Voltage</b>	V <sub>RRM</sub>	50	100	200	400	600	800	1000	Volts
<b>Maximum RMS Voltage</b>	V <sub>RMS</sub>	35	70	140	280	420	560	700	Volts
<b>Maximum DC Blocking Voltage</b>	V <sub>DC</sub>	50	100	200	400	600	800	1000	Volts
<b>Maximum Average Forward Rectified Current</b> (see Fig. 1) on glass-epoxy P.C.B (Note 2) on aluminum substrate (Note 3)	I <sub>(AV)</sub>				0.5				Amp
					0.8				
<b>Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)</b>	I <sub>FSM</sub>				25				Amp
<b>Maximum Forward Voltage at 0.4A DC and 25°</b>	V <sub>F</sub>				1.25				Volts
<b>Maximum Reverse Current at T<sub>A</sub>=25° at Rated DC Blocking Voltage T<sub>A</sub>=125°</b>	I <sub>R</sub>				5.0				uAmp
					500				
<b>Typical Junction Capacitance (Note 1)</b>	C <sub>J</sub>			13					pF
<b>Maximum Reverse Recovery Time (Note 4)</b>	T <sub>RR</sub>		150		250		500		nS
<b>Typical Thermal Resistance (Note 3)</b>	R <sub>0JA</sub>			70					/W
<b>Typical Thermal Resistance (Note 2)</b>	R <sub>0JL</sub>			20					/W
<b>Operating and Storage Temperature Range</b>	T <sub>J</sub> , T <sub>stg</sub>			-55 to +150					

## 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<sub>F</sub>=.5A, I<sub>R</sub>=1A, I<sub>RR</sub>=.25A.

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## RATINGS AND CHARACTERISTIC CURVES

Fig. 1 – Maximum Forward Current Derating Curve

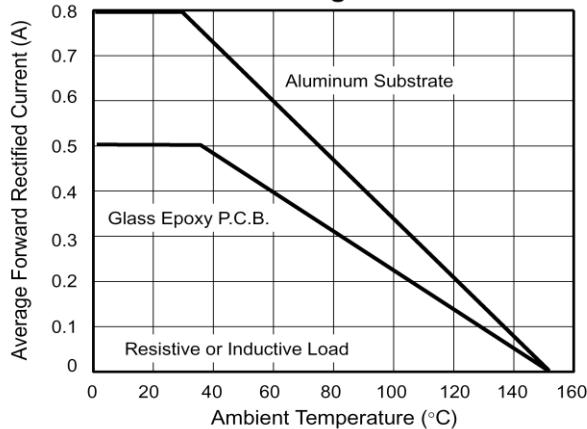


Fig. 2 – Maximum Non-Repetitive Peak Forward Surge Current

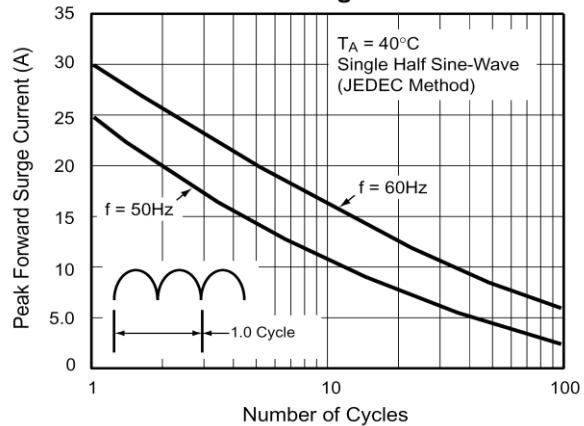


Fig. 3 – Typical Instantaneous Forward Characteristics

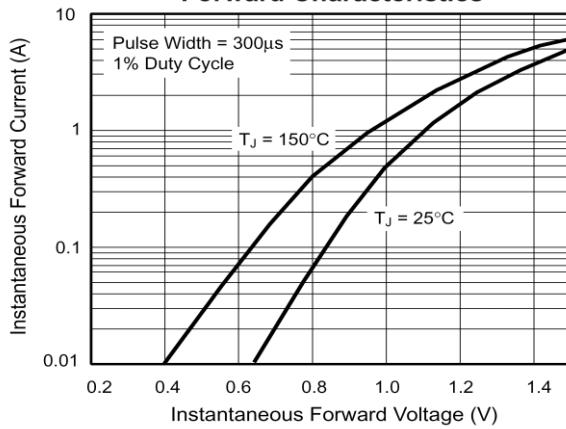


Fig. 4 - Typical Reverse Leakage Characteristics Per Leg

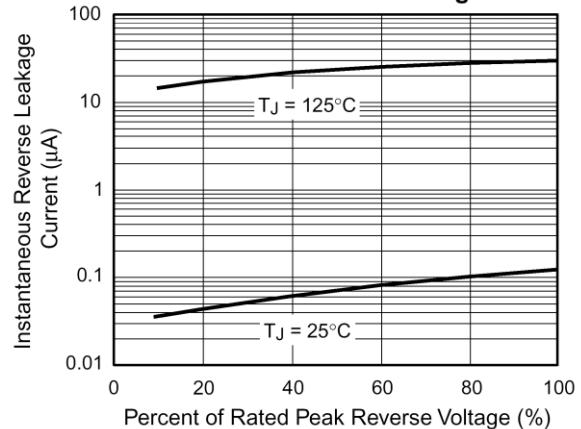


Fig. 5 - Typical Junction Capacitance Per Leg

