

## R2MF

### 2.0AMPS . GLASS PASSIVATED FAST RECOVERY RECTIFIERS

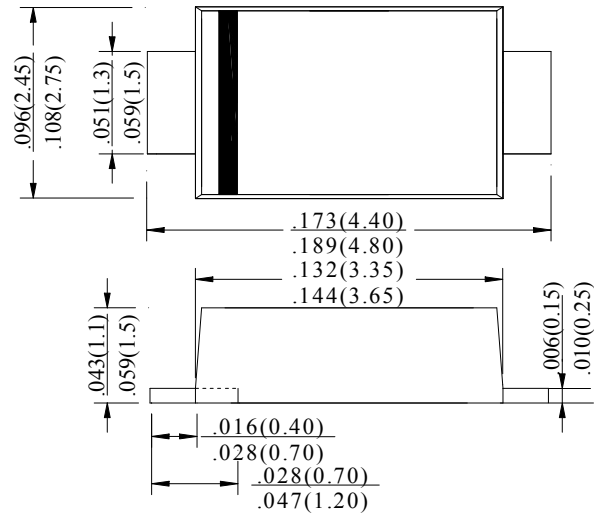
#### FEATURE

- . Fast switching
- . High current capability
- . Low forward voltage drop
- . Low power loss, high efficiency
- . High temperature soldering guaranteed:  
260°C/10 seconds at terminals.
- . For surface mounted application
- . Easy pick and place

#### MECHANICAL DATA

- . Case: Molded plastic
- . Epoxy: UL94V-0 rate flame retardant
- . Lead: MIL-STD- 202E, Method 208 guaranteed
- . Polarity: Marking band denotes cathode end
- . Packaging: 12mm tape per EIA STD RS-481
- . Mounting position: Any

#### SMF



#### 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%

Type Number	SYM BOL	R2MF	units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	1000	V
Maximum RMS Voltage	$V_{RMS}$	700	V
Maximum DC blocking Voltage	$V_{DC}$	1000	V
Maximum Average Forward Rectified Current at $T_A = 55^\circ\text{C}$	$I_{F(AV)}$	2.0	A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	60.0	A
Maximum Forward Voltage at 2.0A DC	$V_F$	1.3	V
Maximum DC Reverse Current @ $T_A = 25^\circ\text{C}$ at rated DC blocking voltage @ $T_A = 125^\circ\text{C}$	$I_R$	5.0 100.0	$\mu\text{A}$
Maximum Reverse Recovery Time (Note 1)	$t_{rr}$	500	nS
Typical Junction Capacitance (Note2)	$C_j$	30	pF
Typical Thermal Resistance (Note 3)	$R_{(JA)}$	50	$^\circ\text{C}/\text{W}$
Storage Temperature	$T_{STG}$	-55 to +150	$^\circ\text{C}$
Operation Junction Temperature	$T_J$	-55 to +150	$^\circ\text{C}$

#### Note:

1. Test Conditions:  $I_F = 0.5\text{A}$ ,  $I_R = 1.0\text{A}$ ,  $I_{rr} = 0.25\text{A}$
2. Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
3. Measured on P. C. Board with  $0.2 \times 0.2'' (5.0 \times 5.0\text{mm})$  Copper Pad Areas.

**RATING AND CHARACTERISTIC CURVES (R2MF)**

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

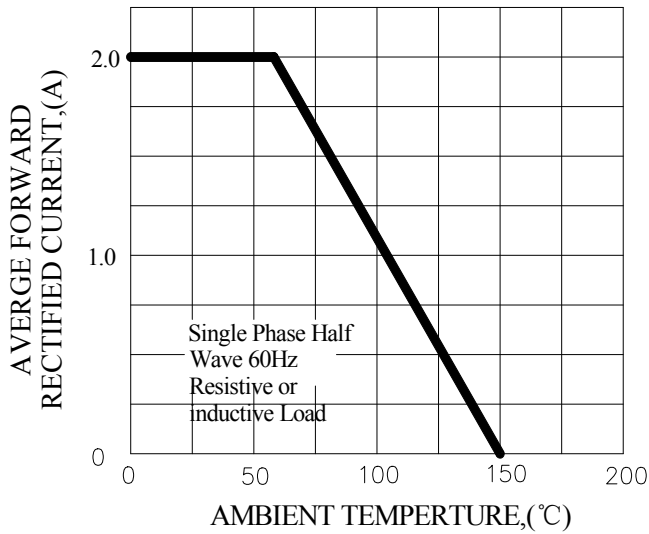


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

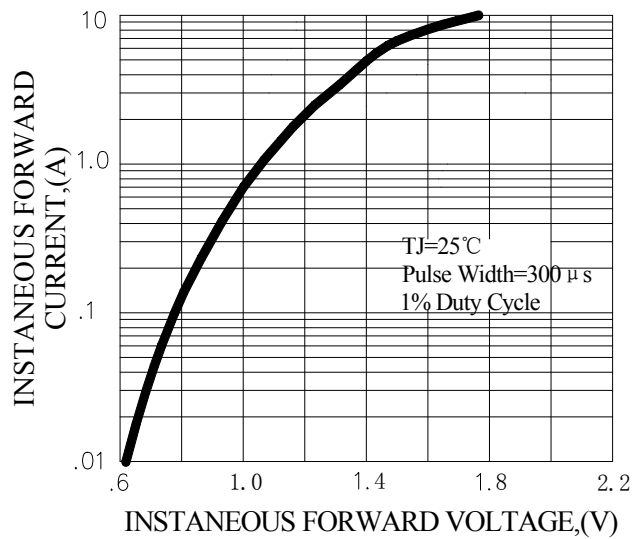


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

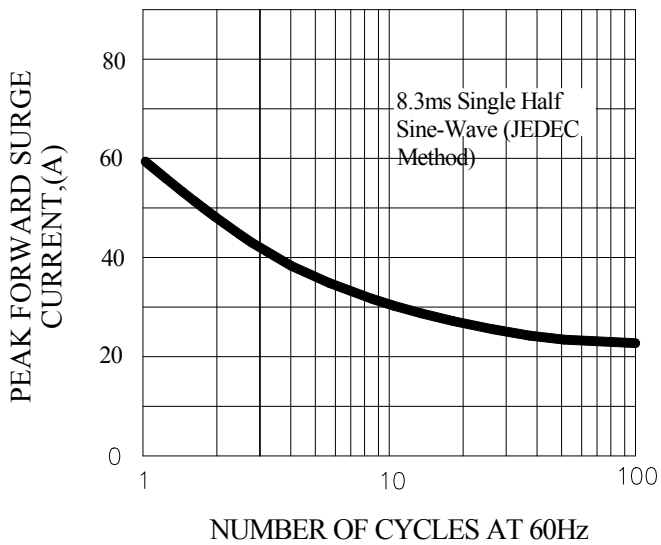


FIG.4-TYPICAL REVERSE CHARACTERISTICS

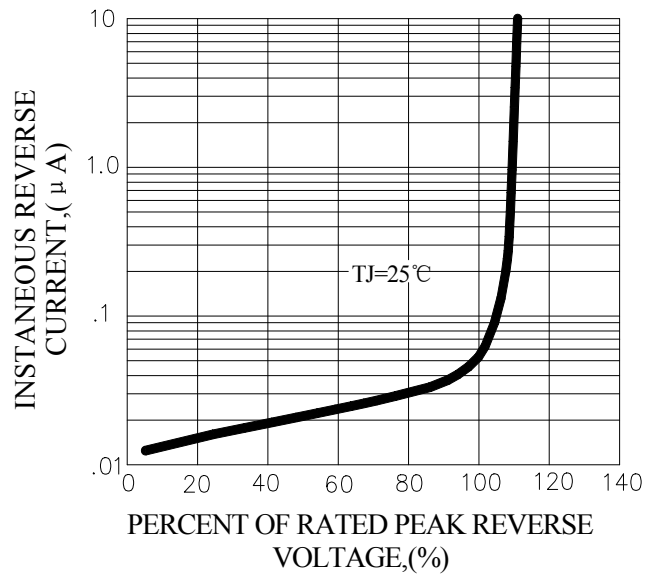
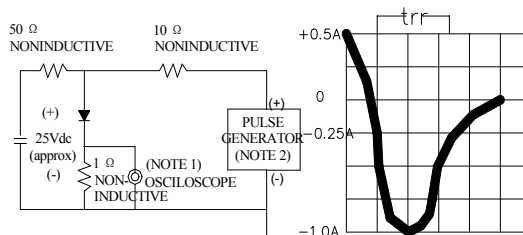


FIG.5-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



NOTES:1. Rise Time=7ns max, Input Impedance= 1 megohm.22pF.  
2. Rise Time=10ns max, Source Impedance= 50 ohms.