

**Surface Mount Glass Passivated Rectifiers****Reverse Voltage - 50 to 1000Volts****Forward Current - 1.0 Amperes****Features**

- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High surge capacity
- Meet UL flammability classification 94V-0

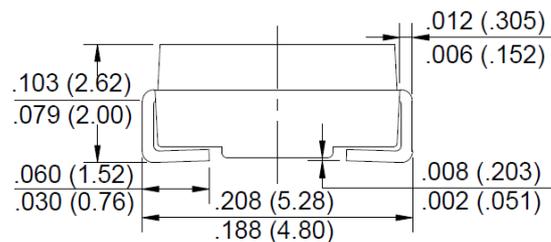
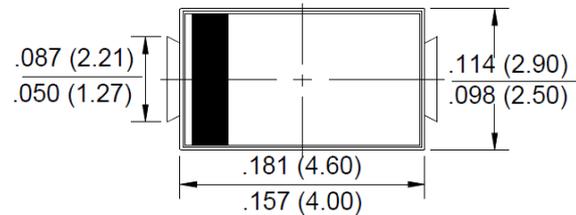
**Mechanical Data**

- Case: JEDEC A-SMA molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

**Applications**

- For use in low voltage, high frequency inverters, polarity protection applications

**A-SMA****RoHS**  
COMPLIANT

Package Outline Dimensions in Inches (Millimeters)

**Maximum Ratings and Electrical Characteristics**

Rating at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Characteristics	Symbol	M1A	M2A	M3A	M4A	M5A	M6A	M7A	Unit
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>L</sub> =100 °C	I <sub>(AV)</sub>	1.0							A
Peak Forward Surge Current, 8.3mS Single Half Sine-Wave, Superimposed on Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
I <sup>2</sup> t Rating for Fusing (t<8.3mS)	I <sup>2</sup> t	3.7							A <sup>2</sup> s
Peak Forward Voltage at 1.0A DC (Note1)	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current @T <sub>J</sub> =25°C	I <sub>R</sub>	5.0							uA
at Rated DC Blocking Voltage @T <sub>J</sub> =100°C		100							
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	10							pF
Typical Thermal Resistance Junction to Case	R <sub>θJC</sub>	30							°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to+150							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to+150							°C

Notes: 1. 300uS pulse width, 2%duty cycle. 300uS

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

3. The typical data above is for reference only.



Fig. 1 - Forward Current Derating Curve

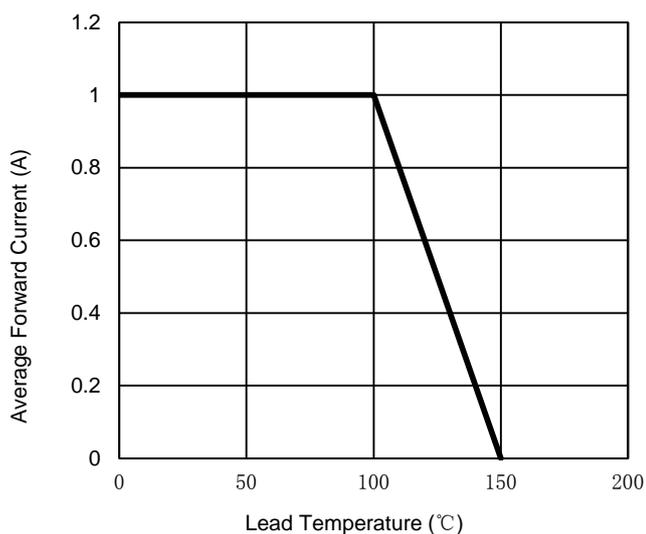


Fig. 2 - Maximum Non-Repetitive Surge Current

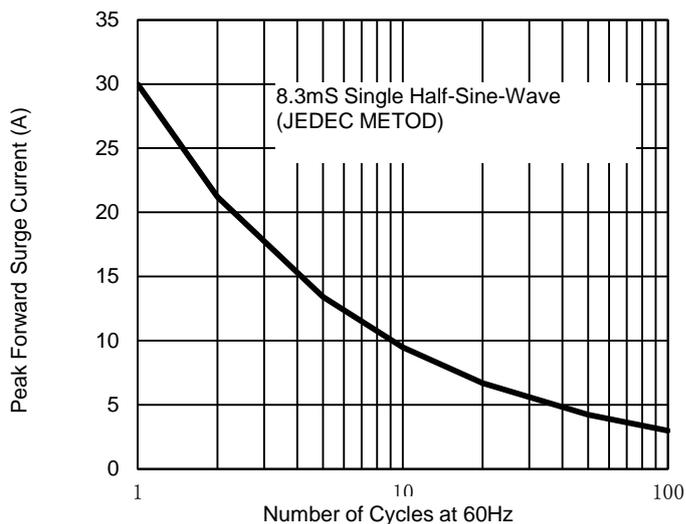


Fig. 3 - Typical Reverse Characteristics

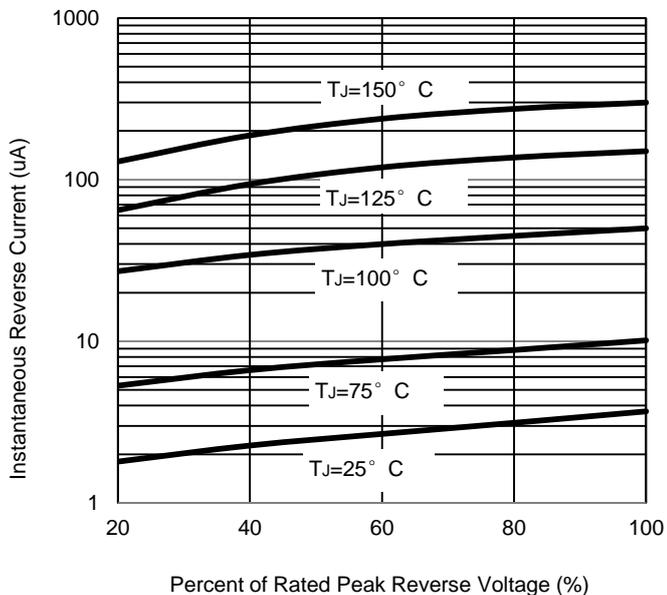


Fig. 4 - Typical Forward Characteristics

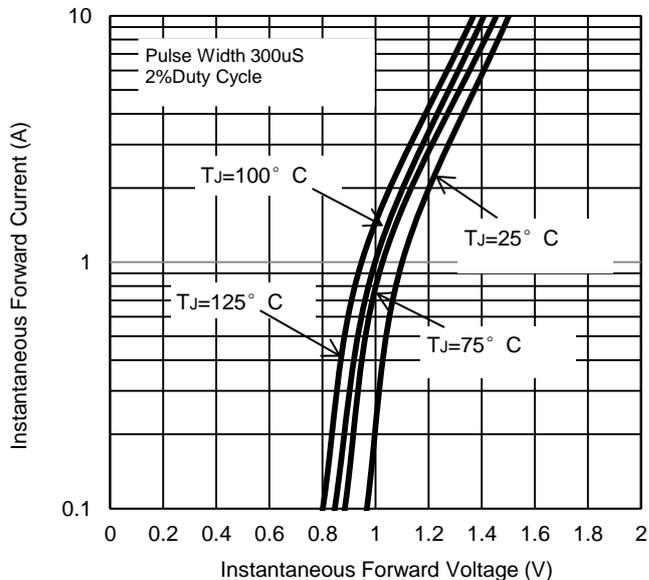
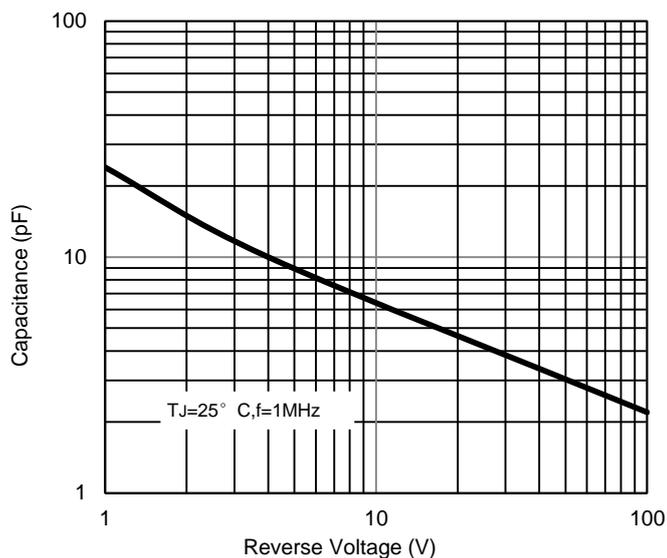


Fig. 5 - Typical Junction Capacitance



The curve above is for reference only.



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