

# M1 thru M7

REVERSE VOLTAGE - 50 to 1000Volts

POWER CURRENT - 1.0 Amperes

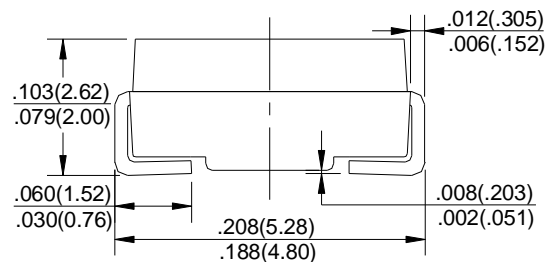
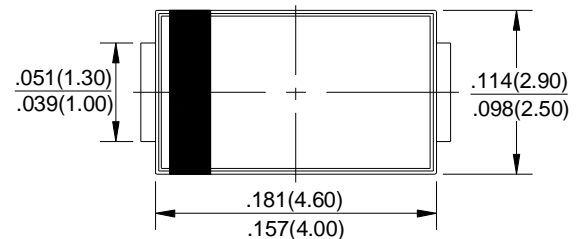
## ● FEATURES

- Diffused junction
- For surface mounted applications
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

## ● MECHANICAL DATA

- Case Molded Plastic
- Polarity: Indicated by cathode band
- Weight: 0.002 ounces, 0.053 grams
- Mounting position: Any

### SMA



Dimensions in inches and (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	M1	M2	M3	M4	M5	M6	M7	UNIT
Maximum Recurrent 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 Super Imposed On Rated Load (JEDEC Method)	I <sub>FSM</sub>	30							A
Maximum Forward Voltage at 1.0A DC	V <sub>F</sub>	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T <sub>J</sub> =25°C @T <sub>J</sub> =100°C	<sup>θ</sup> I <sub>R</sub>	5.0 100							uA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	10							pF
Typical Thermal Resistance (Note2)	R <sub>JC</sub>	30							°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125							°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +125							°C

NOTES:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance junction to lead.



FIG. 1 - FORWARD CURRENT DERATING CURVE

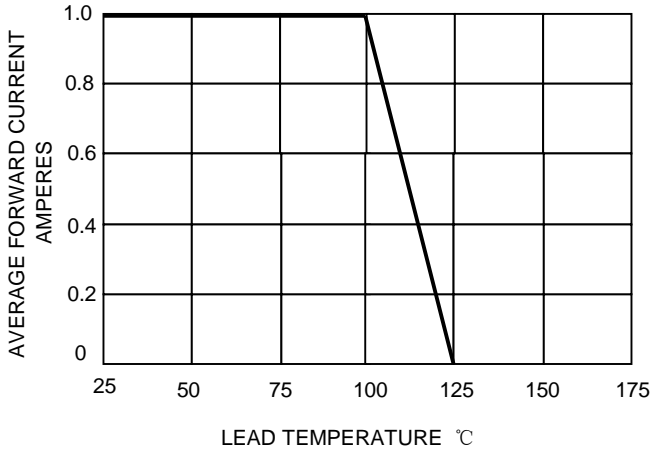
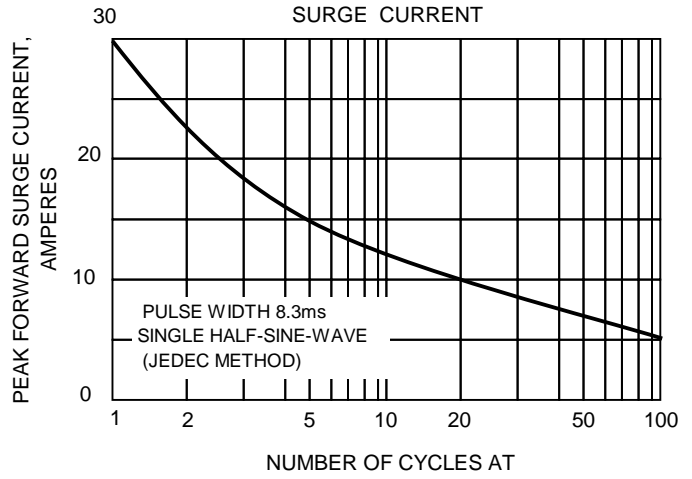


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT



SINGLE PHASE HALF WAVE 60Hz  
RESISTIVE OR INDUCTIVE LOAD

FIG.3-TYPICAL FORWARD CHARACTERISTICS

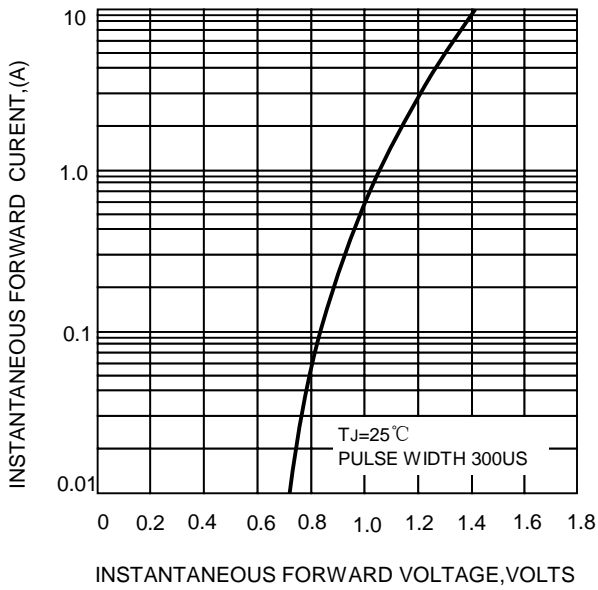


FIG.4-TYPICAL REVERSE CHARACTERISTICS

