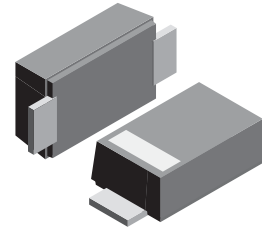


**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 1.0 A**

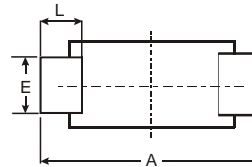
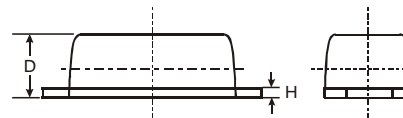
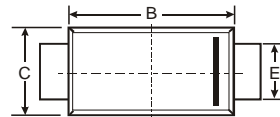


### Features

- 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: SMAF, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0018 ounce, 0.064 grams



SMAF			
Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			



### Maximum Ratings and Electrical Characteristics T<sub>A</sub> = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	M1F	M2F	M3F	M4F	M5F	M6F	M7F	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 @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	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

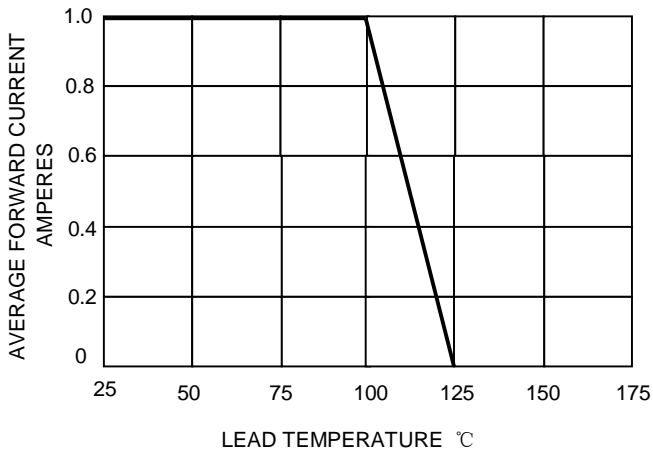
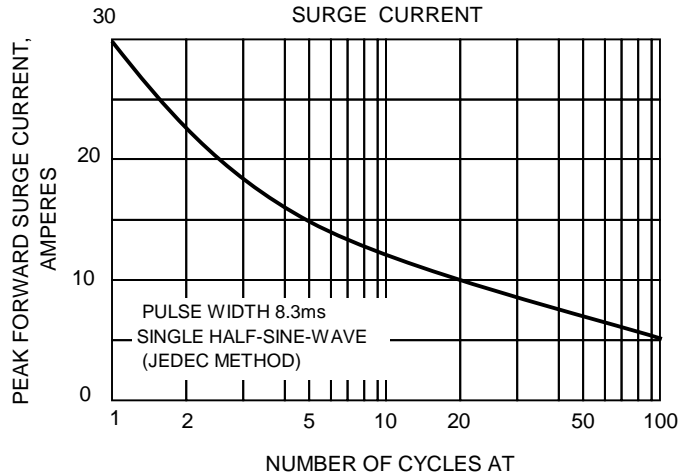


FIG.2 - MAXIMUM NON-REPETITIVE SURGE CURRENT



**SINGLE PHASE HALF WAVE 60Hz  
RESISTIVE OR INDUCTIVE LOAD**

FIG.3-TYPICAL FORWARD CHARACTERISTICS

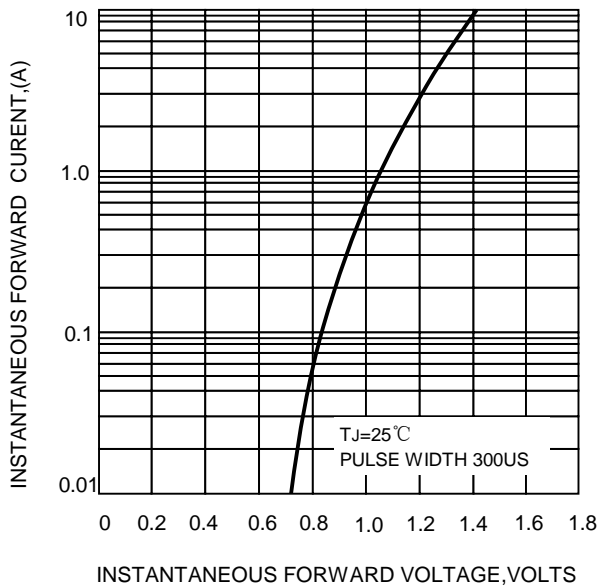


FIG.4-TYPICAL REVERSE CHARACTERISTICS

