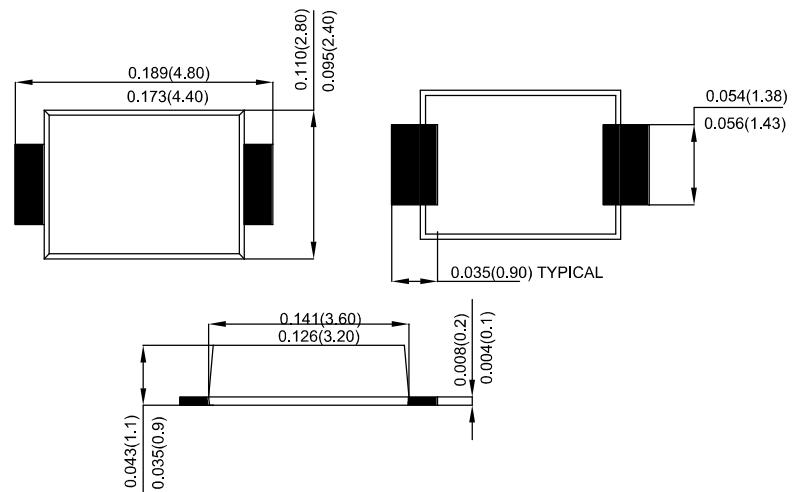


Features

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Easy pick and place
- Low Forward Drop
- High temperature soldering: 260°C/10 seconds at terminals

SMAF



Dimensions in inches and (millimeters)

Mechanical Data

- Terminal: Plated leads, solderable per MIL-STD-750, Method 2026
- Case: molded plastic SMAF
- Polarity: Indicated by cathode band
- Standard packaging: 12mm tape(EIA-481)

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%.

TYPE NUMBER	SYMBOL	M7F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1000	V
Maximum RMS voltage	V_{RMS}	700	
Maximum DC blocking voltage	V_{DC}	1000	
Average Rectified Output Current @ $T_A=75^\circ\text{C}$	I_o	1.0	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30	A
Forward Voltage per element @ $IF=1.0\text{A}$	V_{FM}	1.1	V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 100	uA
Typical junction capacitance(Note 1)	C_J	12	pF
Maximum thermal resistance	$R_{\theta JA}$	75	°C/W
Operating and storage temperature range	T_J, T_{STG}	-55 to +150	°C

Note: 1. Measured at 1MHz and applied $V_r=4.0$ volts.

I_(AV), AVERAGE FORWARD RECTIFIED CURRENT (A)

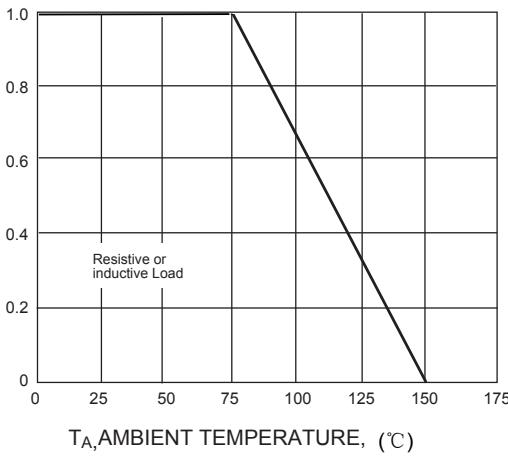


Fig. 1 Output Current Derating Curve

I_F, INSTANTANEOUS FORWARD CURRENT (A)

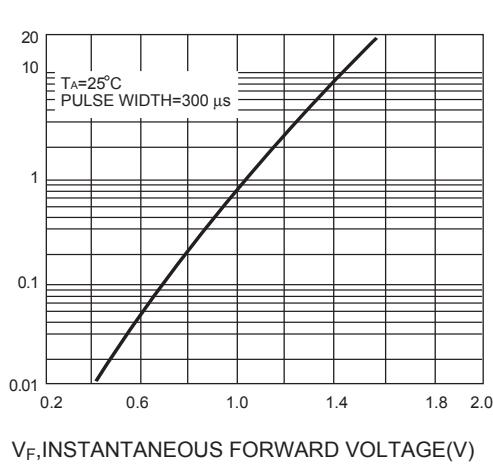


Fig. 2 Typical Instantaneous Forward Characteristics(per leg)

I_{FSM}, PEAK FORWARD SURGE CURRENT,(A)

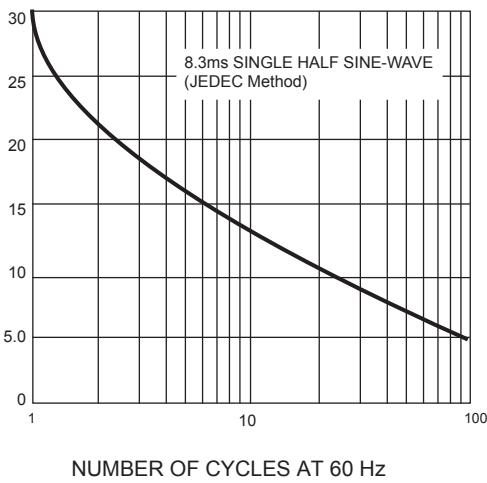


Fig. 3 Maximum Peak Forward Surge Current (per leg)

INSTANTANEOUS REVERSE CURRENT,
MICROAMPERES

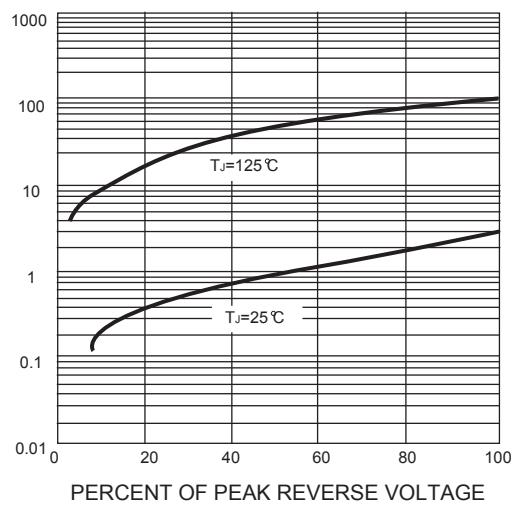


Fig. 4 Typical Junction Capacitance