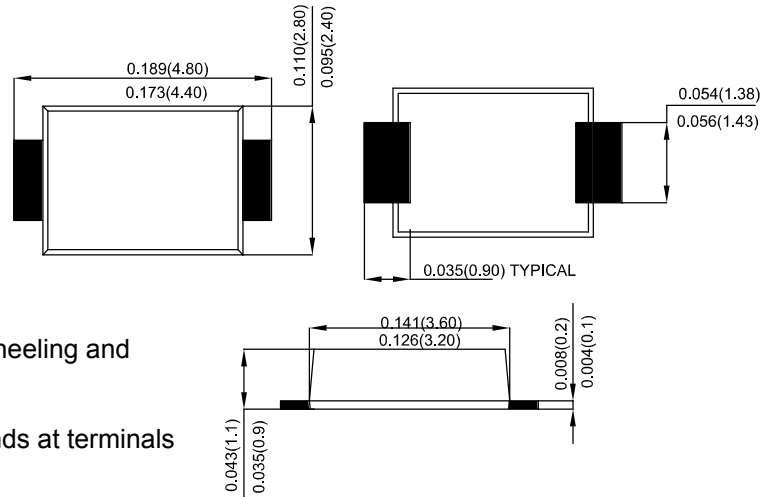


**Features**

- Plastic package Underwriters Laboratory Flammability Classification 94V-0
- For surface mounted applications
- Low profile package
- Built-in strain relief
- Metal to silicon rectifier.majority carrier conduction
- Low power loss,high efficiency
- High surge capacity
- High current capacity,low V_F
- For use in low voltage high frequency inverters,free wheeling and polarity protection applications.
- High temperature soldering guaranteed:260°C/10 seconds at terminals

SMAF**Mechanical Data**

Dimensions in inches and (millimeters)

- Terminal: Plated leads, solderable per MIL-STD-750,Method 2026
- Case: molded plastic SMAF
- Polarity: Color band denotes positives end(cathode)
- 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	SS32F	SS33F	SS34F	SS35F	SS36F	SS38F	SS39F	SS310F	SS315F	SS320F	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	63	70	105	140	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	
Average Rectified Output Current @ $T_A=90^\circ\text{C}$	I_o	3.0										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80										A
Forward Voltage per element @ $I_F=3.0\text{A}$ (Note 1)	V_{FM}	0.55			0.7			0.85		0.9	0.92	V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	I_R	0.1					0.05					mA
At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$		10.0					5.0					
Maximum thermal resistance per leg (Note 2)	$R_{\theta JL}$	17										C/W
	$R_{\theta JA}$	55										
Operating and storage temperature range	T_J, T_{STG}	-55 to +150										°C

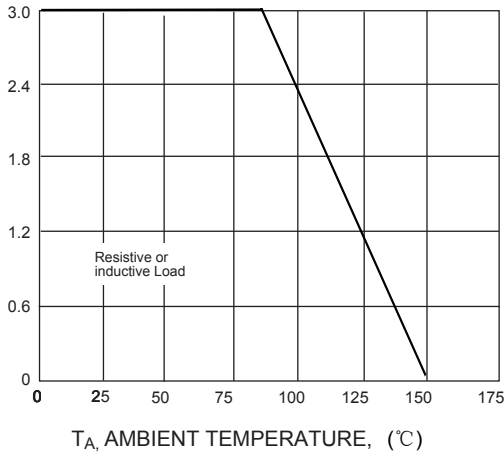
Note: 1. Pulse Test with $PW=300\mu\text{sec}$,2% Duty Cycle.

2. Mounted on P.C.Board with 5.0mm2(.013mm thick)copper pad areas.



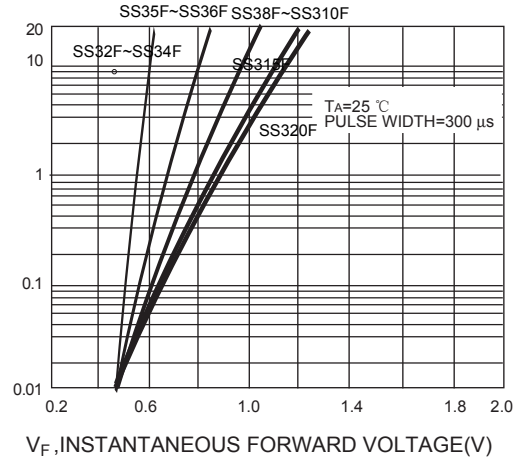
$I_{(AV)}$, AVERAGE FORWARD RECTIFIED CURRENT (A)

Fig. 1 Output Current Derating Curve



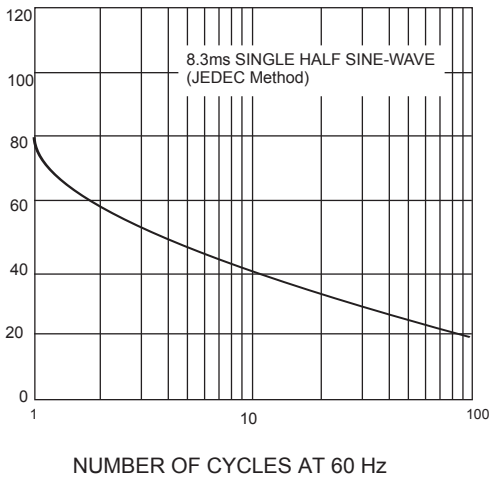
I_F , INSTANTANEOUS FORWARD CURRENT(A)

Fig. 2 Typical Instantaneous Forward Characteristics(per leg)



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

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



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

Fig. 4 Typical Junction Capacitance

