



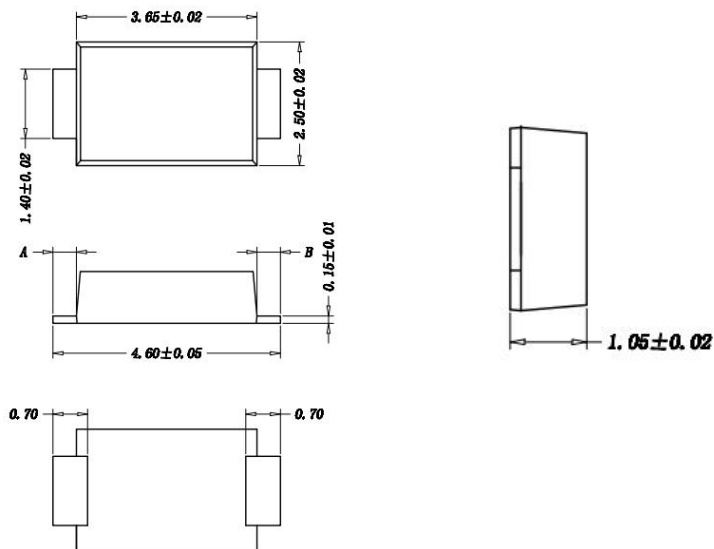
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

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

SMAF



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	RS2MF	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	1000	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_{DC}		
RMS Reverse Voltage	V_{RMS}	700	V
Maximum average forward rectified current @ $A=40^{\circ}\text{C}$	I_o	2	A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	60	A
Forward Voltage per element @ $I_F=1.0\text{A}$	V_{FM}	1.3	V
Peak Reverse Current @ $T_A=25^{\circ}\text{C}$	I_R	5.0	uA
At Rated DC Blocking Voltage @ $T_A=125^{\circ}\text{C}$		50	
Typical Junction Capacitance per leg (Note 1)	C_J	28	pF
Maximum reverse recovery time (Note 2)	t_{rr}	500	ns
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$	60	$^{\circ}\text{C/W}$
	$R_{\theta JL}$	16	
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150	$^{\circ}\text{C}$

Note: 1. Measured with $I_F=0.5\text{A}, I_R=1\text{A}, I_{RR}=0.25\text{A}$

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

3. Thermal resistance junction of ambient.



FIG. 1- FORWARD CURRENT DERATING CURVE

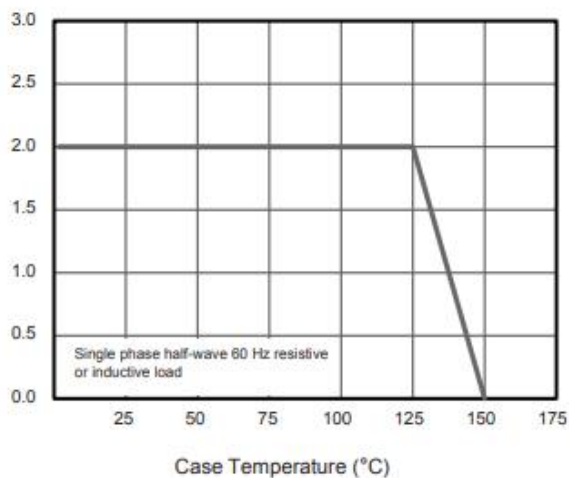


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

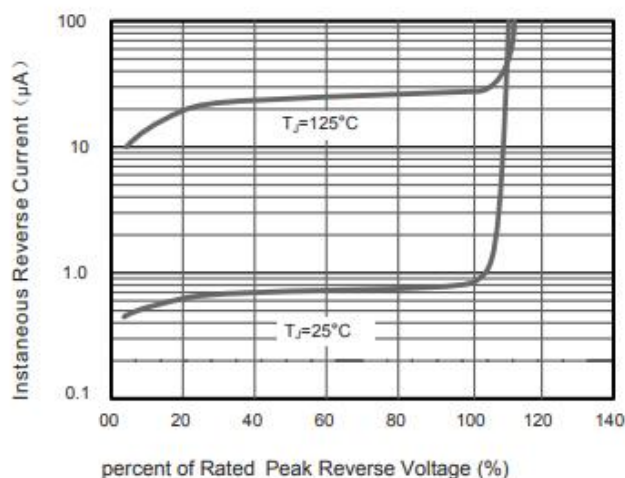


Fig.3 Typical Instaneous Forward Characteristics T_J=25°

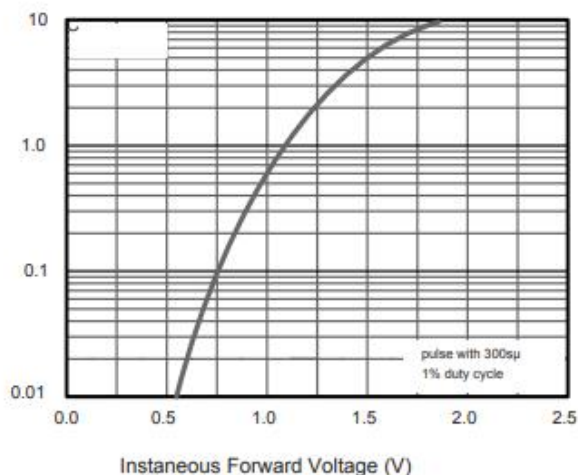


Fig.4 Typical Junction Capacitance

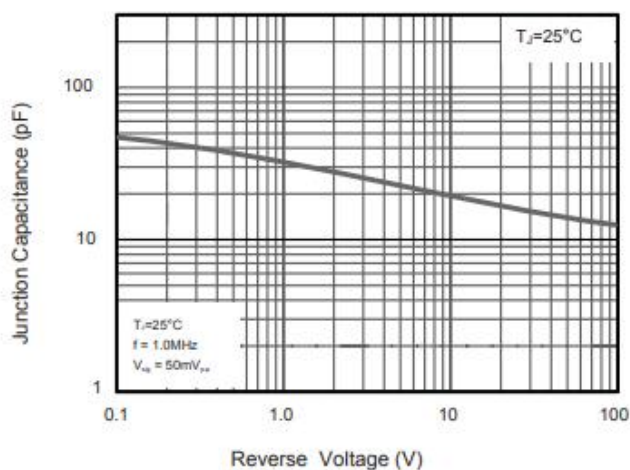


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

