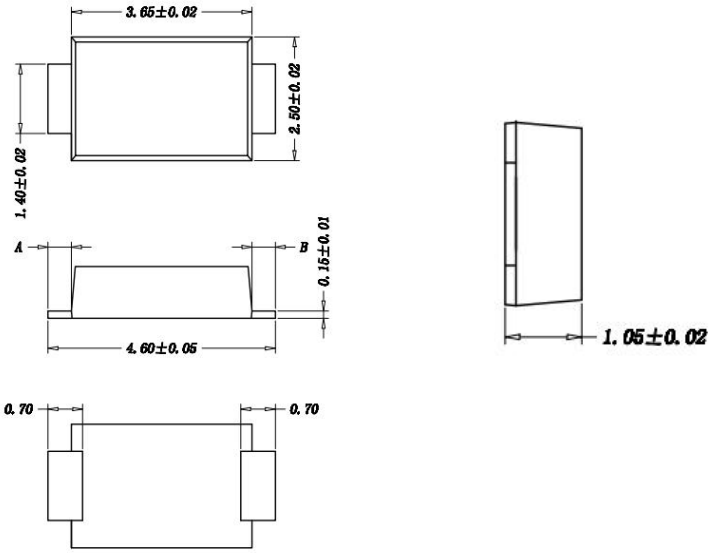
RS2MF

Surface Mount Fast Recovery Rectifiers

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

SMAF



Mechanical Data

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

Maximum Ratings and Electrical Characteristics

Rating at 25℃ 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 Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	1000	V
RMS Reverse Voltage	V_{RMS}	700	V
Maximum average forward rectified current @ T_A=40 ℃	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 @IF=1.0A	V_{FM}	1.3	V
Peak Reverse Current @T_A =25 ℃ At Rated DC Blocking Voltage @T_A =125℃	I_R	5.0 50	uA
Typical Junction Capacitance per leg (Note 1)	C_J	28	pF
Maximum reverserecovery tme (Note2)	trr	500	ns
Typical Thermal Resistance per leg (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	60 16	℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150	℃

Note:1. Measured with I F =0.5A,I R =1A,I RR =0.25A

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

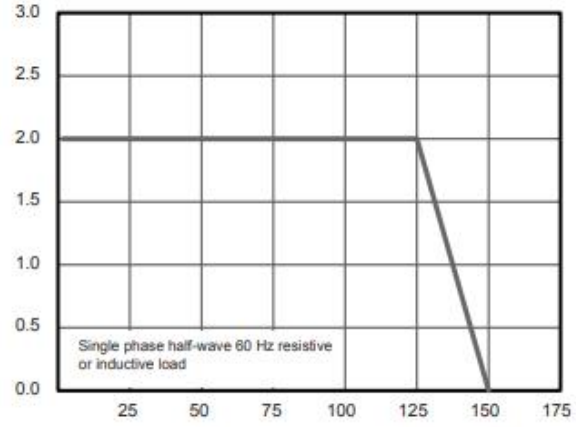


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

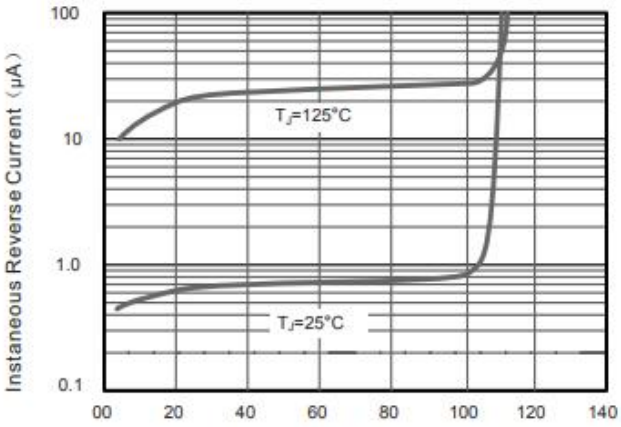


Fig.3 Typical Instaneous Forward Characteristics T_J=25°

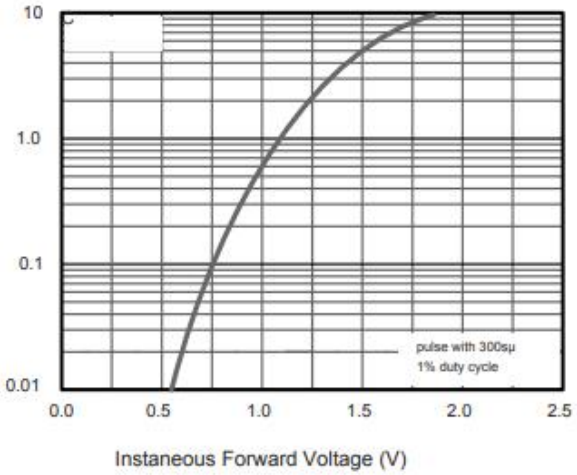


Fig.4 Typical Junction Capacitance

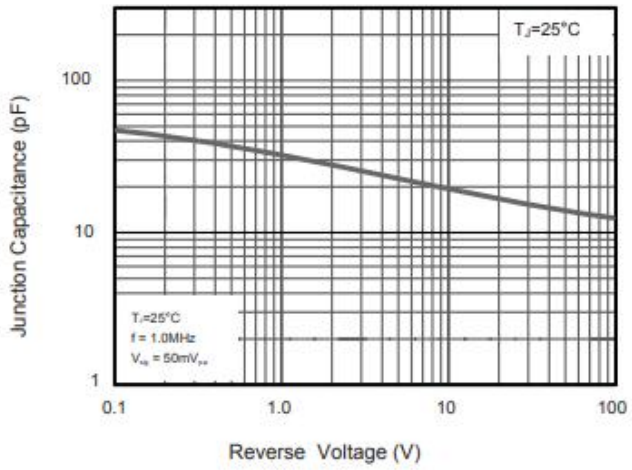


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current