

Surface Mount Fast Recovery Rectifier

RS2MAF

SMAF



Cathode  **Anode**

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability

Mechanical Data

- Case : Molded plastic body
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity : Polarity symbol marking on body
- Mounting Position : Any
- Weight : 0.0014 ounce, 0.038 grams

■Maximum Ratings (T_a=25°C Unless otherwise specified)

Parameter	Symbols	RS2MAF	Units
Maximum Repetitive Peak Reverse Voltage	VRRM	1000	V
Maximum RMS voltage	VRMS	700	V
Maximum DC Blocking Voltage	VDC	1000	V
Maximum Average Forward Rectified Current	I(AV)	2.0	A
Reverse Recovery Time. IF=0.5A, IR=1A, IRR=0.25A	Trr	500	ns
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	IFSM	50	A
I ² t rating for fusing (1ms< t < 8.3ms)	I ² t	10.3	A ² S
Maximum Forward Voltage at 2.0A and 25°C	VF	1.3	V
Maximum DC Reverse Current @TA=25°C at Rated DC Blocking Voltage @TA=100°C (Note1)	IR	5 500	μA
Typical Junction Capacitance (Note2)	Cj	50	pF
Operating and Storage Temperature Range	Tj, Tstg	-55 ~ +150	°C
Typical thermal resistance	RθJ-A	70	°C/W

Note: 1. Reverse recovery time test condition: IF=0.5A IR=1.0A IRR=0.25A
2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

RATINGS AND CHARACTERISTICS CURVES (TA = 25 °C unless otherwise noted)

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

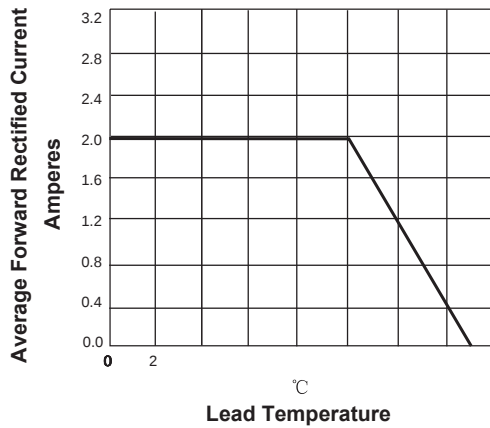


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

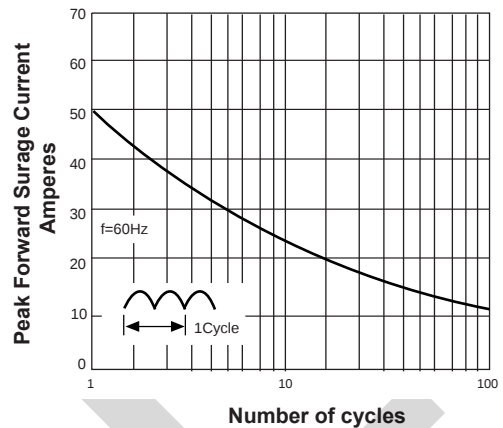


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

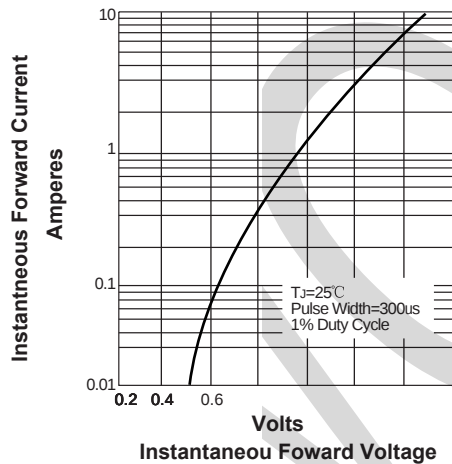
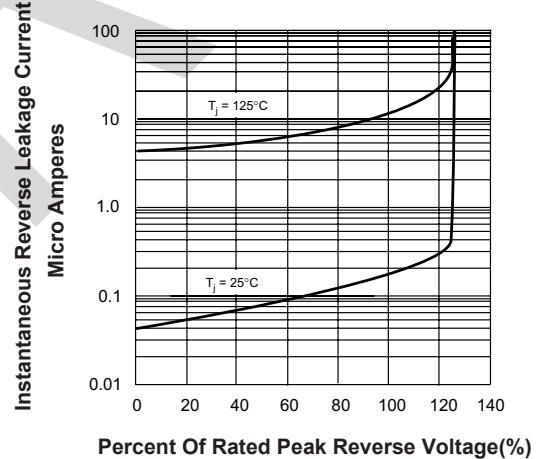
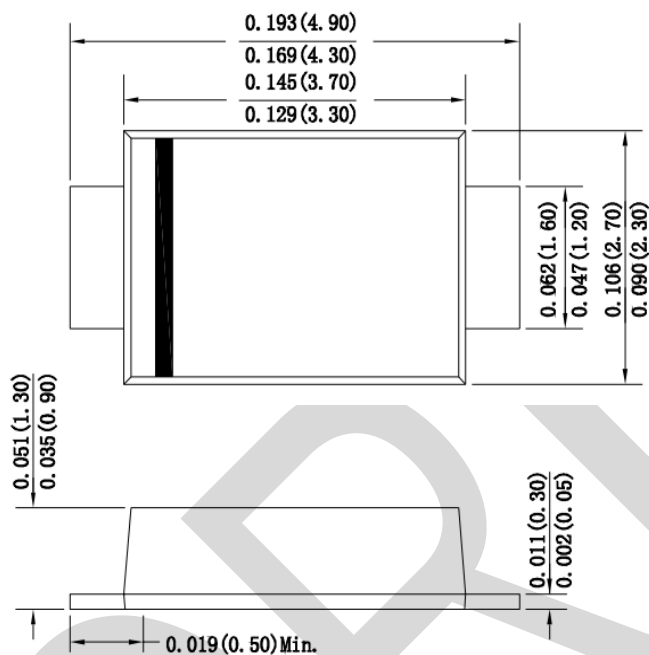


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

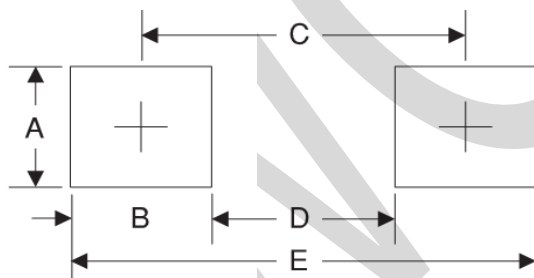


PACKAGE OUTLINE DIMENSIONS

SMAF dimension definitions



Suggested Pad Layout



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.90	0.154
D	2.00	0.078
E	5.10	0.200