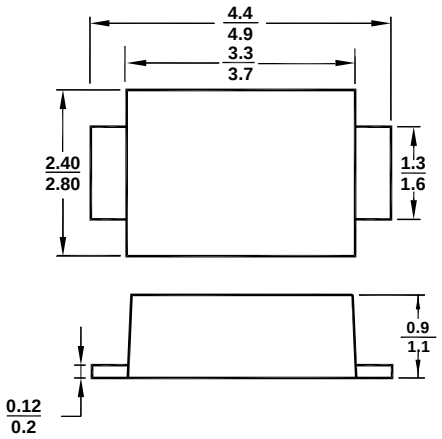
RS2AF THRU RS2MF

Surface Mount Fast Recovery Rectifier
Reverse Voltage - 50 to 1000 V
Forward Current - 2 A

SMAF



All Dimensions in mm

Features
- Glass Passivated Chip Juntion
- For surface mounted applications
- Low profile package
- Fast reverse recovery time

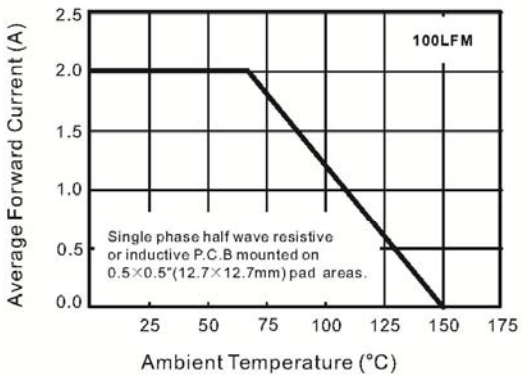
Mechanical Data
- **Case:** SMAF
- **Terminals:** Solderable per MIL-STD-750, Method 2026

Absolute Maximum Ratings and Characteristics
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

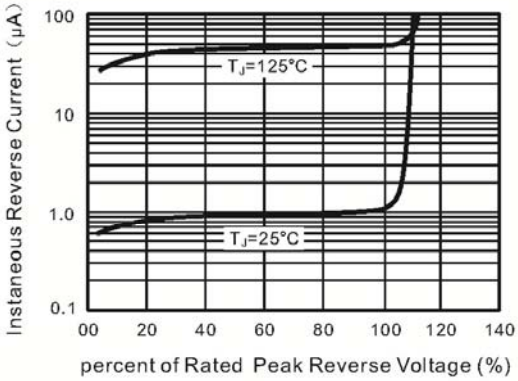
Parameter	Symbols	RS2AF	RS2BF	RS2DF	RS2GF	RS2JF	RS2KF	RS2MF	Units
	Marking	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	-
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_a = 65°C	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage at 2 A	V_F	1.3							V
Maximum Reverse Current at Rated DC Blocking Voltage T_a = 25°C / T_a = 125°C	I_R	5 100							µA
Maximum Reverse Recovery Time at I_F = 0.5 A, I_R = 1 A, I_{rr} = 0.25 A	t_{rr}	150				250	500		ns
Typical Junction Capacitance at V_R = 4 V, f = 1 MHz	C_j	40							pF
Typical Thermal Resistance [1]	$R_{\theta JA}$	75							°C/W
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150							°C

[1] P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

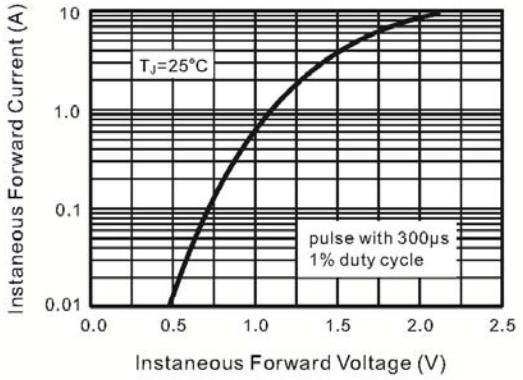
Forward Current Derating Curve



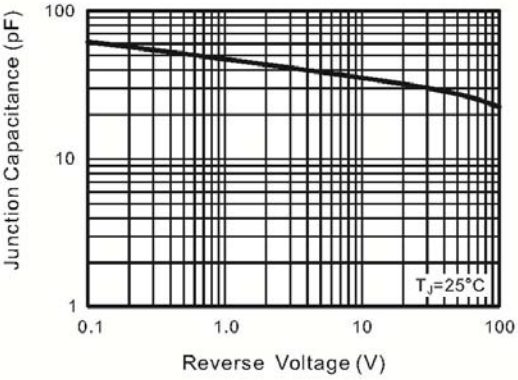
Typical Reverse Characteristics



Typical Instaneous Forward Characteristics



Typical Junction Capacitance



Maximum Non-Repetitive Peak Forward Surage Current