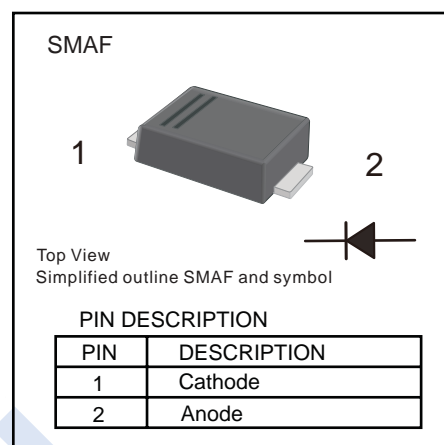


Fast Recovery Rectifiers

RS2AF ~ RS2MF

■ Features

- Reverse Voltage - 50 to 1000 V
- Forward Current - 2 A
- For Surface Mounted Applications
- Low Profile Package
- Glass Passivated Chip Junction
- Easy to Pick and Place
- Fast Reverse Recovery Time



■ 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, derate current by 20%.

Parameter	Symbol	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M	Unit
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	
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Current at $T_c=125^\circ\text{C}$	$I_{F(AV)}$	2							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load	I_{FSM}	50							
Maximum Forward Voltage at 2 A	V_F	1.3							V
Maximum DC Reverse Current $T_a=25^\circ\text{C}$ at Rated DC Blocking Voltage $T_a=125^\circ\text{C}$	I_R	5 100							μA
Maximum Reverse Recovery Time (Note 1)	t_{rr}	150					250	500	ns
Typical Junction Capacitance at $V_R=4\text{V}$, $f=1\text{MHz}$	C_j	22							pF
Typical Thermal Resistance (Note 2)	R_{thJA} R_{thJC}	65 20							$^\circ\text{C/W}$
Junction Temperature	T_j	150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to 150							

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

2. P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

■ Marking

NO.	RS2AF	RS2BF	RS2DF	RS2GF	RS2JF	RS2KF	RS2MF
Marking	RS2A	RS2B	RS2D	RS2G	RS2J	RS2K	RS2M

Fast Recovery Rectifiers

RS2AF ~ RS2MF

■ Typical Characteristics

Fig.1 Forward Current Derating Curve

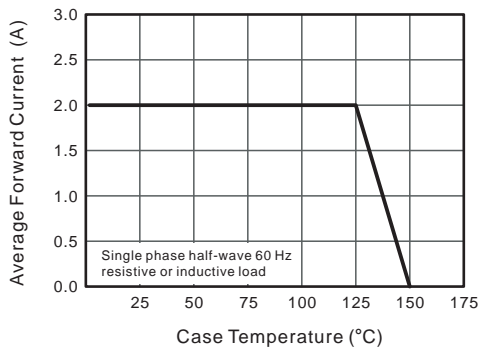


Fig.2 Typical Reverse Characteristics

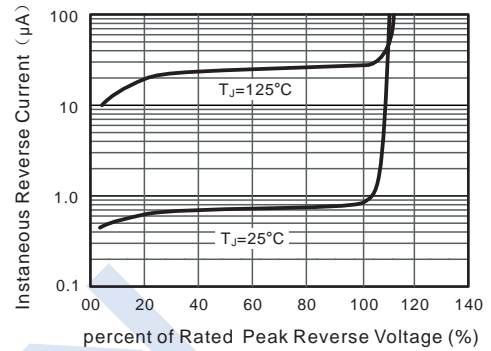


Fig.3 Typical Instantaneous Forward Characteristics

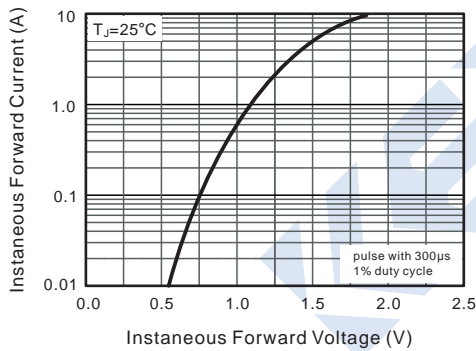


Fig.4 Typical Junction Capacitance

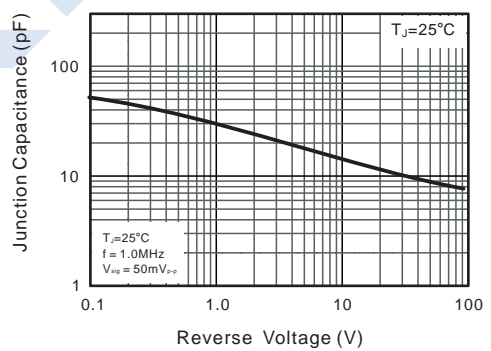
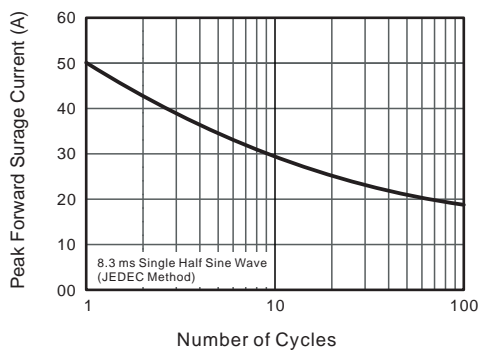


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current



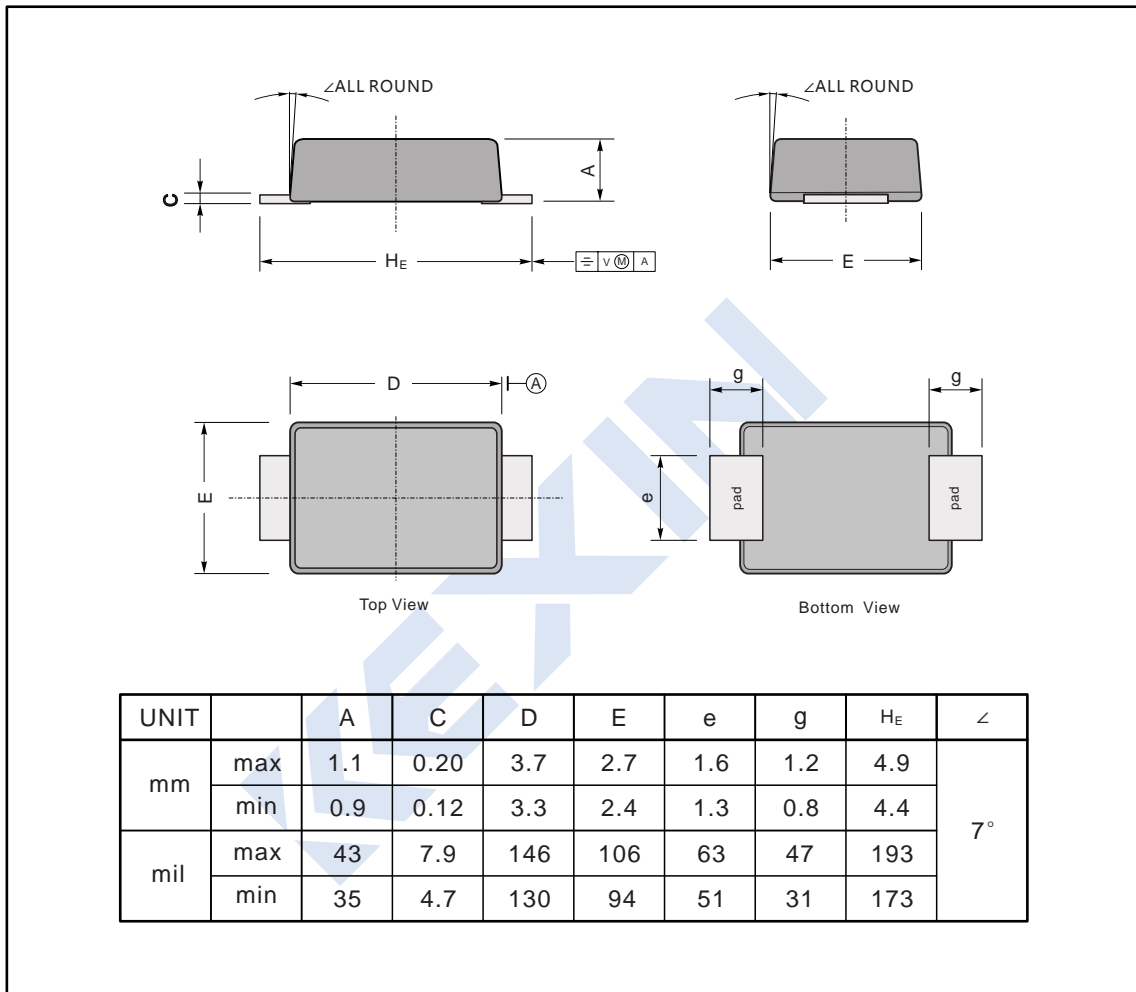
Fast Recovery Rectifiers

RS2AF ~ RS2MF

■ Package Outline

Plastic surface mounted package; 2 leads

SMAF



■ The recommended mounting pad size

