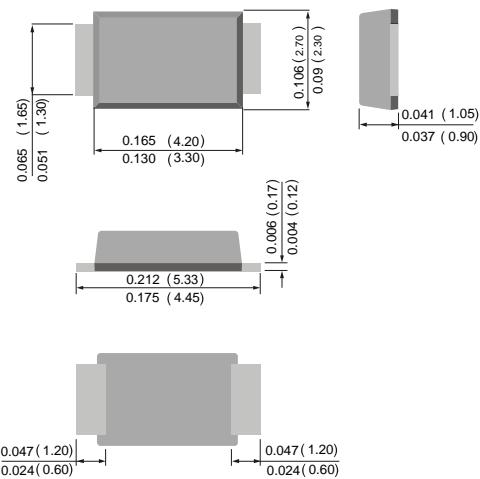


# RS2DF - RS2MF

**FAST RECOVERY RECTIFIER**
**VOLTAGE 200 to 1000 Volts CURRENT 2 Ampere**

**SMAF**

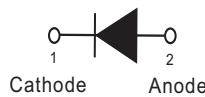
Unit: inch (mm)


**FEATURES**

- For surface mounted applications
- Easy pick and place
- Fast Recovery times for high efficiency
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- Glass passivated junction
- Ultra Thin Profile Package for Space Constrained Utilization
- Package suitable for Automated Handling
- Lead free in comply with EU RoHS 2011/65/EU directives.
- Green molding compound as per IEC61249 Std

**MECHANICAL DATA**

- Case: SMAF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.0011 ounce, 0.0328 grams
- Polarity: Color band denotes cathode end


**MAXIMUM RATINGS AND ELECTRICAL 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%.

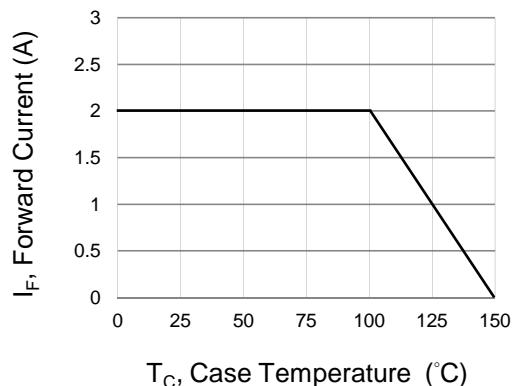
PARAMETER	SYMBOL	RS2DF	RS2GF	RS2JF	RS2KF	RS2MF	UNITS
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$			2			A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$			50			A
Maximum Forward Voltage at 2A	$V_F$			1.3			V
Maximum DC Reverse Current $T_J=25^\circ C$	$I_R$			5			$\mu A$
Typical Junction Capacitance ( $V_R=4V$ $f=1MHz$ )	$C_J$			24			pF
Typical Thermal Resistance (Note 1) (Note 2)	$R_{\theta JL}$ $R_{\theta JA}$			22 150			$^\circ C / W$
Maximum Reverse Recovery Time	$T_{rr}$	150		250		500	nS
Operating Junction and Storage Temperature Range	$T_J, T_{STG}$			-55 to +150			$^\circ C$

NOTES : 1. Mounted on an FR4 PCB, single-sided copper, with  $100cm^2$  copper pad area.

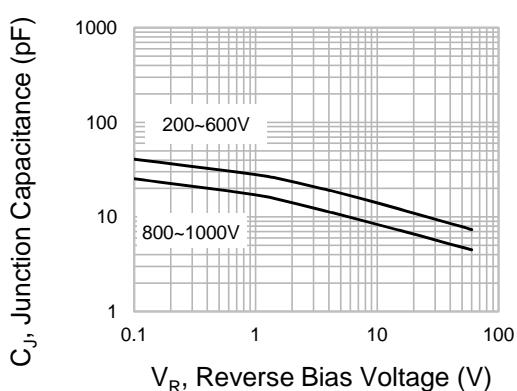
2. Mounted on an FR4 PCB, single-sided copper, mini pad.

# RS2DF - RS2MF

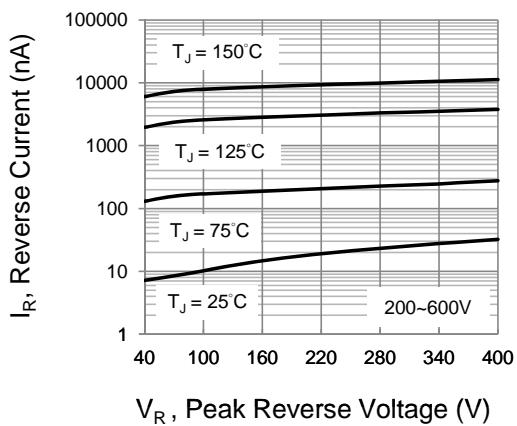
## RATING AND CHARACTERISTIC CURVES



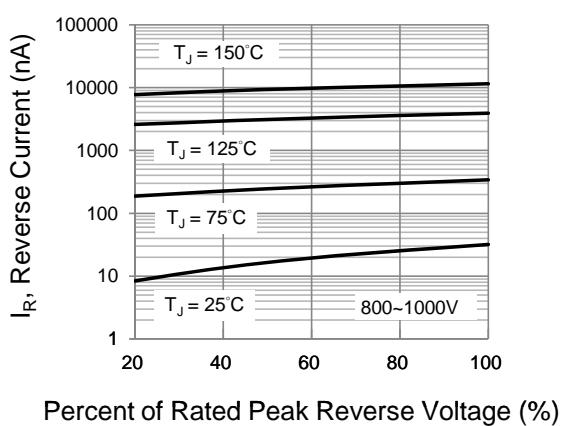
**Fig.1 Forward Current Derating Curve**



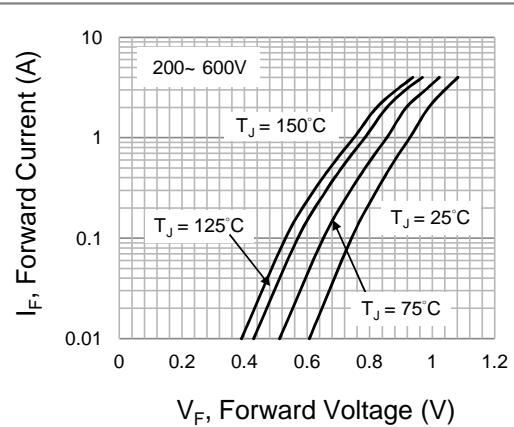
**Fig.2 Typical Junction Capacitance**



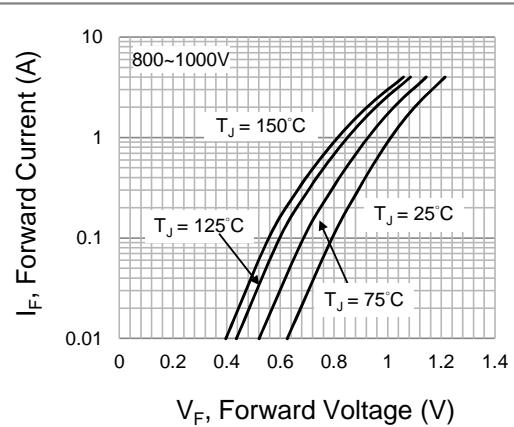
**Fig.3 Typical Reverse Characteristics**



**Fig.4 Typical Reverse Characteristics**



**Fig.5 Typical Forward Characteristics**



**Fig.6 Typical Forward Characteristics**