



#### SURFACE MOUNT FAST RECOVERY RECTIFIER

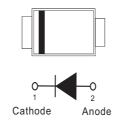
VOLTAGE50 to 600 VoltCURRENT2 Ampere

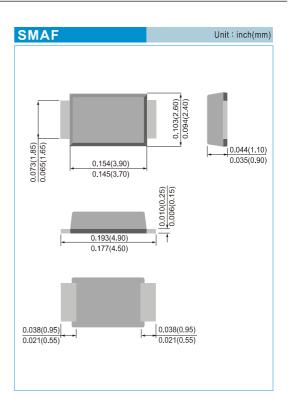
#### **FEATURES**

- · For surface mounted applications in order to optimize board space
- · 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 compliance with EU RoHS 2011/65/EU directive
- Green molding compound as per IEC61249 Std. . (Halogen Free)

#### **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	RS2AF	RS2BF	RS2DF	RS2GF	RS2JF	UNITS
Maximum Recurrent Peak Reverse Voltage		50	100	200	400	600	V
Maximum RMS Voltage		35	70	140	280	420	V
Maximum DC Blocking Voltage		50	100	200	400	600	V
Maximum Average Forward Rectified Current	I <sub>F(AV)</sub>	2					А
Peak Forward Surge Current: 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	50					А
Maximum Forward Voltage at 2A	V <sub>F</sub>	1.3					V
Maximum DC Reverse Current T <sub>J</sub> =25°C	I <sub>R</sub>	1					μА
Typical Junction Capacitance (V <sub>R</sub> =4V f=1MHz)	CJ	24 1			14	pF	
Typical Thermal Resistance (Note (Note		22 150				°C / W	
Maximum Reverse Recovery Time	T <sub>rr</sub>	150 25		250	nS		
Operating Junction and Storage Temperature Range		-55 to +150					°C

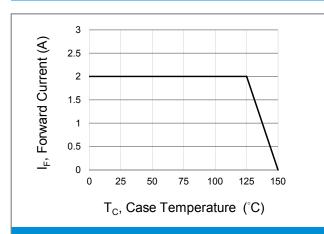
NOTES: 1. Mounted on an FR4 PCB, single-sided copper, with 100cm<sup>2</sup> copper pad area.

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

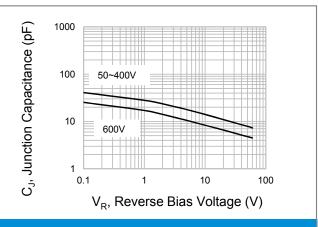




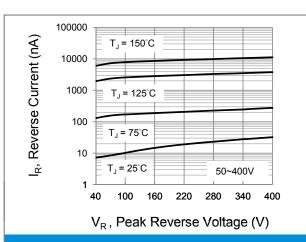
### **RATING AND CHARACTERISTIC CURVES**



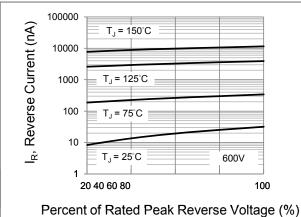
**Fig.1 Forward Current Derating Curve** 



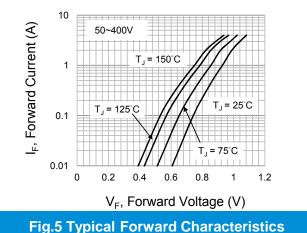
**Fig.2 Typical Junction Capacitance** 



**Fig.3 Typical Reverse Characteristics** 



**Fig.4 Typical Reverse Characteristics** 



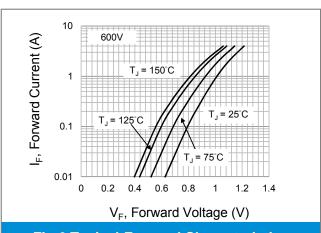


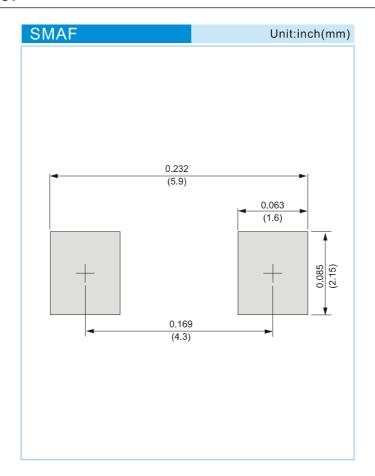
Fig.6 Typical Forward Characteristics

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### **MOUNTING PAD LAYOUT**



### **ORDER INFORMATION**

· Packing information

T/R - 10K per 13" plastic Reel

T/R - 3K per 7" plastic Reel





## Part No\_packing code\_Version

RS2AF\_R1\_00001 RS2AF\_R2\_00001

### For example:



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U		-	
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			





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