

RS3AAF THRU RS3MAF FAST RECOVERY RECTIFIERS

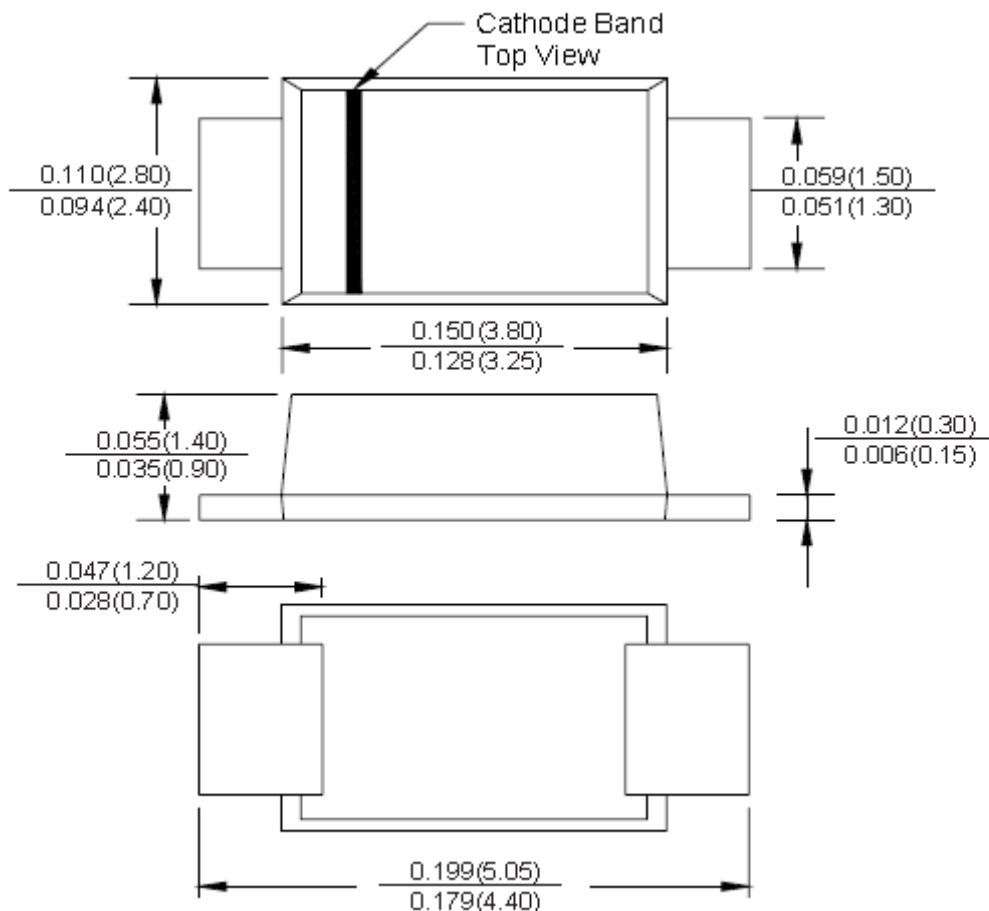
Features

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Fast reverse recovery time
- Lead free in comply with EU RoHS 2011/65/EU directives

Mechanical Data

- Case: SMAF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 27mg / 0.00095oz

Mechanical Dimensions (In Inches/mm)



SMAF



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Marking Diagram:



Where XXXXX is YYWWL

RS3AAF	= Part Name
YY	= Year
WW	= Week
L	= Lot Number

Cautions : Molding resin
Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
RS3AAF THRU RS3MAF	SMAF	5000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification.



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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 current derate by 20 %.

Parameter	Symbols	RS3AAF	RS3BAF	RS3DAF	RS3GAF	RS3JAF	RS3KAF	RS3MAF	Units
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 $T_L = 100\text{ °C}$	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	80							A
Maximum Instantaneous Forward Voltage at 3 A	V_F	1.3							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_a = 25\text{ °C}$							μA
		$T_a = 125\text{ °C}$							
Maximum Reverse Recovery Time ¹⁾	t_{rr}	160							ns
Typical Junction Capacitance ²⁾	C_j	60							pF
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	60							°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	-55 ~ +150							°C

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

2) Measured at 1MHz and applied reverse voltage of 4V D.C

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



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Fig.1 Forward Current Derating Curve

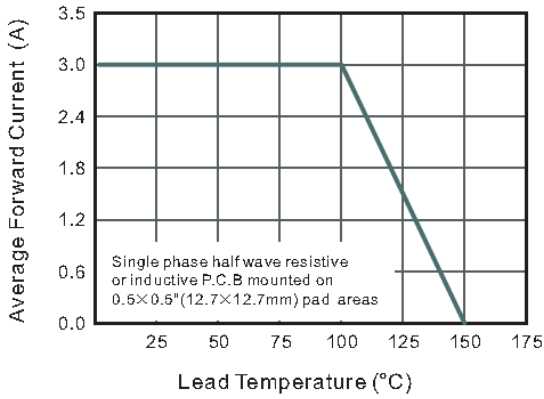


Fig.2 Typical Reverse Characteristics

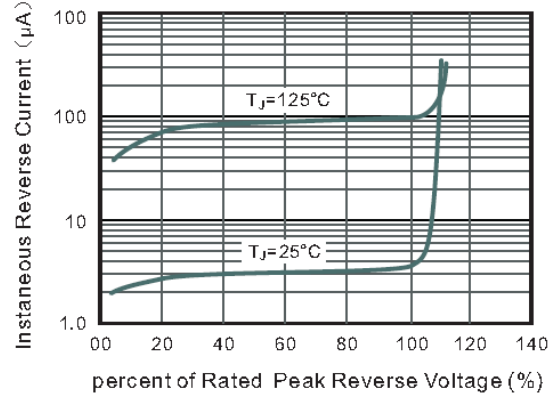


Fig.3 Typical Instantaneous Forward Characteristics

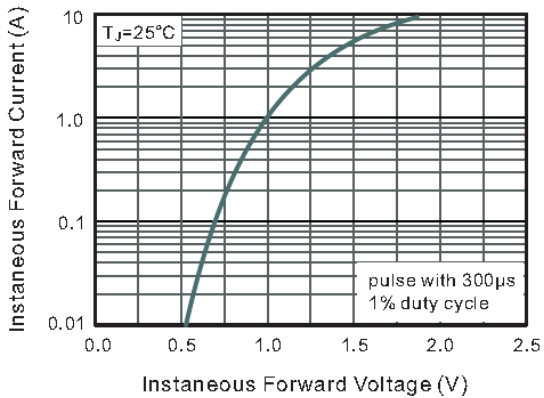


Fig.4 Typical Junction Capacitance

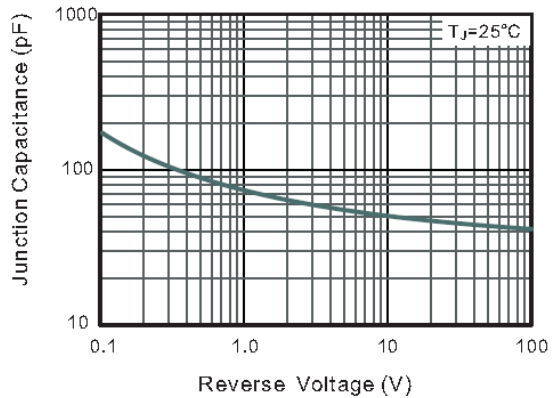
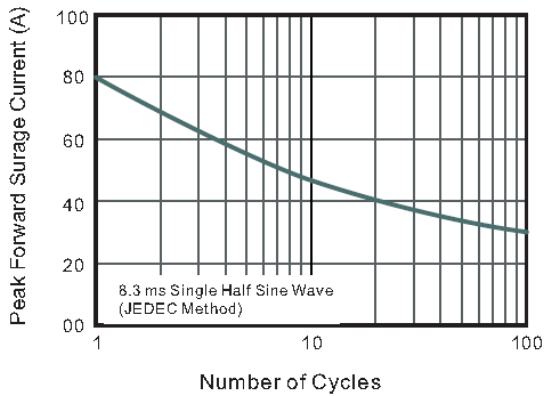


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current





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