DESCRIPTION

The S3AF~S3MF are available in SMAF package

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Juntion
- Easy to pick and place
- Available in SMAF package

ORDERING INFORMATION

Package Type	Part Number
SMAF	S3AF
	S3BF
	S3DF
	S3GF
	S3JF
	S3KF
	S3MF
Note	SPQ: 3,000pcs/Reel
AiT provides all RoHS Compliant Products	

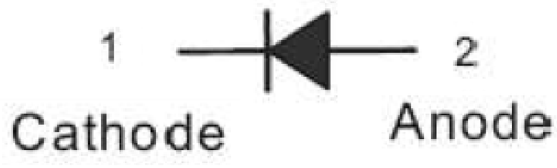
MECHANICAL DATA

Case: SMAF

Terminals: Solderable per MIL-STD-750,
Method 2026

Approx. Weight: 27mg 0.00086oz

PIN DESCRIPTION



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	S3AF	S3BF	S3DF	S3GF	S3JF	S3KF	S3MF	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	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current at T_A=65℃	$I_{F(AV)}$	3							A
Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load(JEDEC Method)	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage at 3A	V_F	1.2							V
Maximum DC Reverse Current @T_A=25°C at Rated DC Blocking Voltage @T_A=125°C	I_R	5 250							μA
Typical junction capacitance NOTE1	C_J	53							pF
Typical thermal resistance NOTE2	$R_{\theta JA}$	13 47							℃/W
Operating and Storage Temperature Range	T_J, T_{STG}	-55 to 150							℃

NOTE1: Measured at 1 MHz and applied reverse voltage of 4 V DC
NOTE2: Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead length, P.C.B. mounted

TYPICAL CHARACTERISTICS

Figure 1. Forward Current Derating Curve

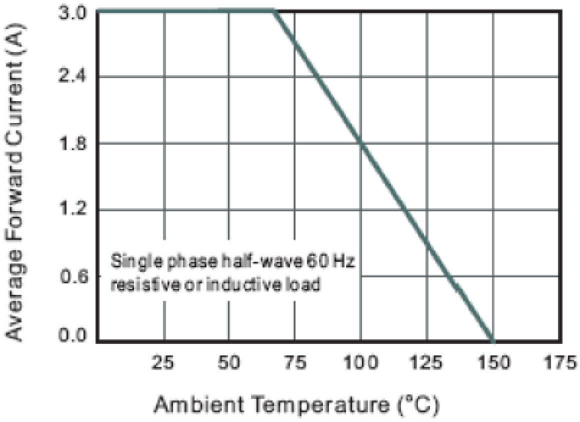


Figure 2. Typical Instaneous Reverse Characteristics

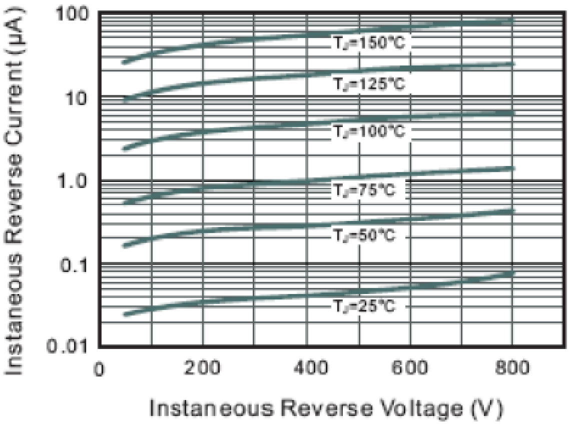


Figure 3. Typical Forward Characteristic

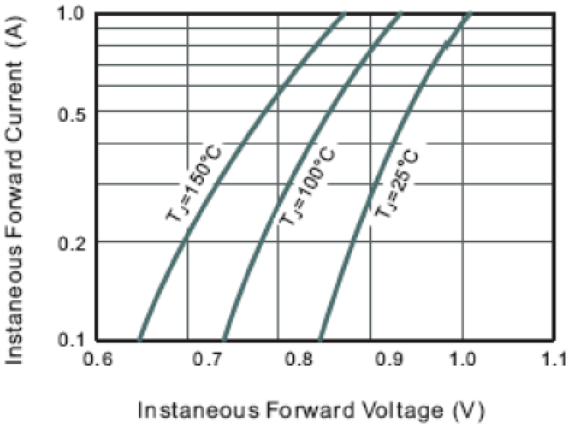
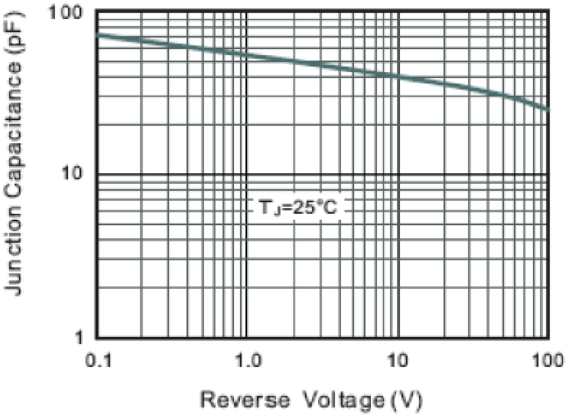


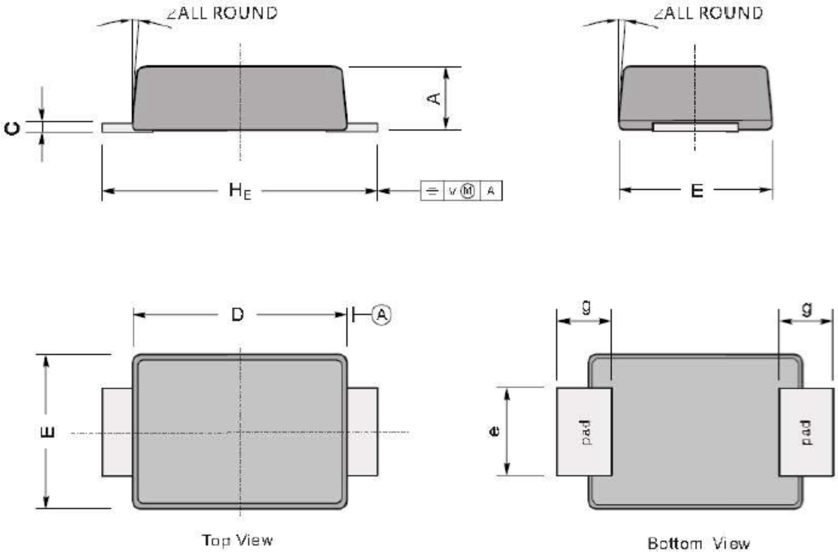
Figure 4. Typical Junction Capacitance



PACKAGE INFORMATION

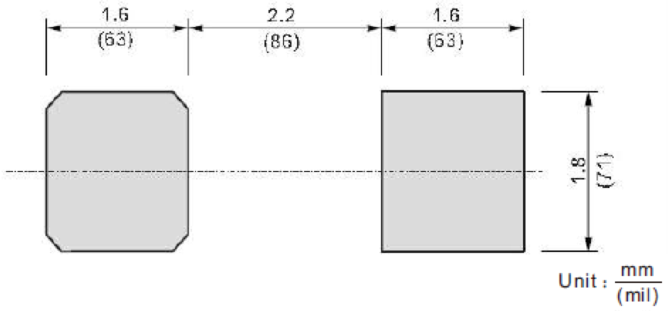
Dimension in SMAF Package (Unit: mm/mil)

Plastic surface mounted package; 2 leads



UNIT		A	C	D	E	e	g	H_E	∠
mm	max	1.1	0.20	3.7	2.7	1.6	1.2	4.9	7°
	min	0.9	0.12	3.3	2.4	1.3	0.8	4.4	
mil	max	43	7.9	146	106	63	47	193	
	min	35	4.7	130	94	51	31	173	

The recommended mounting pad size



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