



DESCRIPTION

The S3ABF~S3MBF are available in SMBF Package

ORDERING INFORMATION

Package Type	Part Number
SMBF	S3ABF
	S3BBF
	S3DBF
	S3GBF
	S3JBF
	S3KBF
	S3MBF
Note	SPQ: 5,000pcs/Reel
AiT provides all RoHS Compliant Products	

FEATURES

- For surface mounted applications
- Low profile package
- Glass Passivated Chip Junction
- Easy to pick and place
- Available in SMBF Package

MECHANICAL DATA

- Case: SMBF
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 57mg / 0.002oz

PIN DESCRIPTION





MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

Parameter	Symbol	S3ABF	S3BBF	S3DBF	S3GBF	S3JBF	S3KBF	S3MBF	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 Blanking Voltage	V_{DC}	50	100	200	400	600	800	100	V
Maximum Average Forward Rectified Current $T_A=65^\circ\text{C}$	$I_{F(AV)}$	3.0							A
Peak Forward Surge Current 8.3ms Single Half Sine wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100							A
Maximum Instantaneous Forward Voltage at 3A	V_F	1.1							V
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	$T_A=25^\circ\text{C}$ 5.0 $T_A=125^\circ\text{C}$ 200							μA
Typical Junction Capacitance ^{NOTE1}	C_J	45							pF
Typical Thermal Resistance ^{NOTE2}	$R_{\theta JA}$	40							$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{STG}	-55~+150							$^\circ\text{C}$

NOTE1: Measured at 1MHz and applied reverse voltage of 4V D.C

NOTE2: P.C.B. mounted with 0.5 x 0.5" (12.7 x 12.7 mm) copper pad areas.



TYPICAL CHARACTERISTICS

Figure 1. Forward Current Derating Curve

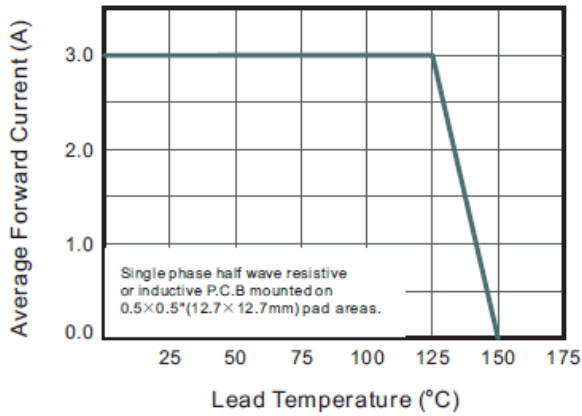


Figure 2. Typical Reverse Characteristics

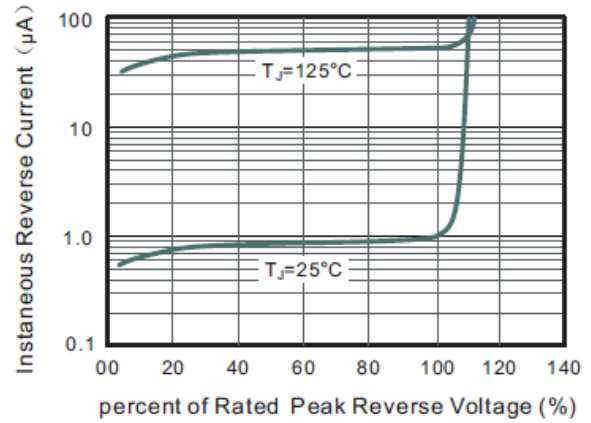


Figure 3. Typical Instantaneous Forward Characteristic

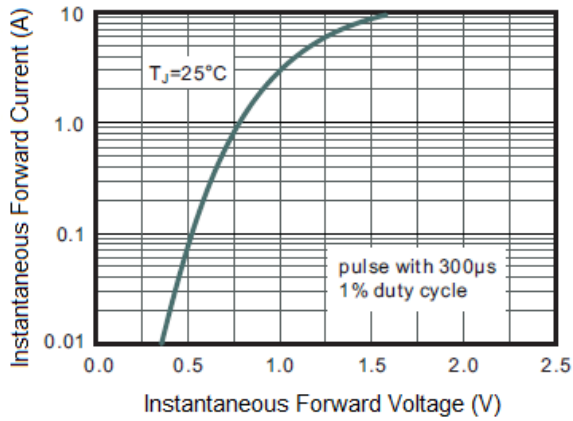


Figure 4. Typical Junction Capacitance

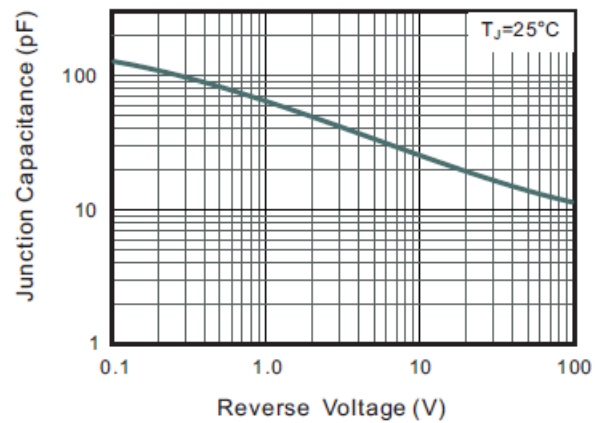
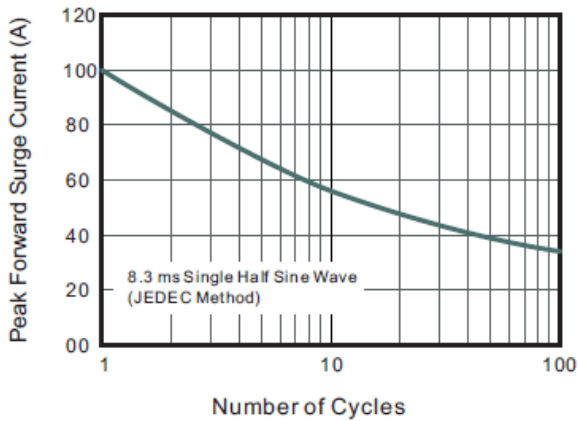


Figure 5. Maximum Non-Repetitive Peak Forward Surge Current

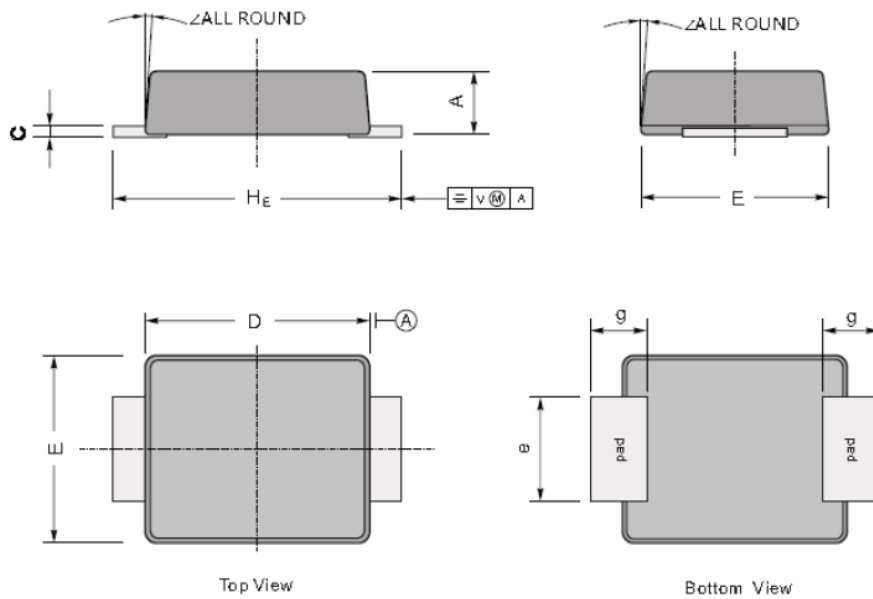




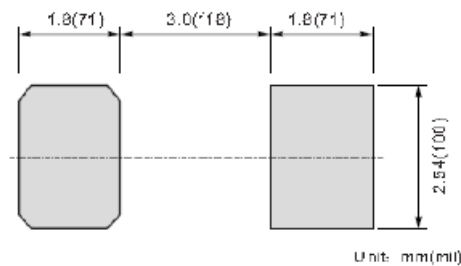
PACKAGE INFORMATION

Dimension in SMBF (Unit: mm)

Plastic Surface mounted package; 2 leads



The recommended mounting pad size



Unit: mm(mil)

UNIT		A	C	D	E	H _E	E	g	∠
mm	Max	1.3	0.26	4.4	3.7	5.5	2.2	1.0	9°
	Min	1.1	0.18	4.2	3.5	5.1	1.9		
mil	Max	51	10	173	146	216	86	40	
	Min	43	7	165	138	200	75		



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