

## SS32BF THRU SS320BF

DESCRIPTION

Cathode

Anode

Simplified outline SMBF and symbol

**PINNING** 

PIN

1

2

### **Surface Mount Schottky Barrier Rectifier**

Reverse Voltage - 20 to 200V Forward Current - 3.0A

### **FEATURES**

- Metal silicon junction, majority carrier conduction
- For surface mounted applications
- Low power loss, high efficiency
- High forward surge current capability
- For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications

### **MECHANICAL DATA**

• Case: SMBF

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

• Approx. Weight: 57 mg / 0.002oz

Absolute Maximum Ratings and Electrical characteristics Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capaciti							acitive lo		
					1				
Symbols	SS32BF	88 <b>34B</b> F	8836BF	8838BF	88310BF	88312BF	SS315BF	88320BF	Units
V <sub>RRM</sub>	20	40	60	80	100	120	150	200	V
V <sub>RMS</sub>	14	28	42	56	70	84	105	140	V
V <sub>pc</sub>	20	40	60	80	100	120	150	200	V
I <sub>F(AV)</sub>	3.0					А			
	Symbols VRRM VRMS VDC	Symbols SS32BF  VRRM 20  VRMS 14  VDC 20	Symbols         SS32BF         SS34BF           V <sub>RRM</sub> 20         40           V <sub>RMS</sub> 14         28           V <sub>DC</sub> 20         40	Symbols         SS32BF         SS34BF         SS36BF           V <sub>RRM</sub> 20         40         60           V <sub>RMS</sub> 14         28         42           V <sub>DC</sub> 20         40         60	Symbols         SS32BF         SS34BF         SS36BF         SS38BF           V_RRM         20         40         60         80           V_RMS         14         28         42         56           V_DC         20         40         60         80	Symbols         SS32BF         SS34BF         SS36BF         SS38BF         SS38BF         SS38BF         SS310BF           VRRM         20         40         60         80         100           VRMS         14         28         42         56         70           VDC         20         40         60         80         100	Symbols         SS32BF         SS34BF         SS36BF         SS38BF         SS38BF         SS310BF         SS312BF           VRRM         20         40         60         80         100         120           VRMS         14         28         42         56         70         84           VDC         20         40         60         80         100         120	Symbols         SS32BF         SS34BF         SS36BF         SS38BF         SS310BF         SS312BF         SS315BF           VRRM         20         40         60         80         100         120         150           VRMS         14         28         42         56         70         84         105           VDC         20         40         60         80         100         120         150	Symbols         SS32BF         SS34BF         SS36BF         SS38BF         SS310BF         SS312BF         SS315BF         SS320BF           V_RRM         20         40         60         80         100         120         150         200           V_RMS         14         28         42         56         70         84         105         140           V_DC         20         40         60         80         100         120         150         200

		I I							
Maximum Average Forward Rectified Current	$I_{F(AV)}$	3.0					А		
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	80			70				А
Max Instantaneous Forward Voltage at 3 A	V <sub>F</sub>	0.55	0.	.70	0.	85	0.8	95	V
Maximum DC Reverse Current T <sub>a</sub> = 25°C at Rated DC Reverse Voltage T <sub>a</sub> = 100°C	I <sub>R</sub>	0.5 5		0.3 3					mA
Typical Junction Capacitance 1)	Ci	450		400				pF	
Typical Thermal Resistance 23	R <sub>e.JA</sub>	50					°C/W		
Operating Junction Temperature Range	Τj	-55 ~ +125					°C		

1) Measured at 1MHz and applied reverse voltage of 4 V D.C. 2) P.C.B. mounted with 0.5 X 0.5" (12.7 X 12.7 mm) copper pad areas.

-55 ~ +150

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Storage Temperature Range

Conscious Products Begin With Conscious People





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Fig.1 Forward Current Derating Curve

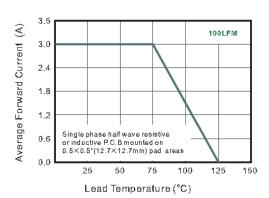


Fig.3 Typical Forward Characteristic

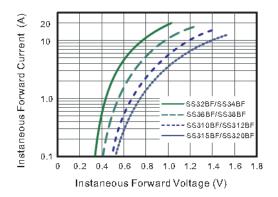


Fig.5- Typical Transient Thermal Impedance

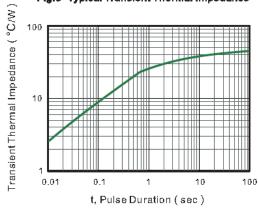
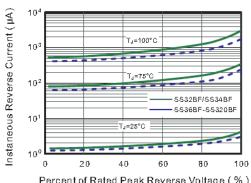
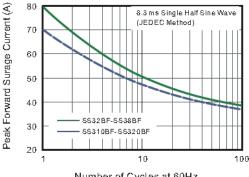


Fig.2 Typical Reverse Characteristics



Percent of Rated Peak Reverse Voltage (%)

Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



Number of Cycles at 60Hz

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**REV.07** 

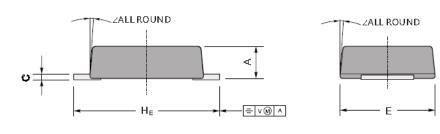


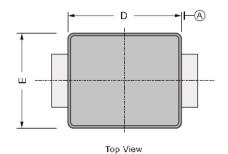
# SS32BF THRU SS320BF

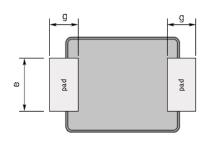
### **PACKAGE OUTLINE**

### Plastic surface mounted package; 2 leads

### **SMBF**



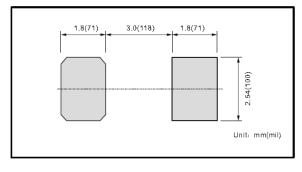




Bottom View

UNIT С D Ε  $H_{E}$ Α Ζ 1.3 0.26 4.4 3.7 5.5 2.2 max mm 1.0 min 1.1 0.18 4.2 3.5 1.9 5.1 9° max 51 10 173 146 216 86 40 mil min 43 7 165 138 200 75

### The recommended mounting pad size



### Marking

Type number	Marking code				
SS32BF	S32B				
SS34BF	S34B				
SS36BF	S36B				
SS38BF	S38B				
SS310BF	S310B				
SS312BF	S312B				
SS515BF	S315B				
SS520BF	\$320B				

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