

/ Descriptions

20V~200V5.0ASMBF

Surface Mount Schottky Barrier Rectifier, Reverse Voltage 20 to 200V,Forward Current:5.0A,SMBF thin package.

/ Features

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications,For surface mounted applications,HF Product.

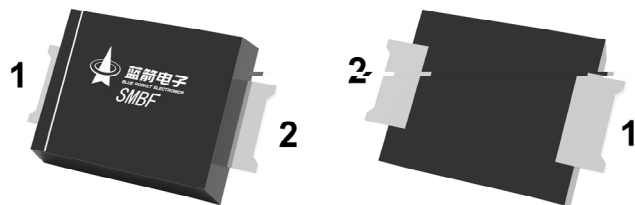
/ Applications

General purpose.

/ Equivalent Circuit

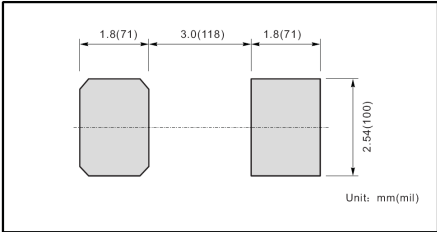


/ Pinning



PIN	DESCRIPTION
1	Cathode
2	Anode

The recommended mounting pad size



/ Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating								Unit
		SS52BF	SS54BF	SS56BF	SS58BF	SS510BF	SS512BF	SS515BF	SS520BF	
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	40	60	80	100	120	150	200	V
Maximum RMS voltage	V _{RMS}	14	28	42	56	70	84	105	140	V
Maximum DC Blocking Voltage	V _{DC}	20	40	60	80	100	120	150	200	V
Maximum Average Forward Rectified Current	I _{F AV}	5.0								A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	120								A
Typical Junction Capacitance ¹	C _j	800		500						pF
Typical Thermal Resistance ²	R _{θJA}	45								/W
Operating Junction Temperature Range	T _j	-55 ~ +150								
Storage Temperature Range	T _{stg}	-55 ~ +150								

Note:

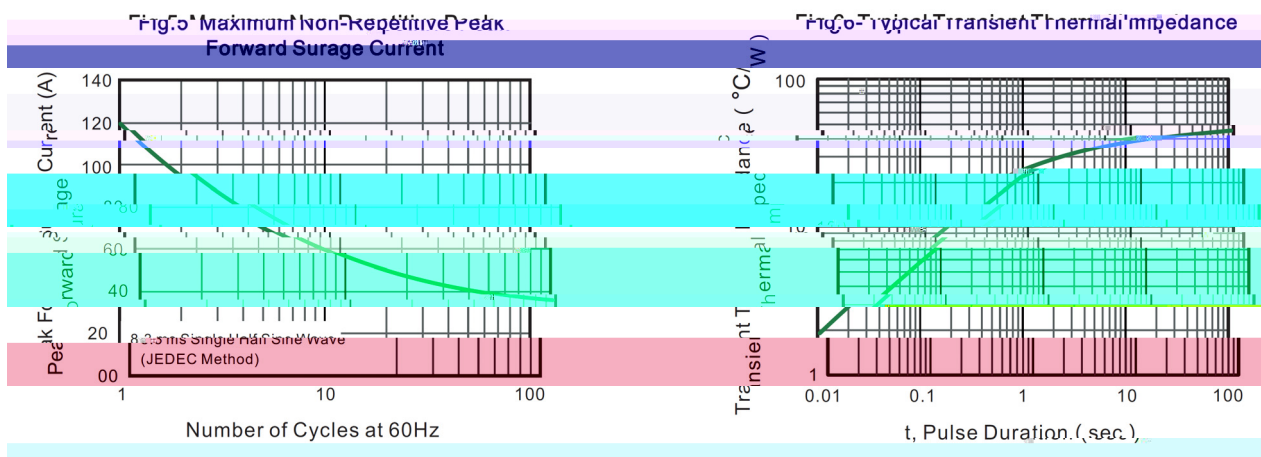
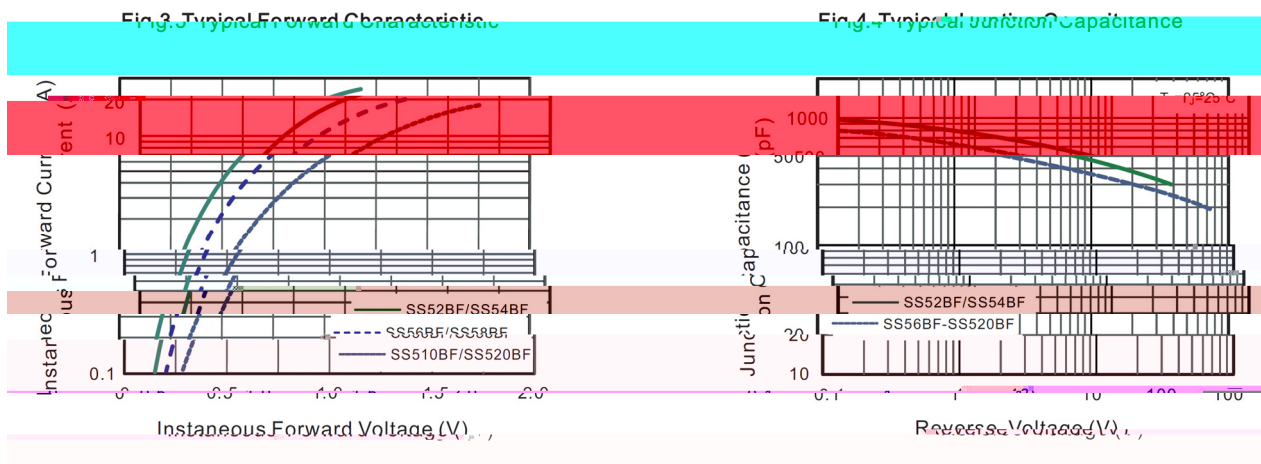
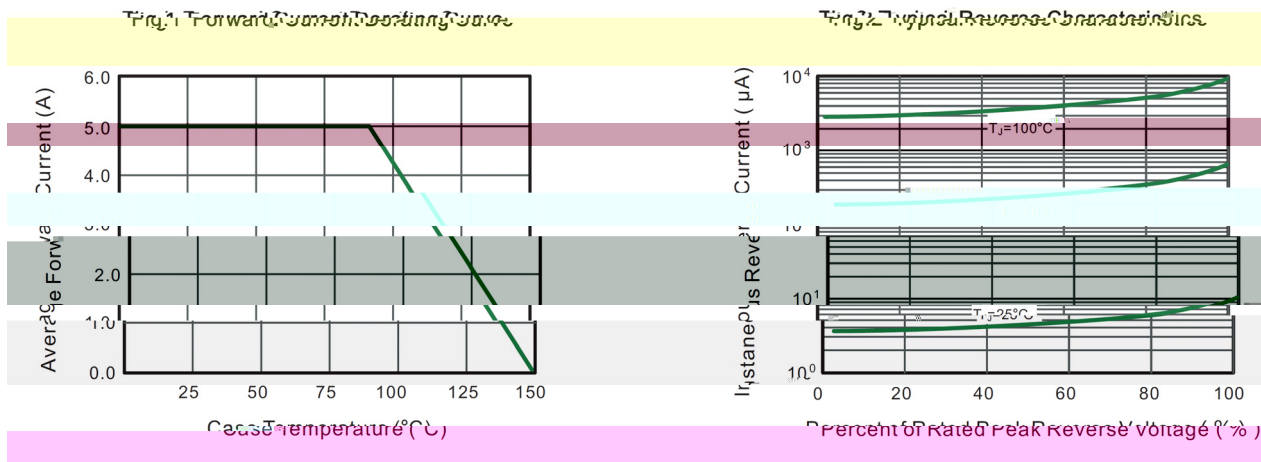
1 Measured at 1MHz and applied reverse voltage of 4 V D.C.

2 P.C.B. mounted with 2.0" X 2.0" (5 X 5 cm) copper pad areas.

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test condition	Rating								Unit
			SS52BF	SS54BF	SS56BF	SS58BF	SS510BF	SS512BF	SS515BF	SS520BF	
Max Instantaneous Forward Voltage	V _F	I _F =5.0A	0.55		0.70		0.85				V
Maximum DC Reverse Current at Rated DC Reverse Voltage	I _R	T _a =25	1.0								mA
		T _a =100	50								

/ Electrical Characteristic Curve

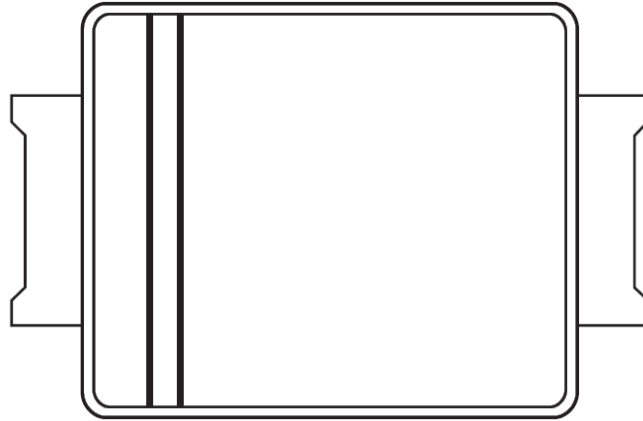


/ Marking Instructions

Marking

Type number	Marking code
SS52BF	S52B
SS54BF	S54B
SS56BF	S56B
SS58BF	S58B
SS610BF	S610B
SS612BF	S612B
SS615BF	S615B
SS620BF	S620B

/ Marking Instructions



S52B

() / Temperature Profile for IR Reflow Soldering(Pb-Free)

Note:

- | | | | | | |
|---|-------|-----|-----------|--------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5sec; | | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | 2 | 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5	10±1 sec.	Temp.:260±5	Time:10±1 sec
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/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel /	Reels/Inner Box /	Units/Inner Box /	Inner Boxes/Outer Box /	Units/Outer Box /	Reel	Inner Box	Outer Box
SMBF	5000	2	10000	7	70000	13 ×12	336X336X40	380X335X366

/ Notices