SMBF Plastic-Encapsulate Diodes

Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode

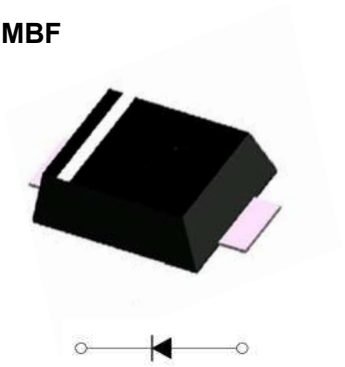
Applications

- Rectifier

Marking

- SS52LBF-SS520LBF

SMBF



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature uniess otherwies specified.
Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SS52LBF	SS54LBF	SS56LBF	SS58LBF	SS510LBF	SS515LBF	SS520LBF	UNITS
Maximum Recurrent Peak Reverse Voltage	20	40	60	80	100	150	200	V
Maximum RMS Voltage	14	28	42	56	70	105	140	V
Maximum DC Blocking Voltage	20	40	60	80	100	150	200	V
Maximum Average Forward Rectified Current See Fig. 1	5.0							A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	150							A
Maximum Instantaneous Forward Voltage at 5.0A	0.45		0.55		0.75			V
Maximum DC Reverse Current Ta=25°C	0.2							mA
at Rated DC Blocking Voltage Ta=100°C	20							mA
Typical Junction Capacitance (Note1)	380							pF
Typical Thermal Resistance R JA (Note 2)	10							°C/W
Operating Temperature Range Tj	-65 — +150							°C
Storage Temperature Range TSTG	-65 — +150							°C

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2. Thermal Resistance Junction to Ambient.

Typical Characteristics

RATING AND CHARACTERISTIC CURVES (SS52LBF THRU SS520LBF)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

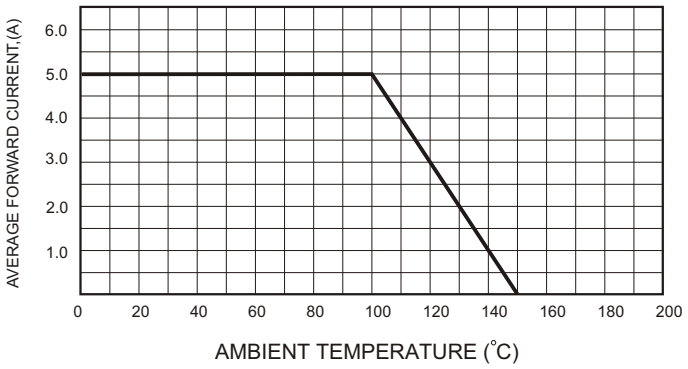


FIG.2-TYPICAL FORWARD CHARACTERISTICS

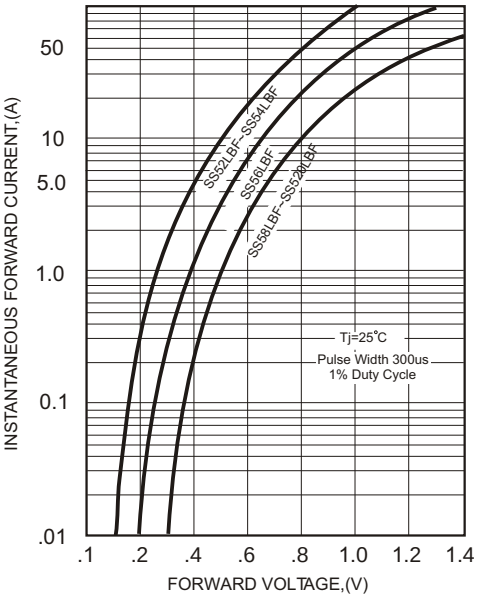


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

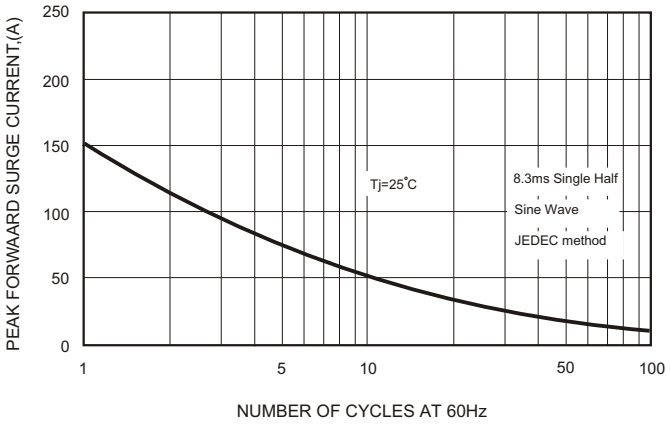


FIG.4-TYPICAL JUNCTION CAPACITANCE

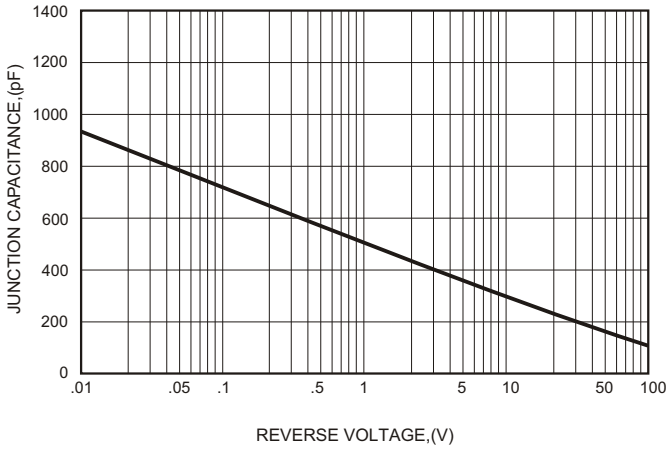
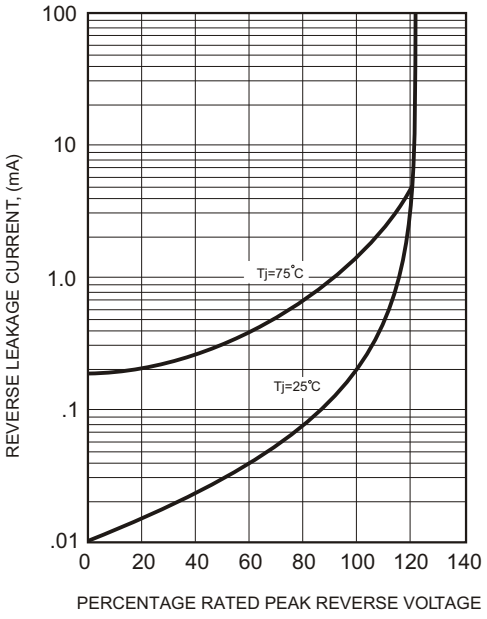
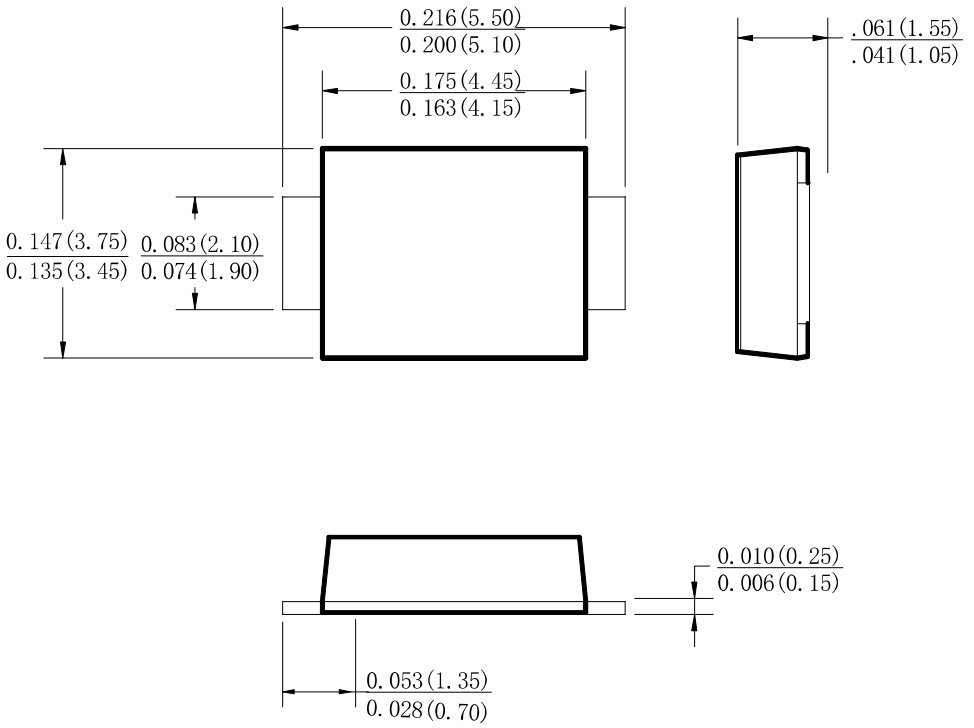


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

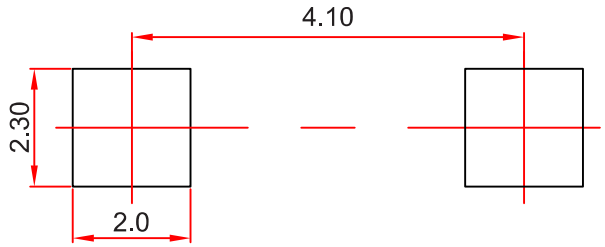


SMBF Package Outline Dimensions



Dimensions in inches and (millimeters)

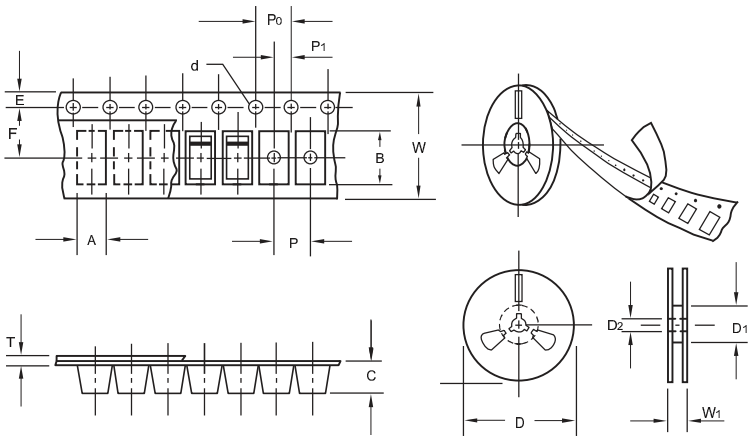
SMBF Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

Reel Taping Specifications For Surface Mount Devices- SMBF

Packing information



unit:mm

Item	Symbol	Tolerance	SMBF
Carrier width	A	0.1	3.81
Carrier length	B	0.1	5.61
Carrier depth	C	0.1	1.60
Sprocket hole	d	0.05	1 50
13" Reel outside diameter	D	2.0	330.00
13" Reel inner diameter	D1	min	50.00
Feed hole diameter	D2	0.5	13.00
Sprocket hole position	E	0.1	1.75
Punch hole position	F	0.1	5.50
Punch hole pitch	P	0.1	4.00
Sprocket hole pitch	P0	0.1	4.00
Embossment center	P1	0.1	2.00
Overall tape thickness	T	0.1	0.30
Tape width	W	0.3	12.00
Reel width	W1	1.0	12.30

Note:Devices are packed in accor dance with EIA standar RS-481-A and specifications listed above.