SZCJ

Shenzhen Changji Semiconductor Co., LTD.

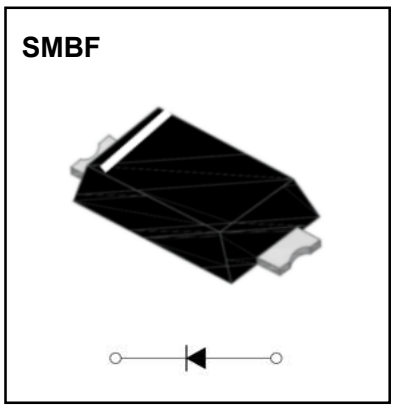
SMBF Plastic-Encapsulate Diodes

SK32BF THRU SK310BF

Schottky Rectifier Diode

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 20V~100V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage



Applications

- Rectifier

Marking

- SK3XBF
  X:From 2 To 10

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SK3						
				2BF	3BF	4BF	5BF	6BF	8BF	10BF
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100
Maximum RMS Voltage	V_{RMS}	V		14	21	28	35	42	56	70
Maximum DC Blocking Voltage	V_{DC}	V		20	30	40	50	60	80	100
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load, Ta(Fig.1)	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	70						
Junction Temperature	T_J	℃		-55 ~ +125			-55 ~ +150			
Storage Temperature	T_{STG}	℃		-55 ~ +150						

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SK3						
					2BF	3BF	4BF	5BF	6BF	8BF	10BF
Peak Forward Voltage	V_F	V	I_F=3.0A	T_a=25℃	0.55			0.70		0.85	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	T_a=25℃	1						
	I_{RRM2}			T_a=100℃	50						
Typical Junction Capacitance	C_J	pF	Measured at 1MHz and applied reverse voltage of 4.0V D.C.		500			300			
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		78						

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

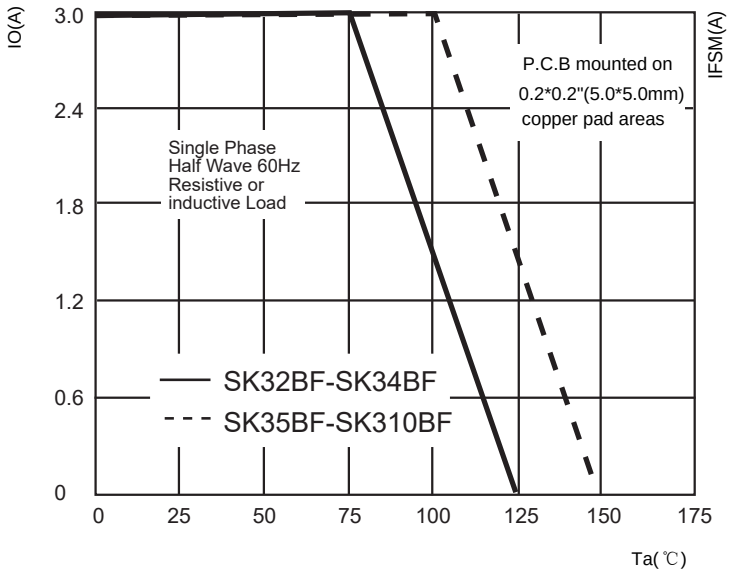


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

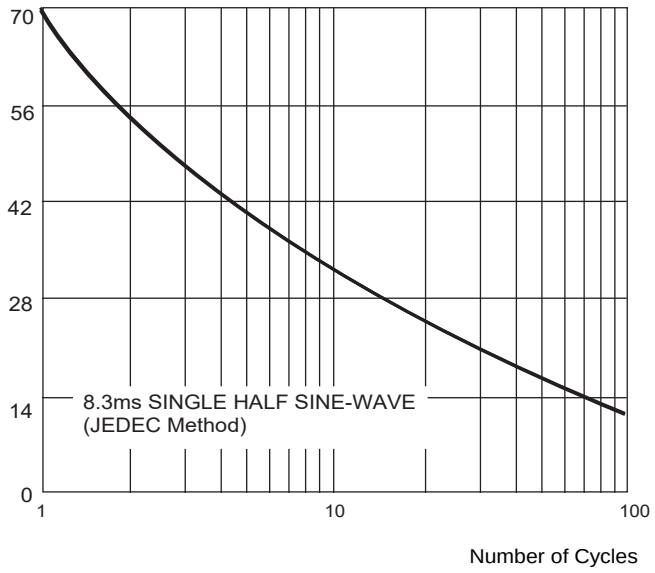


FIG.3: TYPICAL FORWARD CHARACTERISTICS

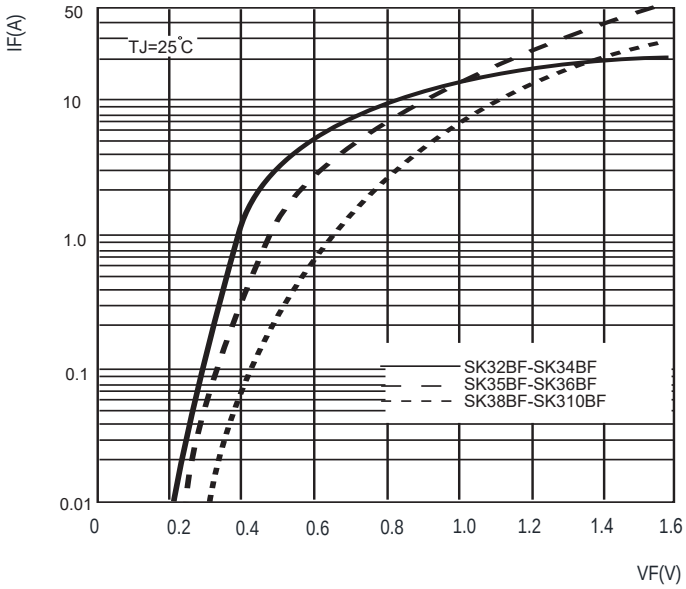


FIG.4:TYPICAL REVERSE CHARACTERISTICS

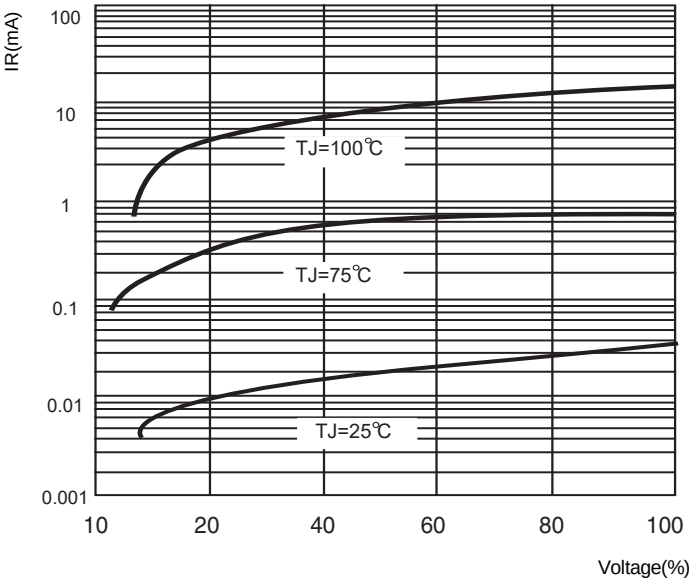
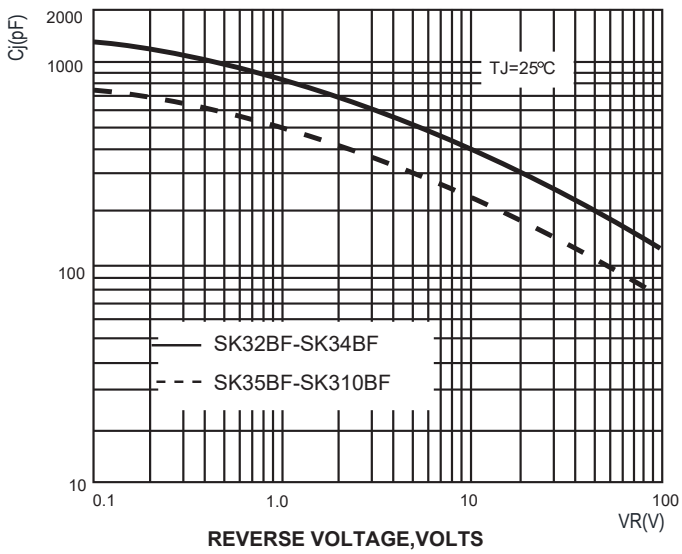
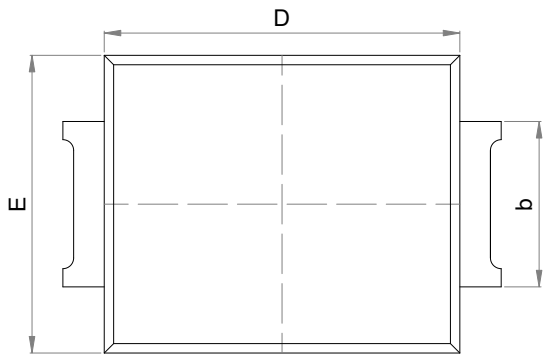


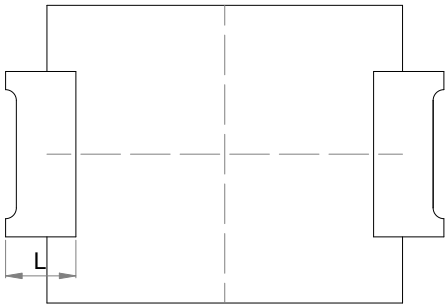
FIG.5: TYPICAL JUNCTION CAPACITANCE



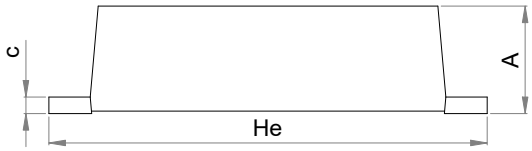
SMBF Package Outline Dimensions



Top View



Bottom View

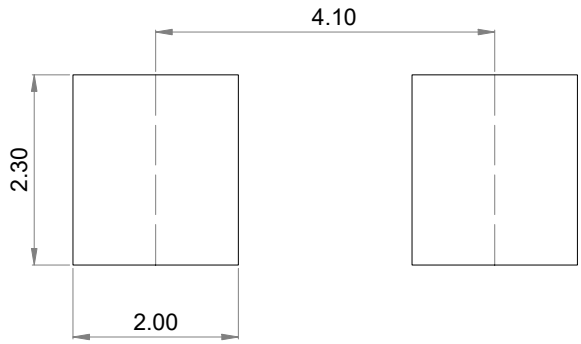


Side View

Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min.	Max.	Min.	Max.
A	1.05	1.55	0.041	0.061
b	1.90	2.10	0.075	0.083
c	0.15	0.25	0.006	0.010
D	4.15	4.45	0.163	0.175
E	3.45	3.75	0.136	0.148
He	5.10	5.50	0.201	0.217
L	0.70	1.35	0.028	0.053

Notes：
1 Dimensions exclusive of mold gate burrs.
2 Dimensions exclusive of mold flash and cutting burrs.

SMBF Suggested Pad Layout



Controlling dimension：in millimeters.

NOTICE

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