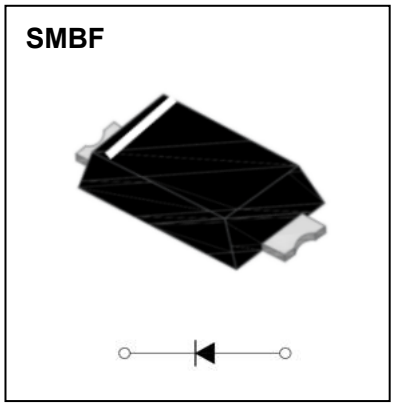
SZCJ Shenzhen Changji Semiconductor Co., LTD.

SMBF Plastic-Encapsulate Diodes

S3ABF THRU S3MBF General Purpose Rectifier Diodes

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 50V-1000V
- High surge current capability
- Polarity: Color band denotes cathode



Applications

- Rectifier

Marking

- S3XBF

  X：From A To M

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	S3						
				ABF	BBF	DBF	GBF	JBF	KBF	MBF
Repetitive Peak Reverse Voltage	V_{RRM}	V		50	100	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V		35	70	140	280	420	560	700
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave，Resistance load，TL= 100 ℃	3.0						
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave，1 cycle，Ta=25 ℃	100						
Junction Temperature	T_J	℃		-55 ~ +150						
Storage Temperature	T_{STG}	℃		-55 ~ +150						

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		S3						
					ABF	BBF	DBF	GBF	JBF	KBF	MBF
Peak Forward Voltage	V_F	V	I_F=3.0A		1.1						
Peak Reverse Current	I_{RRM1}	μA	$V_{RM}=V_{RRM}$	Ta =25℃	5						
	I_{RRM2}			Ta =125℃	500						
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		85						
Typical junction capactiance per diode	C_J	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.		40						

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

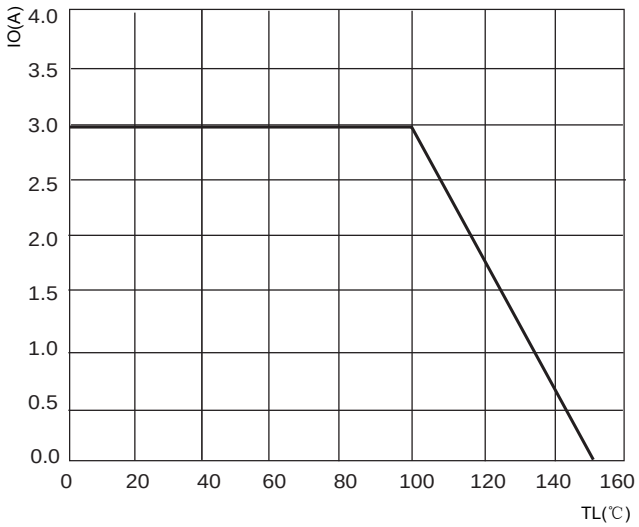


FIG2:Surge Forward Current Capadility

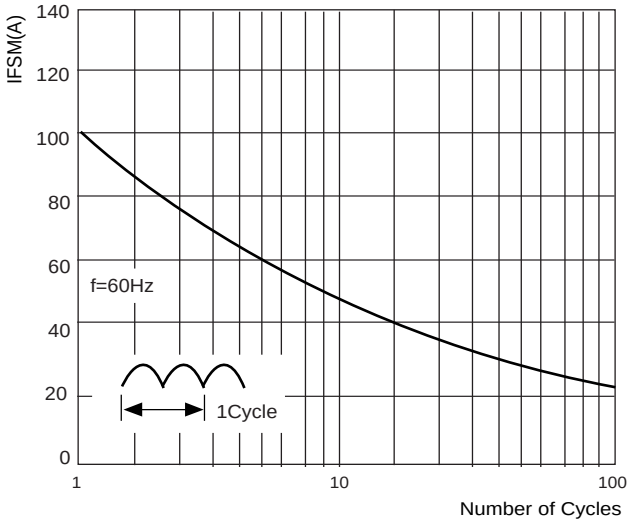


FIG.3: TYPICAL FORWARD CHARACTERISTICS

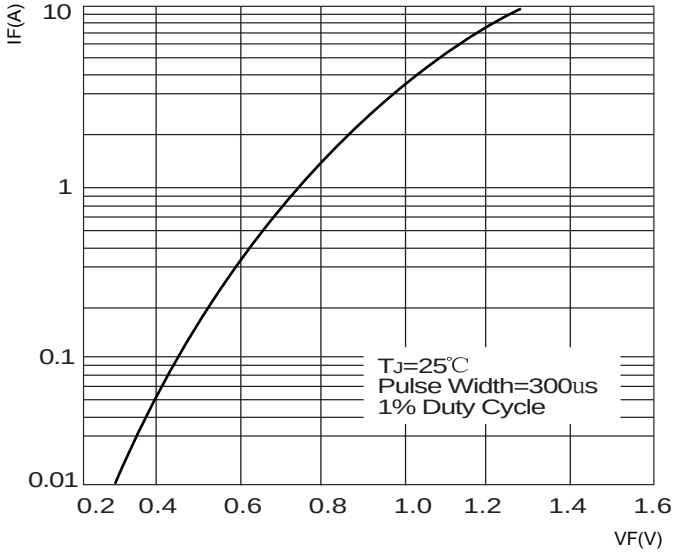
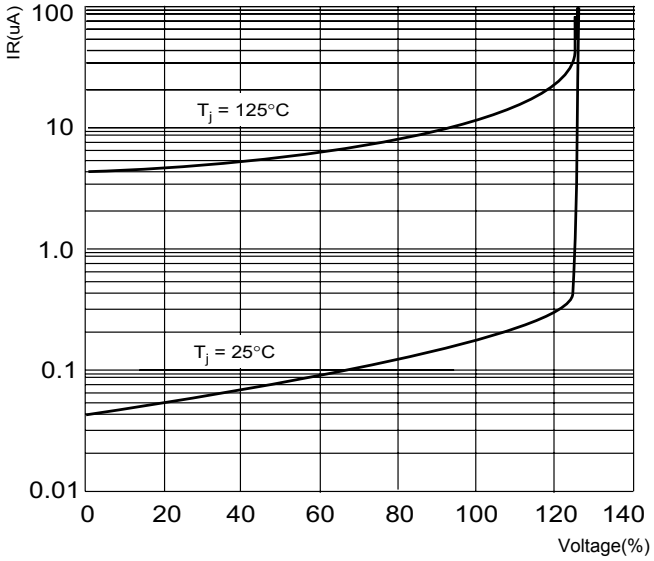
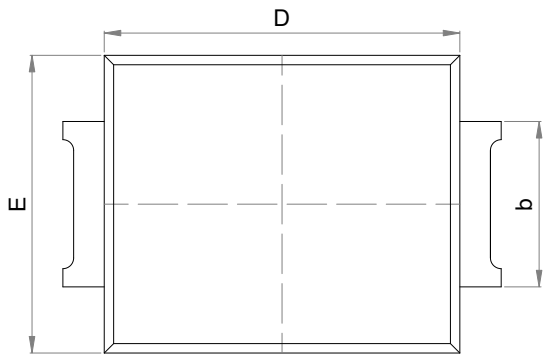


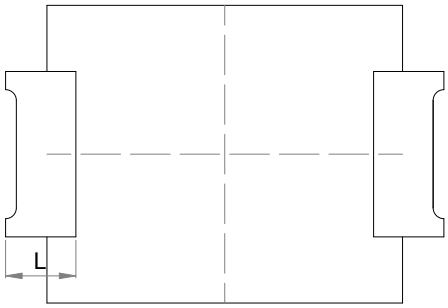
FIG.4 ：TYPICAL REVERSE CHARACTERISTICS



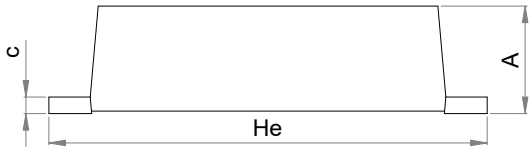
SMBF Package Outline Dimensions



Top View



Bottom View

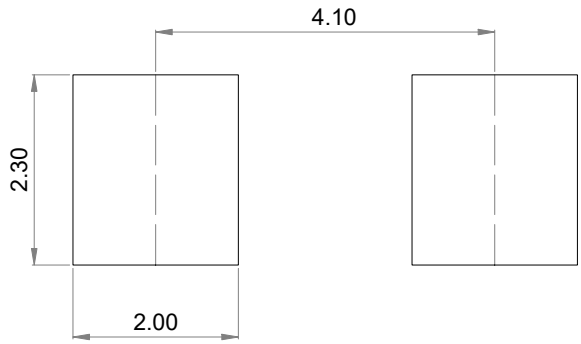


Side View

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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