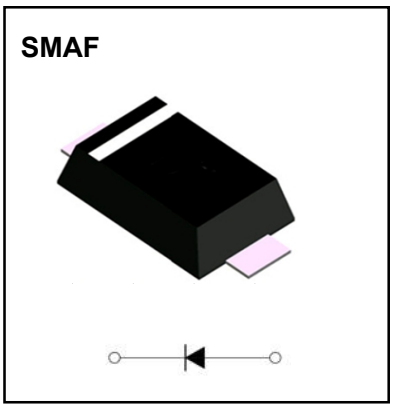
SZCJ Shenzhen Changji Semiconductor Co., LTD.

SMAF Plastic-Encapsulate Diodes

S3AF THRU S3MF 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

- S3X

  X：From A To M

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	S3						
				AF	BF	DF	GF	JF	KF	MF
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 ℃	90						
Operation Junction and Storage Temperature Range	T_J,T_{STG}	℃		-55 ~ +150						

Electrical Characteristics (T=25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		S3						
					AF	BF	DF	GF	JF	KF	MF
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 =100℃	50						
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		88						
Typical junction capactiance per diode	C_J	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.		15						

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

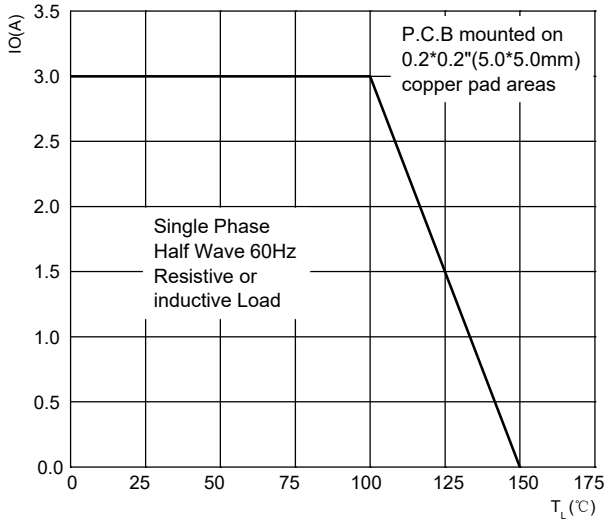


FIG2:Surge Forward Current Capadility

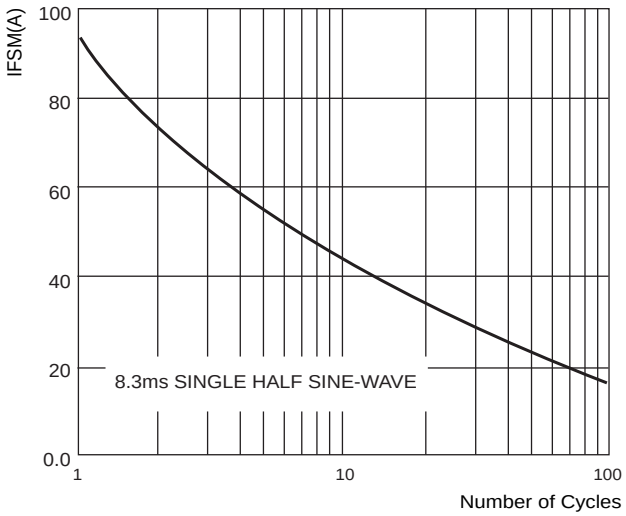


FIG.3: TYPICAL FORWARD CHARACTERISTICS

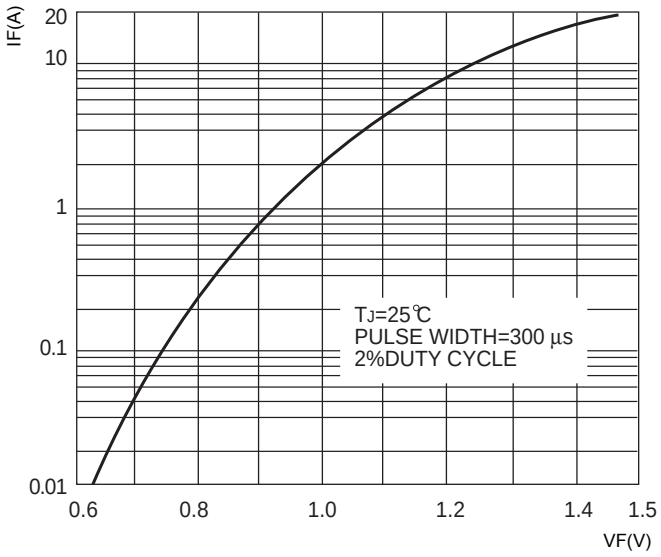
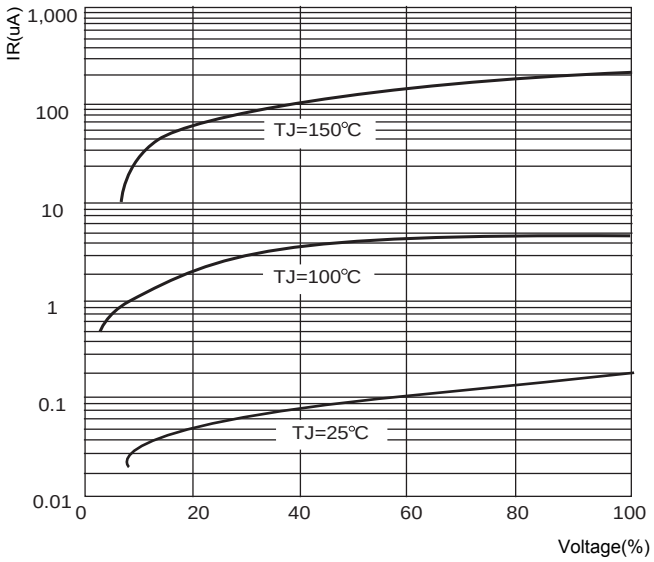
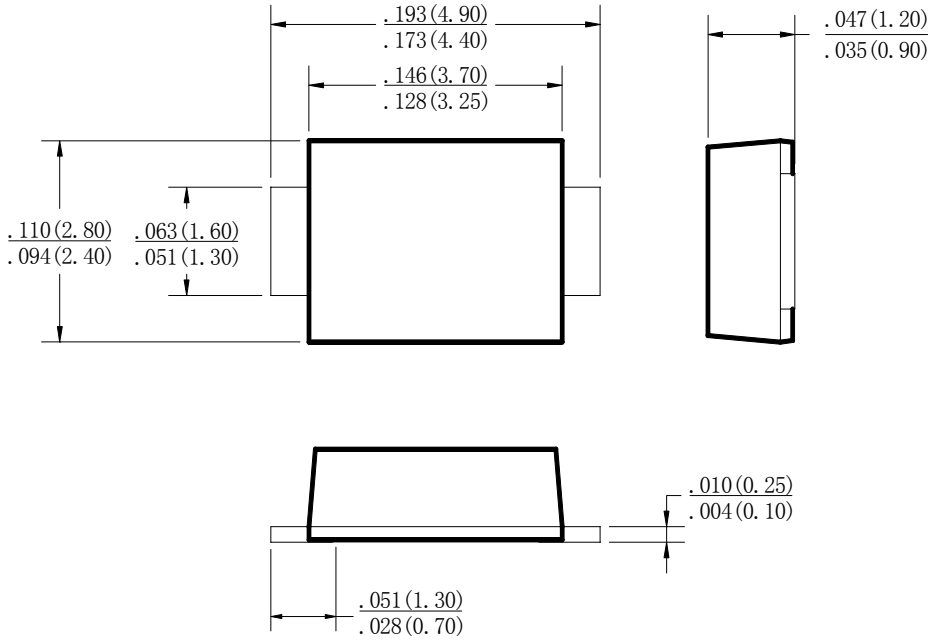


FIG.4 ：TYPICAL REVERSE CHARACTERISTICS

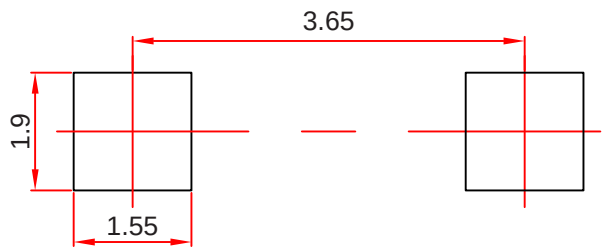


SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAF Suggested Pad Layout



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

NOTICE

SZCJ reserves the right to make modifications,enha nts,improvements,corrections or other es without further notice to any product herein.SZCJ does not assume any liability arising out of the application or use of any product described .