SZCJ

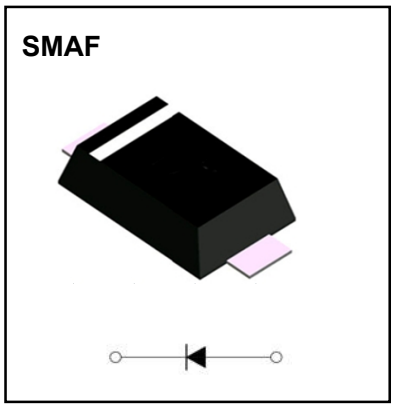
Shenzhen Changji Semiconductor Co., LTD.

SMAF Plastic-Encapsulate Diodes

SS52F THRU SS520F Schottky Rectifier Diodes

Features

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



Applications

- Rectifier

Marking

- SS5X

  X：From 2 To 20

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS5								
				2F	3F	4F	5F	6F	8F	10F	15F	20F
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100	150	200
Maximum RMS Voltage	V_{RMS}	V		14	21	28	35	42	56	70	105	140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave, Resistance load	5.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave, 1 cycle, Ta=25℃	150								
Junction Temperature	T_J	℃		-55 ~ +150								
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T =25℃ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SS5							
					2F	3F	4F	5F	6F	8F	10F	15F	20F
Peak Forward Voltage	V_F	V	I_F=5.0A		0.55			0.70		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta=25℃	0.5					0.1			
	I_{RRM2}			Ta=100℃	10					5.0			
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/W	Between junction and ambient		114								
	$R_{\theta J-L}$		Between junction and terminal		12								
Juction Capacitance (Typical)	Cj	pF	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C		260			220		130		100	80

Notes:

Thermal resistance from junction to ambient and from juction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

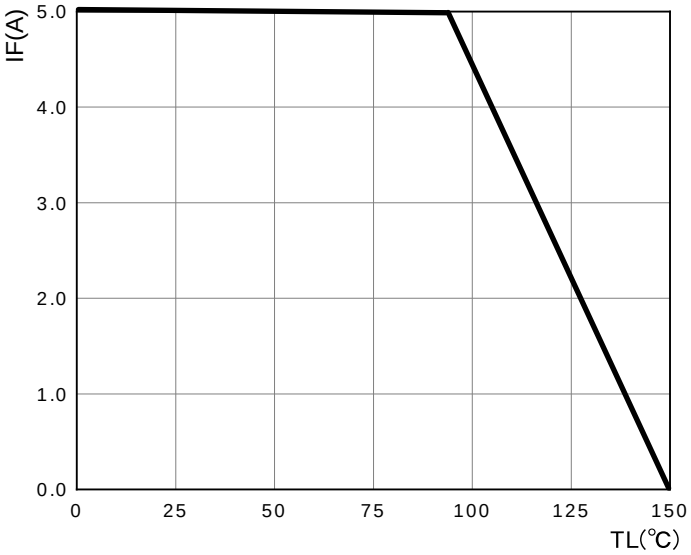
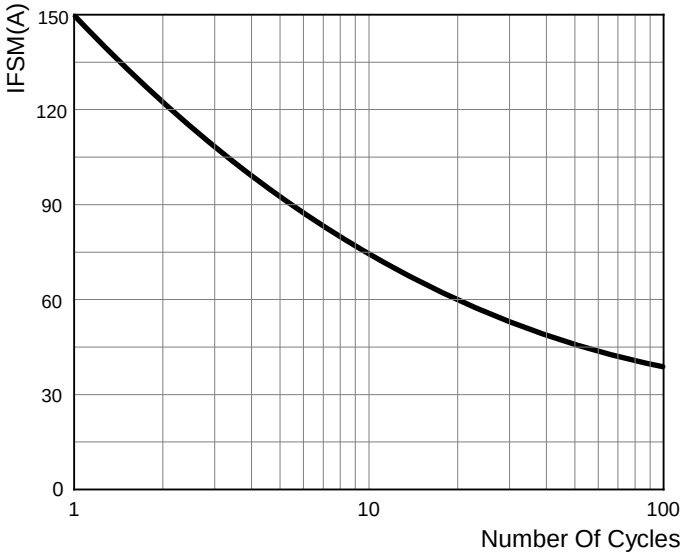
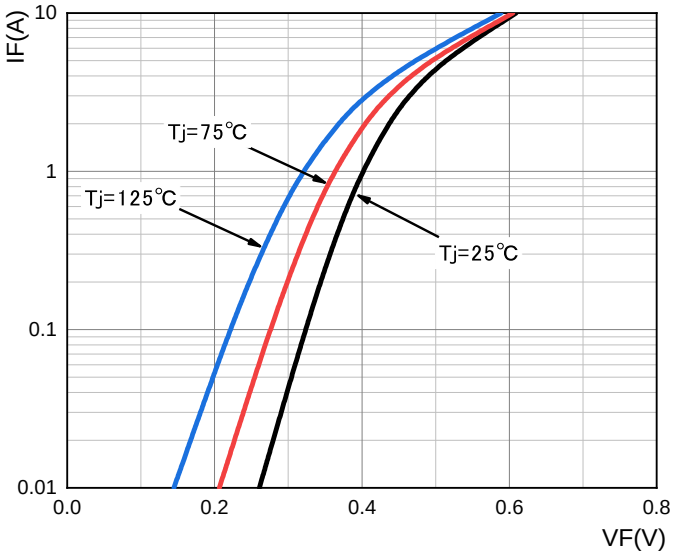


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



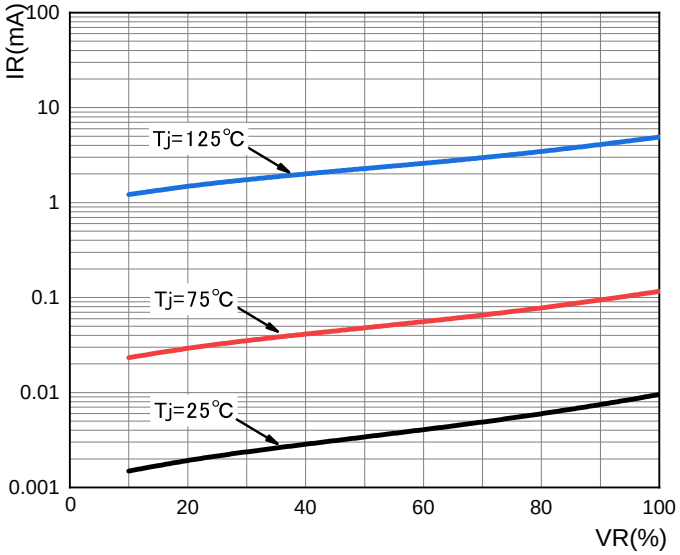
SS52F-SS54F

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SS52F-SS54F

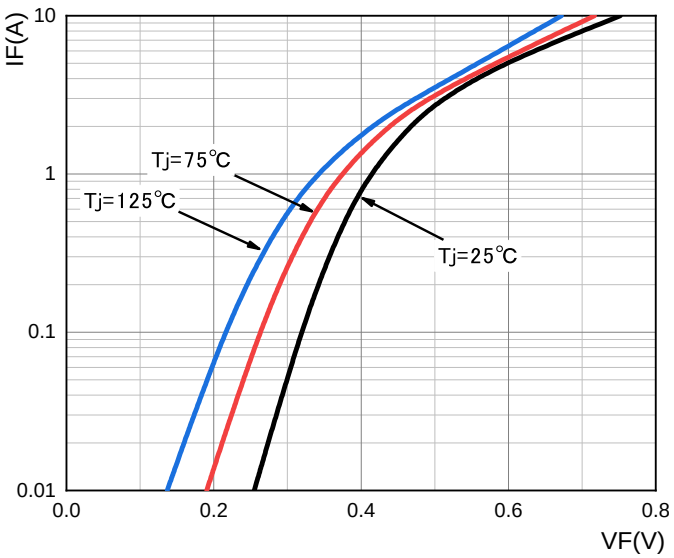
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

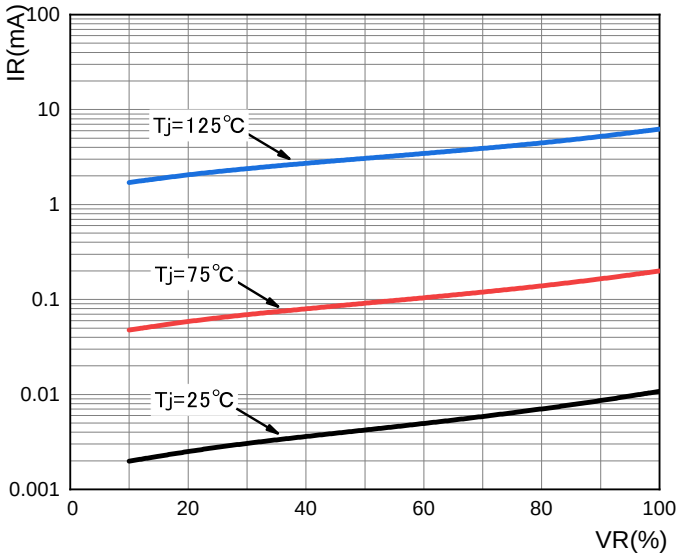
SS55F-SS56F

FIG.5: TYPICAL FORWARD CHARACTERISTICS



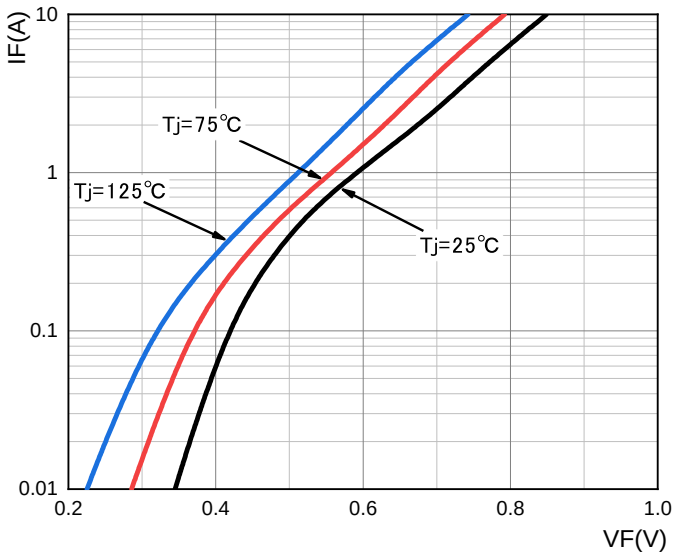
SS55F-SS56F

FIG.6: TYPICAL REVERSE CHARACTERISTICS



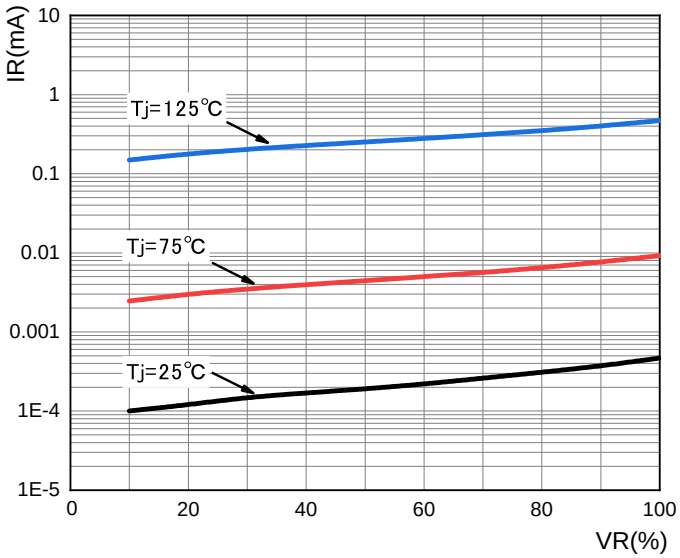
SS58F-SS510F

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SS58F-SS510F

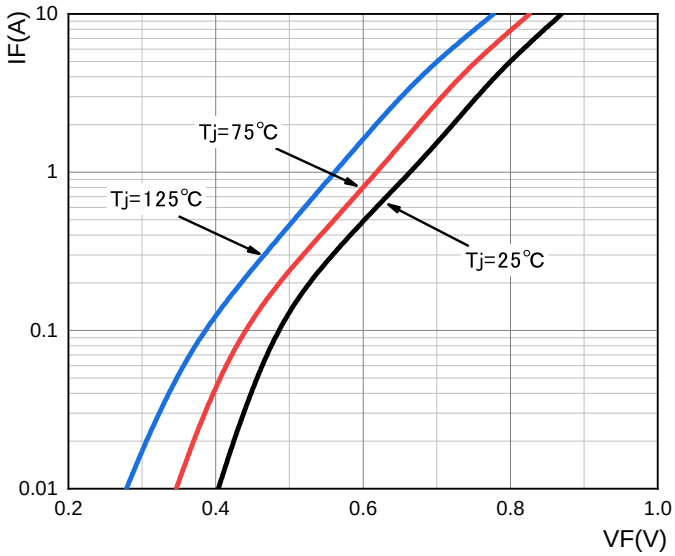
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

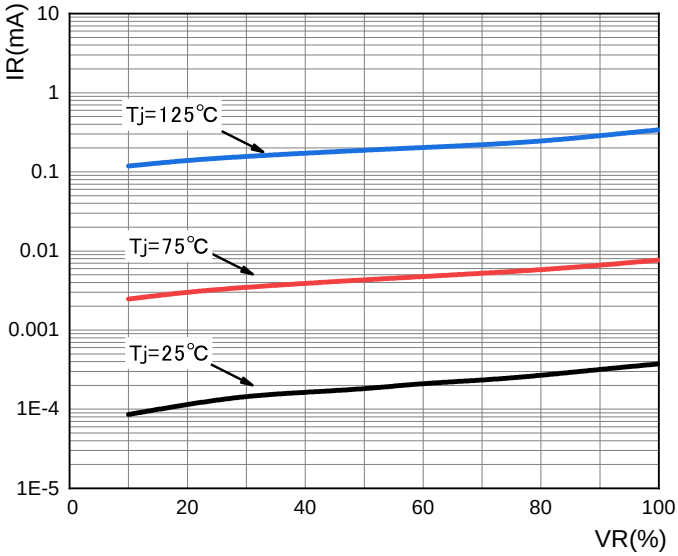
SS515F

FIG.9: TYPICAL FORWARD CHARACTERISTICS



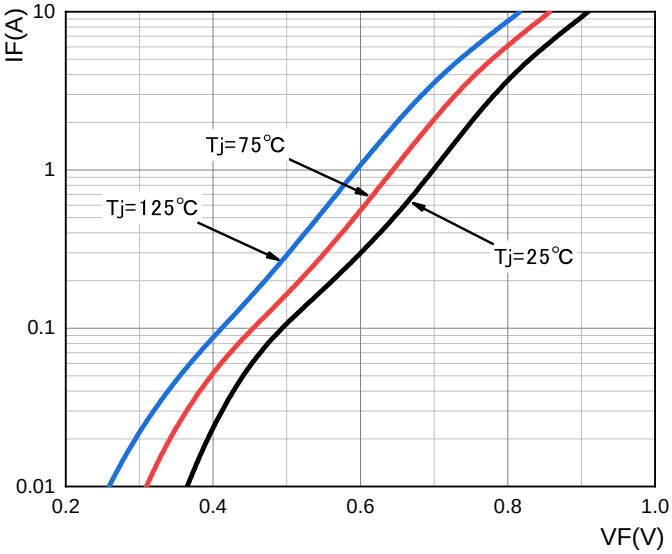
SS515F

FIG.10: TYPICAL REVERSE CHARACTERISTICS



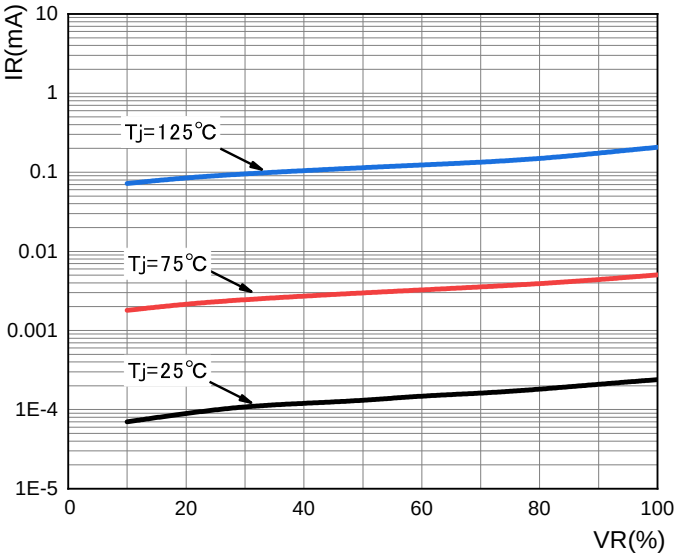
SS520F

FIG.11: TYPICAL FORWARD CHARACTERISTICS

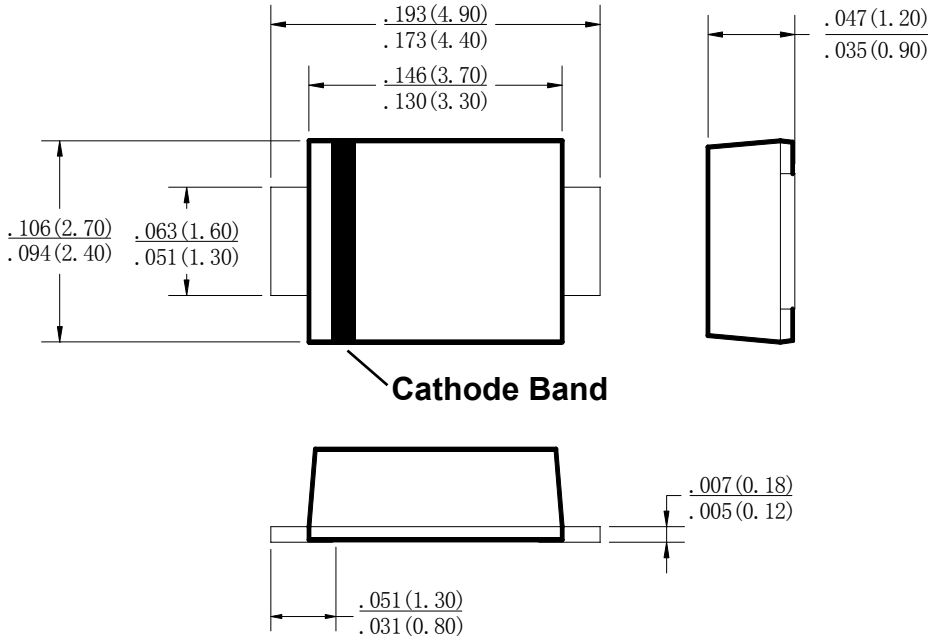


SS520F

FIG.12: TYPICAL REVERSE CHARACTERISTICS

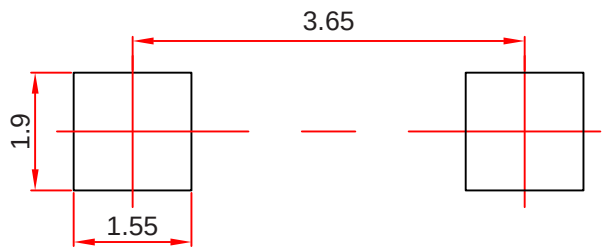


SMAF Package Outline Dimensions



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 .

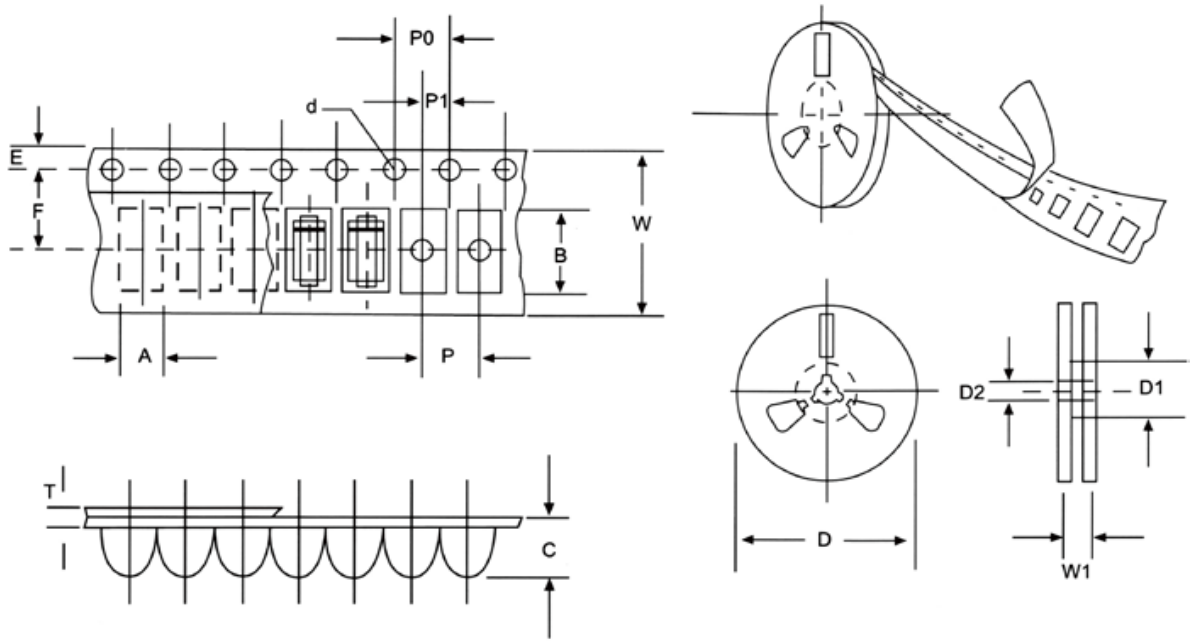


FIG:CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	SMAF mm(inch)
Carrier width	A	2.83±0.1(0.112±0.004)
Carrier length	B	4.90±0.1(0.193±0.004)
Carrier depth	C	1.45±0.1(0.057±0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	178±2.0(7.0±0.079)
Reel inner diameter	D1	54±1.0(2.13±0.039)
Feed hole diameter	D2	13±0.5(0.512±0.020)
Stroket hole position	E	1.75±0.1(0.069±0.004)
Punch hole position	F	5.5±0.05(0.217±0.002)
Punch hole pitch	P	4.0±0.1(0.157±0.004)
Sprocket hole pitch	P0	4.0±0.1(0.157±0.004)
Embossment center	P1	2.0±0.1(0.079±0.004)
Totall tape thickness	T	0.23-0.29(0.009-0.011)
Tape width	W	12.0±0.1(0.472±0.004)
Reel width	W1	16.8±2.0(0.661±0.079)

NOTE:Devices are packde in accordance with EIA standard RS-481-A and specification given above.