

Features

$I_{F(AV)}$ 5A
 V_{RRM} 20V-200V

High surge current capability

Polarity: Color band denotes cathode

Applications

Rectifier

SMA



Marking: SS5X

X : 2 To 20

Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	SS5								
				2	3	4	5	6	8	10	15	20
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 ($T = 25^{\circ}\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	SS5								
				2	3	4	5	6	8	10	15	20
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			
	Ta=100℃			10			5					
Thermal Resistance(Typical)	R _{θJ-C}	℃/W	Between junction and case		7.0							
	Between junction and ambient		52.5									
	Between junction and terminal		16									
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 case, from junction to ambient and from junction to lead mounted on 1" x 1"(25.4mm x 25.4mm) FR4 PCB, double sided copper, with minimum pad layout

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

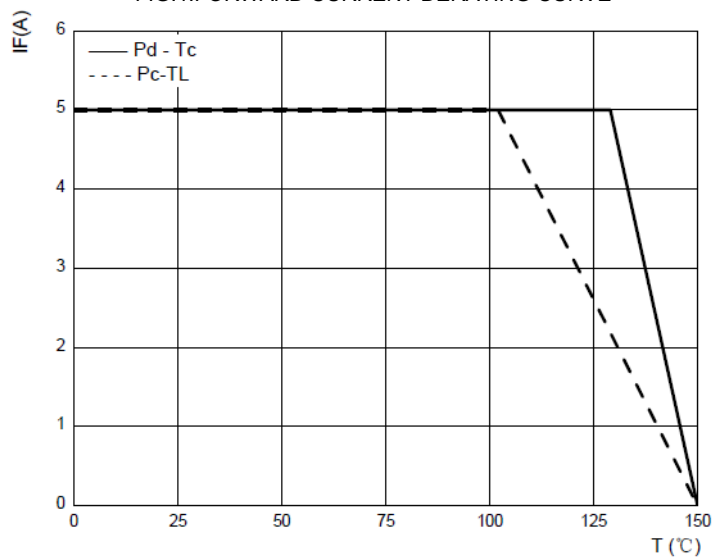
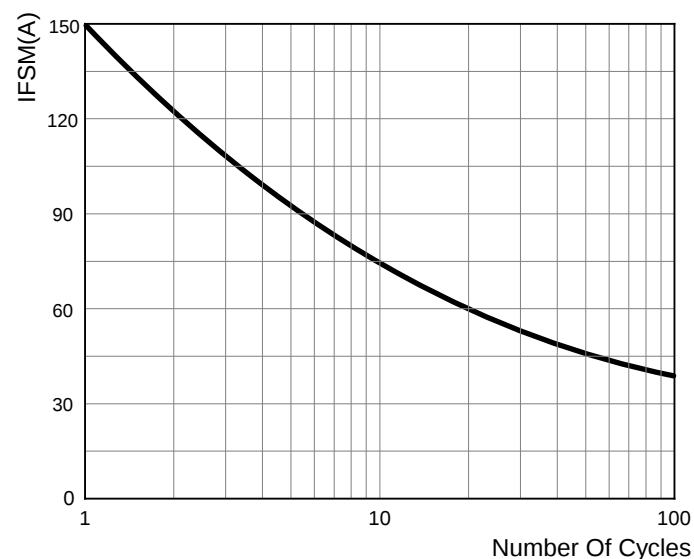
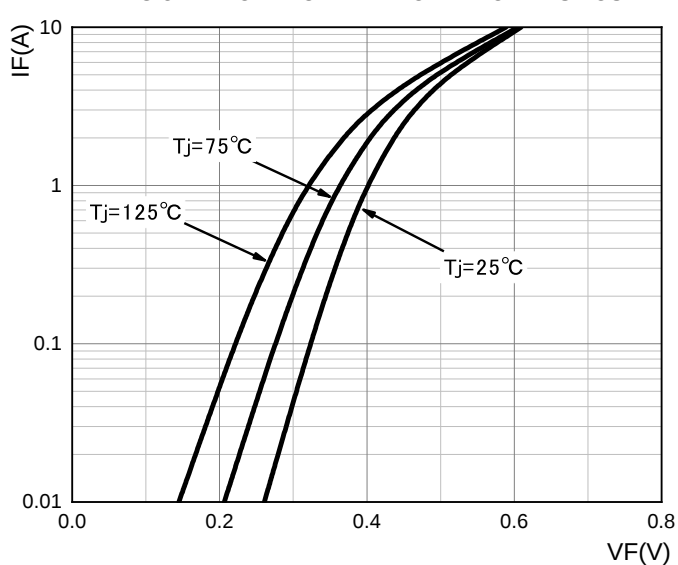


FIG 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



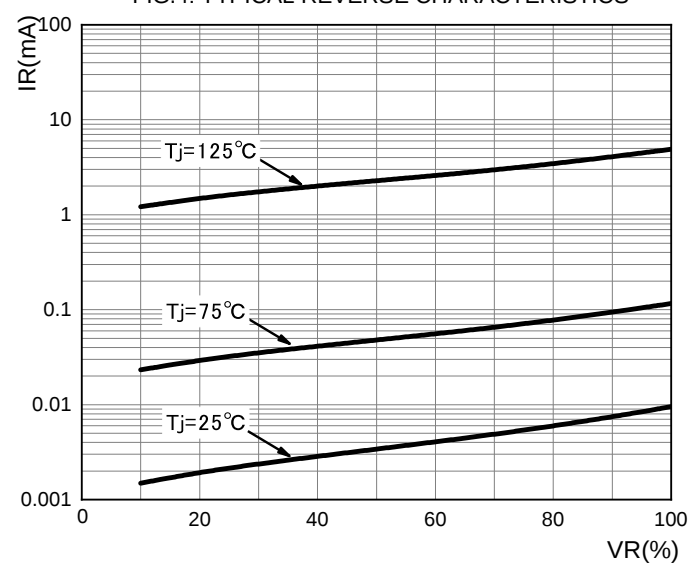
SS52-SS54

FIG.3: TYPICAL FORWARD CHARACTERISTICS



SS52-SS54

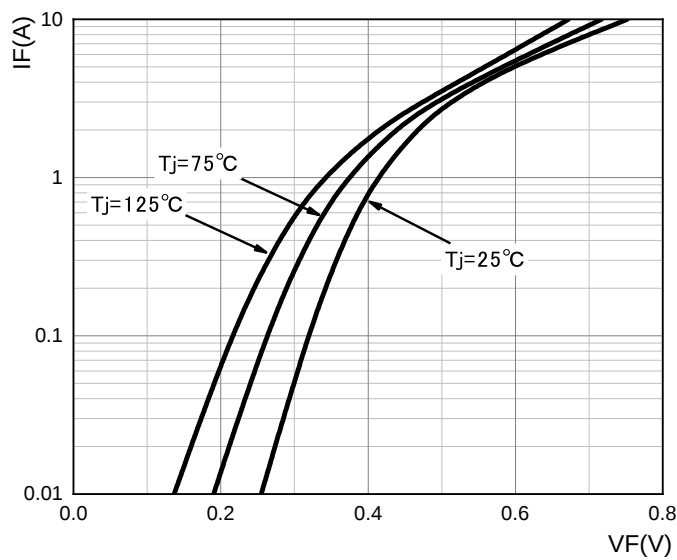
FIG.4: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

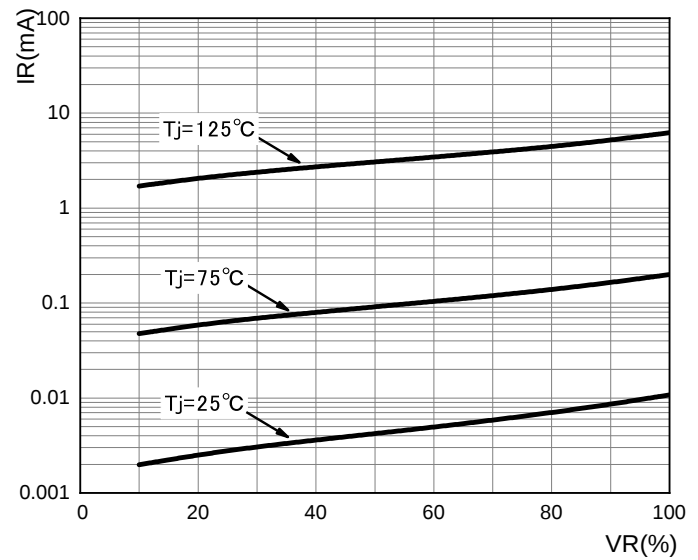
SS55-SS56

FIG.5: TYPICAL FORWARD CHARACTERISTICS



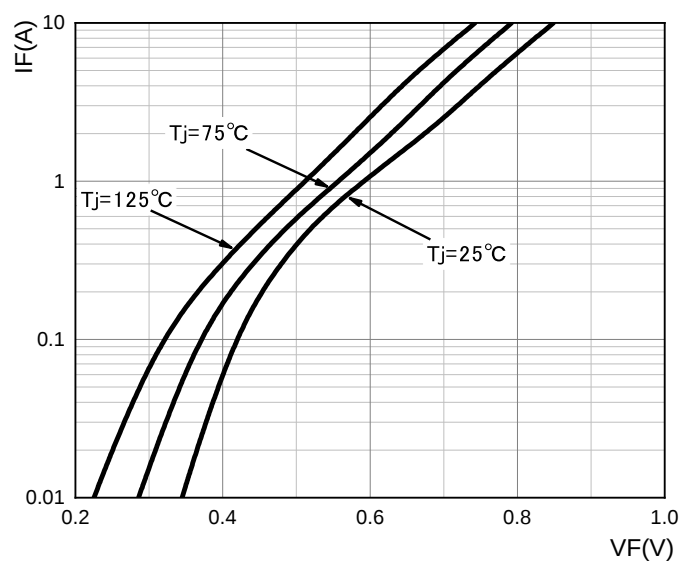
SS55-SS56

FIG.6: TYPICAL REVERSE CHARACTERISTICS



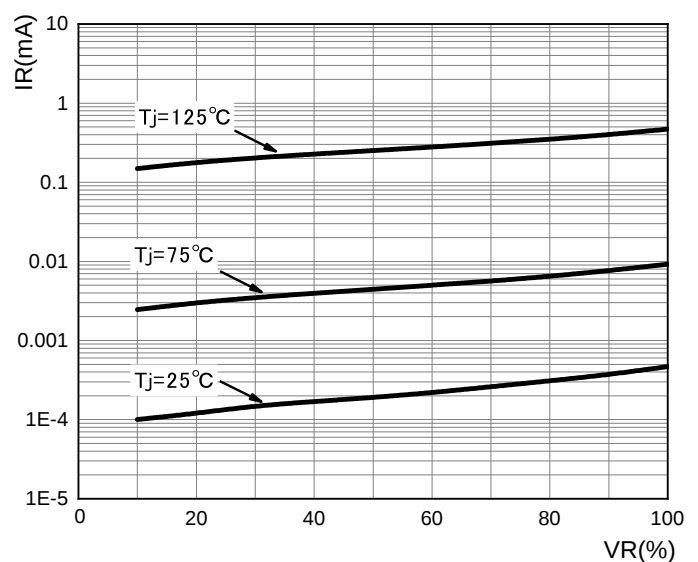
SS58-SS510

FIG.7: TYPICAL FORWARD CHARACTERISTICS



SS58-SS510

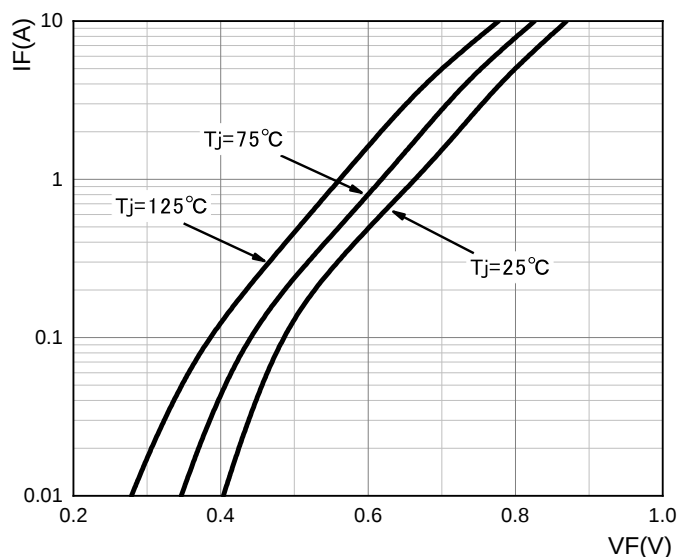
FIG.8: TYPICAL REVERSE CHARACTERISTICS



Typical Characteristics

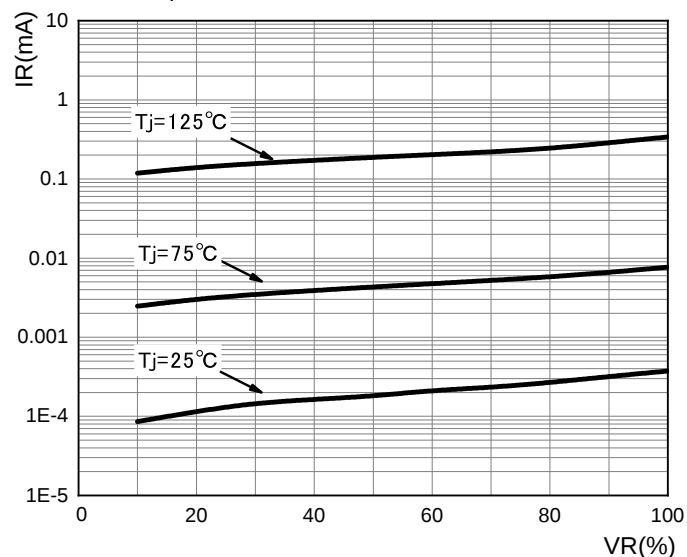
SS515

FIG.9: TYPICAL FORWARD CHARACTERISTICS



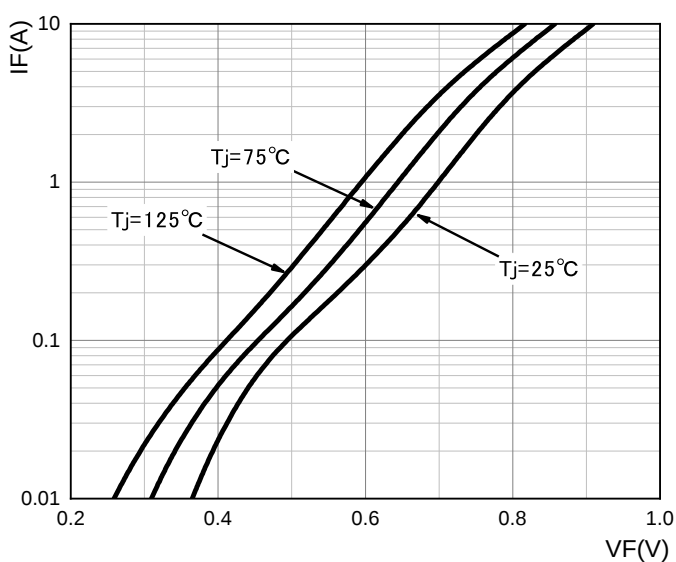
SS515

FIG.10: TYPICAL REVERSE CHARACTERISTICS



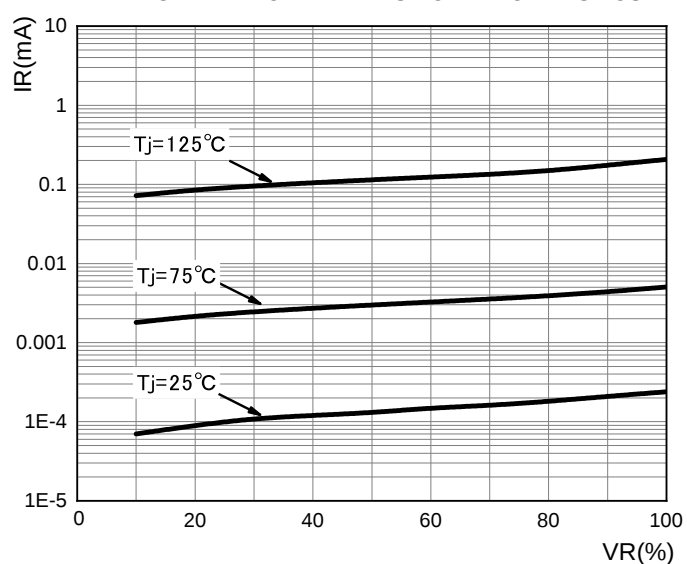
SS520

FIG.11: TYPICAL FORWARD CHARACTERISTICS

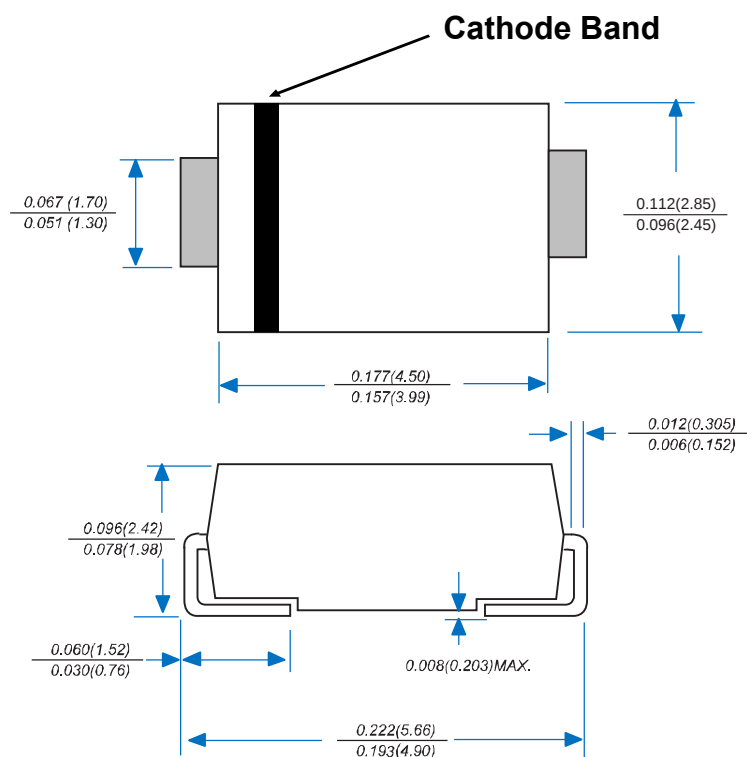


SS520

FIG.12: TYPICAL REVERSE CHARACTERISTICS

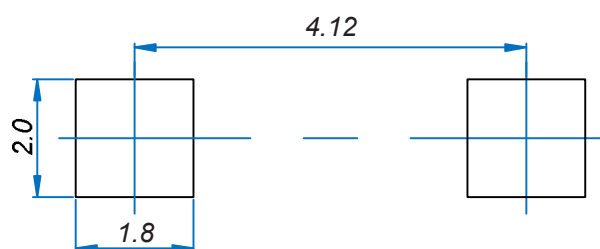


SMA Package Outline Dimensions



Dimensions in inches and (millimeters)

SMA Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.