

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



SMA top view



Schematic diagram



Halogen-Free

Maximum Ratings($T_a=25^\circ\text{C}$ unless otherwise noted)

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

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

Item	Symbol	Test Condition		SS5								Unit
				2	3	4	5	6	8	10	15	
Peak Forward Voltage	V _F	I _F =5.0A		0.55		0.70		0.85		0.95		V
Peak Reverse Current	I _{RRM1}	V _{RM} =V _{RRM}	Ta =25℃	0.5				0.1				mA
	I _{RRM2}	V _{RM} =V _{RRM}	Ta =100℃	10				5				
Thermal Resistance(Typical)	R _{θJ-A}	Between junction and ambient		7.0								℃/W
	R _{θJ-L}	Between junction and terminal		52.5								
	R _{θJ-C}	Between junction and case		16								
Junction Capacitance (Typical)	C _j	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C		260		220		130		100	80	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS52	SMA	SS52	2,000	10,000	100,000	7"reel
SS53		SS53				
SS54		SS54				
SS55		SS55				
SS56		SS56				
SS58		SS58				
SS510		SS510				
SS515		SS515				
SS520		SS520				

Typical Characteristics

Fig.1 Forward Current Derating Curve

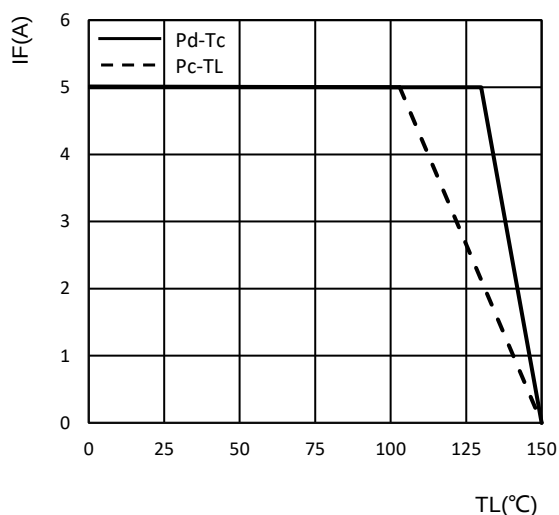
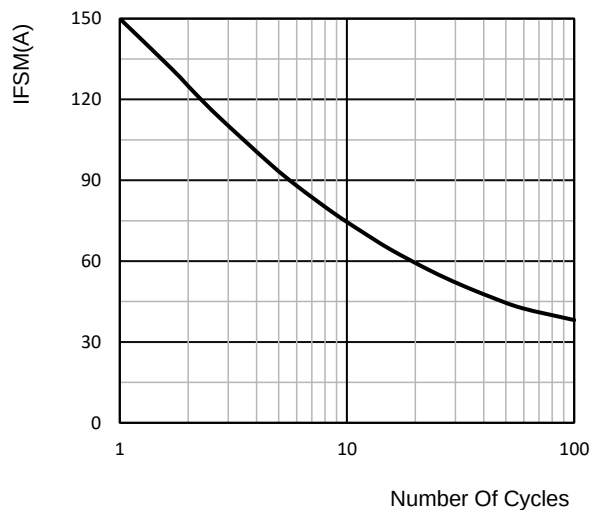
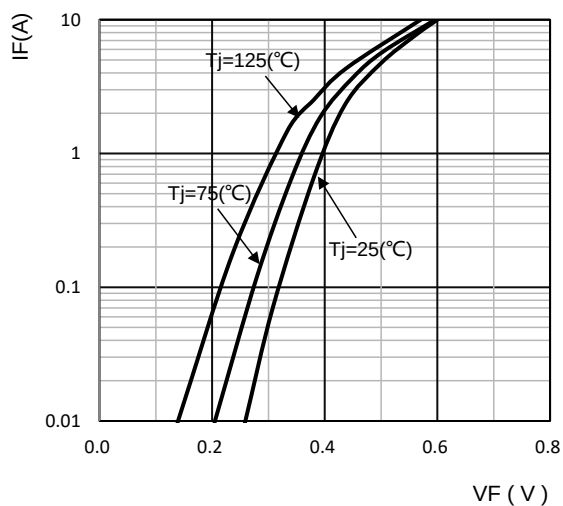


Fig.2 Maximum Non-Repetitive Forward Surge Current



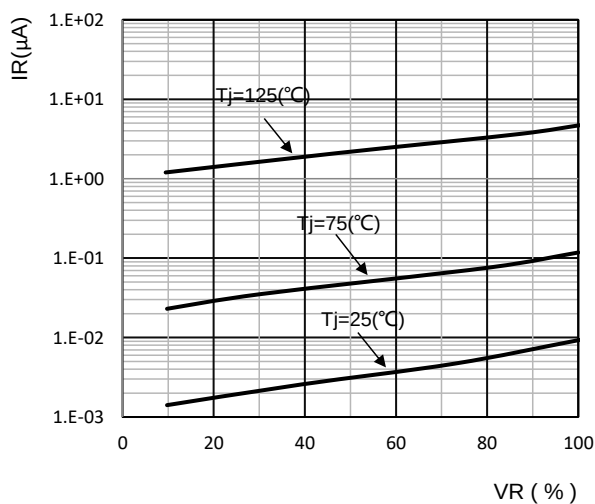
SS52-SS54

Fig.3 Typical Forward Characteristics



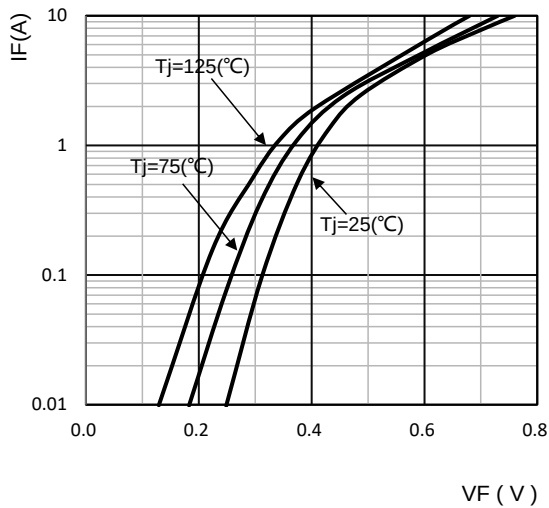
SS52-SS54

Fig.4 Typical Reverse Characteristics



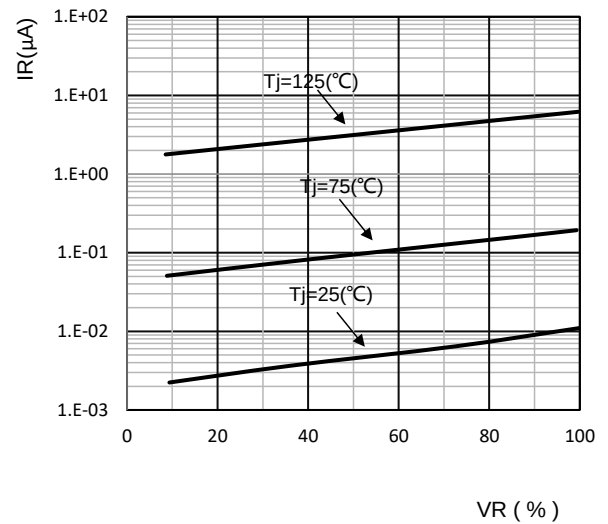
SS55-SS56

Fig.5 Typical Forward Characteristics



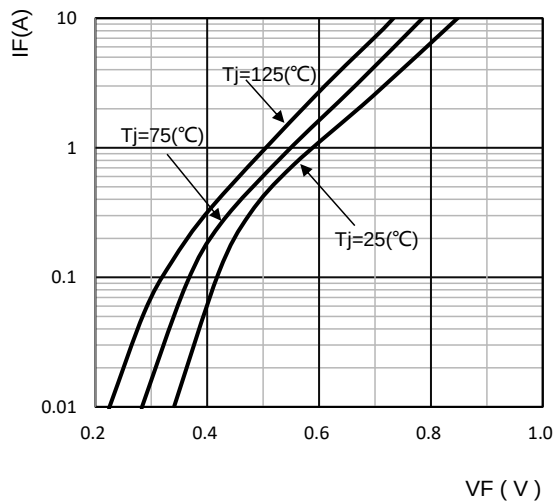
SS55-SS56

Fig.6 Typical Reverse Characteristics



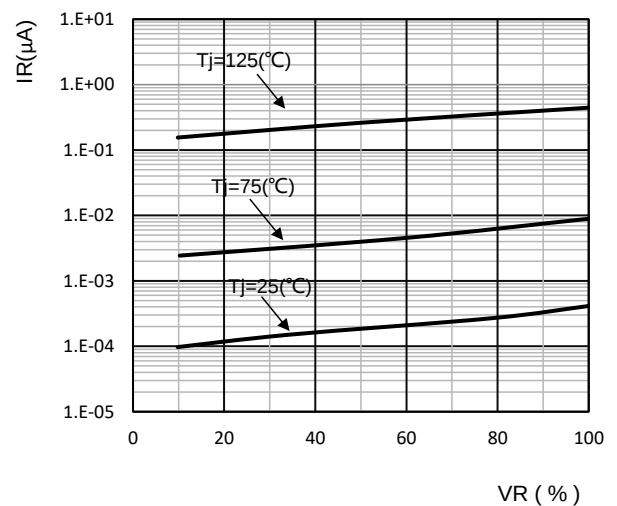
SS58-SS510

Fig.7 Typical Forward Characteristics



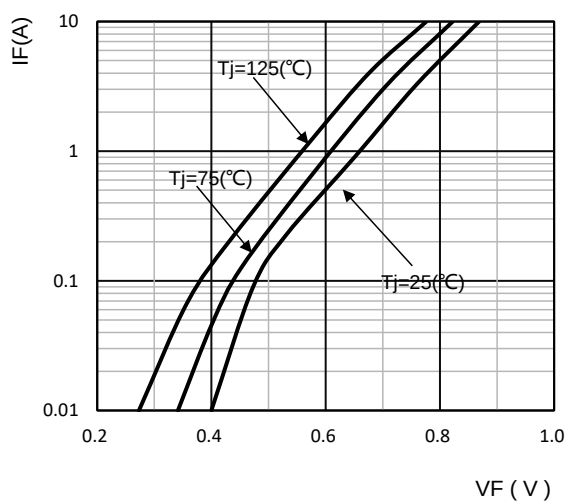
SS58-SS510

Fig.8 Typical Reverse Characteristics



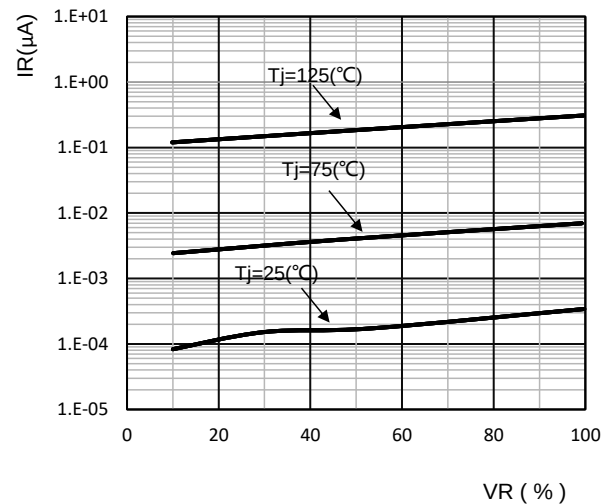
SS515

Fig.9 Typical Forward Characteristics



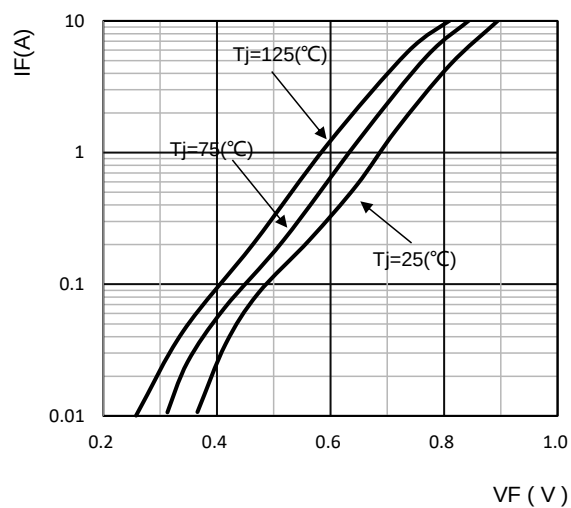
SS515

Fig.10 Typical Reverse Characteristics



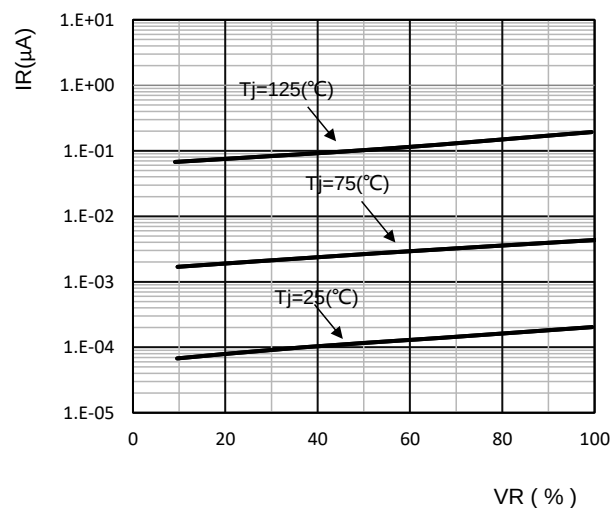
SS520

Fig.11 Typical Forward Characteristics



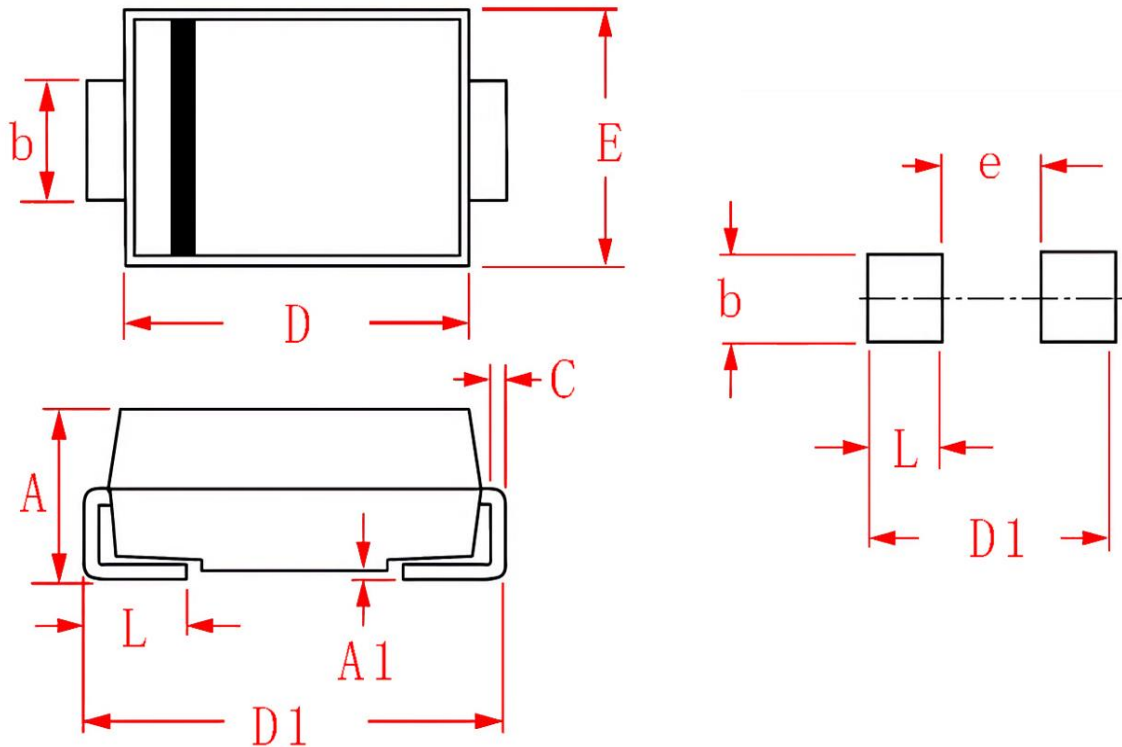
SS520

Fig.12 Typical Reverse Characteristics



SMA Package information

SMA (DO-214AC)



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	1.900	2.200	0.075	0.087
A1	0.050	0.200	0.002	0.008
b	1.300	1.600	0.051	0.063
C	0.150	0.310	0.006	0.012
D	4.000	4.500	0.157	0.177
D1	4.700	5.200	0.185	0.205
E	2.300	2.700	0.090	0.106
e	-	1.880	-	0.074
L	0.900	1.500	0.035	0.059