

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 100V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage



SMA top view



Schematic diagram

Applications

- Rectifier

Marking

- SS510L:SS510L



Pb-Free



Halogen-Free

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

Symbol	Item	Test Conditions	SS510L	Unit
V_{RRM}	Repetitive Peak Reverse Voltage		100	V
V_{RMS}	Maximum RMS voltage		70	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, $T_a=25^{\circ}\text{C}$	120	A
T_j, T_{stg}	Operating and Storage Temperature Range		-55~+150	$^{\circ}\text{C}$

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

Symbol	Item	Test Condition		SS510L	Unit
V_F	Peak Forward Voltage	$I_F = 5.0\text{A}$	$T_a = 25^{\circ}\text{C}$	0.70	V
I_{RRM1}	Peak Reverse Current	$V_{RM}=V_{RRM}$	$T_a = 25^{\circ}\text{C}$	0.03	mA
I_{RRM2}		$V_{RM}=V_{RRM}$	$T_a = 100^{\circ}\text{C}$	20	
$R_{\theta J-A}$	Thermal Resistance	Between junction and ambient		75	$^{\circ}\text{C}/\text{W}$
$R_{\theta J-L}$		Between junction and lead		27	
C_j	Junction Capacitance (Typical)	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C		280	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS510L	SMA	SS510L	2,000	10,000	100,000	7"reel

Typical Characteristics

Fig.1 Forward Current Derating Curve

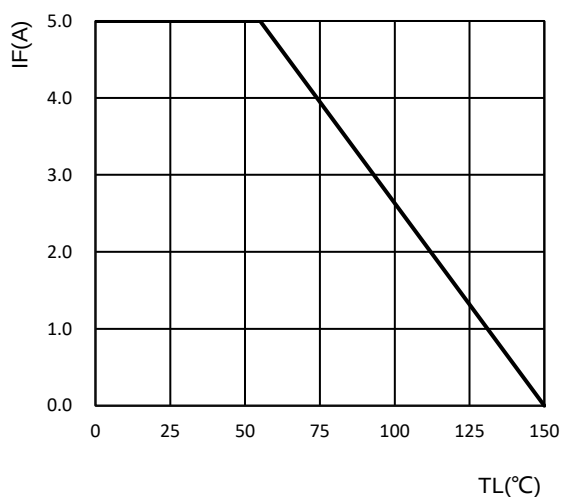


Fig.2 Maximum Non-Repetitive Forward Surge Current

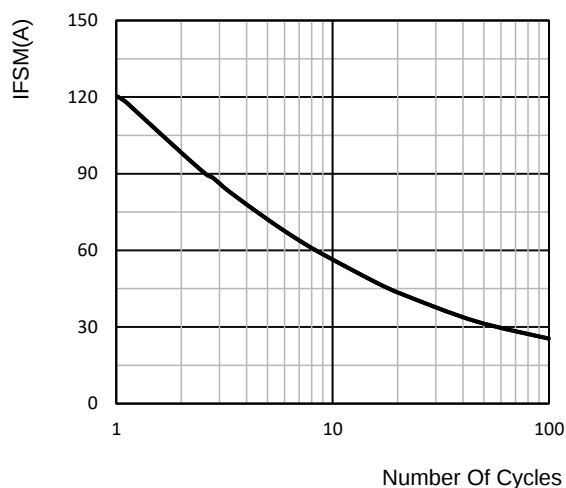


Fig.3 Typical Forward Characteristics

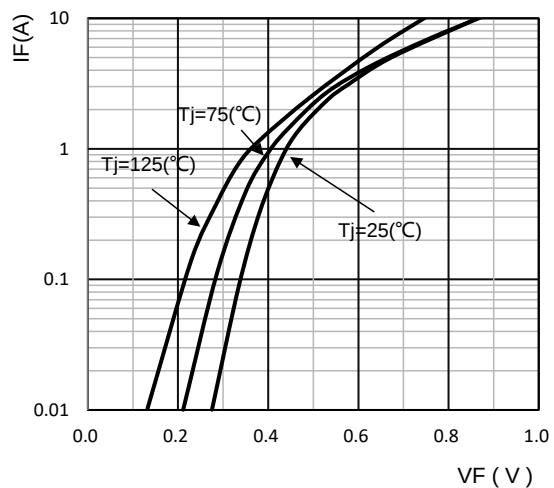
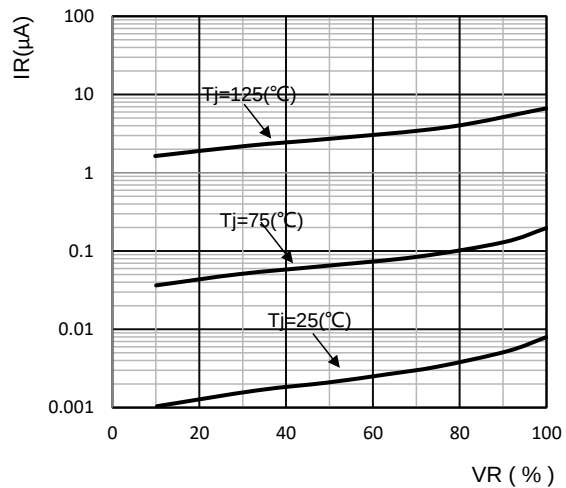
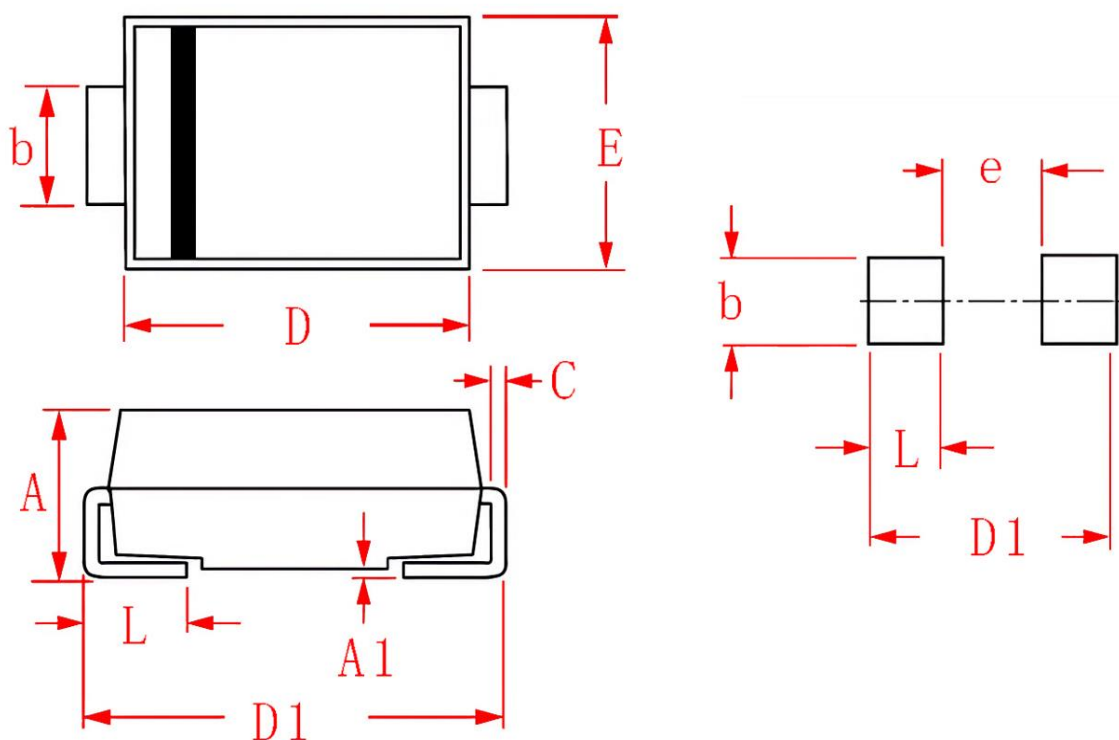


Fig.4 Typical Reverse Characteristics



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