

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 100V
- High surge current capability
- Polarity: Color band denotes cathode

Applications

- Rectifier

Marking

- SS310L



SMB top view



Schematic diagram



Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Item	Test Conditions	SS310L	Unit
V_{RRM}	Repetitive Peak Reverse Voltage		100	V
V_{RMS}	Maximum RMS voltage		70	V
V_{DC}	Maximum DC Blocking Voltage		100	V
$I_{F(AV)}$	Average Forward Current	60Hz Half-sine wave, Resistance load, FIG.1	3.0	A
I_{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, $T_a=25^{\circ}\text{C}$	120	A
T_J	Junction Temperature		-55~+150	$^{\circ}\text{C}$
T_{stg}	Storage Temperature		-55~+150	$^{\circ}\text{C}$

Electrical Characteristics (T=25°C Unless otherwise specified)

Symbol	Item	Test Condition		SS310L	Unit
V_F	Peak Forward Voltage	$I_F=3.0\text{A}$		0.57 (TYP) 0.6(MAX)	V
I_{RRM1}	Peak Reverse Current	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}\text{C}$	0.02	mA
I_{RRM2}		$V_{RM}=V_{RRM}$	$T_a=100^{\circ}\text{C}$	20	
$R_{\theta JA}$	Thermal Resistance(Typical)	Between junction and ambient		50	$^{\circ}\text{C/W}$
$R_{\theta JL}$		Between junction and terminal		15	

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS310L	SMB	SS310	2,000	10,000	100,000	7"reel

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

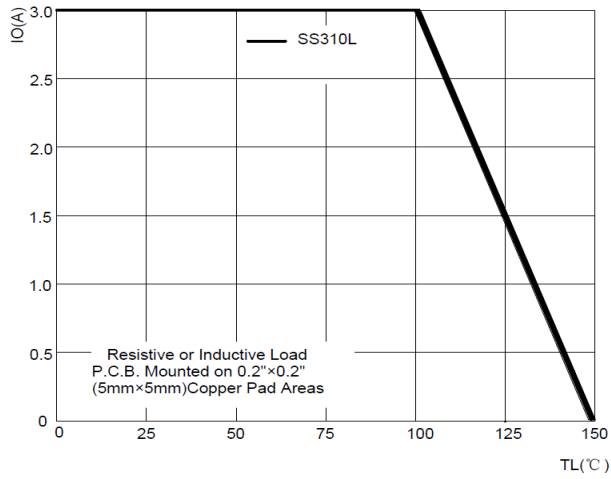


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

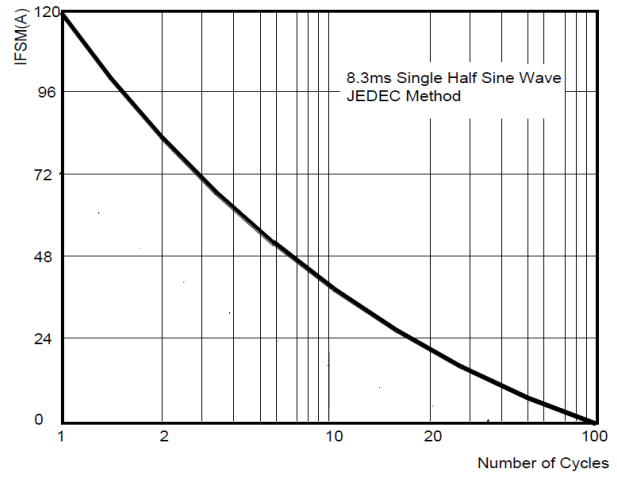


FIG.3: TYPICAL FORWARD CHARACTERISTICS

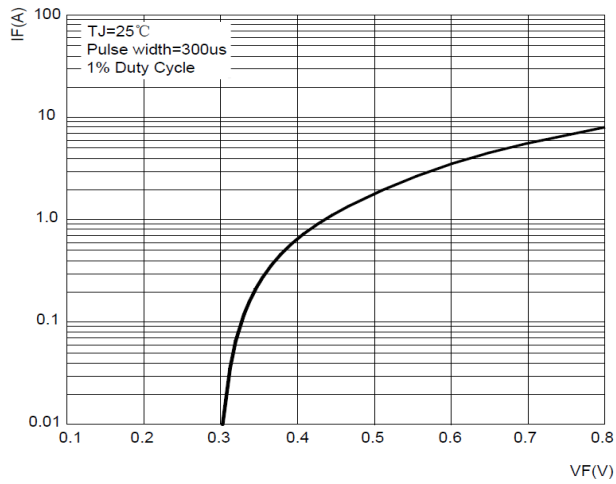
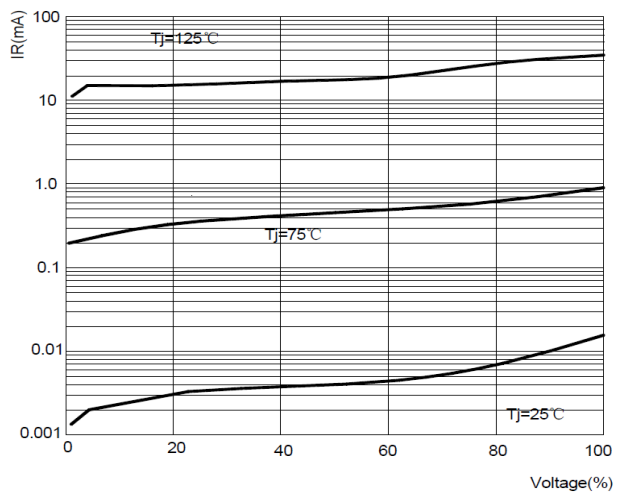
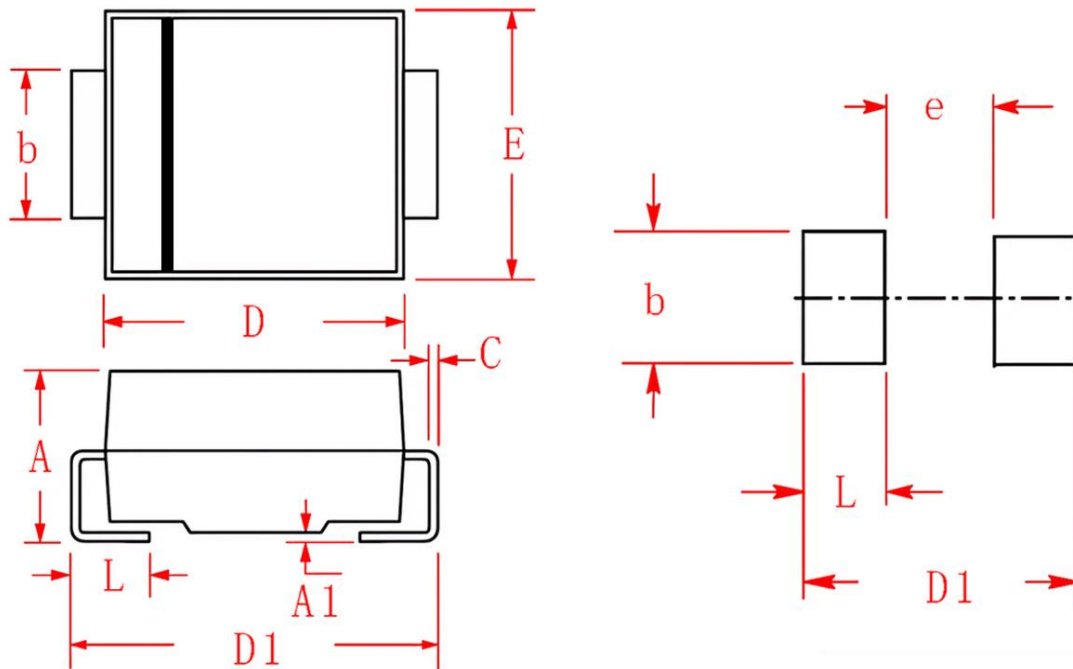


FIG.4: TYPICAL REVERSE CHARACTERISTICS



SMB Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	2.130	2.440	0.084	0.096
A1	0.050	0.200	0.002	0.008
b	1.900	2.200	0.075	0.087
C	0.152	0.305	0.006	0.012
D	4.060	4.700	0.160	0.185
D1	5.080	5.590	0.200	0.220
E	3.300	3.940	0.130	0.155
e	-	2.159	-	0.085
L	0.800	1.500	0.031	0.059