

Features

$I_{F(AV)}$	3A
V_{RRM}	100V

High surge current capability

Polarity: Color band denotes cathode

SMB



Marking:SS310L

Applications

Rectifier

Limiting Values(Absolute Maximum Rating)

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

Electrical Characteristics ($T = 25^{\circ}C$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition		SS310L	
Peak Forward Voltage	V _F	V	I _F =3.0A		0.57(TYP)	0.60(MAX)
Peak Reverse Current	I _{RRM1}	mA	V _{RM} =V _{RRM}	Ta=25℃	0.02	
	Ta=100℃			20		
Thermal Resistance(Typical)	R _{θJ-A}	℃/W	Between junction and ambient		50	
	R _{θJ-L}		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

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

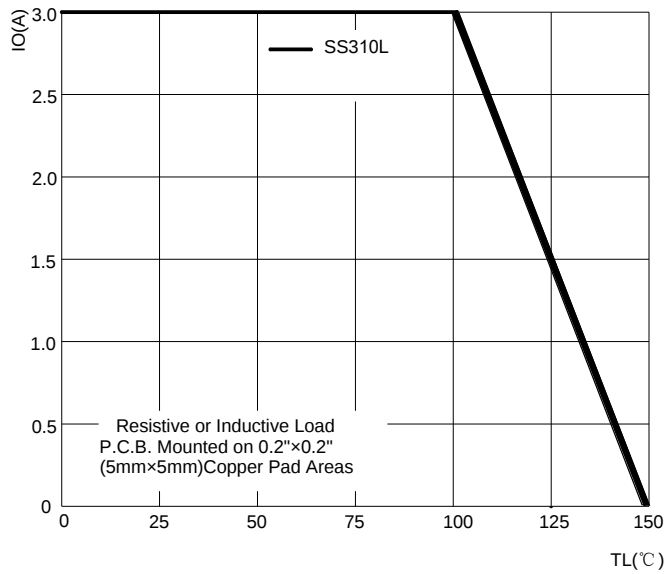


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

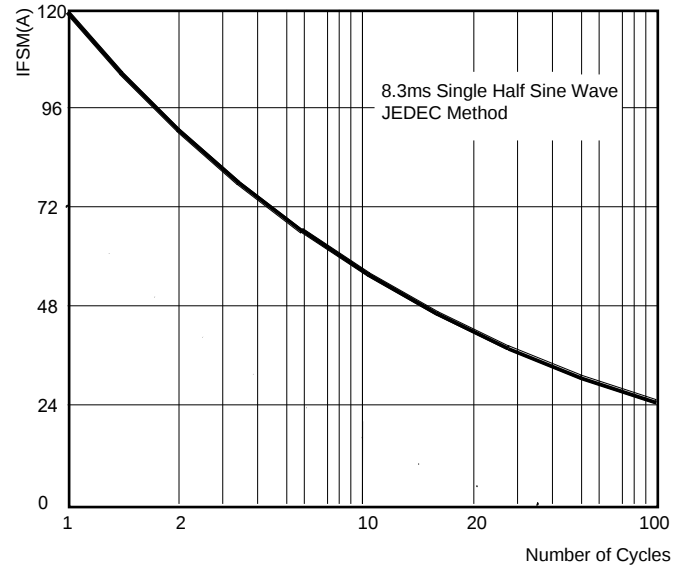


FIG.3: TYPICAL FORWARD CHARACTERISTICS

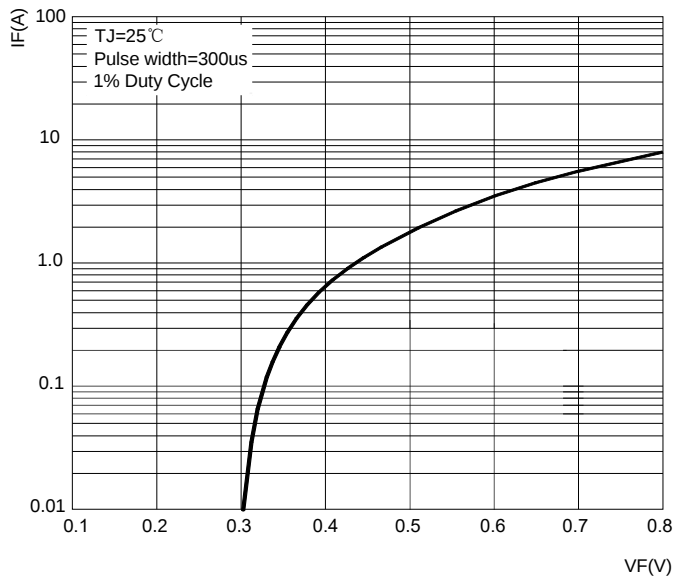
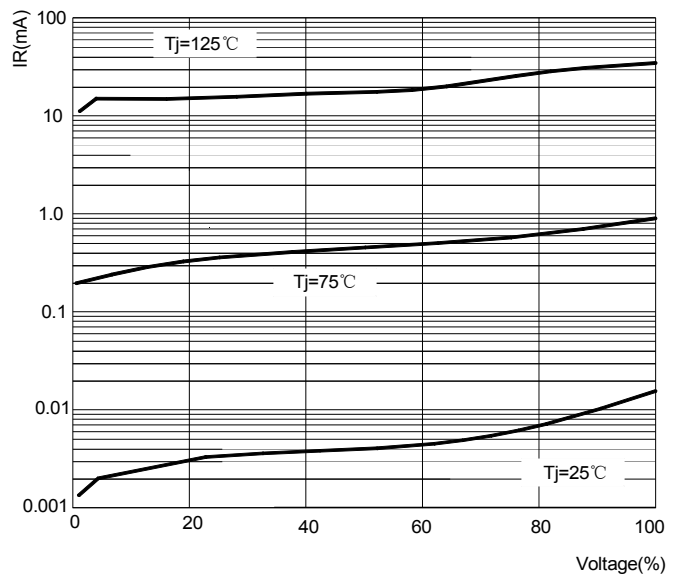
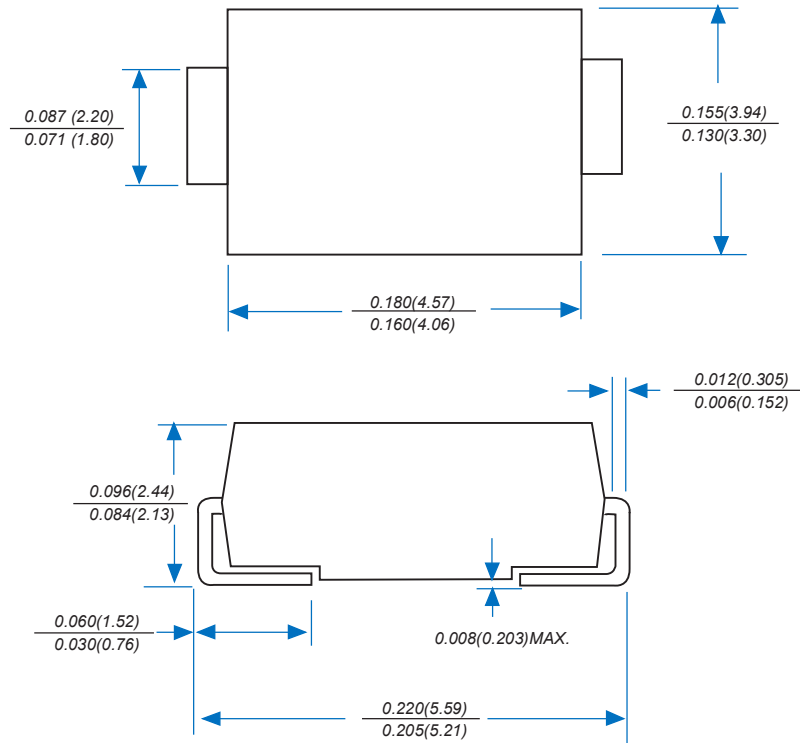


FIG.4: TYPICAL REVERSE CHARACTERISTICS

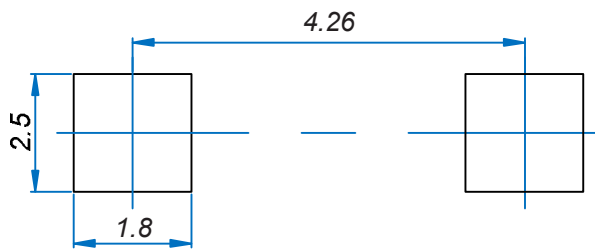


SMB Package outline Dimensions



Dimensions in inches and (millimeters)

SMB 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.