

### Features

- $I_{F(AV)}$  5A
- $V_{RRM}$  60V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage



SMB top view



Schematic diagram

### Applications

- Rectifier

### Marking

- SS56L:SS56L



Pb-Free



RoHS



Halogen-Free

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

Symbol	Item	Test Conditions	SS56L	Unit
$V_{RRM}$	Repetitive Peak Reverse Voltage		60	V
$V_{RMS}$	Maximum RMS voltage		42	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
$T_j$	Junction Temperature		-55 ~ +150	$^\circ\text{C}$
$T_{stg}$	Storage Temperature		-55 ~ +150	$^\circ\text{C}$

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

Symbol	Item	Test Condition		SS56L	Unit
$V_F$	Peak Forward Voltage	$I_F = 5.0\text{A}$	$T_a = 25^\circ\text{C}$	0.50	V
$I_{RRM1}$	Peak Reverse Current	$V_{RM} = V_{RRM}$	$T_a = 25^\circ\text{C}$	0.3	mA
$I_{RRM2}$		$V_{RM} = V_{RRM}$	$T_a = 100^\circ\text{C}$	50	
$R_{\theta J-A}$	Thermal Resistance(Typical)	Between junction and ambient		55	$^\circ\text{C/W}$
$R_{\theta J-L}$		Between junction and lead		13	
$C_j$	Junction Capacitance (Typical)	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C		400	pF

### Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS56L	SMB	SS56L	2,000	10,000	100,000	7" reel

Typical Characteristics

Fig.1 Forward Current Derating Curve

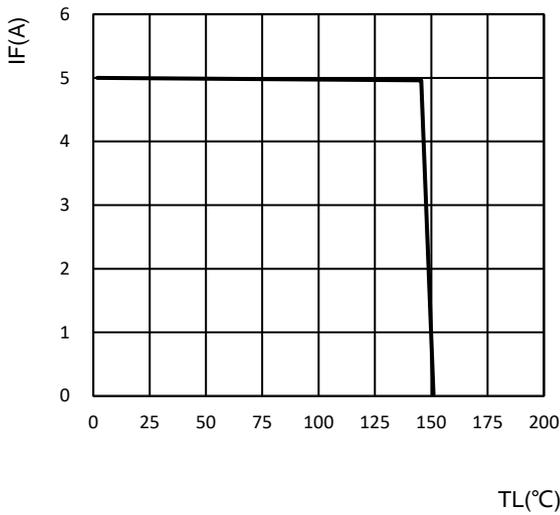


Fig.2 Maximum Non-Repetitive Forward Surge Current

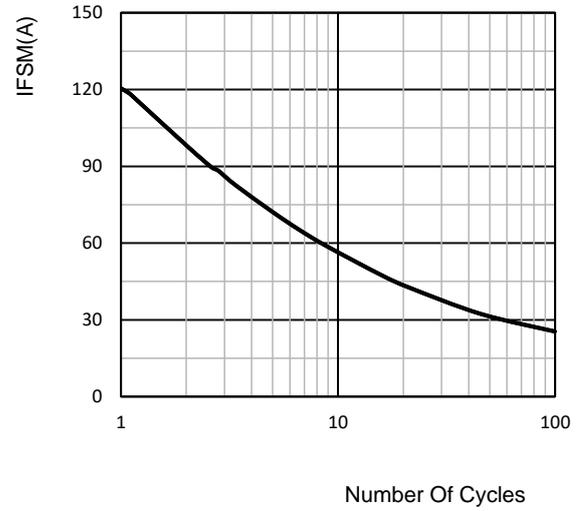


Fig.3 Typical Forward Characteristics

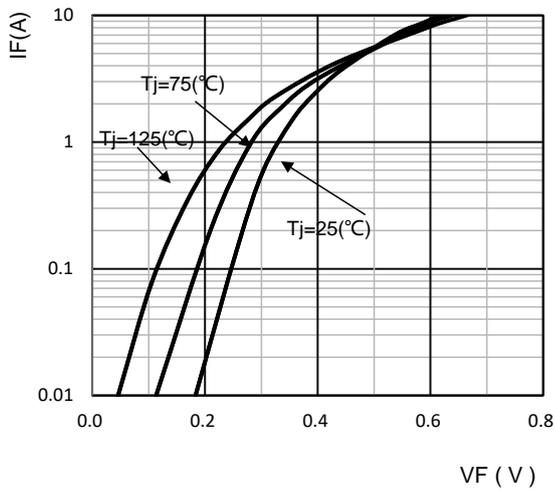
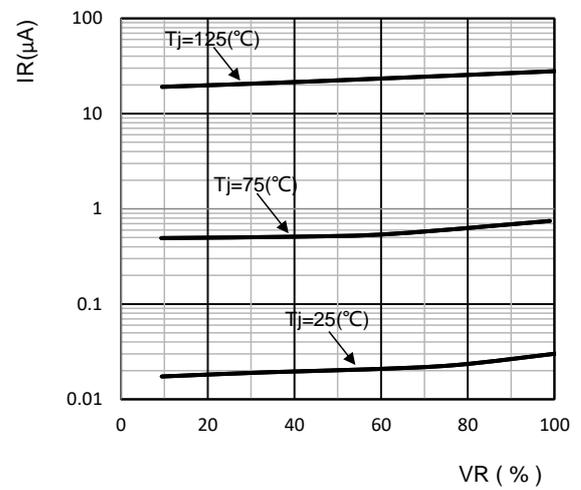
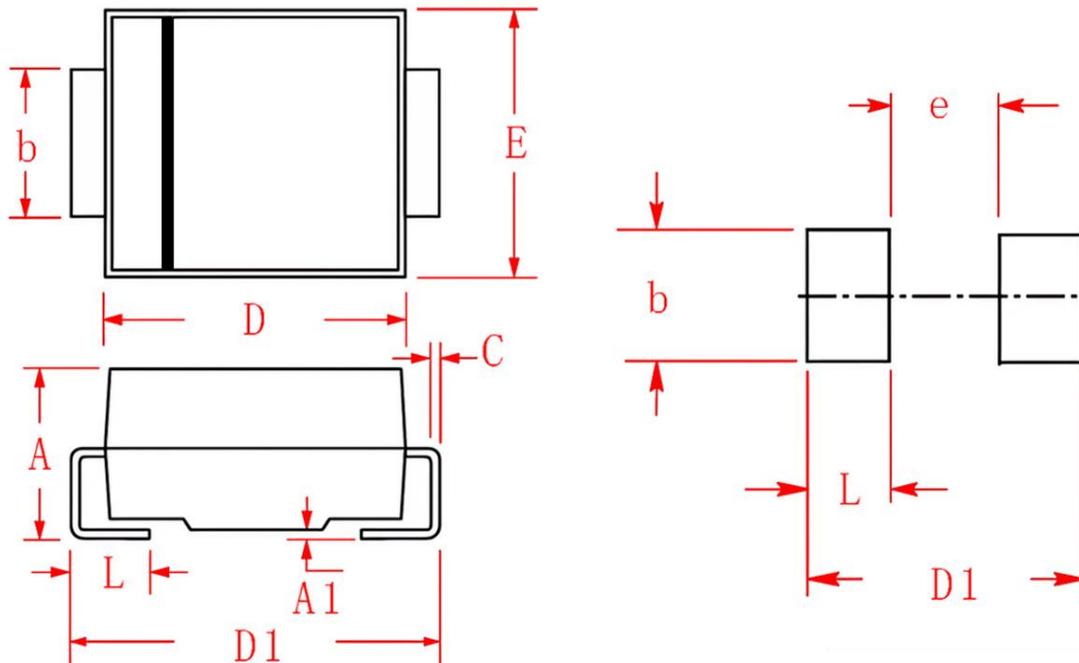


Fig.4 Typical Reverse Characteristics



**SMB Package information**

SMB (DO-214AA)



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