SS54L

Schottky Rectifier Diode

Features

- $I_{F(AV)}$ 5A
- V_{RRM} 40V
- High surge current capability
- Polarity: Color band denotes cathode
- Low peak forward voltage

SMB top view

Schematic diagram

Applications

- Rectifier

Marking

- SS54L:SS54L

Pb-Free RoHS Halogen-Free

Maximum Ratings(T_a=25℃ unless otherwise noted)

Symbol	Item	Test Conditions	SS54L	Unit
V_{RRM}	Repetitive Peak Reverse Voltage		40	V
V_{RMS}	Maximum RMS voltage		28	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℃	120	A
Tj	Junction Temperature		-55 ~ +150	℃
T_{stg}	Storage Temperature		-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

Symbol	Item	Test Condition		SS54L	Unit
V_F	Peak Forward Voltage	I_F =5.0A	Ta =25℃	0.45	V
I_{RRM1}	Peak Reverse Current	V_{RM}=V_{RRM}	Ta =25℃	0.3	mA
I_{RRM2}		V_{RM}=V_{RRM}	Ta =100℃	50	
$R_{\theta J-A}$	Thermal Resistance(Typical)	Between junction and ambient		55	℃/W
$R_{\theta J-L}$		Between junction and lead		13	
C_j	Juction Capacitance (Typical)	Measured at 1MHZ and Applied Rever Voltage of 4.0 V.D.C		420	pF

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SS54L	SMB	SS54L	2,000	10,000	100,000	7"reel

Typical Characteristics

Fig.1 Forward Current Derating Curve

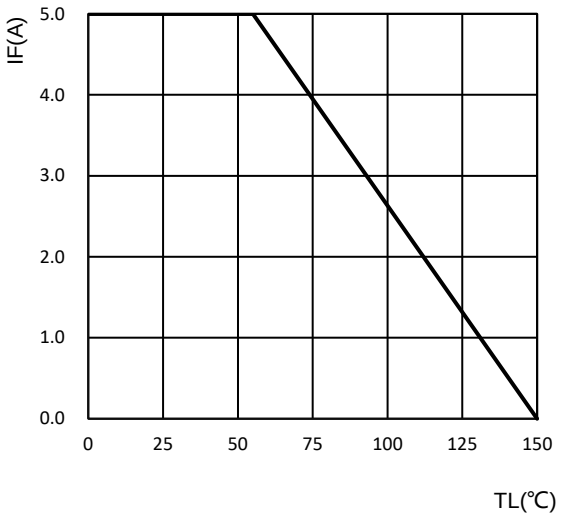


Fig.2 Maximum Non-Repetitive Forward Surge Current

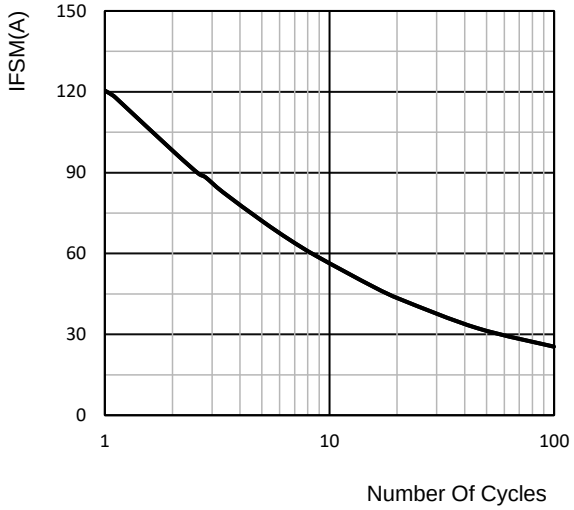


Fig.3 Typical Forward Characteristics

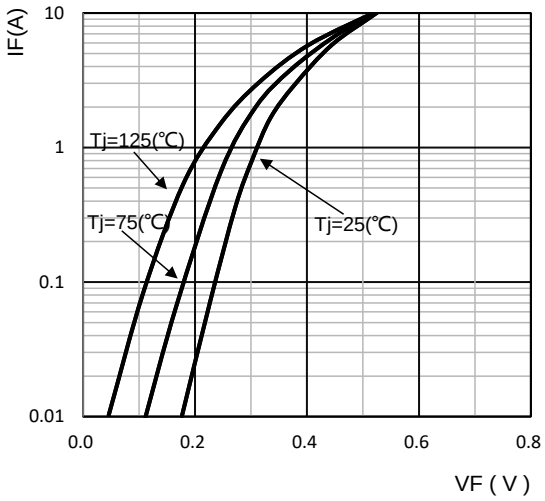
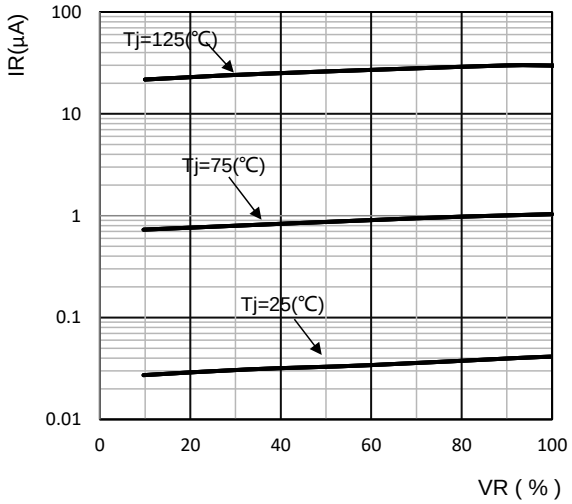
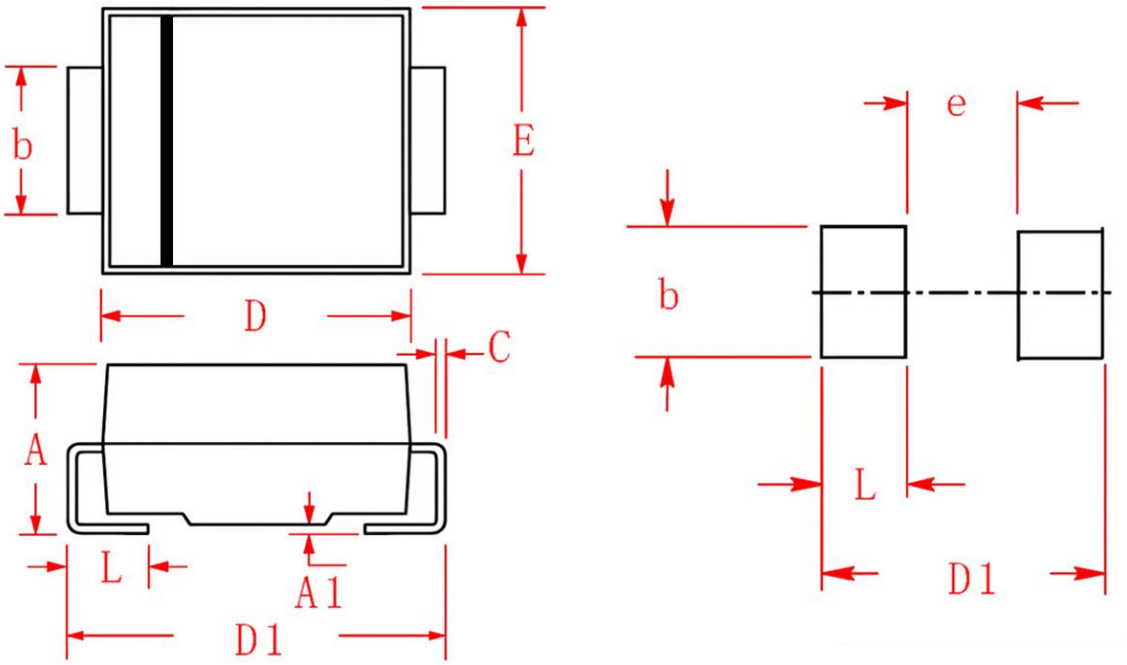


Fig.4 Typical Reverse Characteristics



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