PANJIT SEMI CONDUCTOR

SS1040L

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE 40 Volt **CURRENT** 1 A

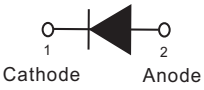
FEATURES

- Guard Ring Die Construction for Transient Protection
- Low Power Loss, Hgih Efficiency
- High Surge Capability
- High Current Capability and Low Forward Voltage Drop
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

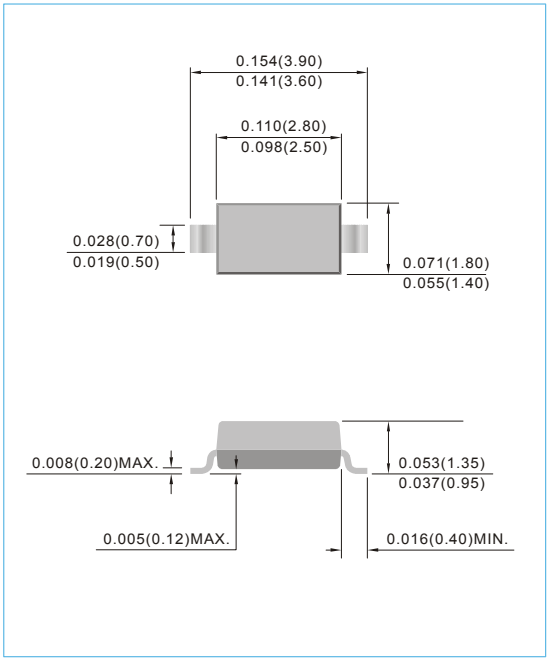
MECHANICAL DATA

- Case : SOD-123, Plastic
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0003 ounces, 0.0103 grams
- Polarity : Color band cathode
- Marking : 40L





SOD-123 Unit : inch(mm)



MAXIMUM RATINGS@T_A=25°C UNLESS OTHERWISE SPECIFIED

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	VALUE	UNIT
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage @I_R=1.0mA	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectified Output Current	I_O	1	A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	25	A
Power Dissipation (Note 1)	P_D	450	mW
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	222	°C/W
Operating and Storage Temperature Range	T_J , T_{STG}	-65 to + 125	°C

Notes : 1. FR-4 Board = 70 x 60 x 1mm.

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ELECTRICAL CHARACTERISTICS (T_A= 25°C unless otherwise noted)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Reverse Breakdown Voltage (Note 2)	$V_{(BR)R}$	I_R=1mA	40	-	-	V
Forward Voltage	V_F	I_F=0.1A I_F=1A I_F=3A	- - -	- - -	0.32 0.45 0.75	V
Reverse Leakage Current (Note 2)	I_R	V_R=40V,T_A=25°C V_R=40V,T_A=100°C V_R=4V,T_A=25°C V_R=4V,T_A=100°C V_R=6V,T_A=25°C V_R=6V,T_A=100°C	- - - - - -	- 8.5 10 1 15 1.5	220 - 50 - 75 -	µA mA µA mA µA mA
Total Capacitance	C_T	V_R=4V,f=1MHz	-	50	-	pF

Notes : 2. Short duration pulse test used to minmize self-heating effect.
3. Mounted on metal core PCB.

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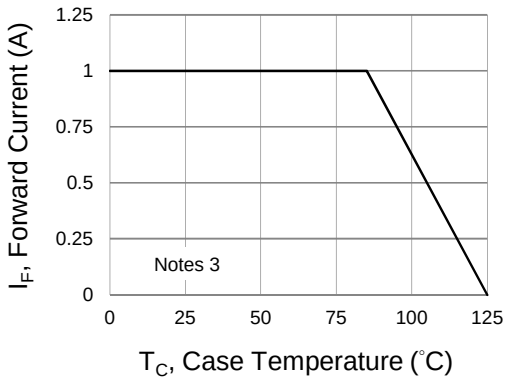


Fig.1 Forward Current Derating Curve

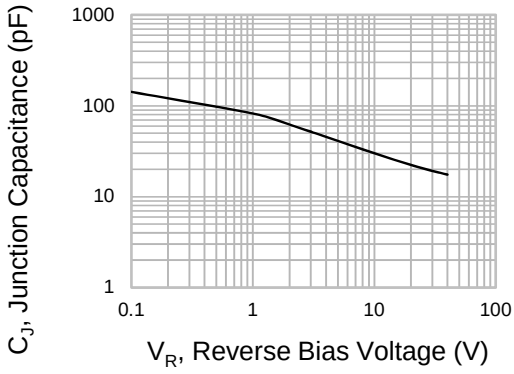


Fig.2 Typical Junction Capacitance

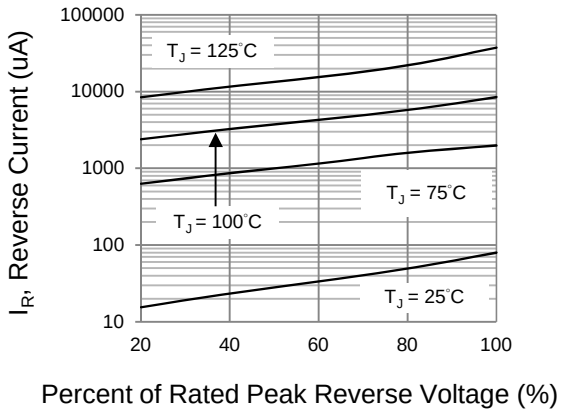


Fig.3 Typical Reverse Characteristics

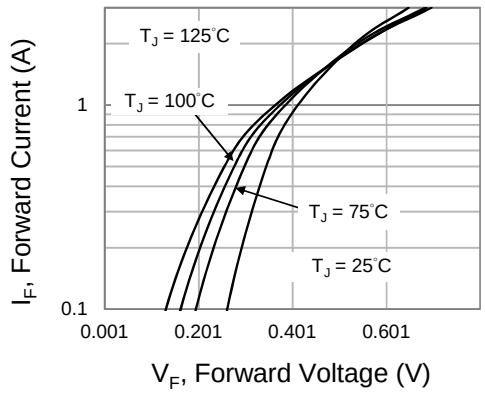


Fig.4 Typical Forward Characteristics

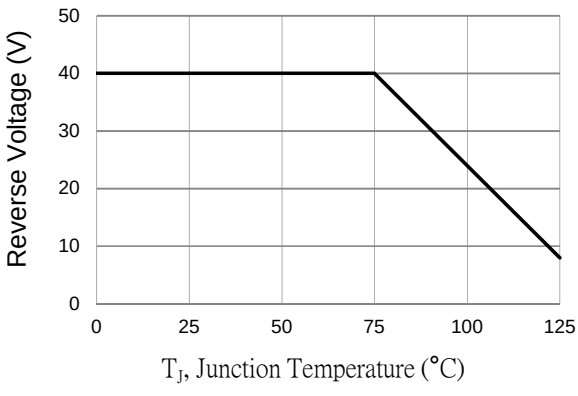
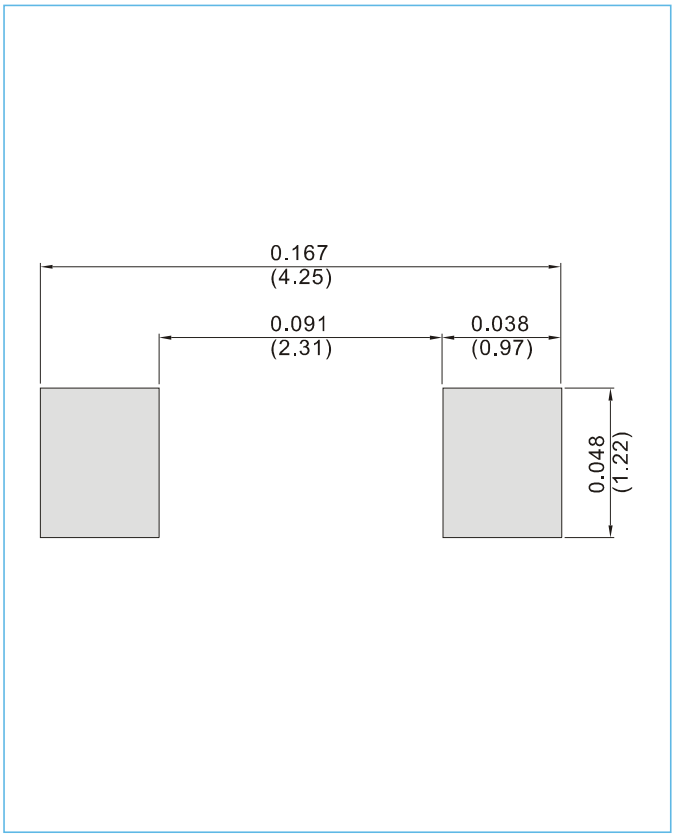


Fig.5 Operating Temperature Derating Curve

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MOUNTING PAD LAYOUT

SOD-123 Unit : inch(mm)



ORDER INFORMATION

- Packing information

  T/R - 10K per 13" plastic Reel

  T/R - 3K per 7" plastic Reel

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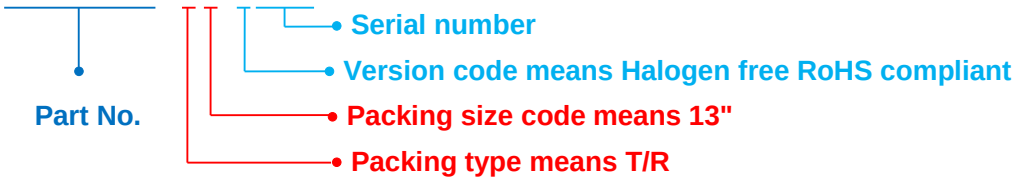
Part No._packing code_Version

SS1040L_R1_00001

SS1040L_R2_00001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code X		Serial number XXXX
Packing type	1st Code	Packing size code	2nd Code	HSF Level	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	Halogen free RoHS compliant	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS compliant	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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