



SLD16TH

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 60 VOLTS
FORWARD CURRENT: 1.0 AMPERE

FEATURES

- Low forward voltage drop, low reverse current
- Low power loss, high efficiency.
- Suffix "H" indicates Halogen-free parts, ex. SLD16TH

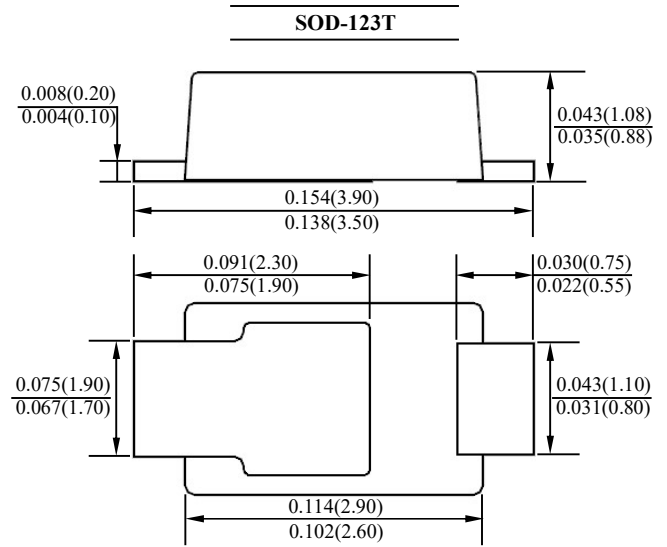
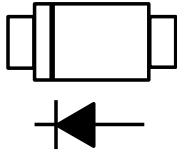
MECHANICAL DATA

Case : Molded plastic, SOD-123T

Terminals: Solder plated, solderable per

MIL-STD-750, method 2026 guaranteed

Polarity : Color band denotes cathode end



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbols	SLD16TH	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	60	Volts
Maximum RMS Voltage	V_{RMS}	42	Volts
Maximum DC Blocking Voltage	V_R	60	Volts
Maximum Average Forward Rectified Current (See Fig. 1)	$I_{(AV)}$	1.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	50	Amp
Maximum Forward Voltage at $I_F=1A, T_J=25^\circ C$	V_F	0.65	Volts
Maximum Reverse Current at $V_R=60V, T_J=25^\circ C$ $V_R=60V, T_J=100^\circ C$	I_R	0.5 10.0	mAmp
Typical Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	75	°C/W
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{stg}	-55 to +150	

Note :

1. Device mounted on FR-4 substrate PC board, 2oz copper, with 1-inch square copper plate.



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RATINGS AND CHARACTERISTIC CURVES

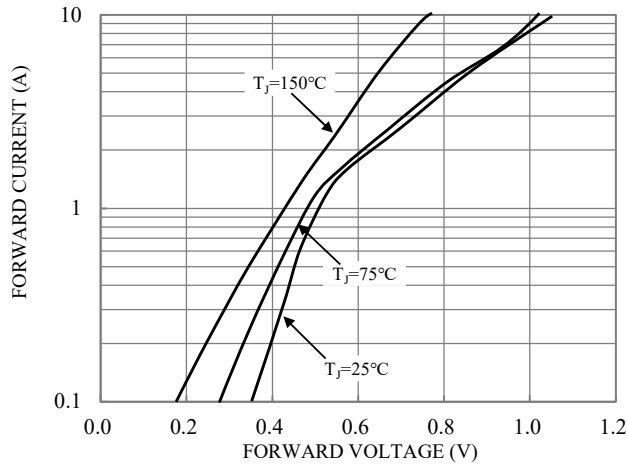


Fig.1-TYPICAL FORWARD CHARACTERISTICS

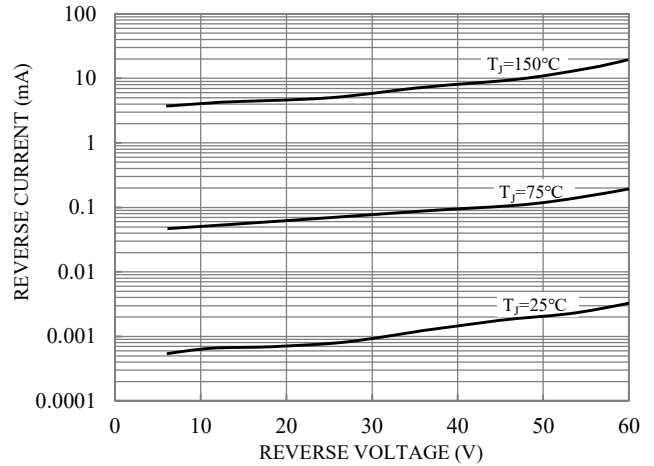


Fig.2-TYPICAL REVERSE CHARACTERISTICS

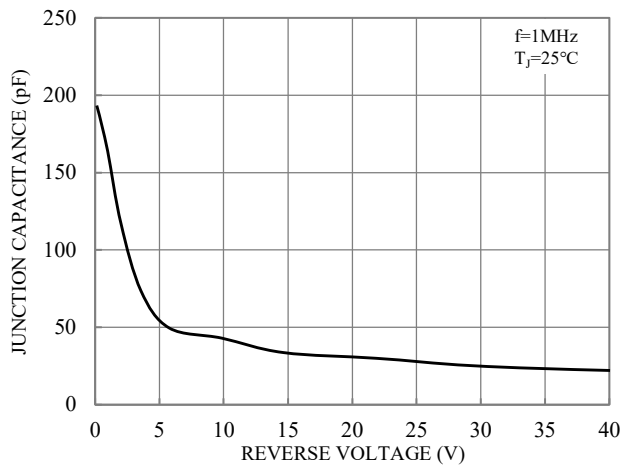


Fig.3-CAPACITANCE

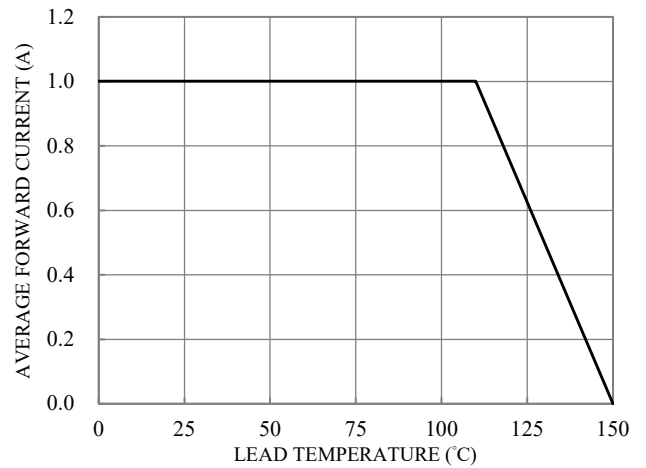


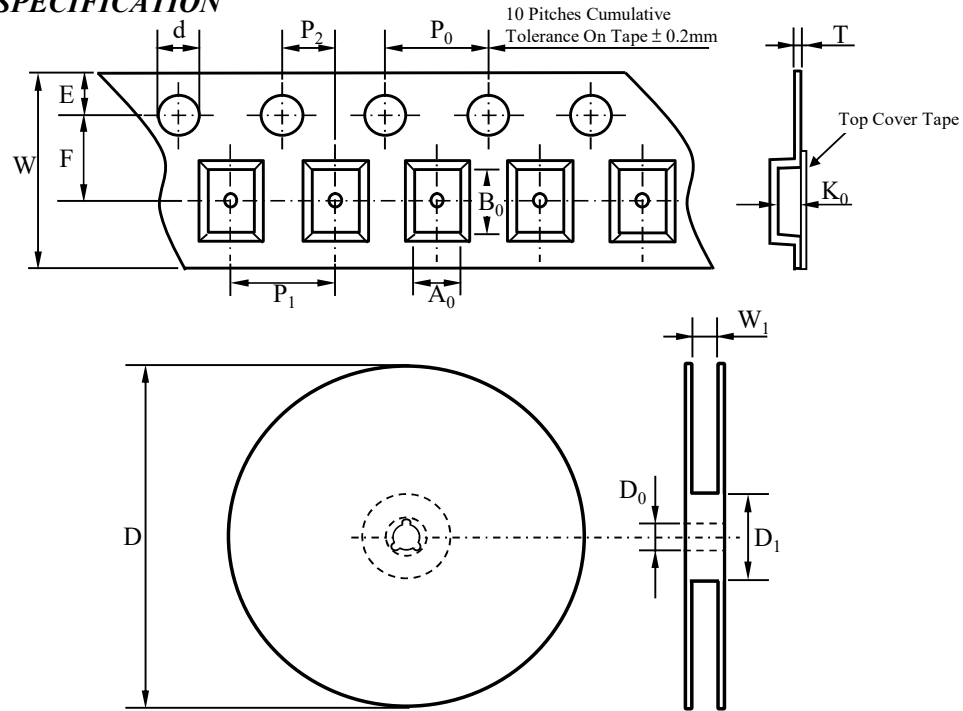
Fig.4-FORWARD CURRENT DERATING CURVE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-123T
Carrier width	A_0	*
Carrier length	B_0	
Carrier depth	K_0	
Sprocket hole	d	1.50 ± 0.10
Reel outside diameter	D	178.00 ± 2.00
Feed hole width	D_0	13.00 ± 0.50
Reel inner diameter	D_1	MIN. 50.00
Sprocket hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocket hole pitch	P_0	4.00 ± 0.10
Punch hole pitch	P_1	4.00 ± 0.10
Embossment center	P_2	2.00 ± 0.10
Overall tape thickness	T	MAX. 0.60
Tape width	W	MAX. 8.30
Reel width	W_1	MAX. 14.90

Note *: A_0 , B_0 , and K_0 are determined by component size. The clearance between the components and the cavity must be within 0.05 mm min. to 0.5 mm max.

ORDER INFORMATION

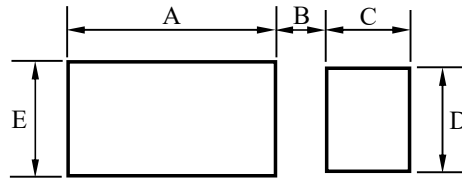
Part Number	Marking Code	Reel Size	Quantity
SLD16TH	KN1	7"	3,000



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SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D	E
SOD-123T	2.20	1.00	0.90	1.40	1.40