



SLD33T

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

REVERSE VOLTAGE: 30 VOLTS
FORWARD CURRENT: 3.0 AMPERE

FEATURES

- Low forward voltage drop, low reverse current
- Low power loss, high efficiency.
- Suffix "H" indicates Halogen-free parts, ex. SLD33TH

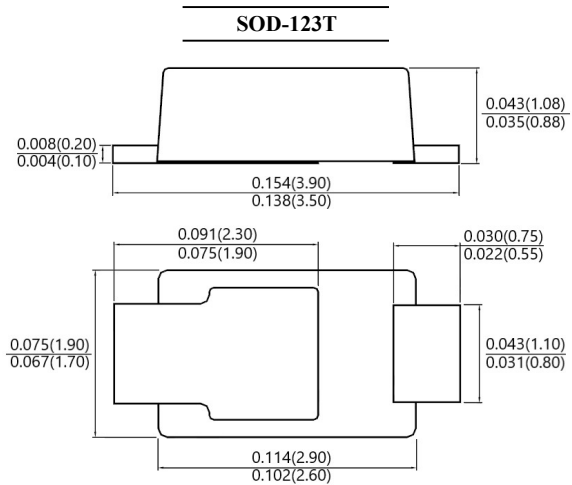
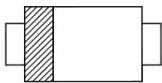
MECHANICAL DATA

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	SLD33T	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	30	Volts
Maximum RMS Voltage	V_{RMS}	21	Volts
Maximum DC Blocking Voltage	V_R	30	Volts
Maximum Average Forward Rectified Current (See Fig. 1)	$I_{(AV)}$	3.0	Amp
Peak Forward Surge Current, 8.3ms single half-sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	75.0	Amp
Maximum Forward Voltage at	V_F	$I_F=0.5A, T_J=25^\circ C$	0.32
		$I_F=1.0A, T_J=25^\circ C$	0.35
		$I_F=3.0A, T_J=25^\circ C$	0.43
		$I_F=0.5A, T_J=125^\circ C$	0.23
		$I_F=1.0A, T_J=125^\circ C$	0.26
		$I_F=3.0A, T_J=125^\circ C$	0.38
Maximum Reverse Current at	I_R	$V_R=5V, T_J=25^\circ C$	0.15
		$V_R=30V, T_J=25^\circ C$	0.40
		$V_R=5V, T_J=125^\circ C$	15.00
		$V_R=30V, T_J=125^\circ C$	20.00
Typical Thermal Resistance Junction to Ambient (Note 1)	$R_{\theta JA}$	178.0	°C/W
Operating Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_{stg}	-55 to +150	

NOTES:

1- FR-4 PCB, 2 OZ. Copper



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RATINGS AND CHARACTERISTIC CURVES

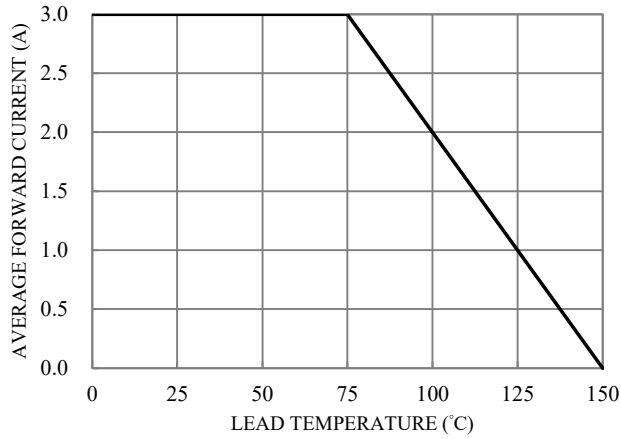


Fig.1-FORWARD CURRENT DERATING CURVE

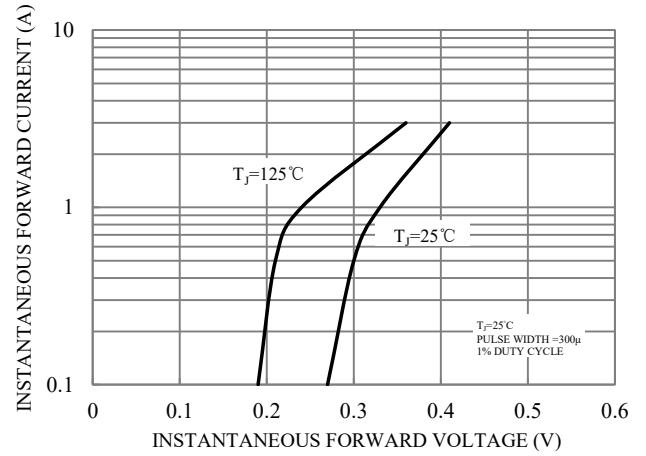


Fig.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

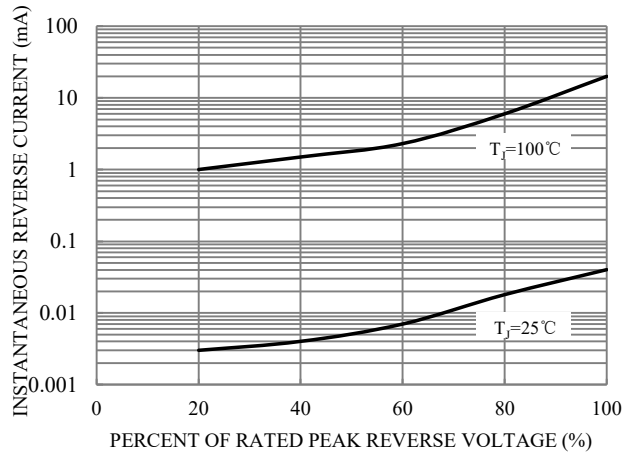


Fig.3-TYPICAL REVERSE CHARACTERISTICS

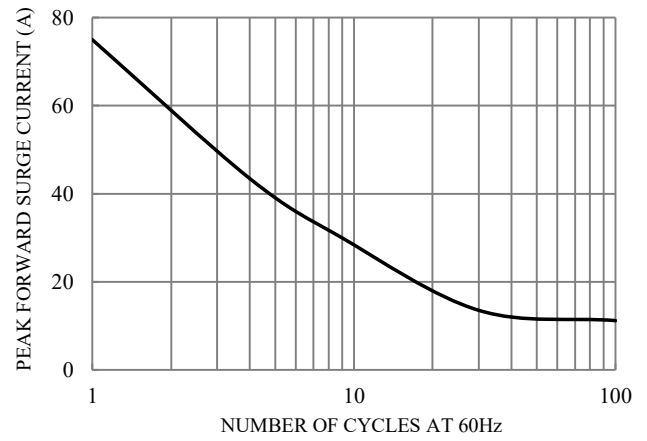


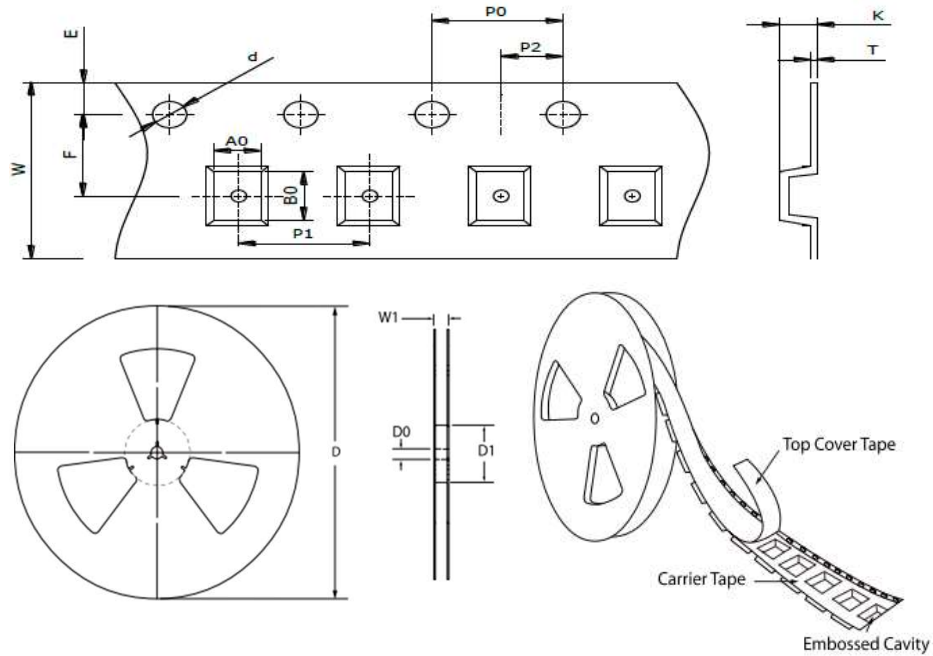
Fig.4-MAXIMUM NON-REPETITIVE SURGE CURRENT



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-123T
Carrier width	A ₀	2.45 ± 0.15
Carrier length	B ₀	4.45 ± 0.15
Carrier depth	K	2.40 ± 0.10
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	W1	MAX. 14.90

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-123T	7"	3,000

MARKING CODE

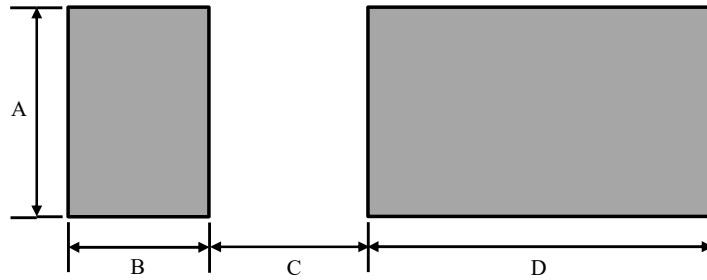
Part Number	Marking Code
SLD33T	S34



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SUGGESTED SOLDER PAD LAYOUT



Unit : mm

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