



SD14T

SCHOTTKY DIODES

FEATURES

· Suffix "H" indicates Halogen-free parts, ex. SD14TH

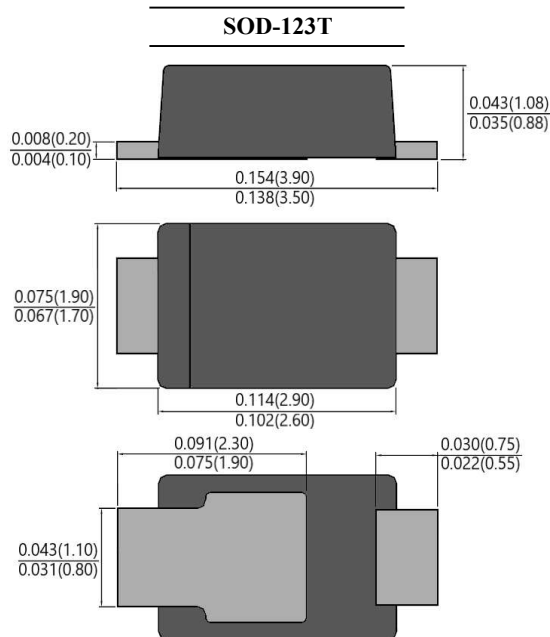
MECHANICAL DATA

Case : SOD-123T

Epoxy : UL 94V-O rate flame retardant

Polarity : Indicated by cathode band

Mounting position : Any



Dimensions in inch and (millimeter)

Maximum Ratings@ $T_A = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Value	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	V
Maximum RMS Voltage	V_{RMS}	28	V
Maximum DC Blocking Voltage	V_{DC}	40	V
Maximum Average Forward Rectified Current	I_F	1	A
Peak Forward Surge Current 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50	A
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	75	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40 to +150	$^\circ\text{C}$

Note :

1. Thermal resistance junction to ambient 0.24" x 0.24"(6 x 6 mm) copper pads to each terminals

Electrical Characteristics@ $T_A = 25\text{ }^\circ\text{C}$

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	$I_F=1\text{A}$	V_F	-	-	0.55	V
Reverse Leakage Current	$V_R=40\text{V}, T_J=25^\circ\text{C}$	I_R	-	-	0.1	mA
	$V_R=40\text{V}, T_J=100^\circ\text{C}$		-	-	10	
Junction Capacitance	$V_R=4\text{V}, f=1\text{MHz}$	C_J	-	110	-	pF



SD14T

SCHOTTKY DIODES

Typical Characteristics

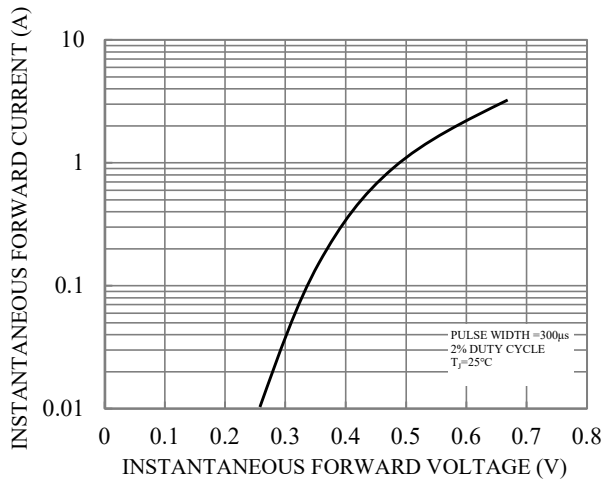


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

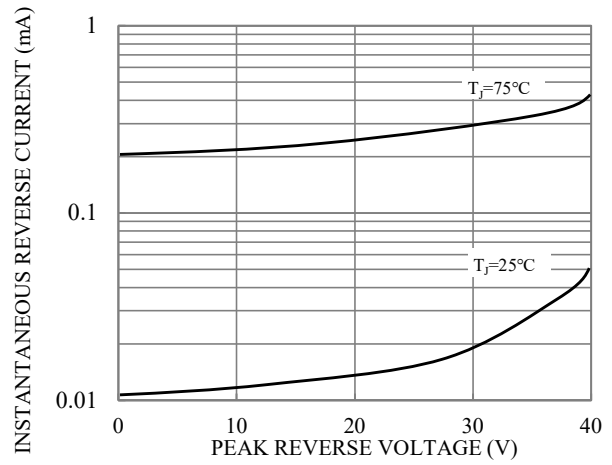


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

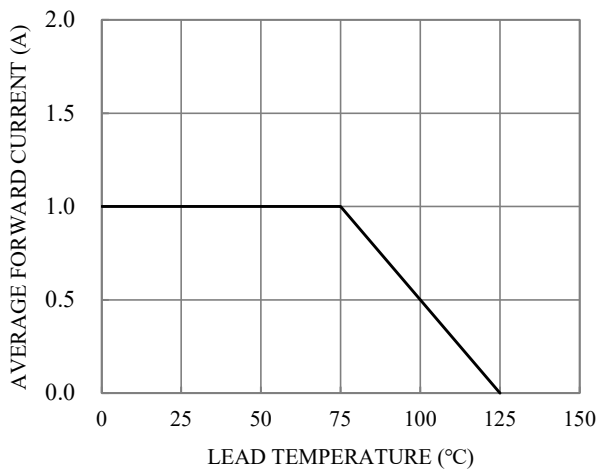


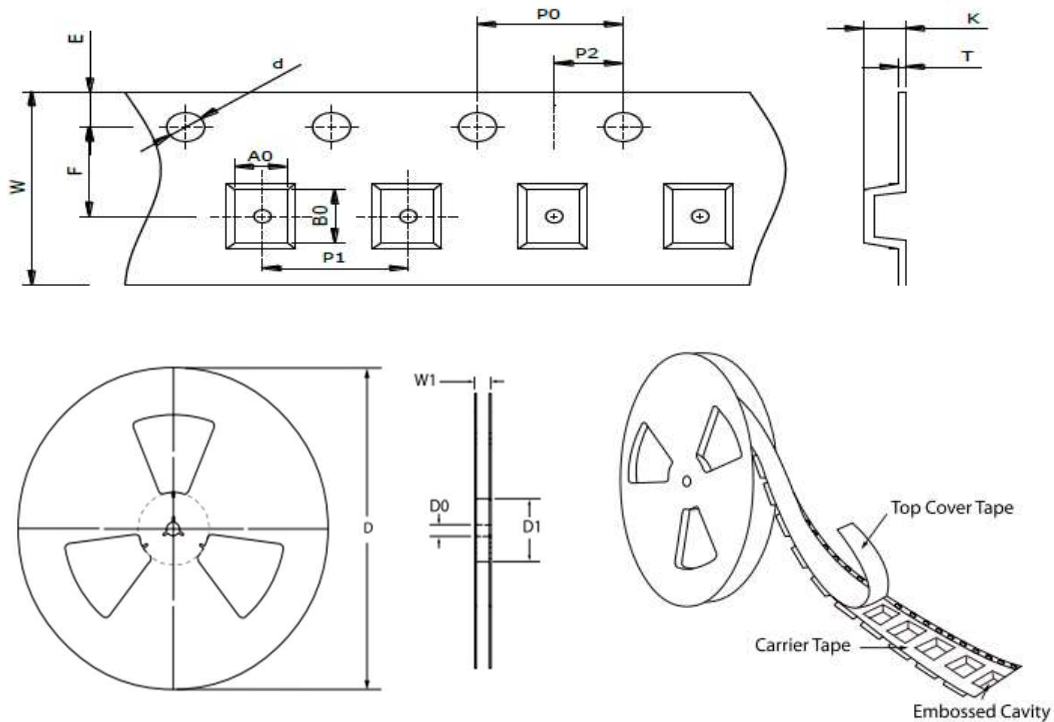
Fig. 3-FORWARD CURRENT DERATING CURVE



SD14T

SCHOTTKY DIODES

TAPE & REEL SPECIFICATION



Item	Symbol	SOD-123T
Carrier width	A ₀	2.15 ± 0.15
Carrier length	B ₀	4.15 ± 0.15
Carrier depth	K	1.90 ± 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
Sprocke hole position	E	1.75 ± 0.10
Punch hole position	F	3.50 ± 0.10
Sprocke 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

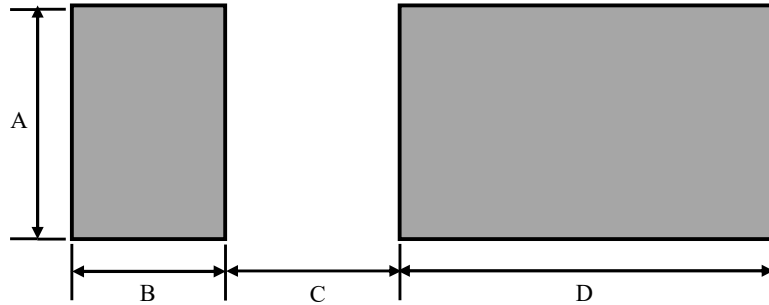
Part Number	Marking Code
SD14T	SR



SD14T

SCHOTTKY DIODES

SUGGESTED SOLDER PAD LAYOUT



Unit : mm

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

