



ASD14WSTH

SCHOTTKY DIODES

FEATURES

- For use in low voltage
- AEC-Q101 qualified
- Suffix "H" indicates Halogen-free parts, ex. ASD14WSTH

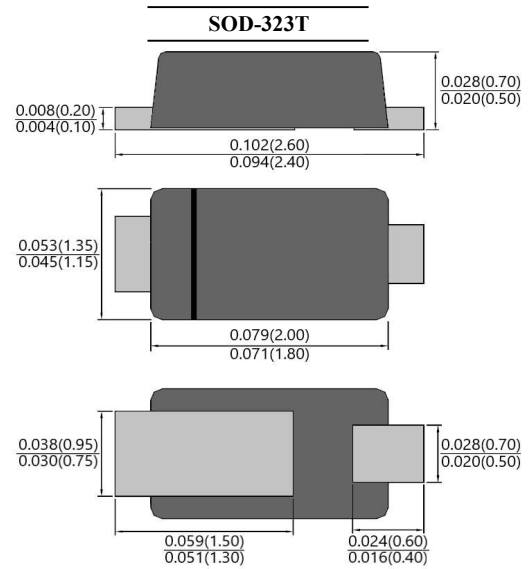
MECHANICAL DATA

Case : SOD-323T

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 Average Forward Rectified Current	$I_{F(AV)}$	1	A
Peak Forward Surge Current 8.3 ms Single HalfSine-Wave Superimposed on	I_{FSM}	25	A
Typical Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	220	$^\circ\text{C/W}$
Typical Thermal Resistance from Junction to Lead (Note 1)	$R_{\theta JL}$	50	$^\circ\text{C/W}$
Junction Temperature	T_j	-40 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-40 to +150	$^\circ\text{C}$

Note :

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

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage	$I_F=0.7\text{A}$	V_F	-	-	0.52	V
Reverse Leakage Current	$V_R=40\text{V}$	I_R	-	-	100	μA



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RATINGS AND CHARACTERISTIC CURVES

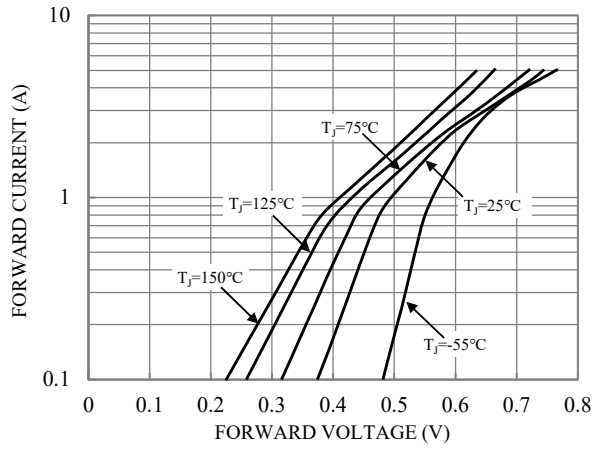


Fig. 1- FORWARD CHARACTERISTICS CURVE

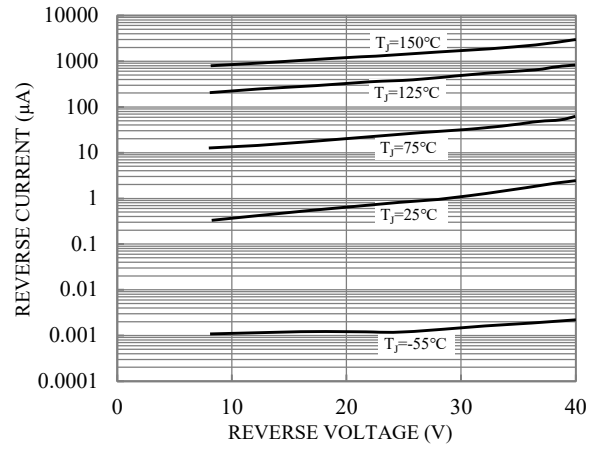


Fig. 2- REVERSE CHARACTERISTICS CURVE

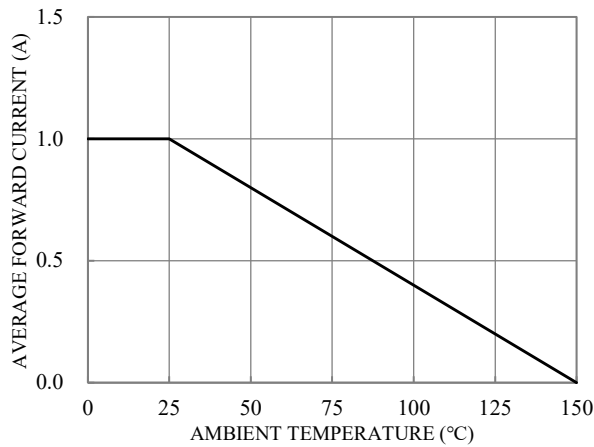


Fig. 3- FORWARD CURRENT DERATING CURVE

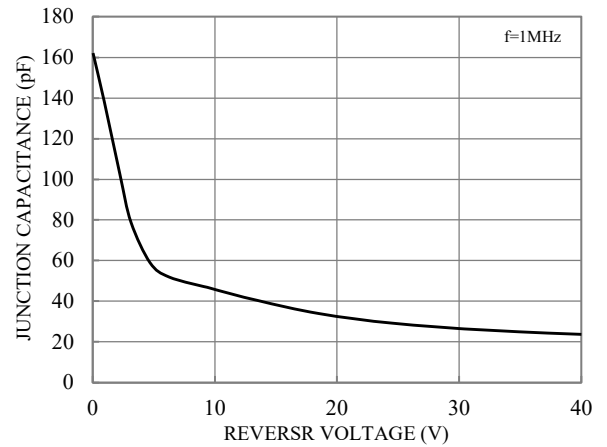


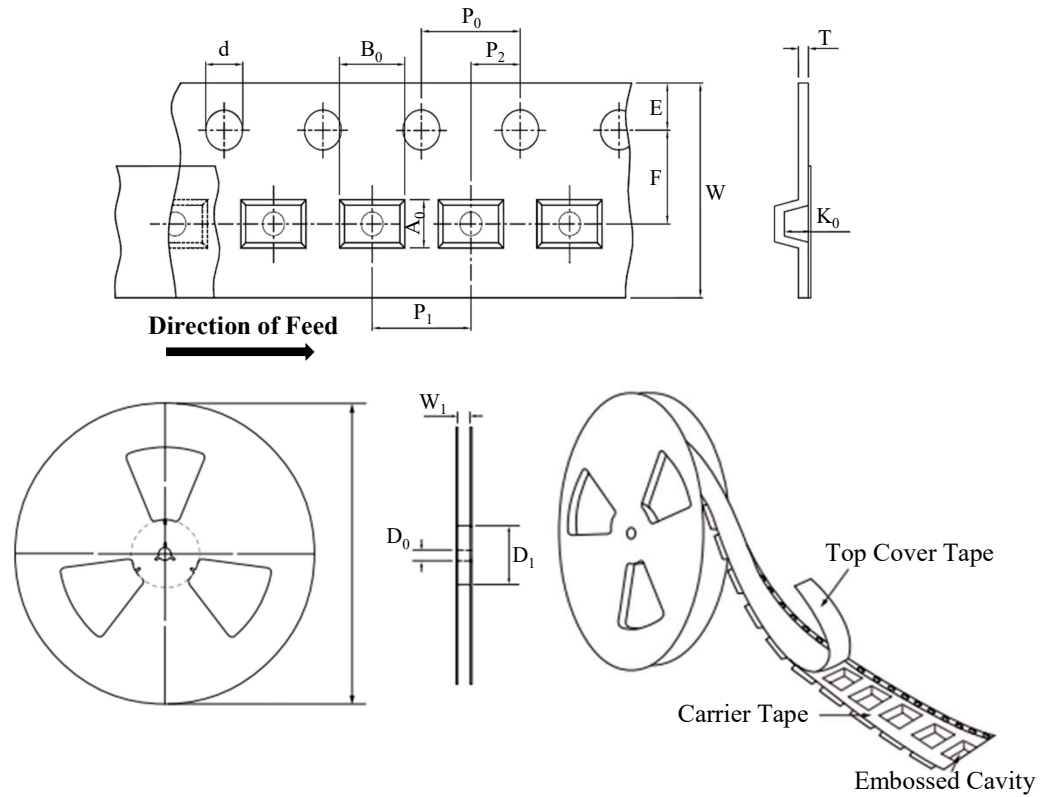
Fig. 4- JUNCTION CAPACITANCE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A ₀	3.30 ± 0.10
Carrier length	B ₀	3.00 ± 0.10
Carrier depth	K ₀	1.70 ± 0.10
Sprocket hole	d	1.60 ± 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	0.20 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W ₁	MAX. 14.50

ORDER INFORMATION

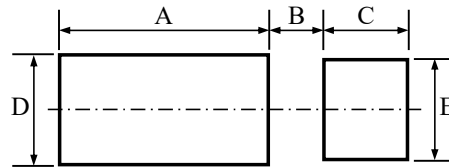
Part Number	Marking Code	Reel Size	Quantity
ASD14WSTH	U4	7"	3,000



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SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D	E
SOD-323T	2.00	0.50	0.80	1.10	1.00