



ABAT46WSH

SCHOTTKY DIODE

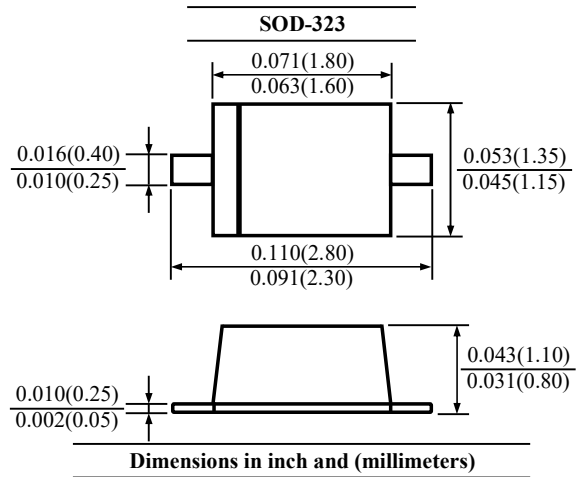
FEATURES

- High breakdown voltage
- Low forward voltage
- AEC-Q101 Qualified
- Suffix "H" indicates Halogen-free parts, ex. ABAT46WSH

MECHANICAL DATA

Case : SOD-323

Polarity : Indicated by cathode band



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Continuous Forward Current	I_F	150	mA
Non-Repetitive Peak Forward Surge Current ($t_p < 10\text{ms}$)	I_{FSM}	750	mA
Power Dissipation	P_D	230	mW
Thermal Resistance Junction Ambient	$R_{\theta JA}$	550	$^\circ\text{C}/\text{W}$
Operating Junction Temperature	T_J	-55 to +150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min.	Typ.	Max.	Unit
Breakdown Voltage	$I_R=100\mu\text{A}$	$V_{(BR)R}$	100	-	-	V
Forward Voltage	$I_F=0.1\text{mA}$	V_F	-	-	250	mV
	$I_F=10\text{mA}$		-	-	450	
	$I_F=250\text{mA}$		-	-	1000	
Reverse Leakage Current	$V_R=1.5\text{V}$	I_R	-	-	0.5	μA
	$V_R=10\text{V}$		-	-	0.8	
	$V_R=50\text{V}$		-	-	2.0	
	$V_R=75\text{V}$		-	-	5.0	
	$V_R=1.5\text{V}, T_J=75^\circ\text{C}$		-	2.5	-	
	$V_R=10\text{V}, T_J=75^\circ\text{C}$		-	4.0	-	
	$V_R=50\text{V}, T_J=75^\circ\text{C}$		-	6.0	-	
Capacitance	$V_R=0\text{V}, f=1.0\text{MHz}$	C_T	-	10	-	pF
	$V_R=1\text{V}, f=1.0\text{MHz}$		-	6	-	



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RATINGS AND CHARACTERISTIC CURVES

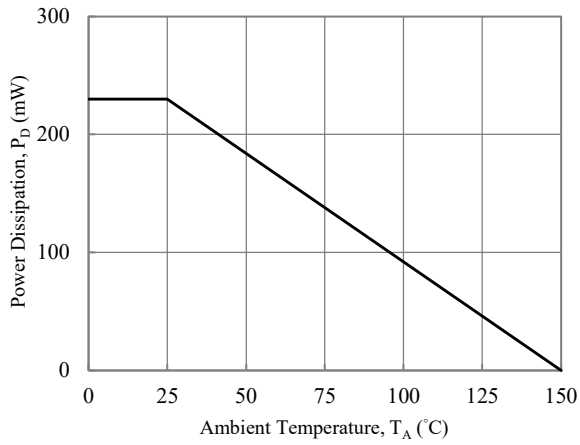


Fig. 1 Power Derating Curves

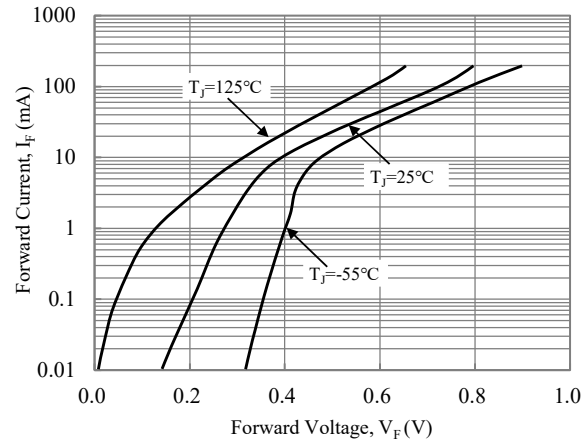


Fig. 2 Forward Characteristics

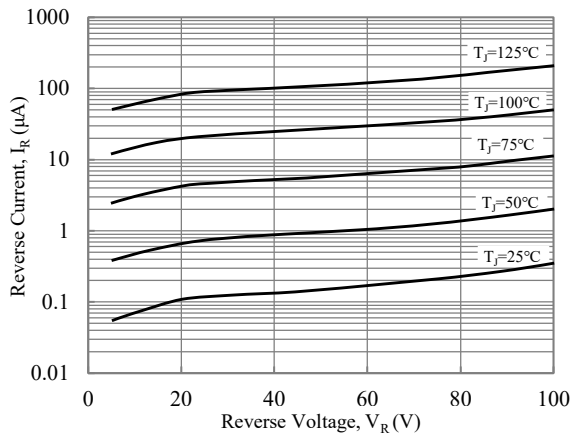


Fig. 3 Reverse Characteristics

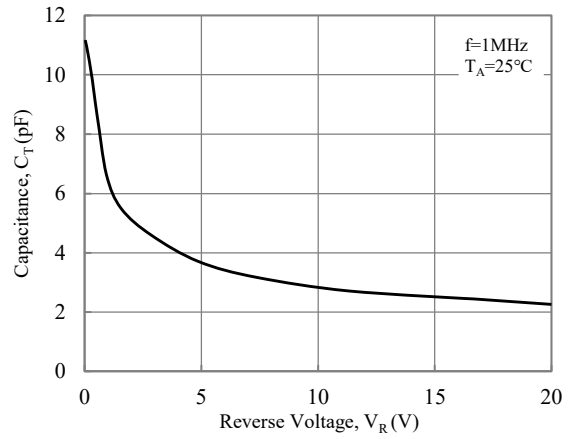


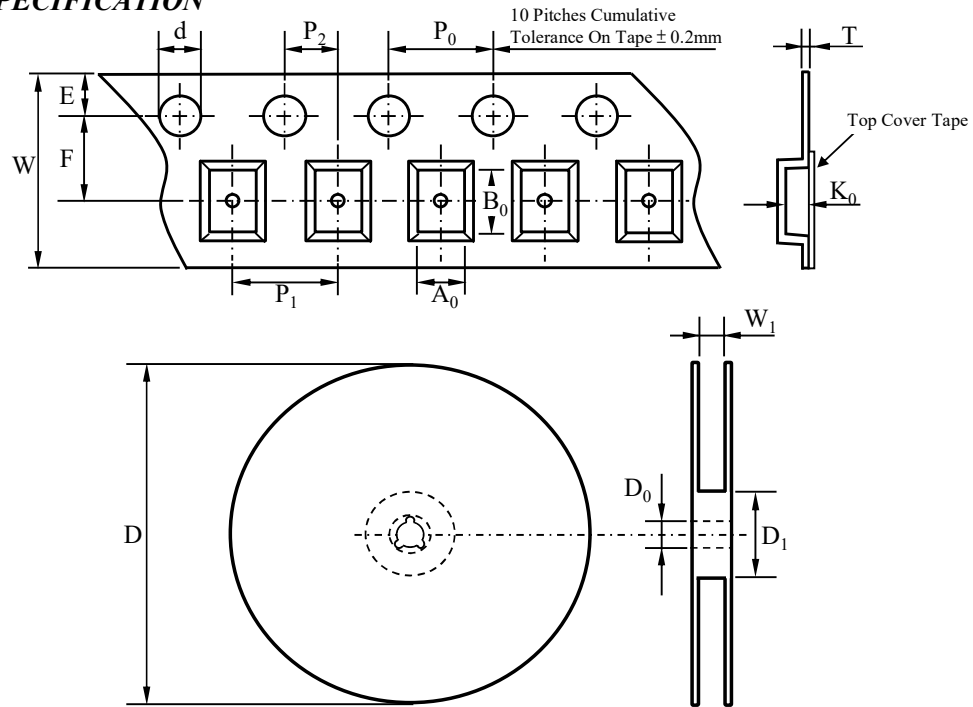
Fig. 4 Capacitance Characteristics



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-323
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	8.00 ± 0.20
Reel width	W_1	MAX. 10.00

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

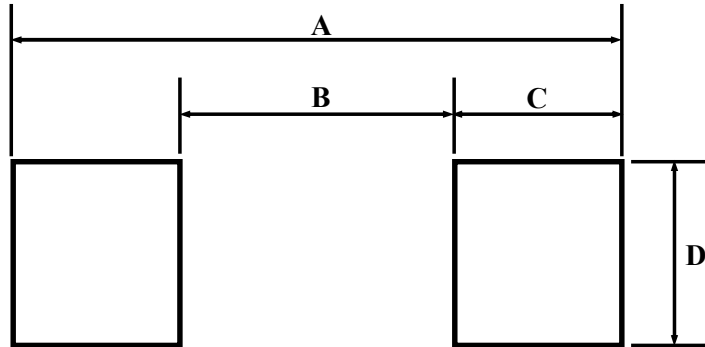
Part Number	Marking Code	Reel Size	Quantity
ABAT46WSH	SO	7"	3,000



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SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-323	2.90	1.30	0.80	0.90