



BAT46WSH

SCHOTTKY DIODES

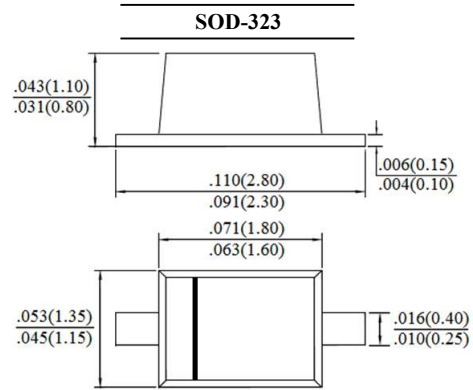
FEATURES

- High breakdown voltage
- Low forward voltage
- Suffix "H" indicates Halogen-free parts, ex. BAT46WSH

MECHANICAL DATA

Case : SOD-323

Polarity : Indicated by cathode band



Dimensions in inch and (millimeters)

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
Power Dissipation	P_{tot}	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	
	$V_R = 1.5\text{V}, T_J = 60^\circ\text{C}$				5.0	
	$V_R = 10\text{V}, T_J = 60^\circ\text{C}$				7.5	
	$V_R = 50\text{V}, T_J = 60^\circ\text{C}$				15.0	
$V_R = 75\text{V}, T_J = 60^\circ\text{C}$	20.0					
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

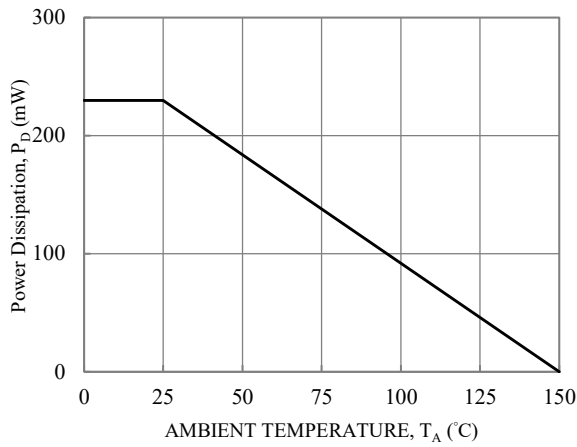


Fig. 1 Power Derating Curves

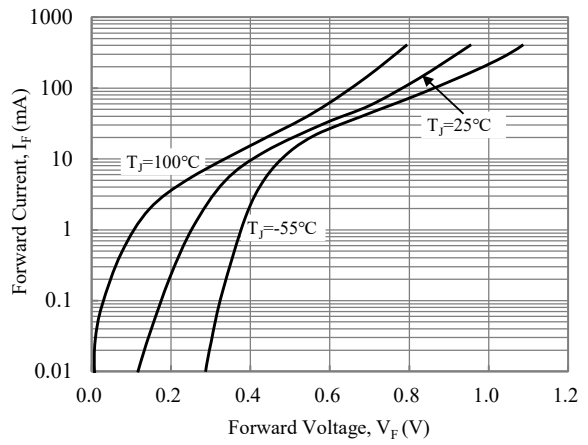


Fig. 2 Forward Characteristics

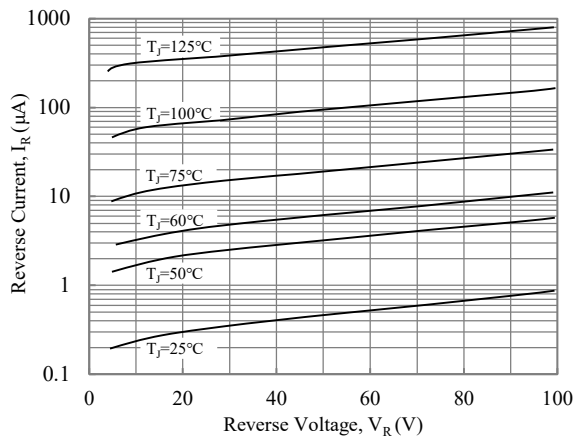


Fig. 3 Reverse Characteristics

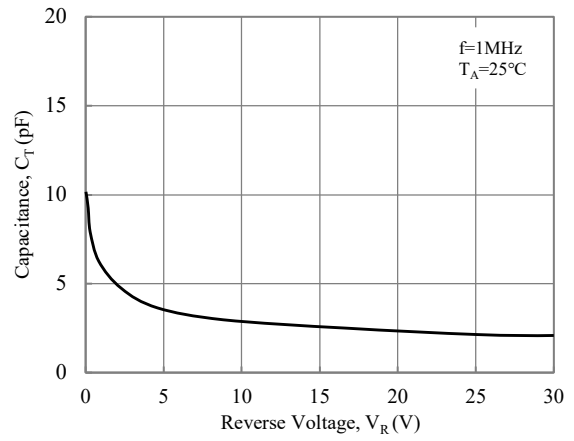


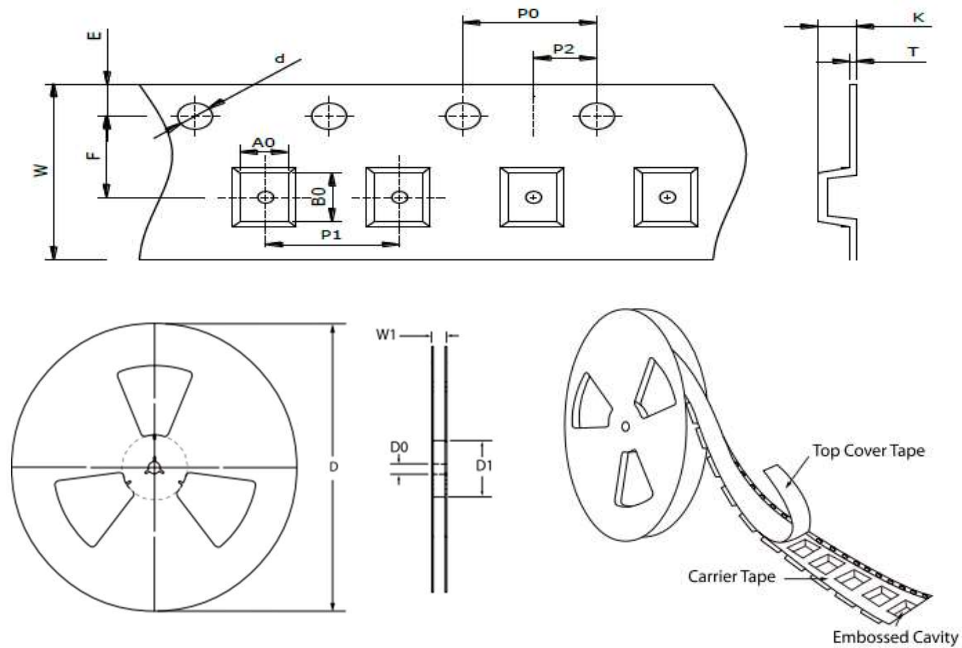
Fig. 4 Capacitance Characteristics



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-323
Carrier width	A ₀	1.50 ± 0.10
Carrier length	B ₀	2.95 ± 0.10
Carrier depth	K	1.20 ± 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	8.00 ± 0.20
Reel width	W ₁	MAX. 10.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOD-323	7"	3,000

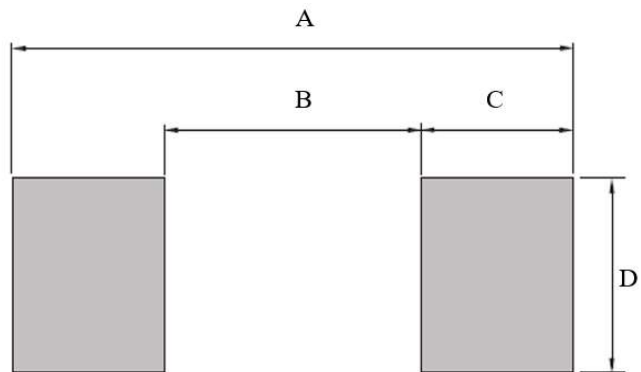
MARKING CODE

Part Number	Marking Code
BAT46WSH	SO



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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