

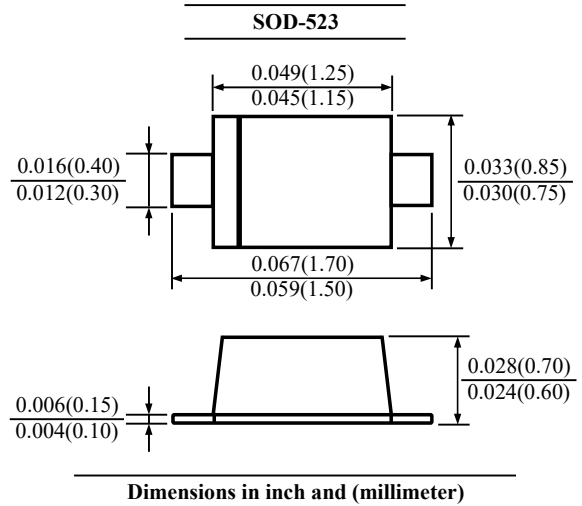


BAS70WTH

SCHOTTKY DIODE

FEATURES

- Low Forward Voltage
- Suffix "H" indicates Halogen-free parts, ex. BAS70WTH



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

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	70	V
Working Peak Reverse Voltage	V_{RWM}	70	V
DC Blocking Voltage	V_R	70	V
RMS Reverse Voltage	V_{RMS}	49	V
Maximum Forward Continuous Current	I_{FM}	70	mA
Peak Forward Surge Current at $t_p \leq 1\text{ s}$	I_{FSM}	100	mA
Power Dissipation (Note 1)	P_D	150	mW
Thermal Resistance from Junction to Ambient (Note 1)	$R_{\theta JA}$	667	$^\circ\text{C/W}$
Operating Junction Temperature Range	T_J	-65 to +125	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150	$^\circ\text{C}$

Note:

1. Device mounted on FR-4 PC board with recommended pad layout.

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

Parameter	Test Conditions	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 100\mu\text{A}$	$V_{(BR)R}$	70	-	V
Forward Voltage	$I_F = 1\text{ mA}$	V_F	-	0.41	V
	$I_F = 15\text{ mA}$			1.00	
Reverse Leakage Current	$V_R = 50\text{ V}$	I_R	-	100	nA
Reverse Recovery Time	$I_F = I_R = 10\text{ mA}$ to $I_R = 1\text{ mA}$, $R_L = 100\Omega$, $I_{rr} = 0.1 \times I_R$	t_{rr}	-	5	ns
Total Capacitance	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_T	-	2	pF



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RATINGS AND CHARACTERISTIC CURVES

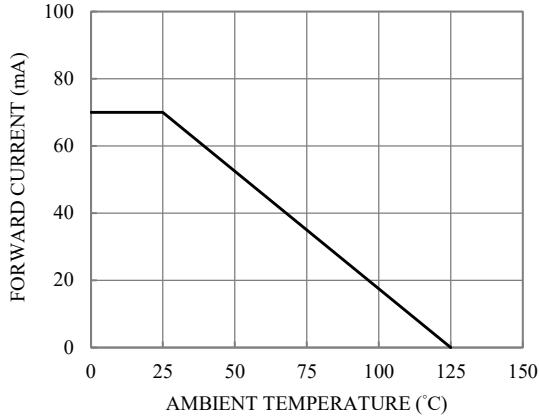


Fig.1-FORWARD CURRENT DERATING CURVE

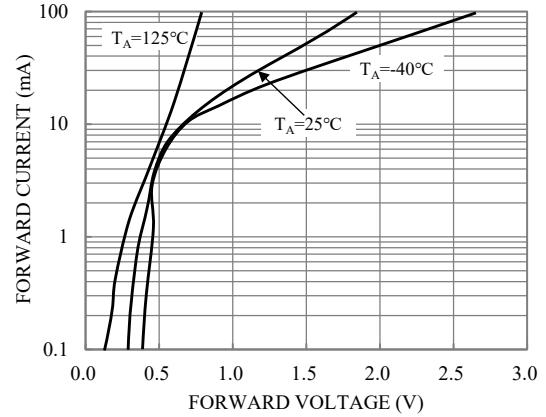


Fig.2-TYPICAL FORWARD CHARACTERISTICS

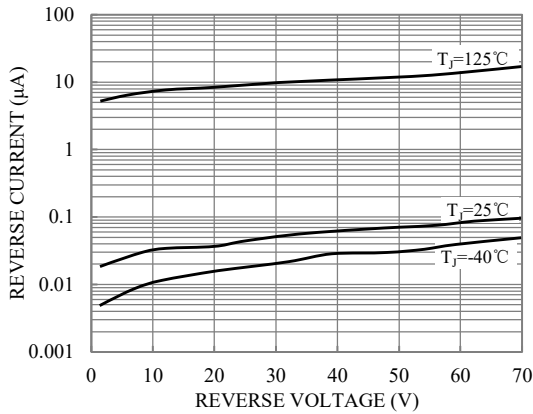


Fig.3-TYPICAL REVERSE CHARACTERISTICS

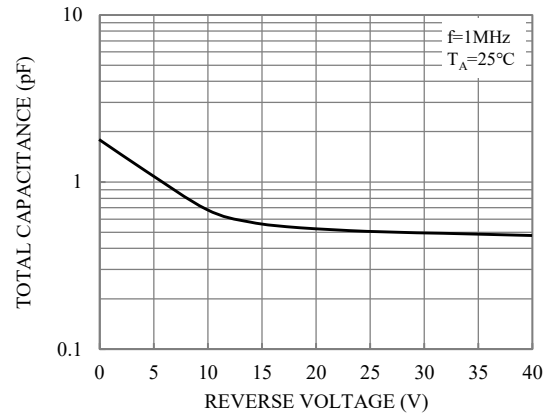


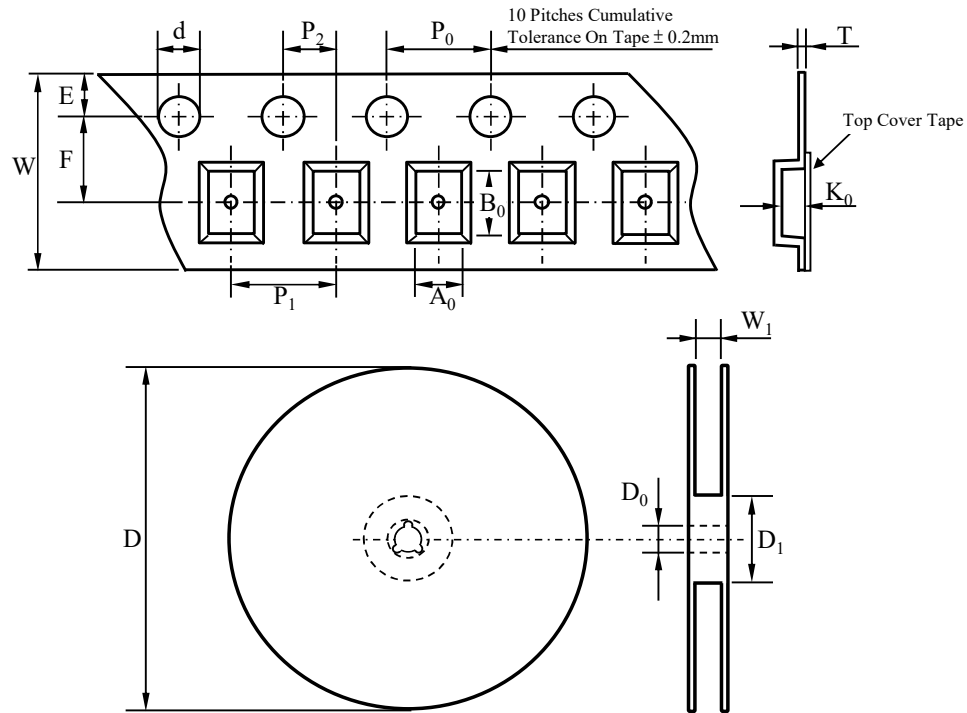
Fig.4-TOTAL CAPACITANCE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOD-523
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	MAX. 8.30
Reel width	W_1	MAX. 14.90

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

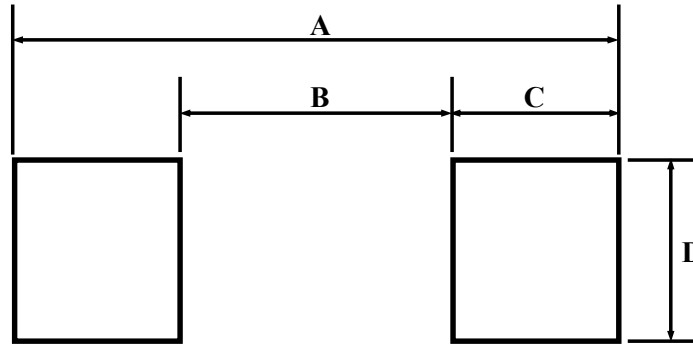
Part Number	Marking Code	Reel Size	Quantity
BAS70WTH	L0	7"	4,000



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SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOD-523	2.30	1.10	0.60	0.80