

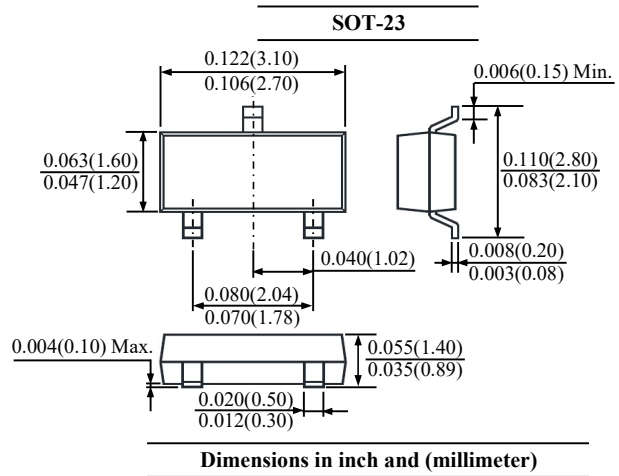
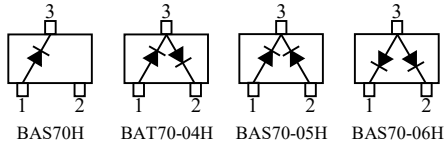


BAS70H / -04H / -05H / -06H

SCHOTTKY BARRIER DIODES

FEATURES

- Fast switching
- Suffix "H" indicates Halogen-free parts, ex. BAS70H



Maximum Ratings ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	70	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	70	V
DC Blocking Voltage	V_R	70	V
Average Forward Rectified Current	$I_{F(AV)}$	70	mA
Peak Forward Surge Current ($t < 10\text{ms}$)	I_{FSM}	100	mA
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction Ambient	$R_{\theta JA}$	500	$^\circ\text{C} / \text{W}$
Operating Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$

Note :

1. Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Min	Max	Unit
Forward voltage	$I_F = 1\text{mA}$	V_F	-	410	mV
	$I_F = 15\text{mA}$		-	1000	
Reverse Breakdown Voltage	$I_R = 10\mu\text{A}$	$V_{BR(R)}$	70	-	V
Reverse Current	$V_R = 50\text{V}$	I_R	-	100	nA
Total Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_T	-	2	pF
Reverse recovery time	$I_F = I_R = 10\text{mA}$ to $I_R = 1\text{mA}$, $R_L = 100\Omega$	t_{rr}	-	5	ns



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SCHOTTKY BARRIER DIODES

RATINGS AND CHARACTERISTIC CURVES

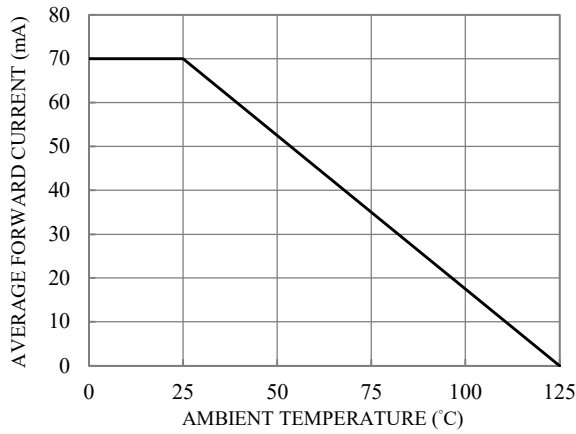


Fig.1-FORWARD CURRENT DERATING CURVE

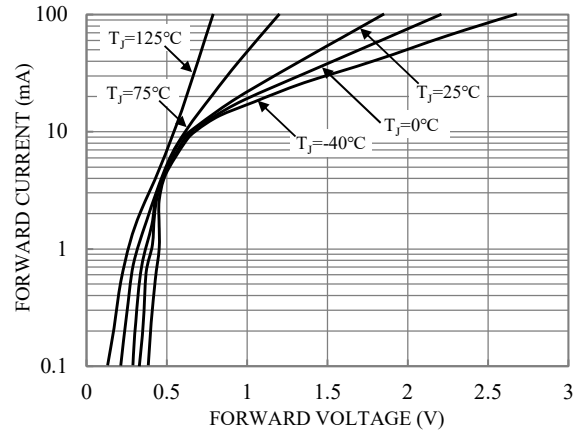


Fig.2-FORWARD CHARACTERISTICS CURVE

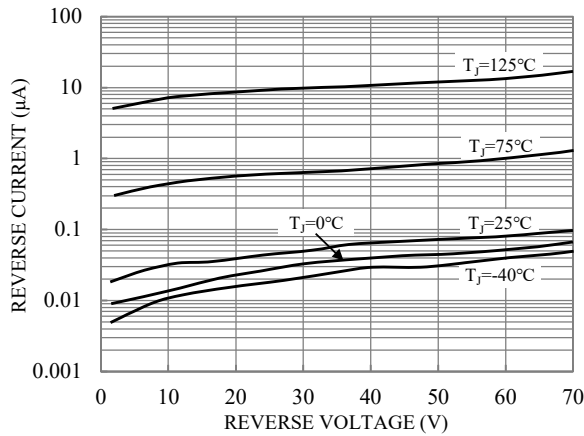


Fig.3-REVERSE CHARACTERISTICS CURVE

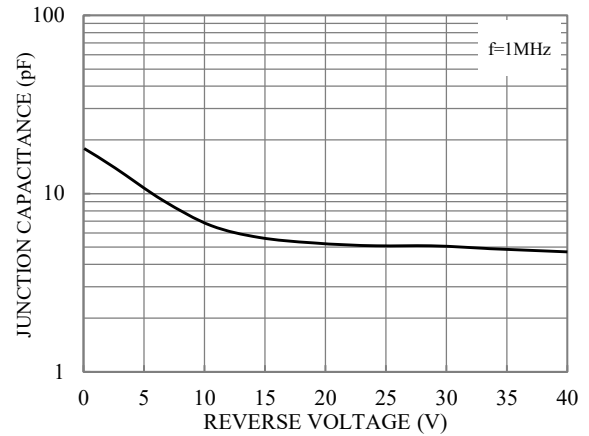


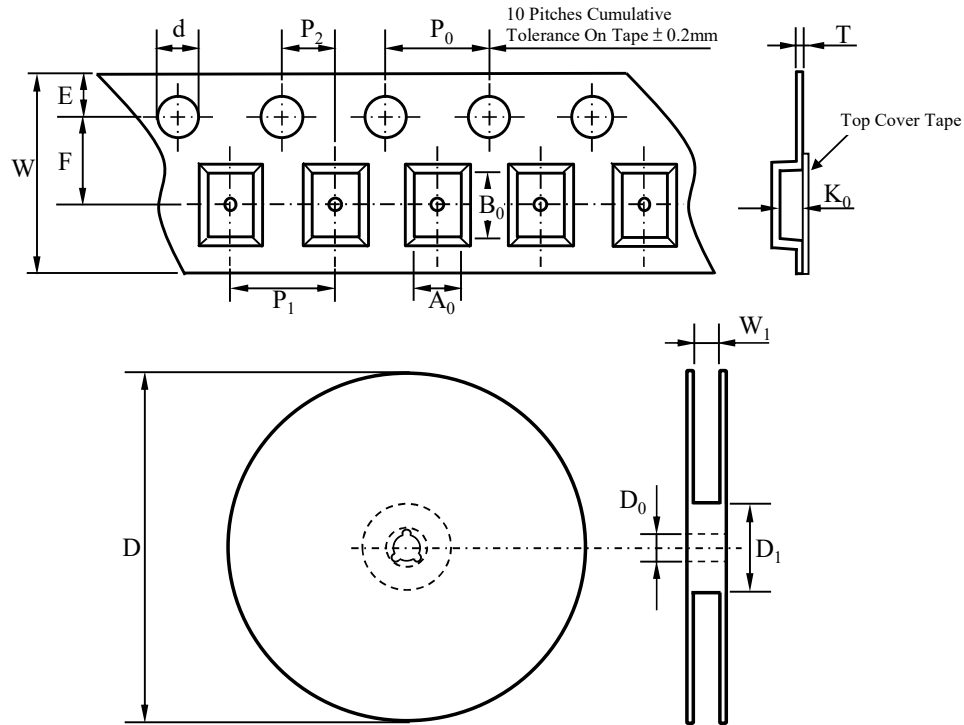
Fig.4-JUNCTION CAPACITANCE



BAS70H / -04H / -05H / -06H

SCHOTTKY BARRIER DIODES

TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
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	0.20 ± 0.05
Tape width	W	8.00 ± 0.20
Reel width	W1	MAX. 14.50

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

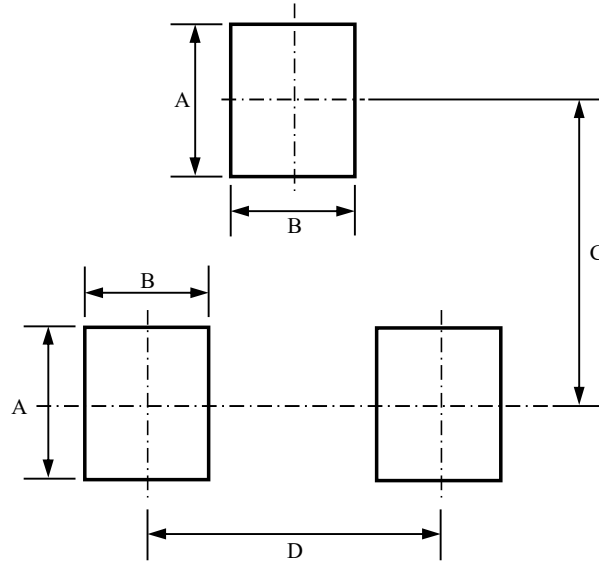
Part Number	Marking Code	Reel Size	Quantity
BAS70H	73	7"	3,000
BAS70-04H	74		
BAS70-05H	75		
BAS70-06H	76		



BAS70H / -04H / -05H / -06H

SCHOTTKY BARRIER DIODES

SUGGESTED SOLDER PAD LAYOUT



Unit :mm

PACKAGE	A	B	C	D
SOT-23	1.00	0.80	2.00	1.90