

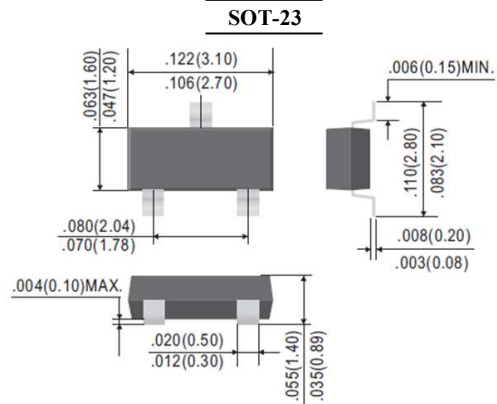
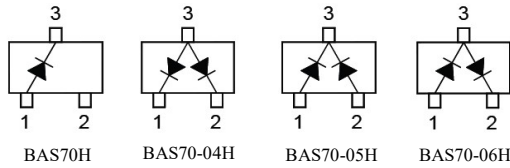


BAS70H / -04H / -05H / -06H

SCHOTTKY BARRIER DIODE

FEATURES

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



Dimensions in inches and (millimeter)

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	70	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	70	V
Reverse voltage	V_R	70	V
Forward Current	$I_{F(AV)}$	70	mA
Peak Forward Surge Current (tp = 10 ms)	I_{FSM}	100	mA
Total Power Dissipation	P_{tot}	200	mW
Thermal Resistance from Junction Ambient	$R_{\theta JA}$	625	$^\circ\text{C} / \text{W}$
Junction Temperature	T_j	125	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$

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
Diode Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_d	-	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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RATINGS AND CHARACTERISTIC CURVES

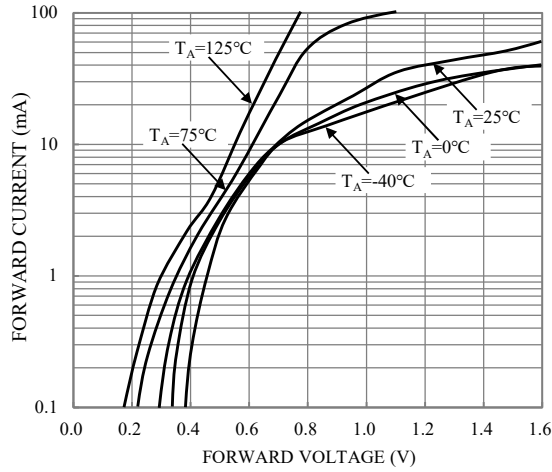


Fig.1-TYPICAL FORWARD CHARACTERISTICS

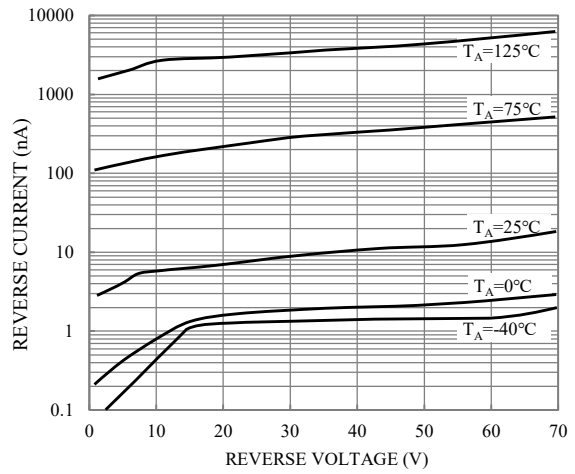


Fig.2-TYPICAL REVERSE CHARACTERISTICS

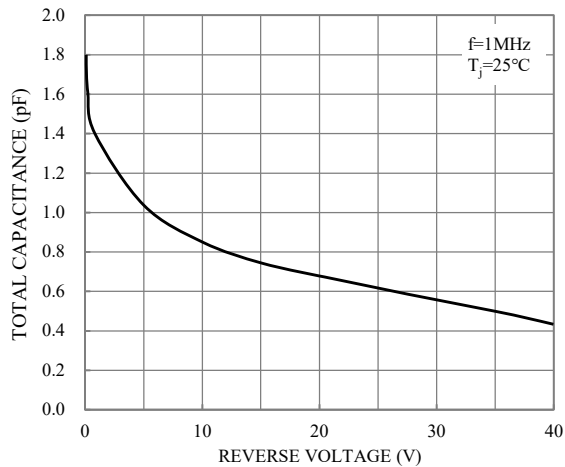


Fig.3-CAPACITANCE

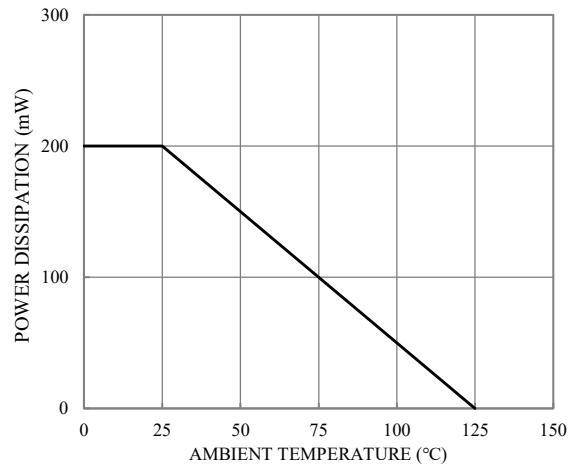


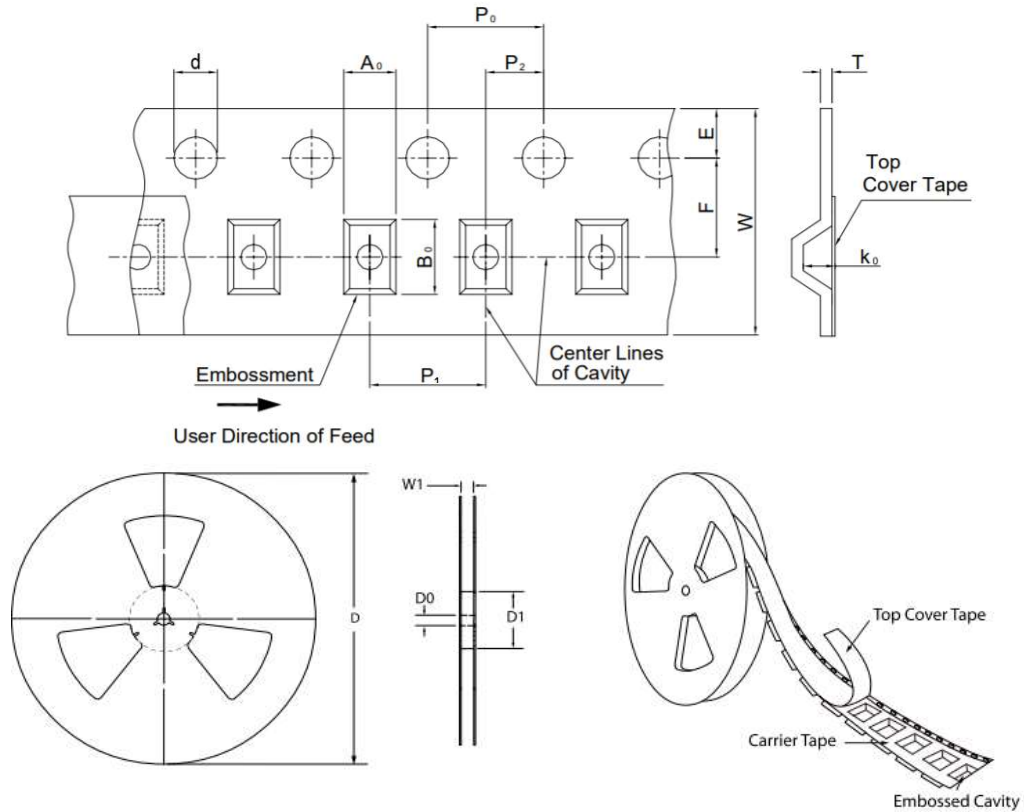
Fig.4-POWER DERATING CURVE



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SCHOTTKY BARRIER DIODE

TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A ₀	3.20 ± 0.10
Carrier length	B ₀	2.80 ± 0.10
Carrier depth	K ₀	1.55 ± 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 ± 0.30
Reel width	W1	MAX. 10.00

ORDER INFORMATION

Package	Reel Size	Quantity
SOT-23	7"	3,000

MARKING CODE

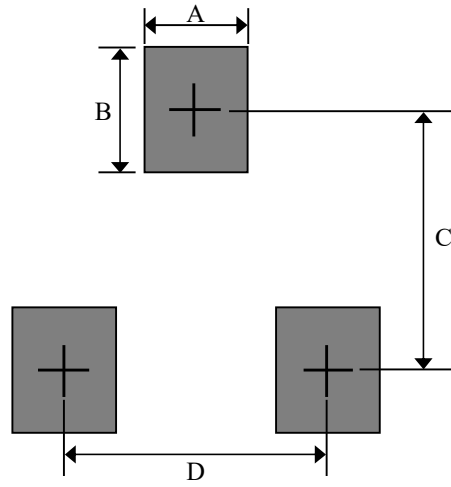
Part Number	Marking Code
BAS70H	73
BAS70-04H	74
BAS70-05H	75
BAS70-06H	76



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

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SUGGESTED SOLDER PAD LAYOUT



Unit : mm

PACKAGE	A	B	C	D
SOT-23	0.80	1.00	2.40	1.90