

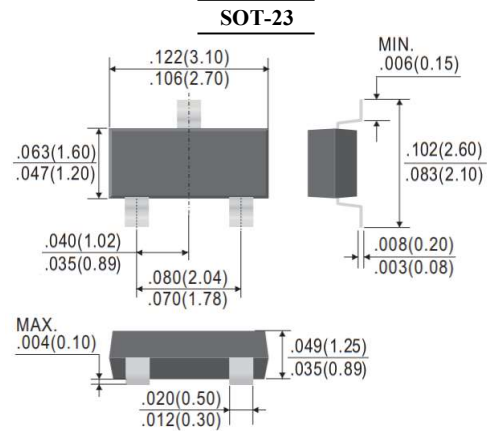
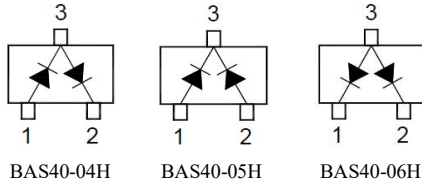


BAS40-04H / BAS40-05H / BAS40-06H

SCHOTTKY DIODE

FEATURES

- Low forward voltage
- Fast switching
- Suffix "H" indicates Halogen-free parts, ex. BAS40-04H



Dimension in inches and (millimeters)

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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	40	V
Reverse Voltage	V_R	40	V
Forward Continuous Current	I_F	200	mA
Peak Forward Surge Current	I_{FSM}	600	mA
	$t_p < 1\text{ s}$		
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$

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

Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage	$I_R = 10\mu\text{A}$	$V_{(BR)R}$	40	-	V
Forward Voltage	$I_F = 1\text{mA}$	V_F	-	0.38	V
	$I_F = 40\text{mA}$		-	1.00	
Reverse Current	$V_R = 30\text{V}$, $T_j = 25^\circ\text{C}$	I_R	-	200	nA
Total Capacitance	$V_R = 0\text{V}$, $f = 1\text{MHz}$	C_T	-	5	pF
Reverse Recovery Time	From $I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1\text{mA}$	t_{rr}	-	5	ns



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RATINGS AND CHARACTERISTIC CURVES

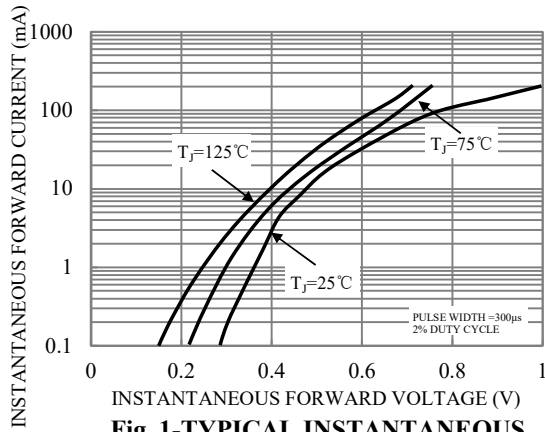


Fig. 1-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

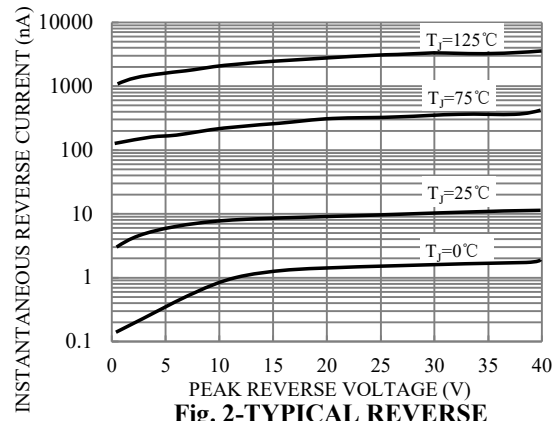


Fig. 2-TYPICAL REVERSE CHARACTERISTICS

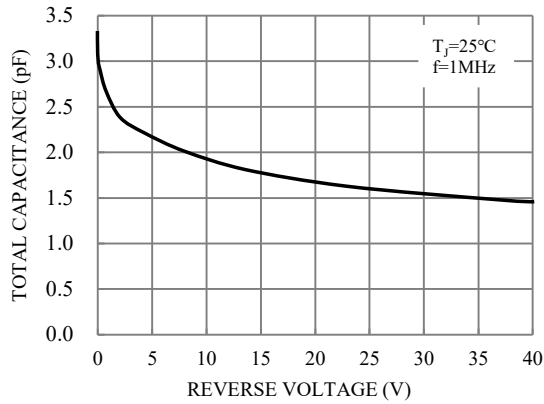


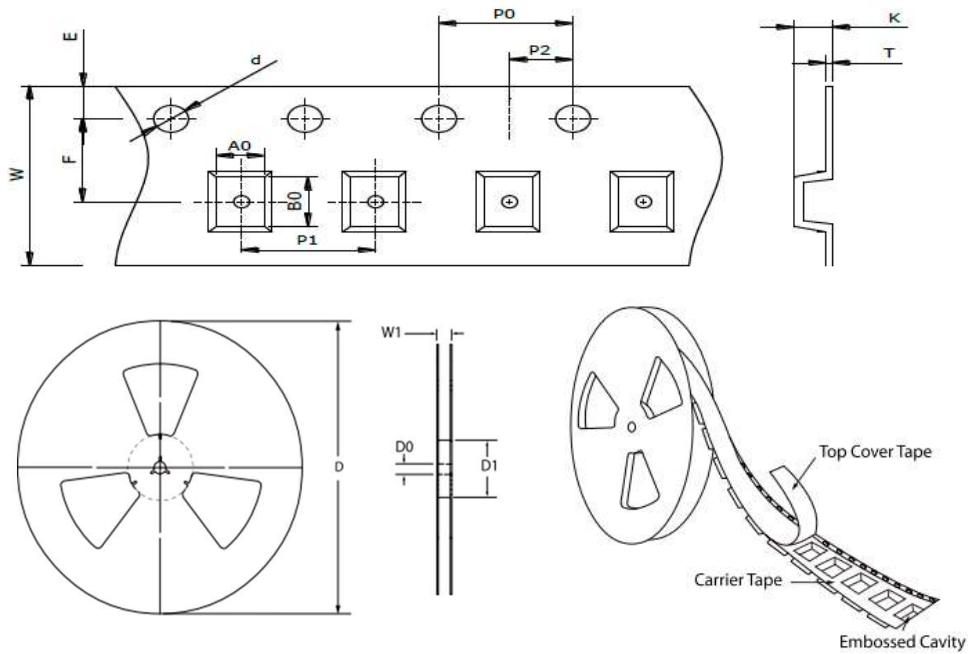
Fig. 3-TYPICAL TOTAL CAPACITANCE



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TAPE & REEL SPECIFICATION



Item	Symbol	SOT-23
Carrier width	A ₀	3.25 ± 0.10
Carrier length	B ₀	2.90 ± 0.10
Carrier depth	K	1.50 ± 0.10
Sprocket hole	d	1.65 ± 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	W ₁	MAX. 14.50

ORDER INFORMATION

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

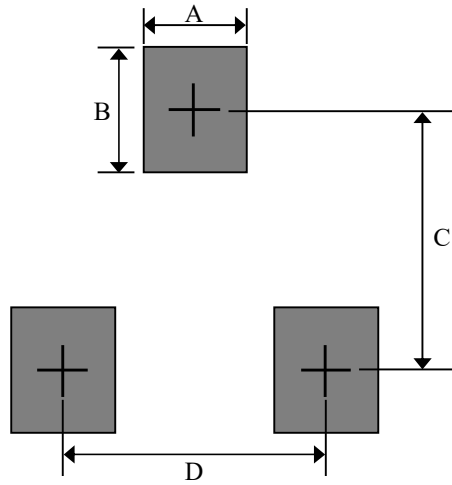
MARKING CODE

Part Number	Marking Code
BAS40-04H	44
BAS40-05H	45
BAS40-06H	46



BAS40-04H / BAS40-05H / BAS40-06H SCHOTTKY DIODE

SUGGESTED SOLDER PAD LAYOUT



Unit : mm

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