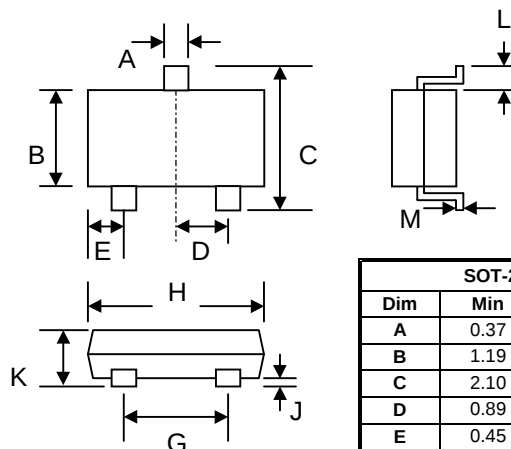


SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

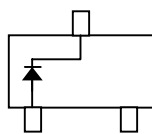
- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection
- Designed for Surface Mount Application
- Plastic Material – UL Recognition Flammability Classification 94V-O



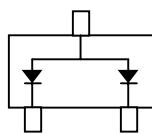
SOT-23		
Dim	Min	Max
A	0.37	0.51
B	1.19	1.40
C	2.10	2.50
D	0.89	1.05
E	0.45	0.61
G	1.78	2.05
H	2.65	3.05
J	0.013	0.15
K	0.89	1.10
L	0.45	0.61
M	0.076	0.178
All Dimensions in mm		

Mechanical Data

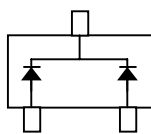
- Case: SOT-23, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: See Diagrams Below
- Weight: 0.008 grams (approx.)
- Mounting Position: Any
- **Lead Free: For RoHS / Lead Free Version, Add "-LF" Suffix to Part Number, See Page 4**



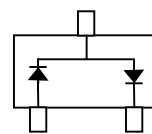
TOP VIEW



TOP VIEW



TOP VIEW



TOP VIEW

BAS40 Marking: S40 BAS40A Marking: S42 BAS40C Marking: S43 BAS40S Marking: S44

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25°C unless otherwise specified

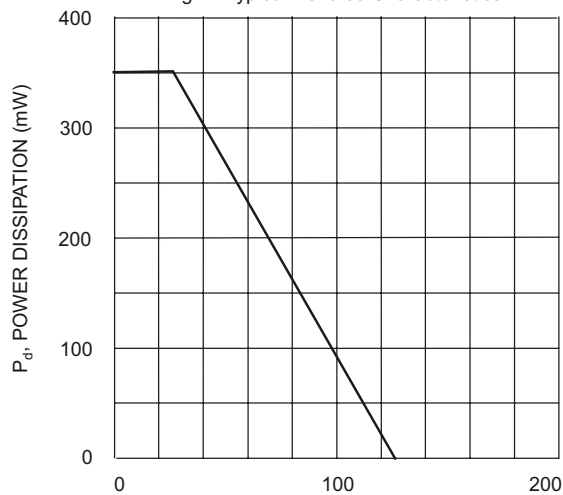
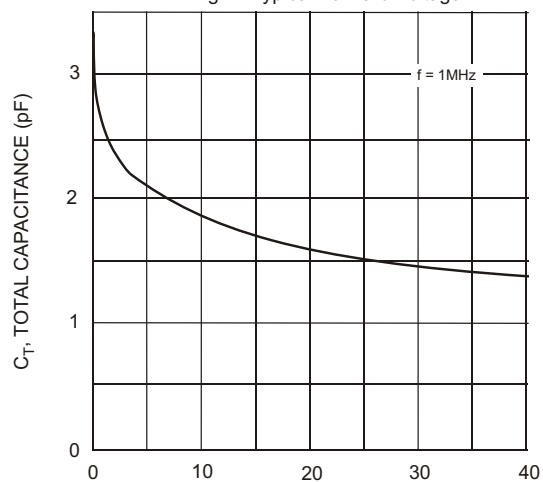
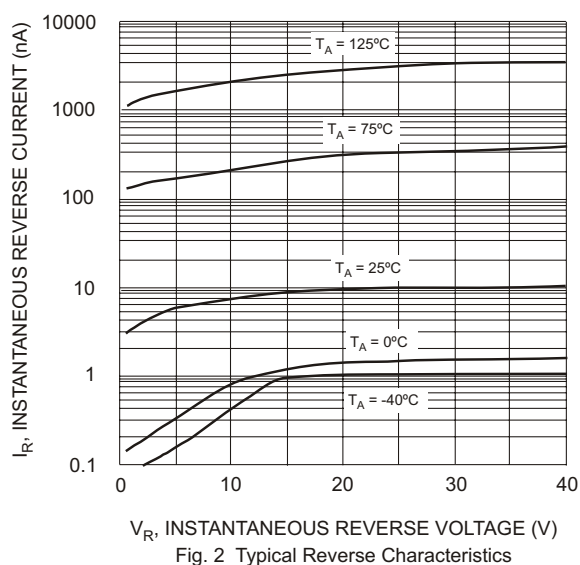
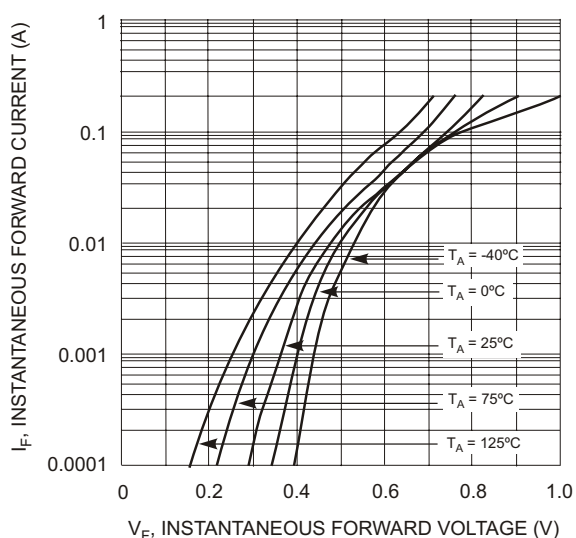
Characteristic	Symbol	Value	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	40	V
Forward Continuous Current (Note 1)	I _F	200	mA
Forward Surge Current (Note 1) @ t < 1.0s	I _{FSM}	600	mA
Power Dissipation (Note 1)	P _d	350	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R _{θJA}	357	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55 to +125	°C

Note: 1. Device on fiberglass substrate.

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 勝特力电子(上海) 86-21-54151736
 勝特力电子(深圳) 86-755-83298787
[Http://www.100y.com.tw](http://www.100y.com.tw)

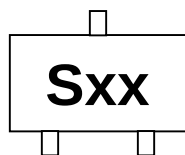
Maximum Ratings and Electrical Characteristics, Single Diode @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	40	—	—	V	@ $I_R = 10\mu\text{A}$
Forward Voltage	V_F	—	—	380 500 1000	mV	@ $I_F = 1.0\text{mA}$, $t_p < 300\mu\text{s}$ @ $I_F = 10\text{mA}$, $t_p < 300\mu\text{s}$ @ $I_F = 40\text{mA}$, $t_p < 300\mu\text{s}$
Reverse Leakage Current	I_R	—	20	200	nA	@ $V_R = 30\text{V}$, $t_p < 300\mu\text{s}$
Junction Capacitance	C_j	—	4.0	5.0	pF	$V_R = 0\text{V}$, $f = 1.0\text{MHz}$
Reverse Recovery Time	t_{rr}	—	—	5.0	nS	$I_F = 10\text{mA}$ through $I_R = 10\text{mA}$ to $I_R = 1.0\text{mA}$, $R_L = 100\Omega$



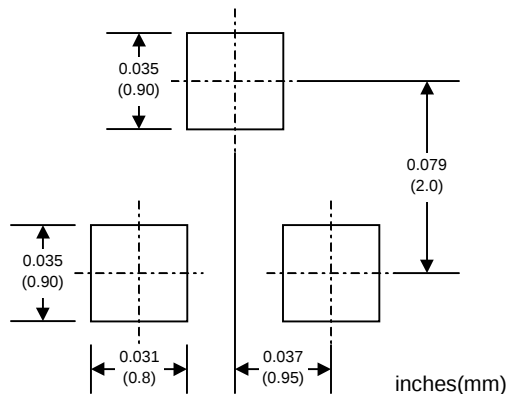
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MARKING INFORMATION



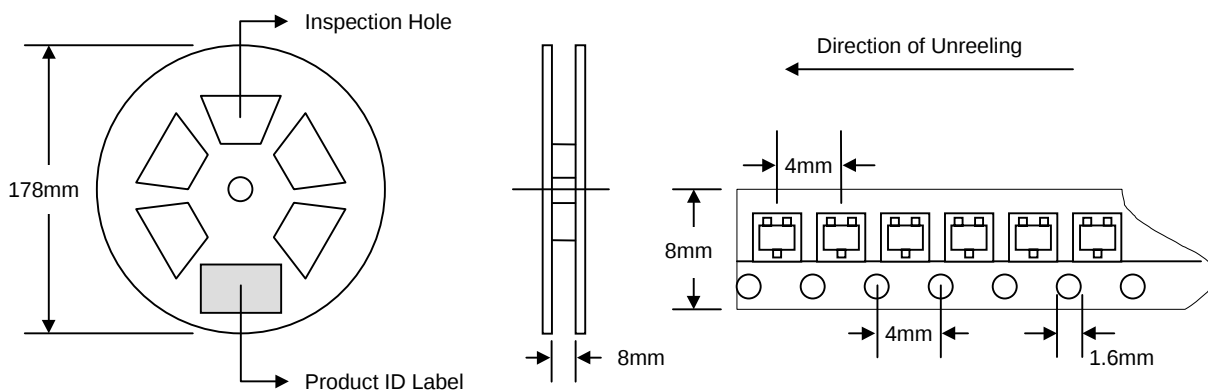
Sxx = Device Code
 xx = 40 (BAS40)
 42 (BAS40A)
 43 (BAS40C)
 44 (BAS40S)

RECOMMENDED FOOTPRINT



PACKAGING INFORMATION

TAPE & REEL



Reel Diameter (mm)	Quantity (PCS)	Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
178	3,000	187 x 187 x 65	15,000	390 x 240 x 420	150,000	10.0

Note: 1. Anti-static plastic reel, white, water clear or blue color. Inspection hole might be varied in different alignment.
 2. Components are packed in accordance with EIA standard 481-1 and 481-2.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
BAS40-T1	SOT-23	3000/Tape & Reel
BAS40A-T1	SOT-23	3000/Tape & Reel
BAS40C-T1	SOT-23	3000/Tape & Reel
BAS40S-T1	SOT-23	3000/Tape & Reel

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. To order RoHS / Lead Free version (with Lead Free finish), add “-LF” suffix to part number above. For example, BAS40-T1-LF.

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