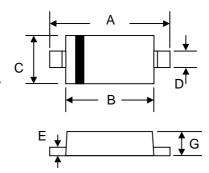


# SURFACE MOUNT SCHOTTKY BARRIER DIODE

#### **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



SOD-323				
Dim	Min	Max		
Α	2.30	2.70		
В	1.75	1.95		
С	1.15	1.35		
D	0.25	0.35		
E	0.05	0.15		
G	0.70	0.95		
Н	0.30			
All Dimensions in mm				

## **Mechanical Data**

Case: SOD-323, Molded Plastic

 Terminals: Plated Leads Solderable per MIL-STD-202, Method 208

Polarity: Cathode Band

Weight: 0.004 grams (approx.)

Marking: S40

## Maximum Ratings @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	BAS40WS	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	ee 40 CC	V
Forward Continuous Current (Note 1)	lF	200	mA
Forward Surge Current @ t < 1.0s	IFSM	600	mA
Power Dissipation (Note 1)	Pd	200	mW
Typical Thermal Resistance, Junction to Ambient Air (Note 1)	R ⊕ JA	625	°C/W
Operating and Storage Temperature Range	Тj, Тsтg	-55 to +150	°C

## Electrical Characteristics @TA=25°C unless otherwise specified

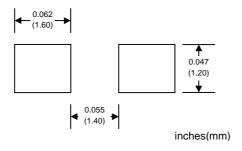
Characteristic	Symbol	Min	Тур	Max	Unit	Test Condition
Reverse Breakdown Voltage	V(BR)R	40	_	_	V	@ IR = 10μA
Forward Voltage	VF	_	_	380 500 1000	mV	@ IF = 1.0mA, t < 300μs @ IF = 10mA, t < 300μs @ IF = 40mA, t < 300μs
Reverse Leakage Current	lR	_	20	200	nA	@ V <sub>R</sub> = 30V, t < 300µs
Junction Capacitance	Cj	_	4.0	5.0	pF	V <sub>R</sub> = 0V, f = 1.0MHz
Reverse Recovery Time	trr		_	5.0	nS	IF = 10mA through IR = 10mA to IR = 1.0mA, RL = $100 \Omega$

Note: 1. Device on fiberglass substrate.

#### **ORDERING INFORMATION**

Product No.◆	Package Type	Shipping Quantity
BAS40WS-T1	SOD-323	5000/Tape & Reel
BAS40WS-T3	SOD-323	10000/Tape & Reel

### RECOMMENDED FOOTPRINT



Won-Top Electronics Co., Ltd (WTE) has checked all information carefully and believes it to be correct and accurate. However, WTE cannot assume any responsibility for inaccuracies. Furthermore, this information does not give the purchaser of semiconductor devices any license under patent rights to manufacturer. WTE reserves the right to change any or all information herein without further notice.

WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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We power your everyday.

Products listed in **bold** are WTE **Preferred** devices.

T1 suffix refers to a 7" reel. T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.