



# BAS40W/AW/CW/SW

SURFACE MOUNT SCHOTTKY DIODES

**Voltage Range 40 Volts**

**Current 0.2 Amperes**

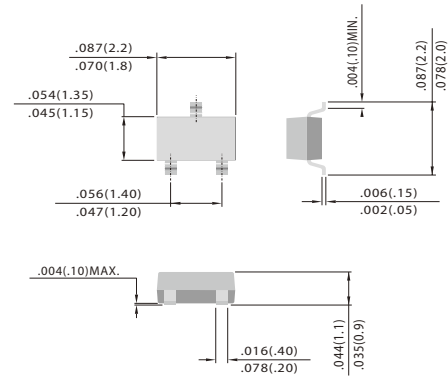
## Features

- \* Fast switching speed
- \* Surface mount package ideally suited for automatic insertion Electrical identical standard JEDEC
- \* High conductor
- \* Both normal and Pb free product are available :  
 Normal : 80~95% Sn, 5~20% Pb  
 Pb free: 98.5% Sn above

## Mechanical Data

Case: SOT-323, Plastic  
 Terminals: Solderable per MIL-STD-202, Method 208  
 Approx. Weight: 0.0052 gram  
 Marking: S40,S42,S43,S44

## SOT-323



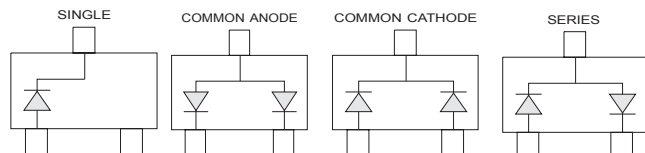
Dimensions in millimeters

## Absolute Ratings

PARAMETER	Symbol	BAS40WS	Units
Reverse Voltage	$V_R$	40	V
Peak Reverse Voltage	$V_{RRM}$	40	V
Average Rectified Current at Temp=25°C	$I_O$	0.2	A
Non-repetitive Peak Forward Surge Current at t=1.0 s	$I_{FSM}$	0.6	A

## Thermal Characteristics

PARAMETER	Symbol	BAS40WS	Units
Power Dissipation	$P_{TOT}$	225	mW
Thermal Resistance , Junction to Ambient	$R_{\theta JA}$	556	°C/W
Junction Temperature	$T_J$	150	°C
Storage Temperature at Temp=25°C	$T_{ISG}$	-55 to 150	°C
Circuit Figure		SINGLE    COMMON ANODE    COMMON CATHODE    SERIES	





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## Electrical Characteristics

PARAMETER	Symbol	Test Condition	MIN.	TYP.	MAX.	Unit s
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10 \mu A$	40	-	-	V
Reverse Current	$I_R$	$V_R=30 V$ $V_R=40 V$	--	-	1.0 10	$\mu A$
Forward Voltage	$V_F$	$I_F=1.0mA$ $I_F=10mA$ $I_F=40mA$	--	-	0.38 0.50 1.00	V
Total Capacitance	$C_T$	$V_R=0V, f=1.0MHz$	--	-	5.0	pF

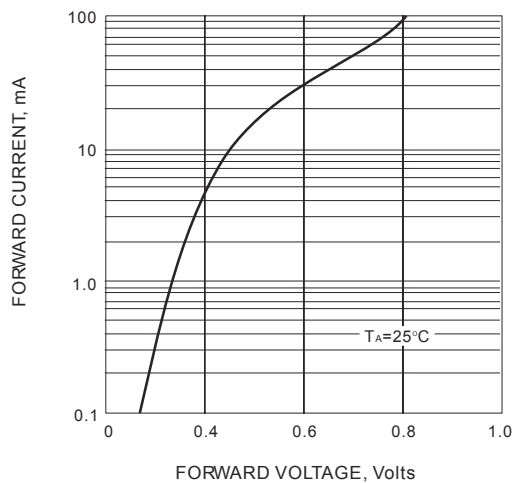


Fig.1 Typical Forward Characteristic

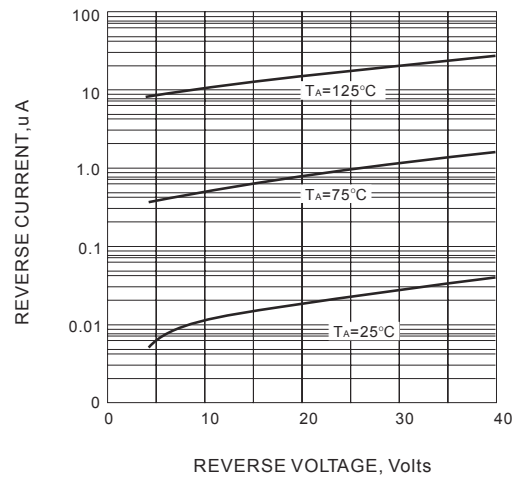


Fig.2 Typical Reverse Characteristics

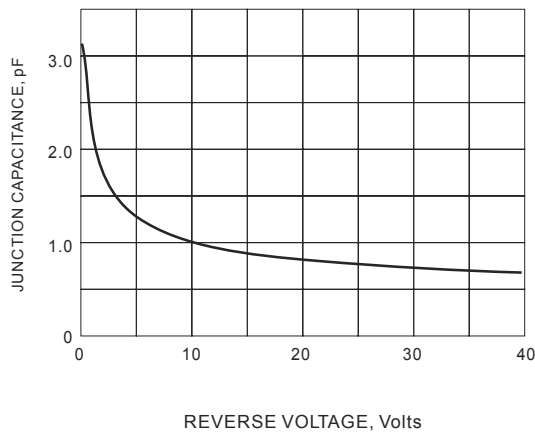


Fig.3 Typical Junction Capacitance

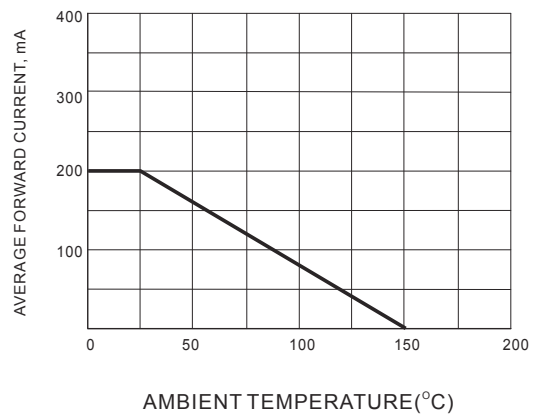


Fig.4 Forward Current Derating



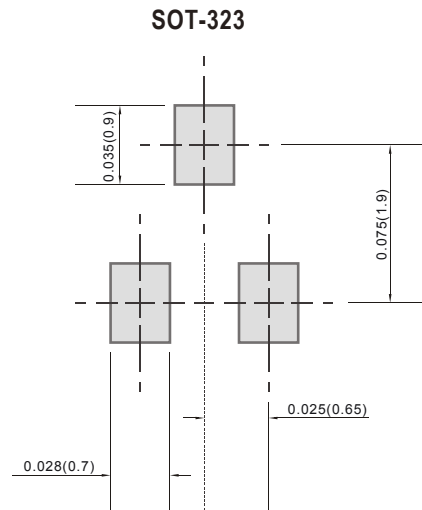
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## Mounting Pad Layout



## Order Information

Packing information

T/R - 12K per 13" plastic Reel

T/R - 3.0K per 7" plastic Reel

## Legal Statement

### \* Important Notice

This information is intended to unambiguously characterize the product in order to facilitate the customer's evaluation of the device in the application. The information will help the customer's technical experts determine that the device is compatible and interchangeable with similar devices made by other vendors. The information in this data sheet is believed to be reliable and accurate. The specifications and information herein are subject to change without notice. New products and improvements in products and product characterization are constantly in process. Therefore, the factory should be consulted for the most recent information and for any special characteristics not described or specified.

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