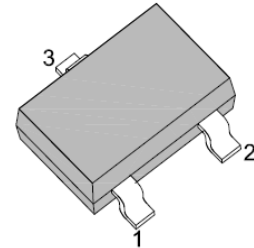


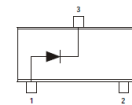
### Three Terminals Surface Mount Switching Diode

#### Features

- Fast switching speed
- Surface mount package ideally suited for automatic insertion
- Electrically identical to standard JEDEC
- High conductance
- RoHS Compliant



**SOT-323**



#### Mechanical Data

<b>Case:</b>	SOT-323, Plastic Case
<b>Terminals:</b>	Solderable per MIL-STD-202, Method 208
<b>Weight:</b>	Approx. 0.0052 gram

#### Maximum Ratings & Electrical Characteristics ( $T_{Ambient}=25^{\circ}C$ unless noted otherwise)

Symbol	Description	BAS19WS	BAS21WS	Unit	Conditions
	Marking Code	A8	A82		
<b>V<sub>R</sub></b>	Reverse Voltage	100	200	V	
<b>V<sub>RRM</sub></b>	Peak Reverse Voltage	120	250	V	
<b>I<sub>F(AV)</sub></b>	Average Forward Current	200		mA	Half wave rectification with resistive load and $f \geq 50\text{Hz}$
<b>I<sub>FSM</sub></b>	Peak Forward Surge Current, Pulse Width=1.0 $\mu$ s	2.5		A	
<b>P<sub>D</sub></b>	Power Dissipation above 25 $^{\circ}C$	200		mW	
<b>V<sub>F</sub></b>	Forward Voltage	1.0		V	I <sub>F</sub> =100mA
<b>I<sub>R</sub></b>	Max. Reverse Current	0.1		$\mu$ A	T <sub>J</sub> =25 $^{\circ}C$
<b>C<sub>D</sub></b>	Diode Capacitance	5.0		pF	V <sub>R</sub> =0V, f=1MHz
<b>T<sub>rr</sub></b>	Reverse Recovery Time	50		nS	I <sub>F</sub> =10mA, I <sub>R</sub> =1mA, V <sub>R</sub> =6V, R <sub>L</sub> =100 $\Omega$
<b>R<sub>thJA</sub></b>	Maximum Thermal Resistance, Junction to Ambient	625		$^{\circ}C / W$	
<b>T<sub>J</sub>, T<sub>STG</sub></b>	Operating Junction and Storage Temperature Range	-55 to +150		$^{\circ}C$	

# Three Terminals Surface Mount Switching Diode

## BAS19WS/BAS21WS

### Typical Characteristics Curves

Fig.1- Forward Power Dissipation Derating Curve

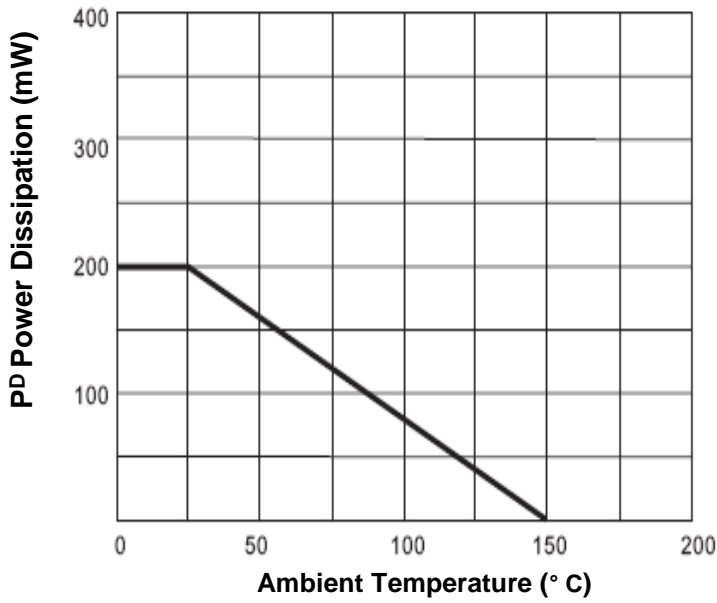


Fig.2- Typical Instantaneous Forward Characteristics

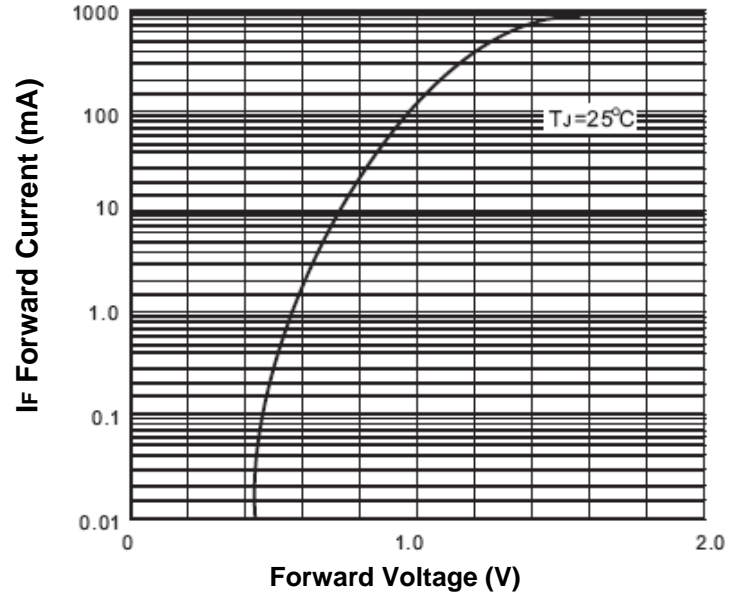


Fig.3- Leakage Current vs. Junction Temperature

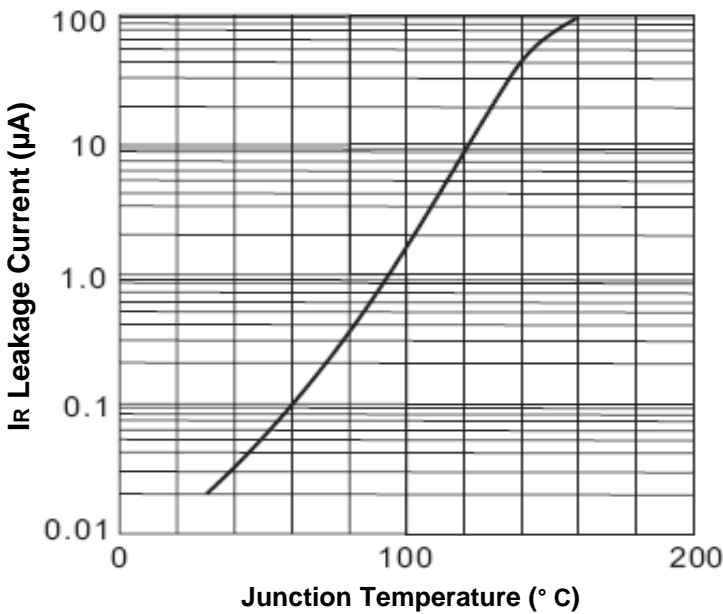
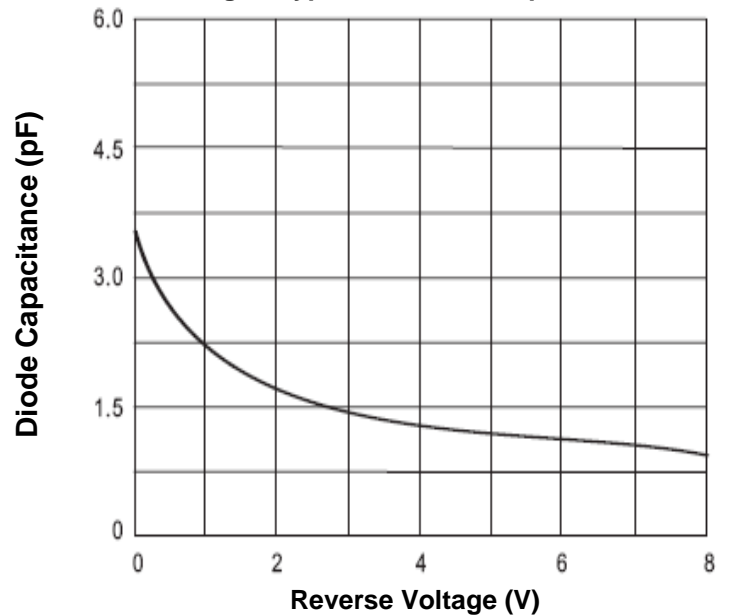


Fig.4- Typical Junction Capacitance

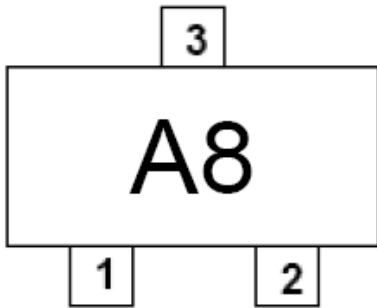


# Three Terminals Surface Mount Switching Diode

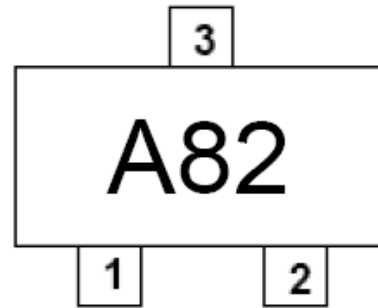
## BAS19WS/BAS21WS

### Marking Information

BAS19WS

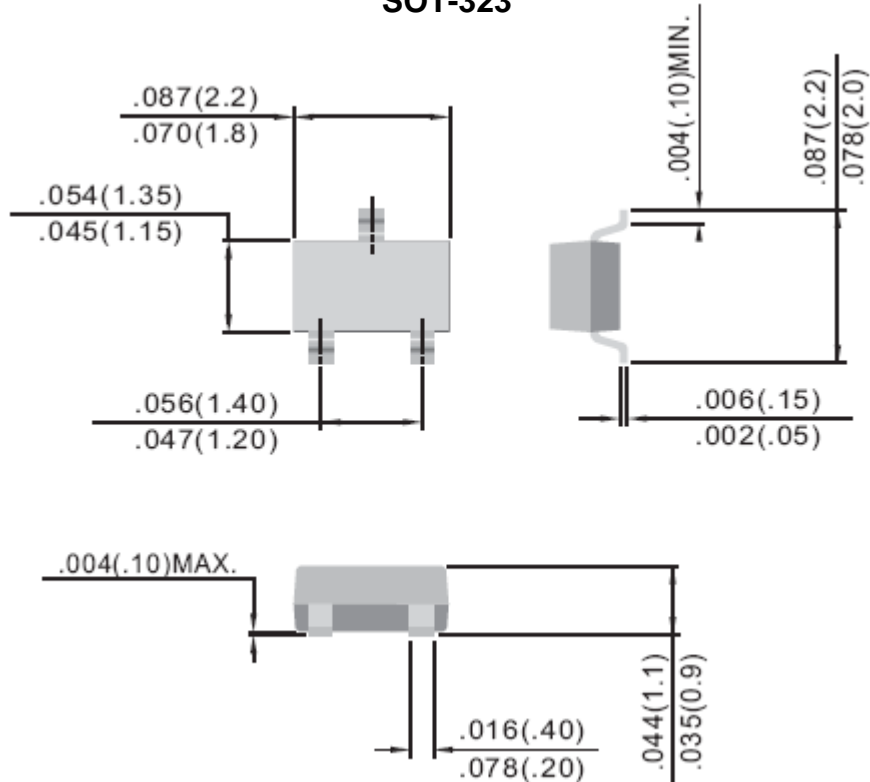


BAS21WS



### Dimensions in inch (mm)

SOT-323



# Three Terminals Surface Mount Switching Diode

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## BAS19WS/BAS21WS

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