

## Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

### Features:

- \* LOW Turn-on Voltage
- \* Fast Switching
- \* PN Junction Guard for Transient and ESD Protection
- \* Designed for Surface Mount Application

### Mechanical Data:

- \* Case: SOD-323,
- \* Plastic Material –UL Recognition Flammability Classification 94V-0
- \* Leads: Solderable per MIL-STD-202, Method 208
- \* Polarity: Cathode Band
- \* Weight: 0.004 grams(approx.)

**SCHOTTKY DIODE**

**70 mAMPERES**

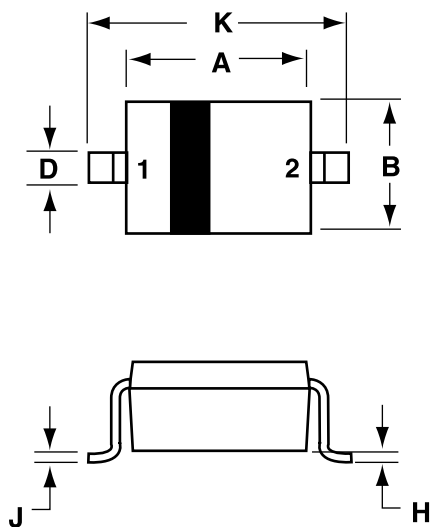
**70 VOLTS**



**SOD-323**

## SOD-323 Outline Demensions

Unit:mm



Dim	MILLMETERS	
	Min	Max
<b>A</b>	1.60	1.80
<b>B</b>	1.15	1.35
<b>C</b>	0.80	1.00
<b>D</b>	0.25	0.40
<b>E</b>	0.15 REF	
<b>H</b>	0.00	0.10
<b>J</b>	0.089	0.377
<b>K</b>	2.30	2.70

PIN 1.CATHODE  
2.ANODE


## Maximum Ratings (T<sub>A</sub>=25°C Unless otherwise noted)

Characteristic	Symbol	Value	Unit
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	70	V
Forward Continuous Current	I <sub>F</sub>	70	mA
Peak forward surge current @<1.0s	I <sub>FSM</sub>	100	mA
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	625	K/W
Junction temperature Range	T <sub>J</sub>	150	°C
Storage temperature Range	T <sub>STG</sub>	-55 to +150	°C

## Electrical Characteristics (T<sub>A</sub>=25°C Unless otherwise noted)

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage I <sub>F</sub> =1.0mA I <sub>F</sub> =15mA	V <sub>F</sub>	-	-	0.41 1.0	V
Reverse Current V <sub>R</sub> =50V	I <sub>R</sub>	-	-	100	nA
Total Capacitance V <sub>R</sub> =0V, f=1.0MHz	C <sub>T</sub>	-	-	2	pF
Reverse Recovery Time I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1 x I <sub>R</sub> , R <sub>L</sub> =100Ω	t <sub>rr</sub>	-	-	5	ns

## Device Marking

Item	Marking	Equivalent Circuit diagram
BAS70WS	K73	

## Electrical Characteristic curves(Ta=25°C)

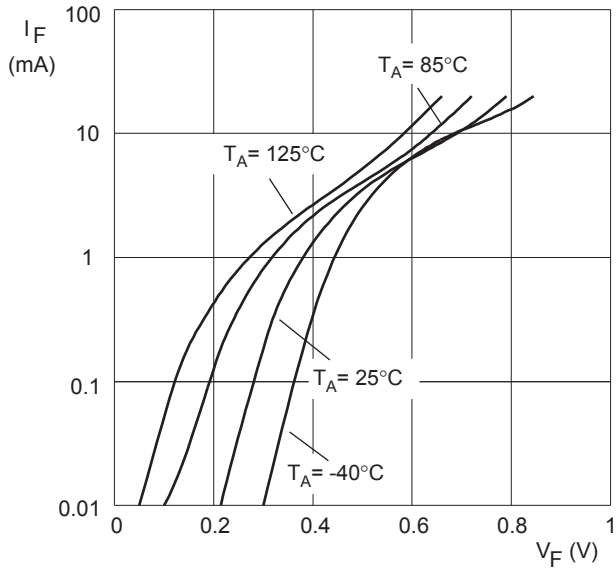


Fig.1 Forward current as a function of forward voltage; typical values.

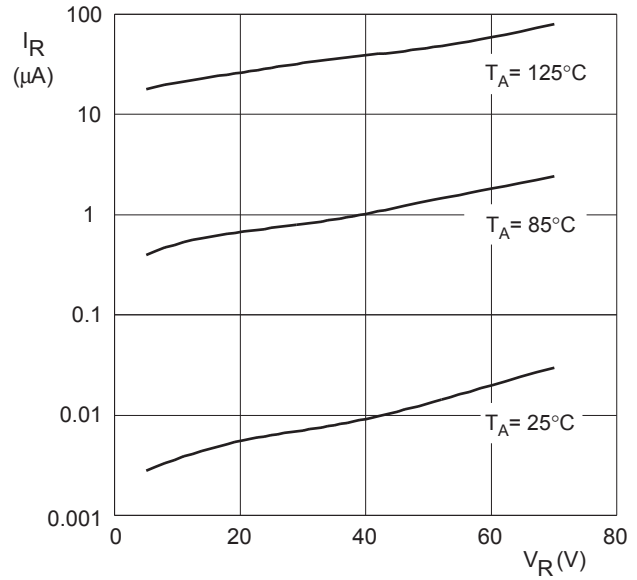


Fig.2 Reverse current as a function of reverse voltage; typical values.

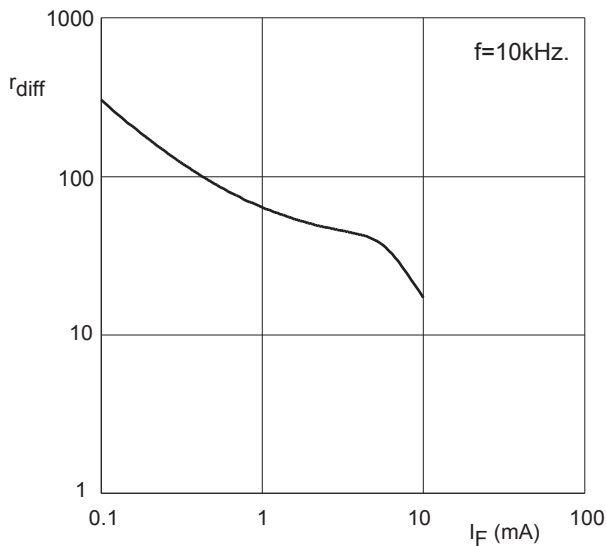


Fig.3 Differential forward resistance as a function of forward current.

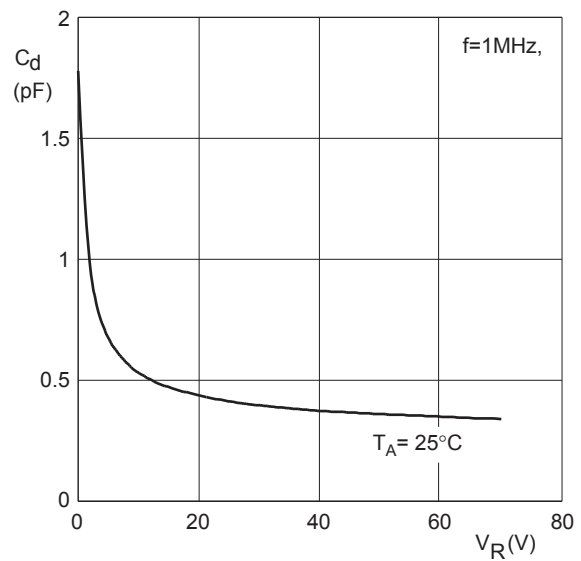


Fig.4 Diode capacitance as a function of reverse voltage.