

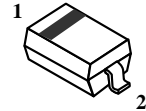
## Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

### Features:

- \* High Breakdown Voltage.
- \* Low Turn-on Voltage.
- \* Gurad Ring Construction for Transient Protection.

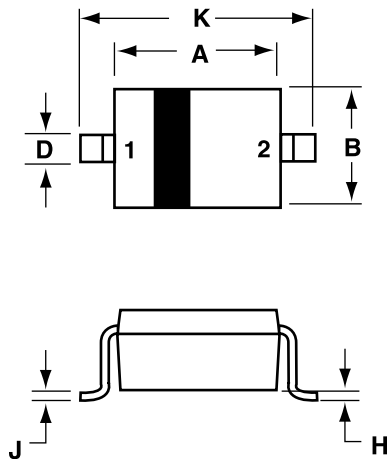
**SCHOTTKY DIODE**  
**100 VOLTS**  
**75m AMPERES**



**SOD-123**

## SOD-123 Outline Dimensions

Unit:mm



SOD-123		
Dim	Min	Max
<b>A</b>	2.55	2.85
<b>B</b>	1.40	1.80
<b>C</b>	0.95	1.35
<b>D</b>	0.50	0.70
<b>E</b>	0.30 REF	
<b>H</b>	-	0.10
<b>J</b>	-	0.15
<b>K</b>	3.55	3.85

PIN 1. CATHODE  
 2. ANODE

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

Characteristic	Symbol	Value	Unit
DC Reverse Voltage	V <sub>R</sub>	100	V
Average Rectifier Forward Current	I <sub>O</sub>	75	mA
Forward Continuous Current <sup>1</sup>	I <sub>F</sub>	150	mA
Repetitive Peak Forward Current <sup>1</sup> t <sub>p</sub> < 1.0s, Duty Cycle < 50%	I <sub>FRM</sub>	350	mA
Forward Surge Forward Current <sup>1</sup> t <sub>p</sub> = 10ms	I <sub>FSM</sub>	750	mA
Power Dissipation	P <sub>D</sub>	200	mW
Thermal Resistance, Junction to Ambient	R <sub>θJA</sub>	500	°C/W
Operation Junction Temperature Range	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-55 to +125	°C

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

Characteristic	Symbol	Min	Typ	Max	Unit
Forward Voltage t <sub>p</sub> <300S, duty Cycle<2% I <sub>F</sub> =0.1mA I <sub>F</sub> =10mA I <sub>F</sub> =250mA	V <sub>F</sub>	-	-	0.25 0.45 1.0	V
Reverse Leakage t <sub>p</sub> <300S, duty Cycle<2% V <sub>R</sub> =1.5V V <sub>R</sub> =1.5V, T <sub>j</sub> =60°C V <sub>R</sub> =1.0V V <sub>R</sub> =1.0V, T <sub>j</sub> =60°C V <sub>R</sub> =50V V <sub>R</sub> =50V, T <sub>j</sub> =60°C V <sub>R</sub> =75V V <sub>R</sub> =75V, T <sub>j</sub> =60°C	I <sub>R</sub>	-	-	0.5 5.0 0.8 7.5 2.0 15 5.0 20	μA
Total Capacitance V <sub>R</sub> =0V, f=1.0MHz V <sub>R</sub> =1.0V, f=1.0MHz	C <sub>J</sub>	-	10 6.0	-	pF

Note: 1. Valid Provided that terminals are kept at specified ambient temperature.

## Electrical Characteristic curves( $T_A=25^{\circ}\text{C}$ )

