

### Surface Mount Schottky Barrier Diode

 Lead(Pb)-Free

#### Features:

- \* Low Forward Voltage :  $V_F = 0.28(\text{Typ.}) @ I_F = 1\text{mA}$
- \* Low Reverse Current :  $I_R = 5\mu\text{A}(\text{Max.})$
- \* Small outline Surface mount SOD-323 Package

#### Mechanical Data:

- \* Terminals : Solderable Per MIL-STD-202 Method 208
- \* Polarity : See Equivalent Circuit Diagram.
- \* Weight : 0.004 grams(approx)

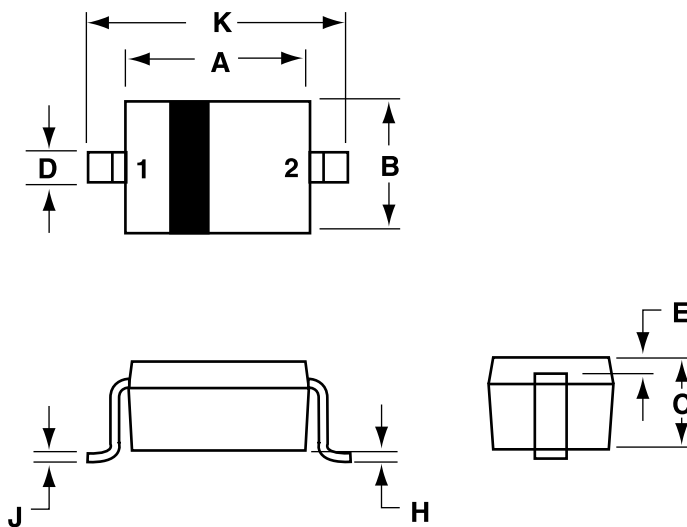
**SCHOTTKY BARRIER**  
**100m AMPERES**  
**40 VOLTS**



**SOD-323**

### SOD-323 Outline Dimensions

Unit:mm



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

**PIN 1.CATHODE**  
**2.ANODE**

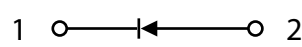
## MAXIMUM RATING (T<sub>A</sub>=25°C)

Characteristics	Symbol	Value	Unit
Peak Reverse Voltage	V <sub>RM</sub>	45	V
Continuous Reverse Voltage	V <sub>R</sub>	40	V
Average Rectified Forward Current	I <sub>O</sub>	100	mA
Peak Forward Surge Current	I <sub>FSM</sub>	1.0	A
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature	T <sub>stg</sub>	-55 to+125	°C

## ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C)

Characteristics	Symbol	Min	Typ	Max	Unit
Maximum Instantaneous Forward Voltage I <sub>F</sub> =1mA I <sub>F</sub> =10mA I <sub>F</sub> =100mA	V <sub>F</sub>		0.28 0.36	0.6	V
Maximum Instantaneous Reverse Current V <sub>R</sub> =40V	I <sub>R</sub>			5	μA
Capacitance Between terminals V <sub>R</sub> =0V, f=1MHz	C <sub>T</sub>			25	pF

## Device Marking & Equivalent Circuit diagram

Item	Marking	Equivalent Circuit diagram
1SS357	S31	

## Electrical Characteristic Curves ( $T_A=25^\circ\text{C}$ Unless Specified Otherwise)

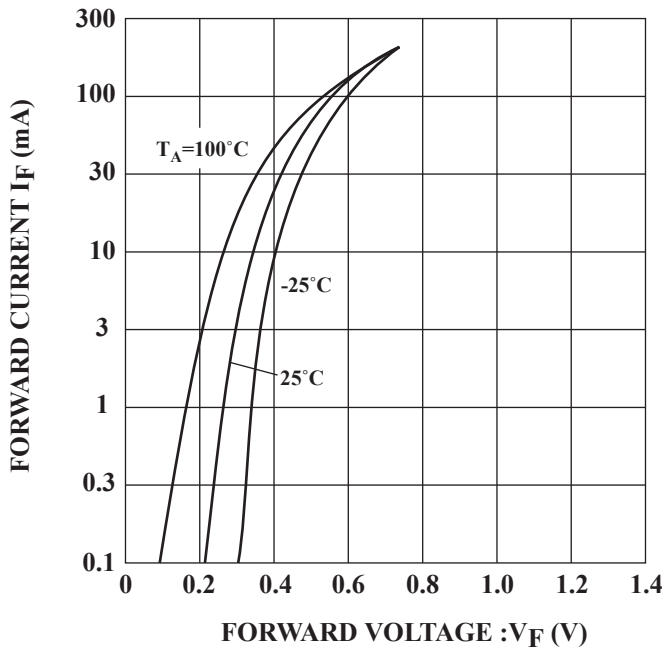


Fig.1 Forward Characteristics

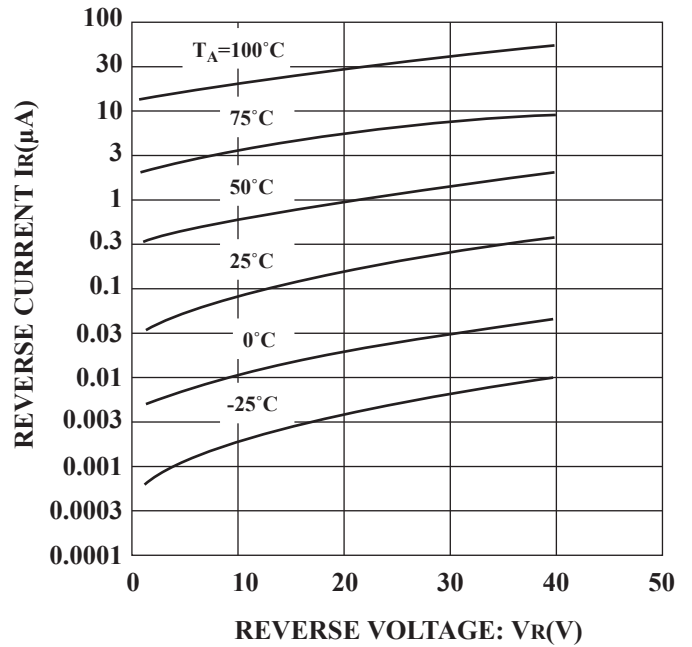


FIG.2 Reverse Characteristics

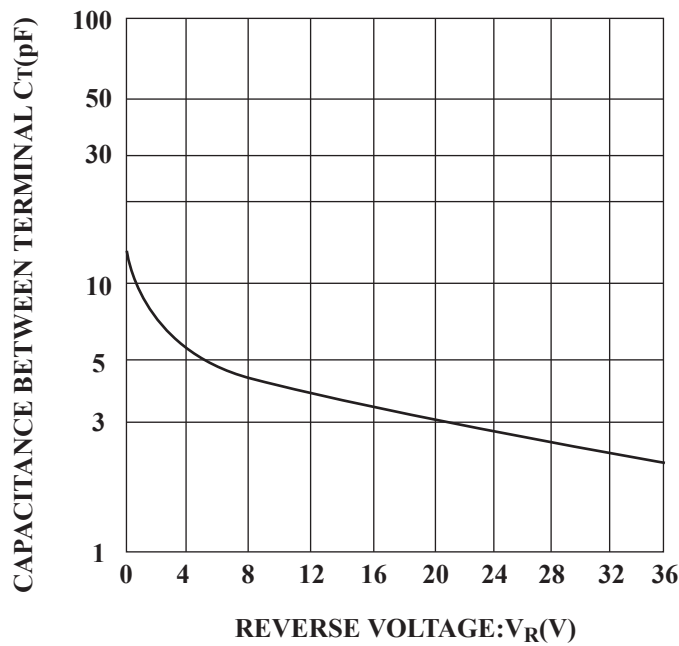


FIG.3 Capacitance Between Terminal Characteristics