

Surface Mount Schottky Barrier Diode

(Pb) Lead(Pb)-Free

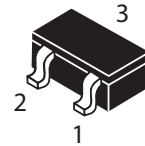
Features:

- *Low Turn-on Voltage
- *Fast Switching
- *PN Junction Guard Ring for Transient and ESD Protection

Mechanical Data:

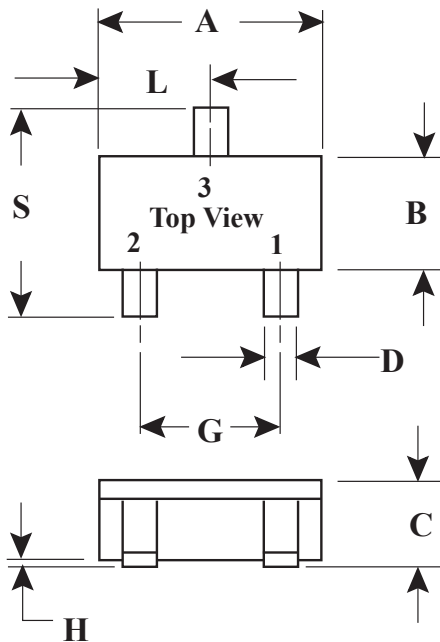
- *Case : SOT-346, Molded Plastic
- *Terminals : Solderable per MIL-STD-202, Method 208
- *Polarity : See Diagrams Below
- *Weight : 0.008 grams (approx.)
- *Mounting Position : Any

**SCHOTTKY BARRIER
RECTIFIERS
1.0AMPERES
20-40VOLTS**



SC-59

SC-59 Outline Dimension



SC-59		
Dim	Min	Max
A	2.70	3.10
B	1.30	1.70
C	1.00	1.30
D	0.35	0.50
G	1.70	2.30
H	0.00	0.10
J	0.10	0.26
K	0.20	0.60
L	1.25	1.65
S	2.25	3.00
All Dimension in mm		

Maximum Ratings and Electrical Characteristics



Rating 25°C Ambient Temperature Unless Otherwise Specified.

Single Phase Half Wave, 60Hz , Resistive or Inductive Load.

For Capacitive Load, Derate Current by 20%.

Type Number	WSD491	WSD490	Unit
Maximum Recurrent Peak Reverse Voltage	25	40	V
Maximum RMS Voltage	14	28	V
Maximum DC Blocking Voltage	20	40	V
Maximum Average Forward Rectified Current	1.0		A
Peak Forward Surge Current, 8.3 ms Single Half Sine-Wave Superimposed on Rated Load (JEDEC Method)	3.0		A
Maximum Instantaneous Forward Voltage at 1.0A	0.45	0.53	V
Maximum DC Reverse Current Ta=25°C	0.2		mA
At Rated DC Blocking Voltage Ta=100°C	4.0		mA
Operating Temperature Range Tj	-25....+ 125		°C
Storage Temperature Range T _{STG}	-50....+ 125		°C

Device Marking

Item	Marking	Equivalent Circuit diagram
WSD491	10T	
WSD490	10F	

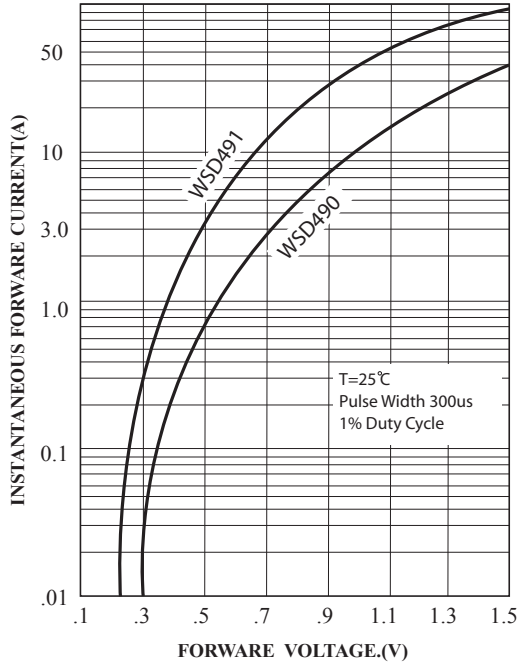


FIG.1 Typical Forward Characteristics

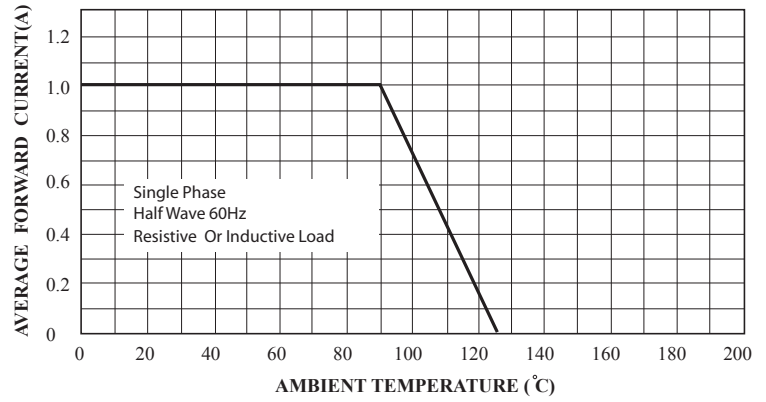


FIG.2 Typical Forward Current Derating Curve

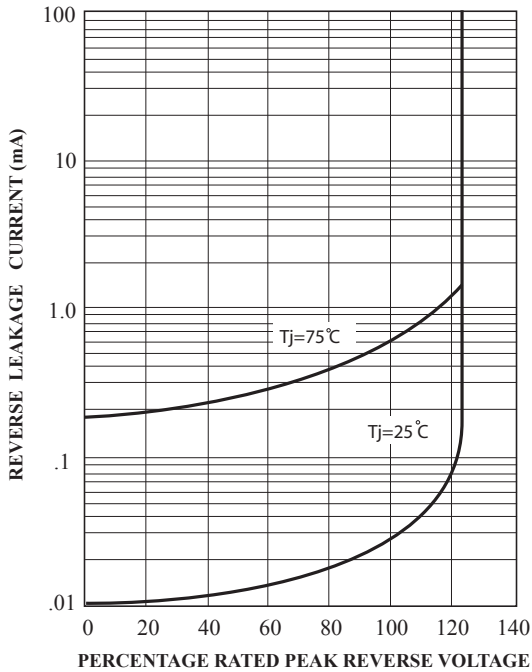


FIG.3 Typical Reverse Characteristics

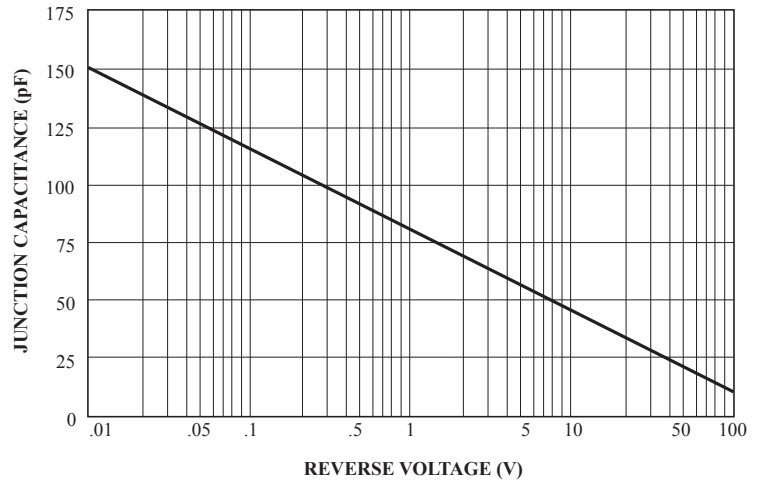


FIG.4 Typical Junction Capacitance