

# DEC

## ER490 / ER491

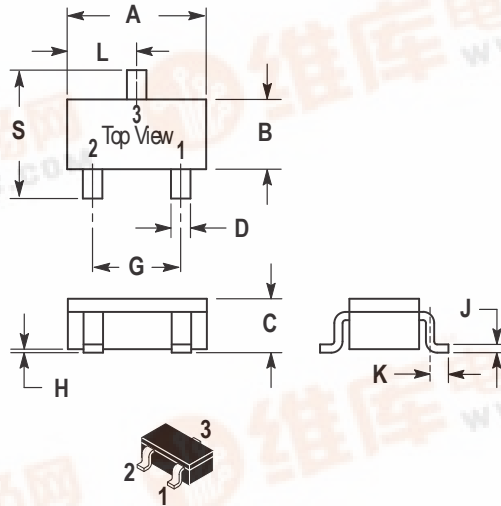
CURRENT 1.0 Ampere  
VOLTAGE 20 to 40 Volts

### Features

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

### Mechanical Data

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



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		



ER491 Marking : 10T



ER490 Marking : 10F

### Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

Type Number	ER491	ER490	Units
Maximum Recurrent Peak Reverse Voltage	20	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 method (JEDEC)	5.00		A
Maximum Instantaneous Forward Voltage At 1.0A	0.45	0.53	V
Maximum D.C. Reverse Current @ T <sub>A</sub> =25°C	0.1		mA
At Rated DC Blocking Voltage @ T <sub>A</sub> =100°C	4.0		mA
Operating Junction Temperature Range T <sub>J</sub>	-25+125		°C
Storage Temperature Range T <sub>STG</sub>	-50+125		°C



## RATINGS AND CHARACTERISTIC CURVES ER490 / ER491

FIG.1-TYPICAL FORWARD CHARACTERISTICS

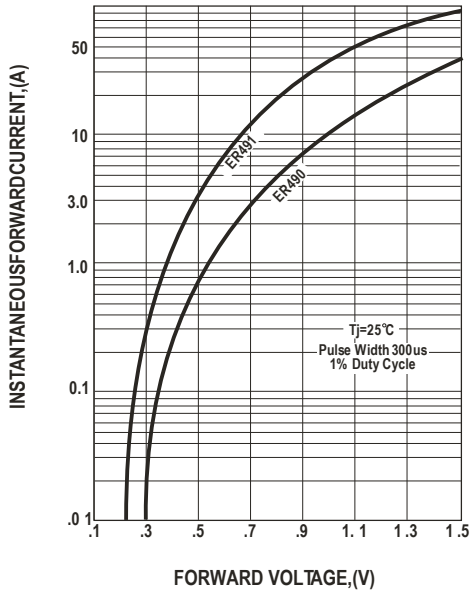


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

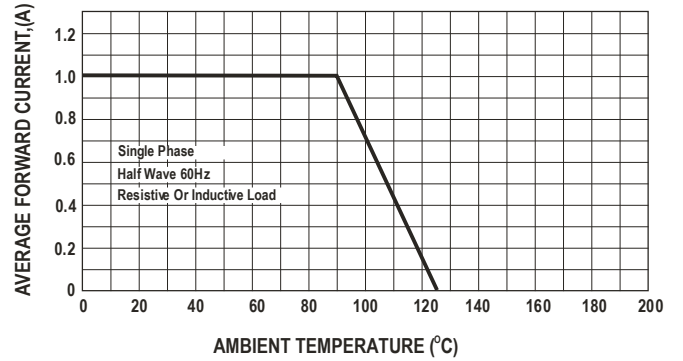


FIG.3 - TYPICAL REVERSE CHARACTERISTICS

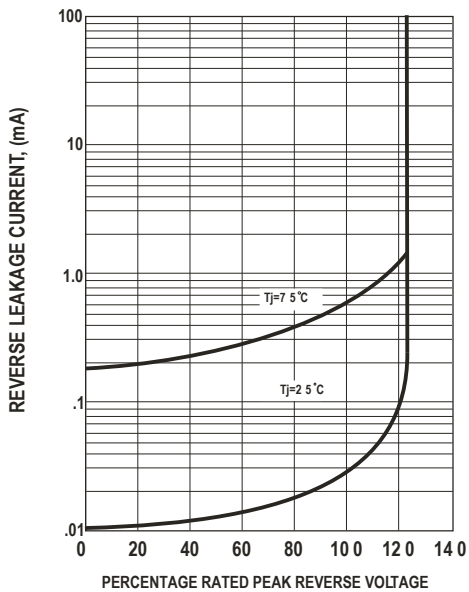


FIG.4-TYPICAL JUNCTION CAPACITANCE

