

# 1N5399G-E-47L

**GENERAL PURPOSE  
GLASS PASSIVATED JUNCTION RECTIFIER  
VOLTAGE: 1000V                      CURRENT: 1.5A**



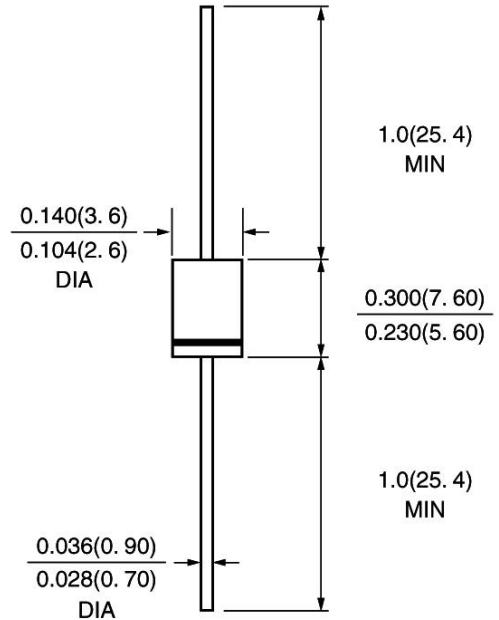
## FEATURE

Molded case feature for auto insertion  
Glass Passivated junction  
High current capability  
Low leakage current  
High surge capability  
High temperature soldering guaranteed  
260°C/10sec/0.375" lead length  
Halogen Free

## MECHANICAL DATA

Terminal: Plated axial leads solderable per J-STD-002  
Case: Molded with UL-94 Class V-0 recognized Halogen Free Epoxy  
Polarity: color band denotes cathode  
Mounting position: any

## DO-15\DO-204AC



Dimensions in inches and (millimeters)

## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(single-phase, half -wave, 60HZ, resistive or inductive load rating at 25°C, unless otherwise stated)

	Symbol	1N5399G-E-47L	units
* Maximum Recurrent Peak Reverse Voltage	V <sub>rrm</sub>	1000	V
* Maximum RMS Voltage	V <sub>rms</sub>	700	V
* Maximum DC blocking Voltage	V <sub>dc</sub>	1000	V
* Maximum Average Forward Rectified Current 3/8" lead length at Ta =55°C	I <sub>f(av)</sub>	1.5	A
* Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I <sub>fsm</sub>	50.0	A
* Maximum Instantaneous Forward Voltage at rated Forward Current	V <sub>f</sub>	1.4	V
* Maximum DC Reverse Current at rated DC blocking voltage	I <sub>r</sub>	10.0 200.0	μA
Typical Reverse Recovery Time (Note1)	T <sub>rr</sub>	2000	nS
Typical Junction Capacitance (Note 2)	C <sub>j</sub>	15.0	pF
Typical Thermal Resistance (Note 3)	R <sub>th(ja)</sub>	50.0	°C/W
* Storage and Operation Junction Temperature	T <sub>stg</sub>	-50 to +150	°C

Note:

- Reverse Recovery Condition I<sub>f</sub> =0.5A, I<sub>r</sub> =1.0A, I<sub>rr</sub> =0.25A
  - Measured at 1.0 MHz and applied voltage of 4.0Vdc
  - Thermal Resistance from Junction to Ambient at 0.375" lead length, P.C. Board Mounted
- \* JEDEC Registered value

# RATINGS AND CHARACTERISTIC CURVES 1N5399G-E-47L

Fig. 1 Forward Current Derating Curve

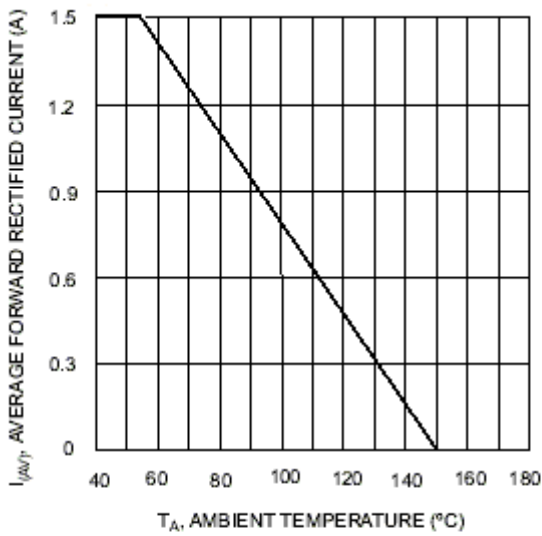


Fig. 2 Typical Forward Characteristics

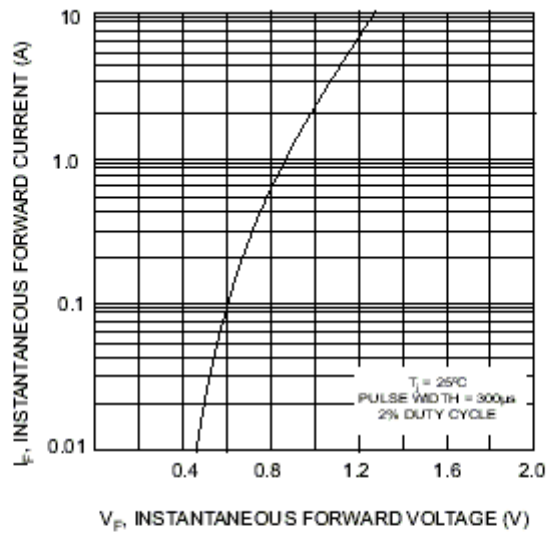


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

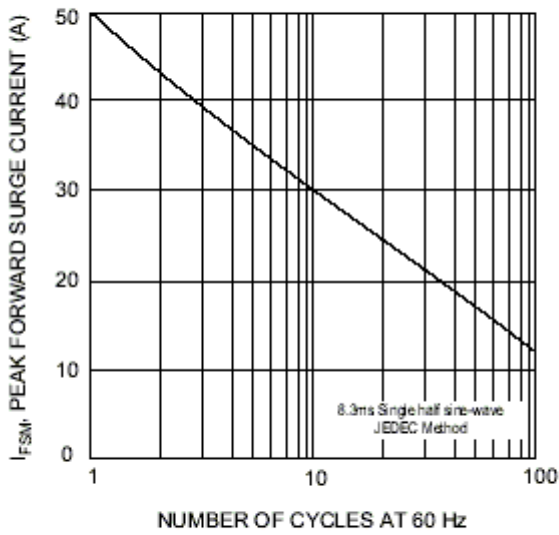


Fig. 4 Typical Junction Capacitance

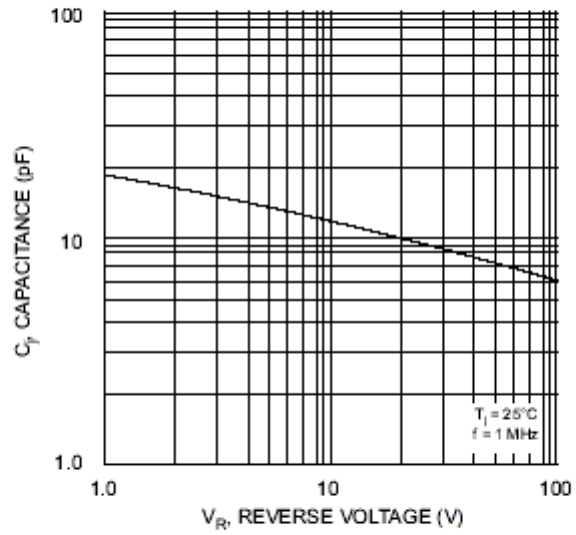


Fig. 5 Typical Reverse Characteristics

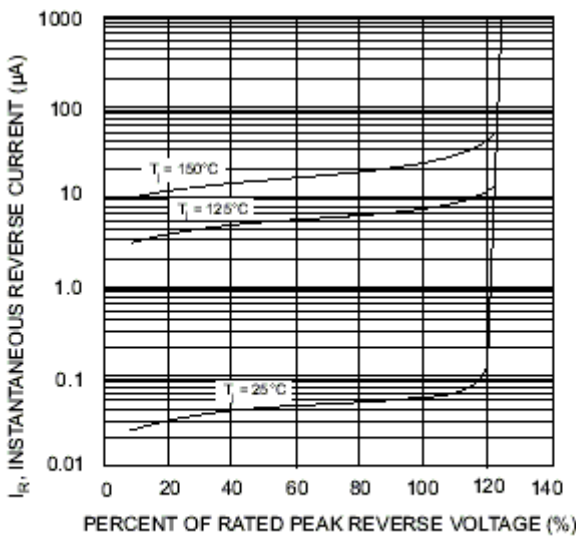


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

