

# 1N5399-E

## GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 1000V

CURRENT: 1.5A



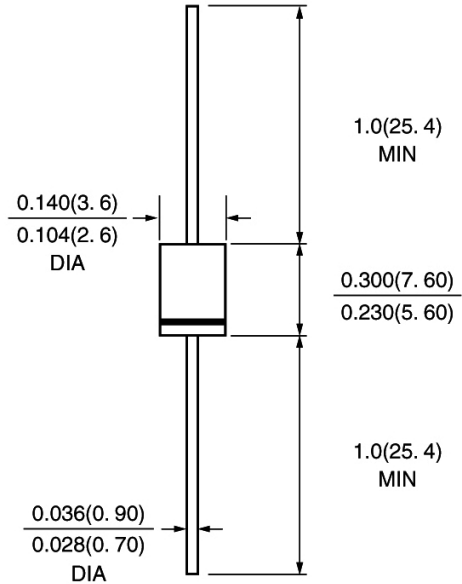
### FEATURE

Molded case feature for auto insertion  
High current capability  
Low leakage current  
High surge capability  
High temperature soldering guaranteed  
250°C/10sec/0.375" lead length at 5 lbs tension  
Halogen Free

### MECHANICAL DATA

Terminal: Plated axial leads solderable per  
MIL-STD 202E, method 208C  
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, for capacitive load, derate current by 20%)

	SYMBOL	1N5399-E	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 T <sub>a</sub> =25°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 1.5A	V <sub>f</sub>	1.4	V
* Maximum full load reverse current full cycle at T <sub>L</sub> =70°C	I <sub>r(av)</sub>	300.0	μA
* Maximum DC Reverse Current at rated DC blocking voltage T <sub>a</sub> =25°C	I <sub>r</sub>	10.0	μA
Typical Junction Capacitance (Note 1)	C <sub>j</sub>	200.0	μA
Typical Thermal Resistance (Note 2)	R <sub>th(ja)</sub> R <sub>th(jl)</sub>	15.0	pF
		50.0 25.0	°C/W
* Storage and Operation Junction Temperature	T <sub>j</sub> , T <sub>stg</sub>	-50 to +150	°C

Note:

1. Measured at 1.0 MHz and applied voltage of 4.0Vdc
  2. Thermal Resistance from Junction to Ambient and from Junction to Lead at 0.375" lead length, P.C. Board Mounted
- \* JEDEC Registered value

Rev.A1

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# RATINGS AND CHARACTERISTIC CURVES 1N5399-E

Fig. 1 Forward Current Derating Curve

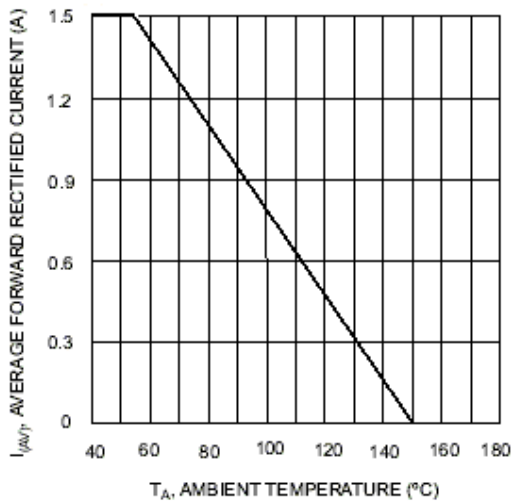


Fig. 2 Typical Forward Characteristics

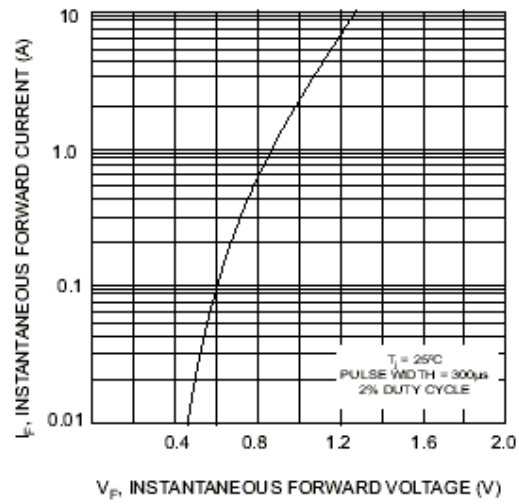


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

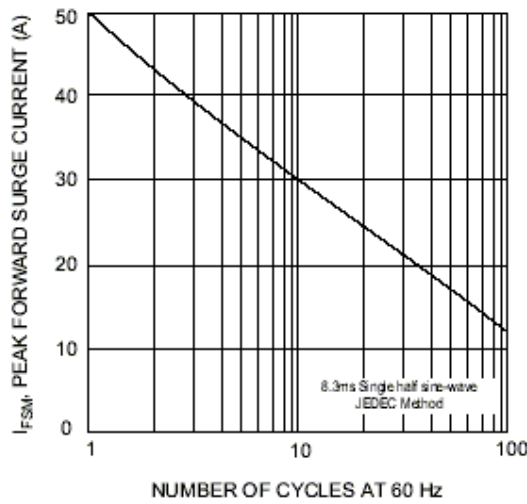


Fig. 4 Typical Junction Capacitance

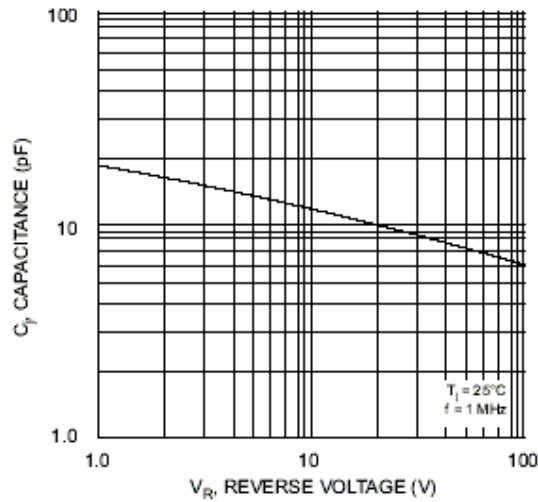


Fig. 5 Typical Reverse Characteristics

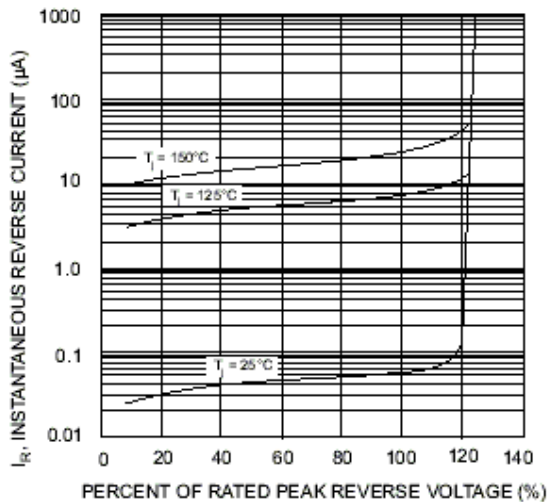


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

