

1N5399-E

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 1000V

CURRENT: 1.5A



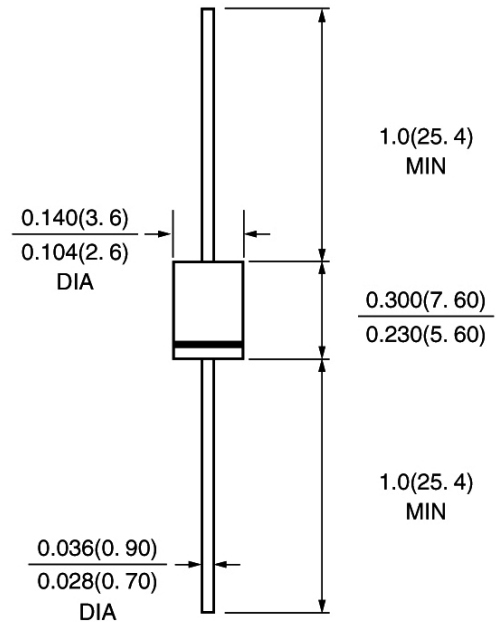
FEATURE

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 _{rrm}	1000	V
* Maximum RMS Voltage	V _{rms}	700	V
* Maximum DC blocking Voltage	V _{dc}	1000	V
* Maximum Average Forward Rectified Current 3/8" lead length at T _a =25°C	I _{f(av)}	1.5	A
* Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	I _{fsm}	50.0	A
* Maximum Instantaneous Forward Voltage at 1.5A	V _f	1.4	V
* Maximum full load reverse current full cycle at T _L =70°C	I _{r(av)}	300.0	μA
* Maximum DC Reverse Current at rated DC blocking voltage T _a =25°C T _a =125°C	I _r	10.0 200.0	μA
Typical Junction Capacitance (Note 1)	C _j	15.0	pF
Typical Thermal Resistance (Note 2)	R _{th(ja)} R _{th(jl)}	50.0 25.0	°C/W
* Storage and Operation Junction Temperature	T _j , T _{stg}	-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

RATINGS AND CHARACTERISTIC CURVES 1N5399-E

Fig. 1 Forward Current Derating Curve

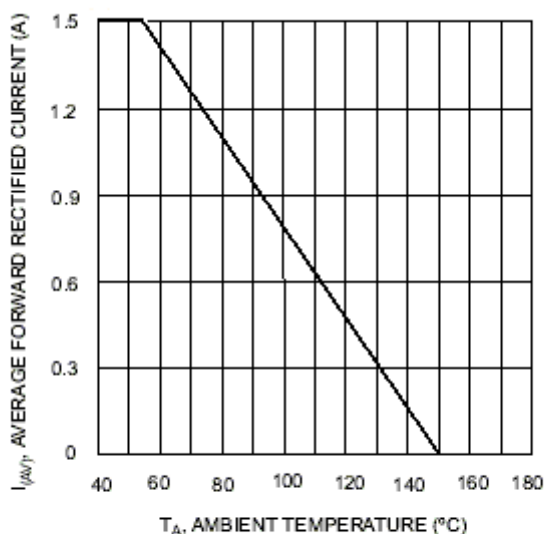


Fig. 2 Typical Forward Characteristics

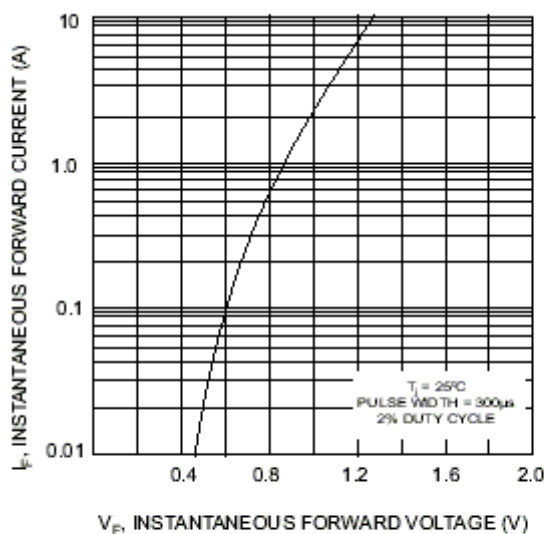


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

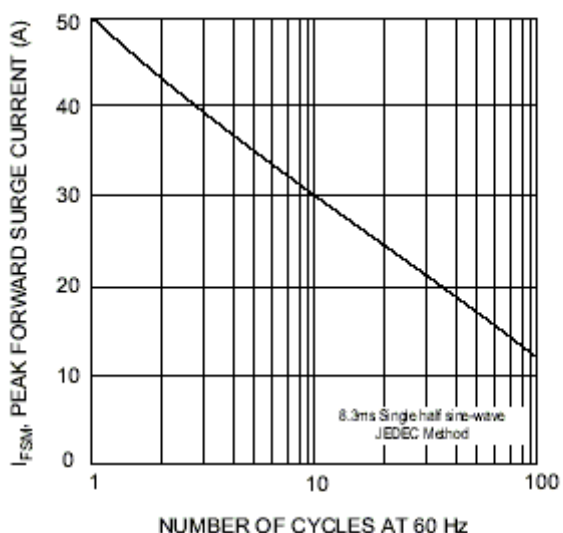


Fig. 4 Typical Junction Capacitance

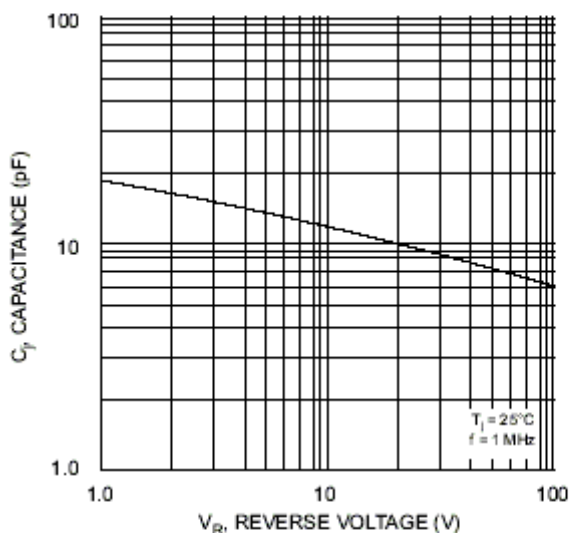


Fig. 5 Typical Reverse Characteristics

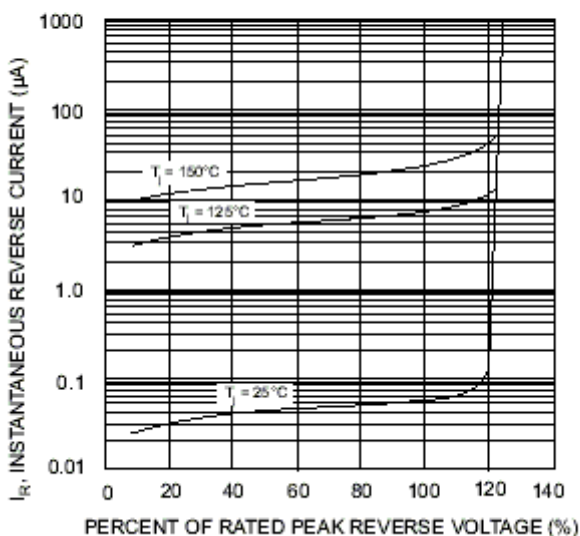


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

