

1N5391 THRU 1N5399

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE:50 TO 1000V CURRENT: 1.5A



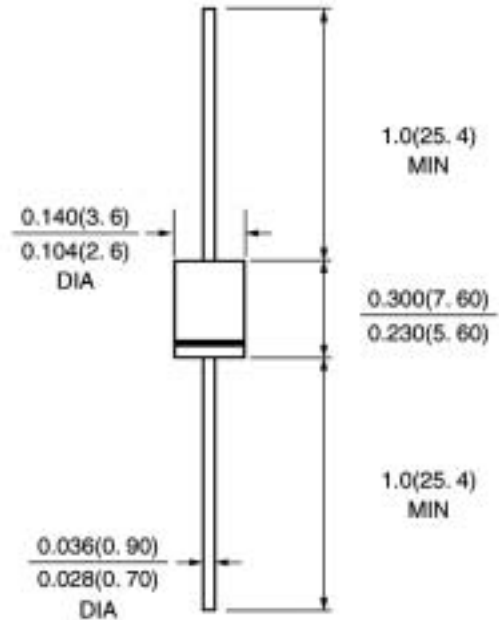
FEATURE

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

MECHANICAL DATA

Terminal:Plated axial leads solderable per MIL-STD 202E, method 208C
Case:Molded with UL-94 Class V-0 recognized Flame Retardant Epoxy
Polarity:color band denotes cathode
Mounting position:any

DO-15/DO-204C



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	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	units
* Maximum Recurrent Peak Reverse Voltage	V _{rrm}	50	100	200	300	400	500	600	800	1000	V
* Maximum RMS Voltage	V _{rms}	35	70	140	210	280	350	420	560	700	V
* Maximum DC blocking Voltage	V _{dc}	50	100	200	300	400	500	600	800	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	I _r	10.0 200.0									μA μA
Typical Junction Capacitance (Note 1)	C _j	15.0									pF
Typical Thermal Resistance (Note 2)	R(ja)	50.0									°C/W
* Storage and Operation Junction Temperature	T _{stg}	-50 to +150									°C

Note:

- 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 1N5391 THRU 1N5399

1

Fig. 1 Forward Current Derating Curve

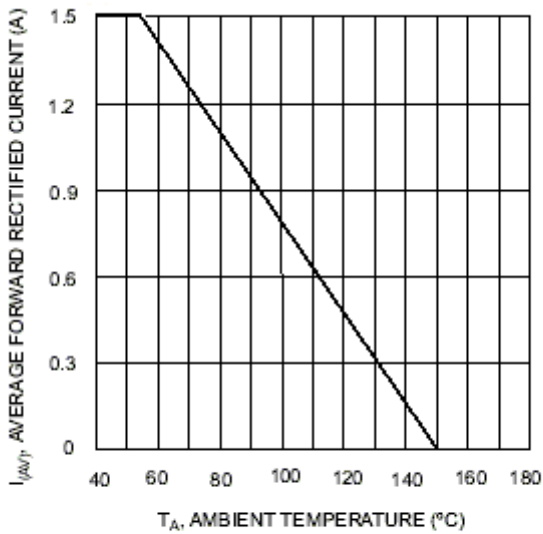


Fig. 2 Typical Forward Characteristics

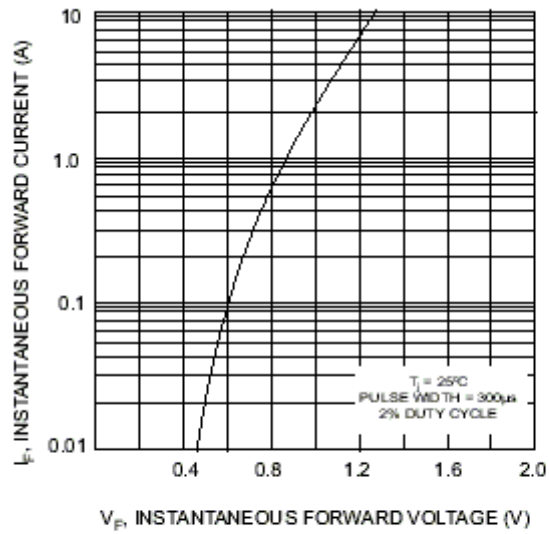


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

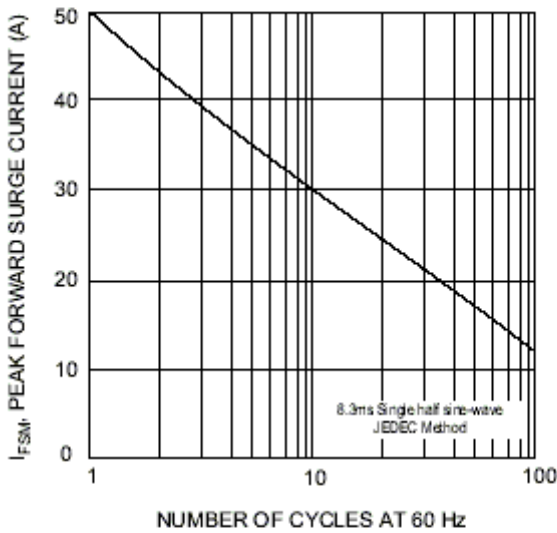


Fig. 4 Typical Junction Capacitance

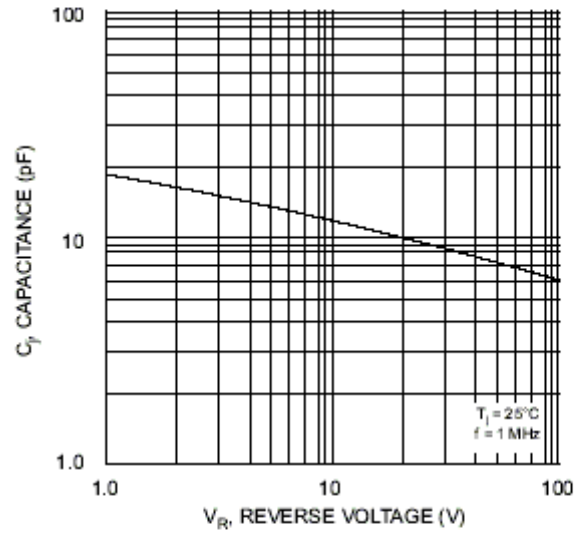


Fig. 5 Typical Reverse Characteristics

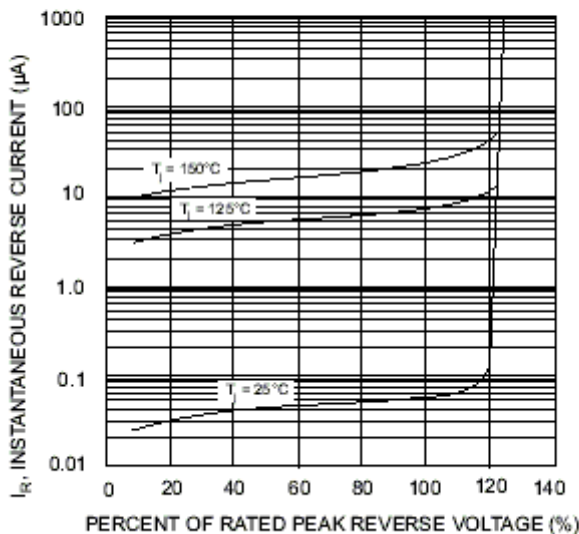


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

