

1N5391 THRU 1N5399

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 50 to 1000V

CURRENT: 1.5A



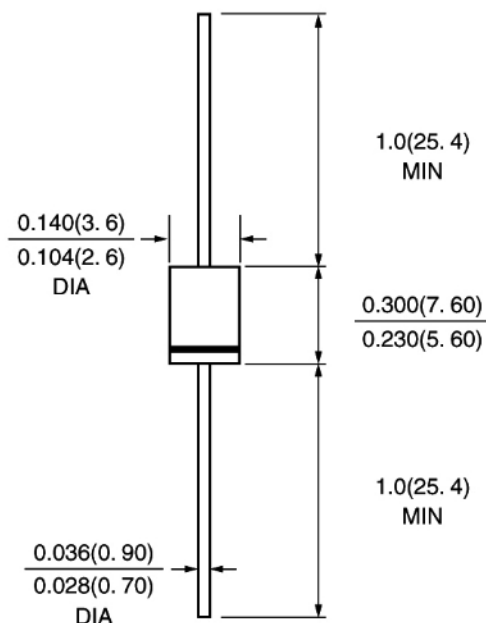
FEATURE

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-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	1N5 391	1N5 392	1N5 393	1N5 394	1N5 395	1N5 396	1N5 397	1N5 398	1N5 399	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 T _a = 25°C at rated DC blocking voltage T _a = 125°C	I _r	10.0 200.0									μA
Rating for fusing (1ms ≤ t < 10ms)	I ² t	12.5									A ² sec
Typical Junction Capacitance (Note 1)	C _j	15.0									pF
Typical Thermal Resistance (Note 2)	R _{th(ja)} R _{th(jc)}	50 13									°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 case at 0.375" lead length, P.C. Board Mounted
* JEDEC Registered value

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

Fig. 1 Forward Current Derating Curve

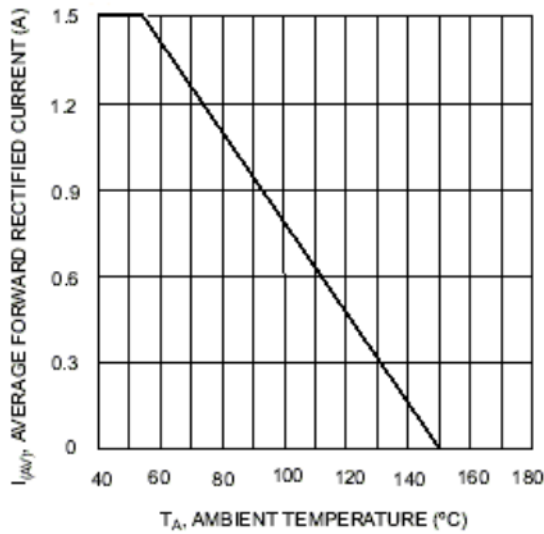


Fig. 2 Typical Forward Characteristics

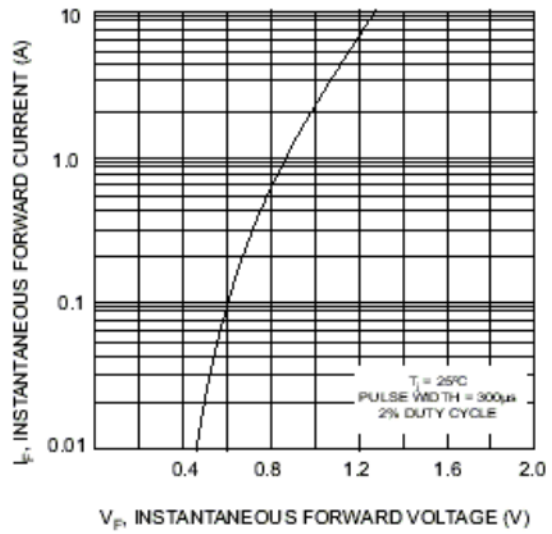


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

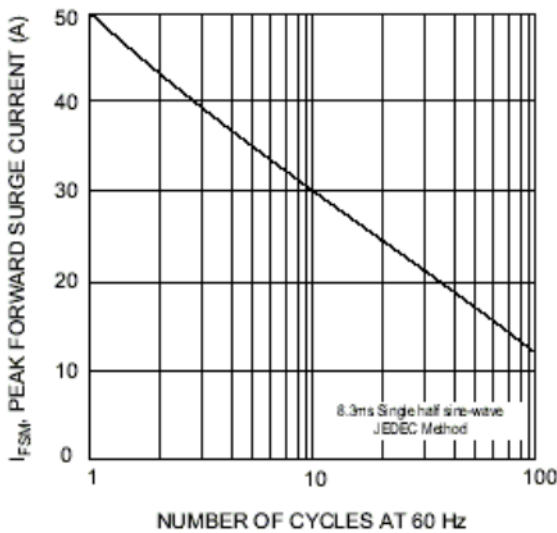


Fig. 4 Typical Junction Capacitance

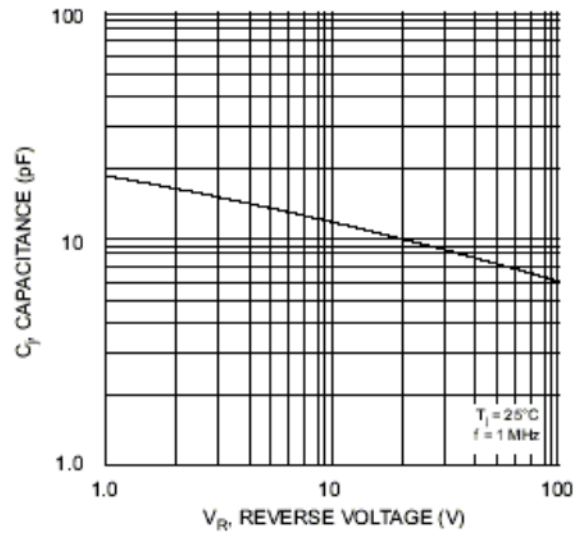


Fig. 5 Typical Reverse Characteristics

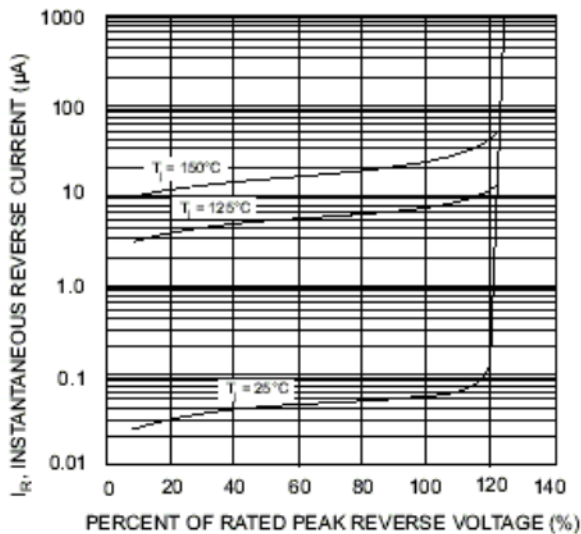


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

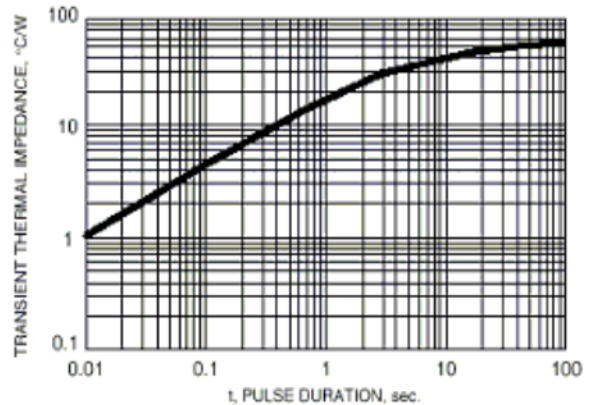


Fig. 7 — Maximum Non-Repetitive Peak Forward Surge Current
(0.5ms~10ms)

