1N5391 THRU 1N5399

GENERAL PURPOSE PLASTIC RECTIFIER

VOLTAGE: 50 to 1000V **CURRENT: 1.5A**

GULF SEMI

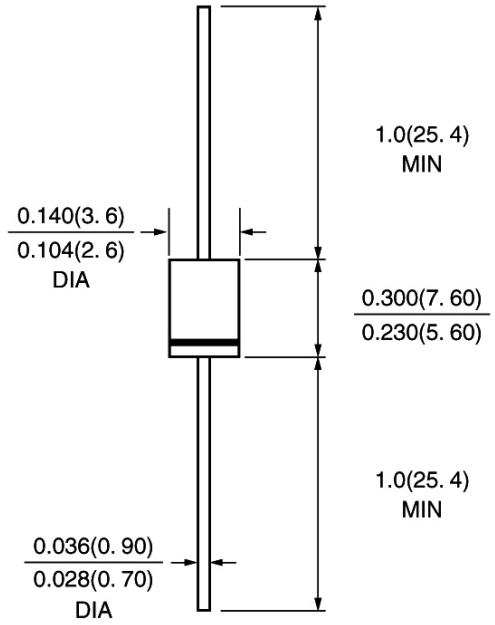
FEATURE

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	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	units
* Maximum Recurrent Peak Reverse Voltage	Vrrm	50	100	200	300	400	500	600	800	1000	V
* Maximum RMS Voltage	Vrms	35	70	140	210	280	350	420	560	700	V
* Maximum DC blocking Voltage	Vdc	50	100	200	300	400	500	600	800	1000	V
* Maximum Average Forward Rectified Current 3/8”lead length at Ta =25°C	If(av)	1.5									A
* Peak Forward Surge Current 8.3ms single Half sine-wave superimposed on rated load	Ifsm	50.0									A
* Maximum Instantaneous Forward Voltage at 1.5A	Vf	1.4									V
* Maximum full load reverse current full cycle at T_L =70°C	Ir(av)	300.0									μA
* Maximum DC Reverse Current Ta =25°C at rated DC blocking voltage Ta =125°C	Ir	10.0 200.0									μA
Rating for fusing (1ms≤ t < 10ms)	I^2t	12.5									A^2sec
Typical Junction Capacitance (Note 1)	Cj	15.0									pF
Typical Thermal Resistance (Note 2)	Rth(ja) Rth(jc)	50 13									°C/W
* Storage and Operation Junction Temperature	Tj, Tstg	-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

Fig. 1 Forward Current Derating Curve

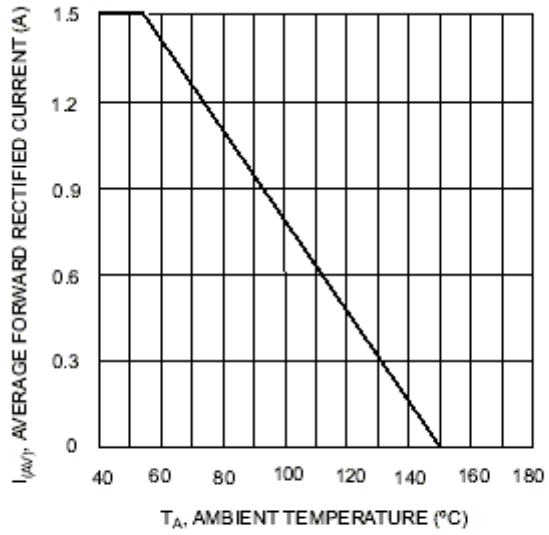


Fig. 2 Typical Forward Characteristics

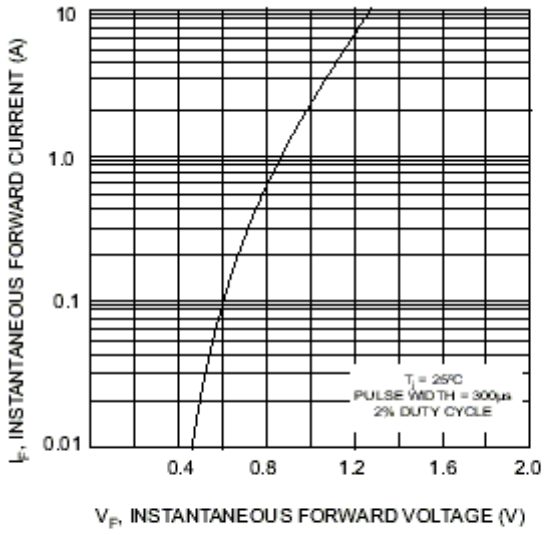


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

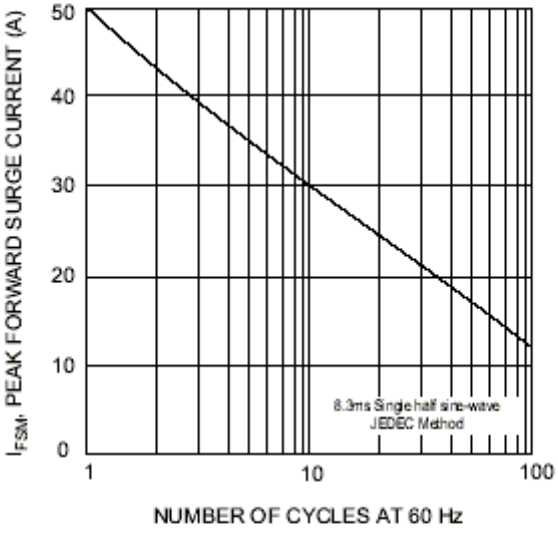


Fig. 4 Typical Junction Capacitance

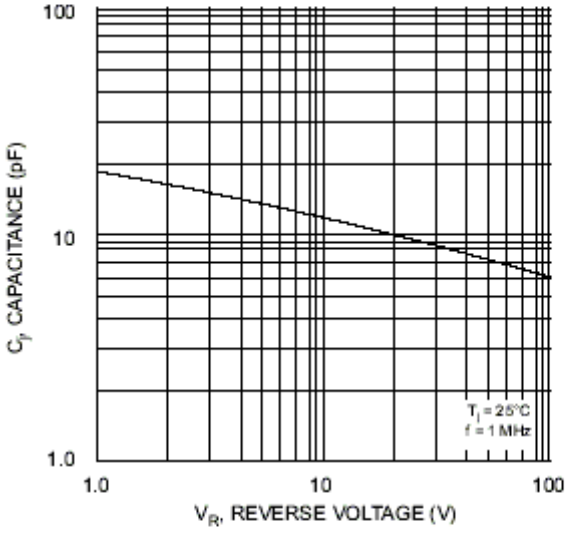


Fig. 5 Typical Reverse Characteristics

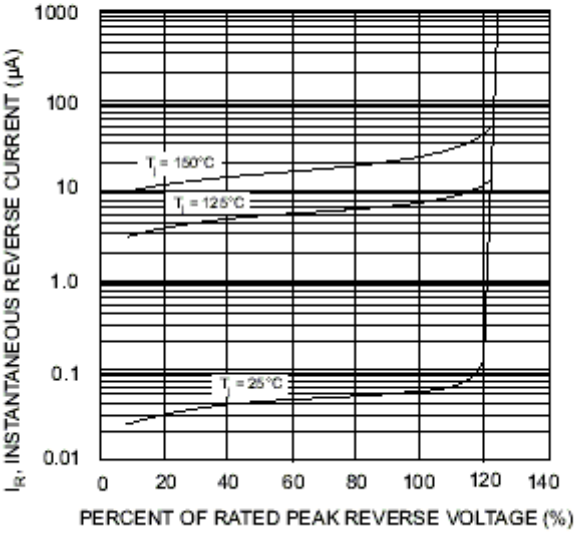


FIG. 6 - TYPICAL TRANSIENT THERMAL IMPEDANCE

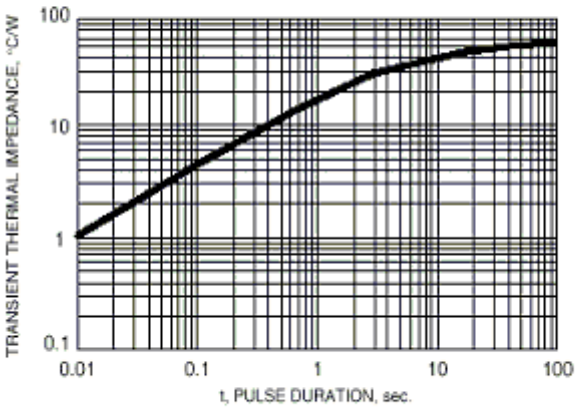


Fig. 7 — Maximum Non-Repetitive Peak Forward Surge Current (0.5ms～10ms)