



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**1N5391
THRU
1N5399**

TECHNICAL SPECIFICATIONS OF SILICON RECTIFIER

VOLTAGE RANGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

FEATURES

- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Lead: MIL-STD-202E, Method 208 guaranteed
- * Polarity: Color band denotes cathode end
- * Mounting position: Any
- * Weight: 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

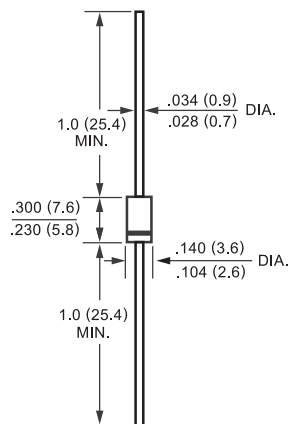
Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.



DO-15



Dimensions in inches and (millimeters)

		SYMBOL	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	UNITS
Maximum Recurrent Peak Reverse Voltage		VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length at T L = 70°C		Io	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		IFSM	50							Amps
Maximum Instantaneous Forward Voltage at 1.5A DC		VF	1.4							Volts
Maximum DC Reverse Current	@ TA = 25°C	IR	5.0							uAmps
at Rated DC Blocking Voltage	@ TA = 100°C		500							
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at T L = 75°C			30							
Typical Junction Capacitance (Note)		CJ	20							pF
Typical Thermal Resistance		R θ JA	50							°C/W
Operating and Storage Temperature Range		TJ, TSTG	-65 to + 175							°C

NOTES : Measured at 1 MHz and applied reverse voltage of 4.0 volts

RATING AND CHARACTERISTIC CURVES (1N5391 THRU 1N5399)

FIG. 1 - TYPICAL FORWARD CURRENT DERATING CURVE

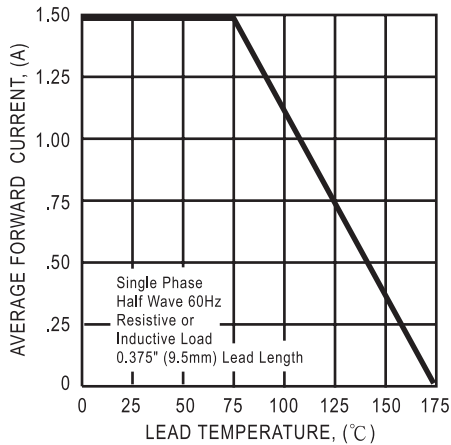


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

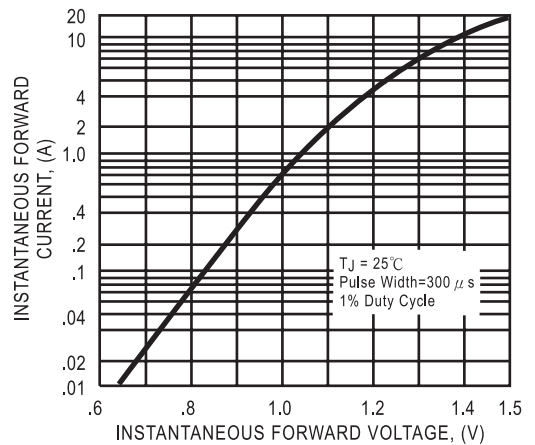


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

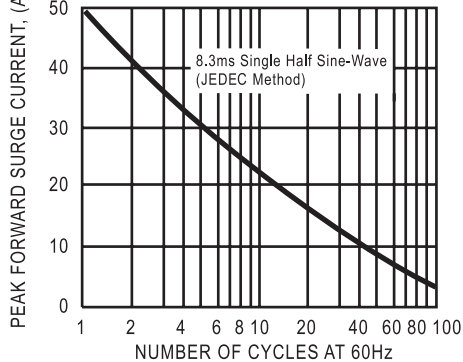


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

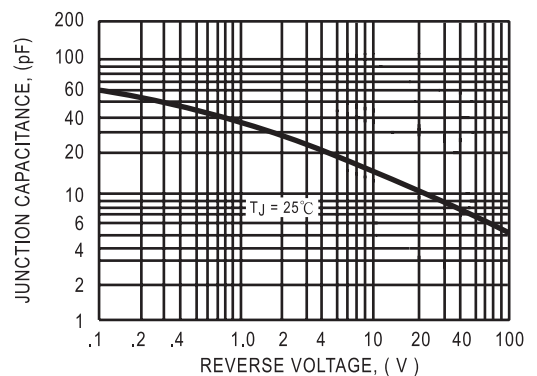
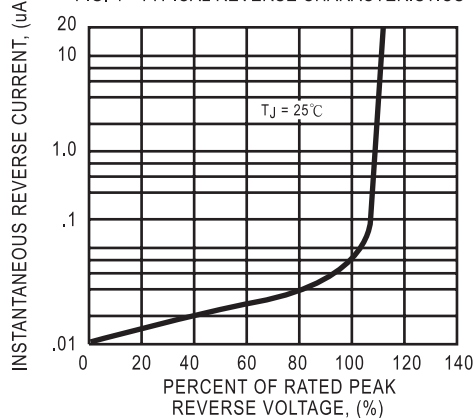


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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