



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

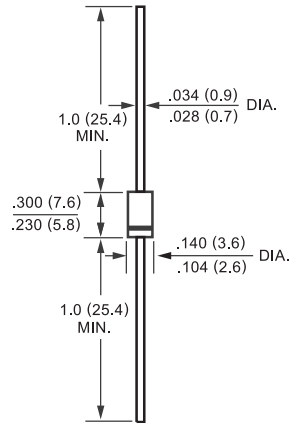
- * Low cost
- * Low leakage
- * Low forward voltage drop
- * High current capability

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



DO-15



Dimensions in inches and (millimeters)

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%.

	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 at Rated DC Blocking Voltage	IR	@TA = 25°C						5.0		uAmps
		@TA = 100°C						500		
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at T L = 75°C		30								uAmps
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

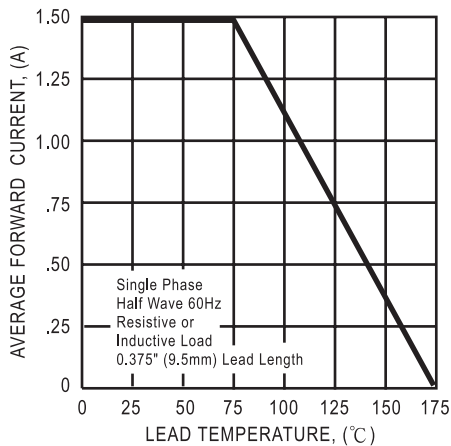


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

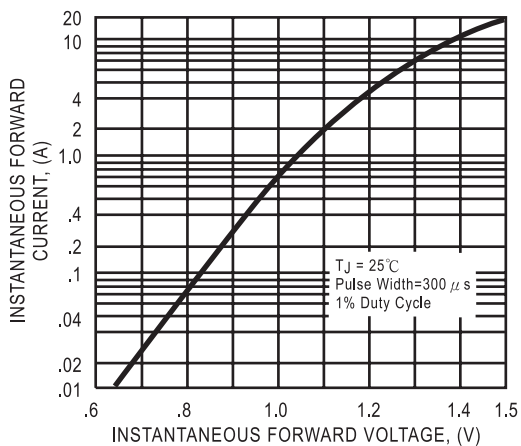


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

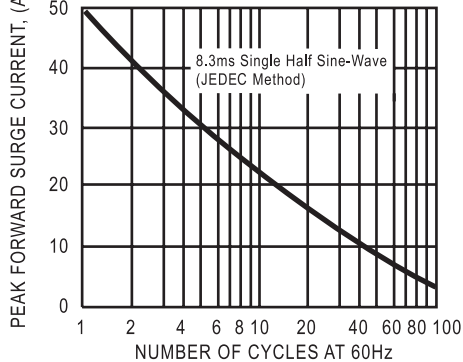


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

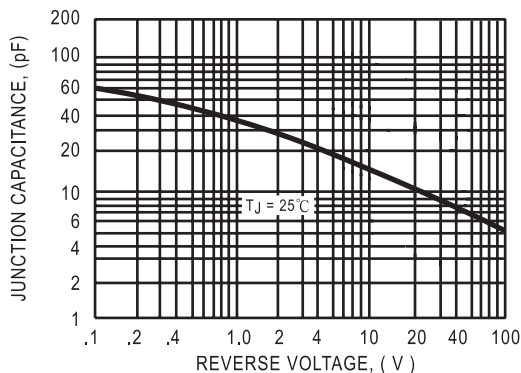
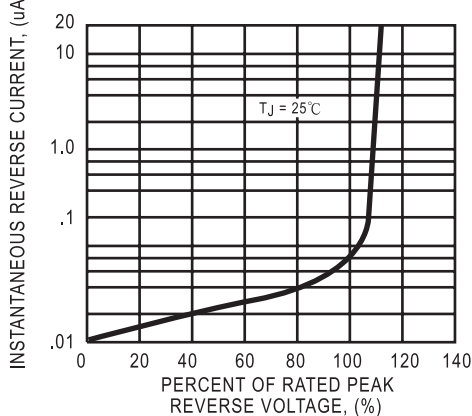


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS



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