HITANO ENTERPRISE CORP.

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

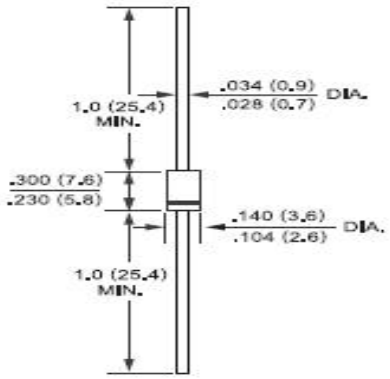
MECHANICAL DATA

* 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, 60Hz, 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		V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current .375*(9.5mm) lead length at $T_L = 70^oC$		I_O	1.5							Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	50							Amps
Maximum Instantaneous Forward Voltage at 1.5A DC		V_F	1.4							Volts
Maximum DC Reverse Current at Rated DC Blocking Voltage	$@T_A = 25^oC$	I_R	5.0							uAmps
	$@T_A = 100^oC$		500							
Maximum Full Load Reverse Current Average, Full Cycle .375*(9.5mm) lead length at $T_L = 75^oC$			30							uAmps
Typical Junction Capacitance (Note)		C_J	20							pF
Typical Thermal Resistance		$R_{\theta JA}$	50							$^0C/W$
Operating and Storage Temperature Range		T_J, T_{STG}	-65 to + 175							^0C

Note : 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

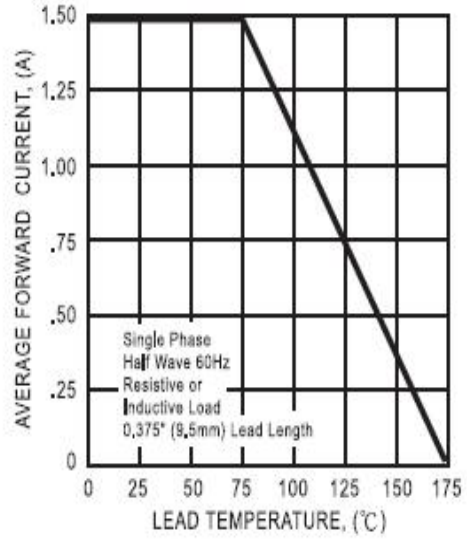


FIG. 2 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

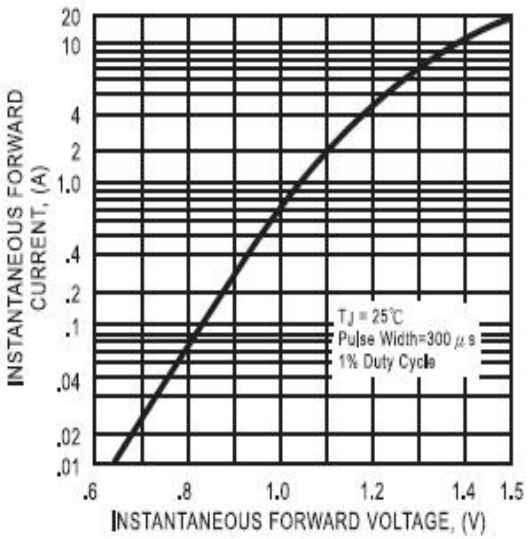


FIG. 3 - MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

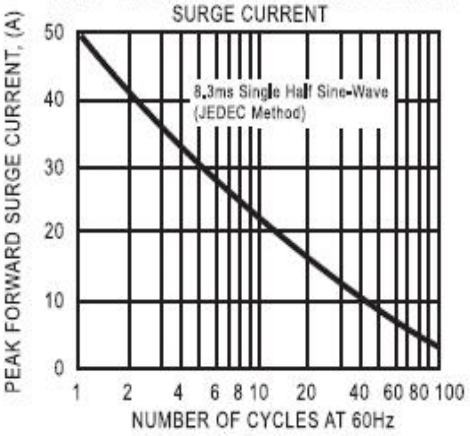


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

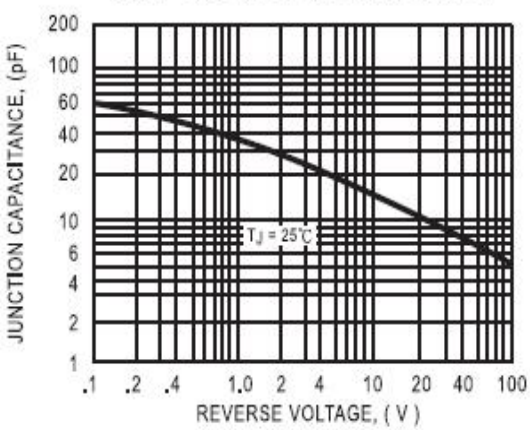


FIG. 4 - TYPICAL REVERSE CHARACTERISTICS