

1N5391S THRU 1N5399S

GENERAL PURPOSE PLASTIC SILICON RECTIFIERS

Reverse Voltage – 50 to 1000 Volts

Forward Current – 1.5 Ampere

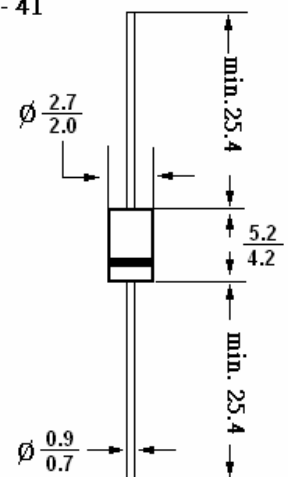
Features

- Low cost
- High current capability
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound
- Low leakage

MECHANICAL DATA:

- Case: Molded plastic, DO-41
- Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

DO-41



Dimensions in mm

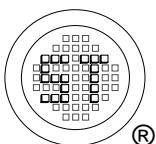
Absolute Maximum Ratings and Characteristics

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%.

	Symbols	1N 5391S	1N 5392S	1N 5393S	1N 5394S	1N 5395S	1N 5396S	1N 5397S	1N 5398S	1N 5399S	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 0.375", 9.5 mm Lead Length at $T_A = 60^\circ\text{C}$	$I_{(AV)}$	1.5									A
Peak Forward Surge Current 8.3ms single half sine-wave	I_{FSM}	50									A
Maximum Forward Voltage at 1.5A DC and 25°C	V_F	1.4									V
Maximum Reverse Current, at $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage $T_A = 100^\circ\text{C}$	I_R	5 500									μA
Typical Junction Capacitance (Note 1)	C_J	25									pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	26									$^\circ\text{C}/\text{W}$
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150									$^\circ\text{C}$

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V_{DC} .
2. Thermal resistance junction to ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. mounted.



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(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002
Certificate No. 05103



ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
Certificate No. 0506098

Dated : 01/06/2005 H

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FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

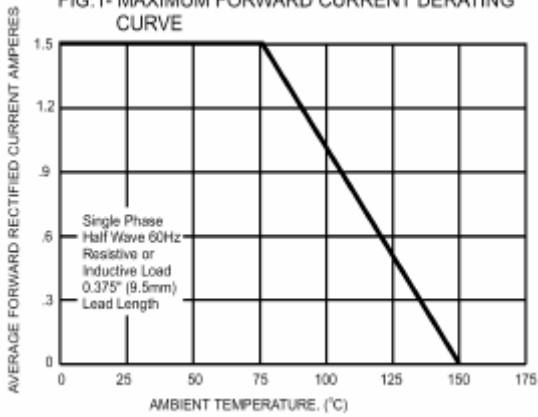


FIG.2- TYPICAL FORWARD CHARACTERISTICS

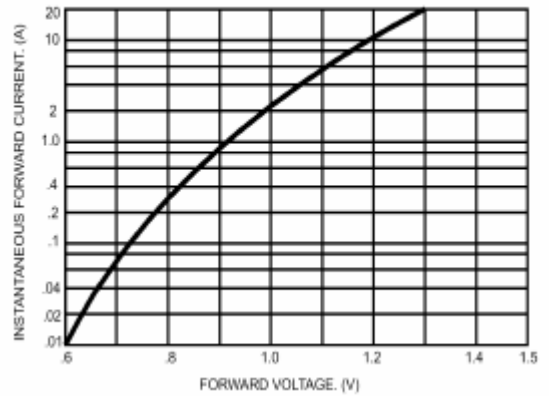


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

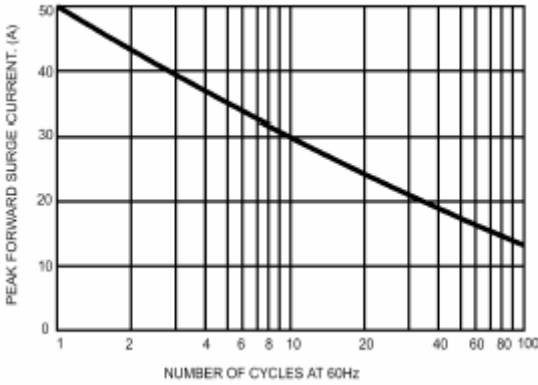


FIG.4- TYPICAL REVERSE CHARACTERISTICS

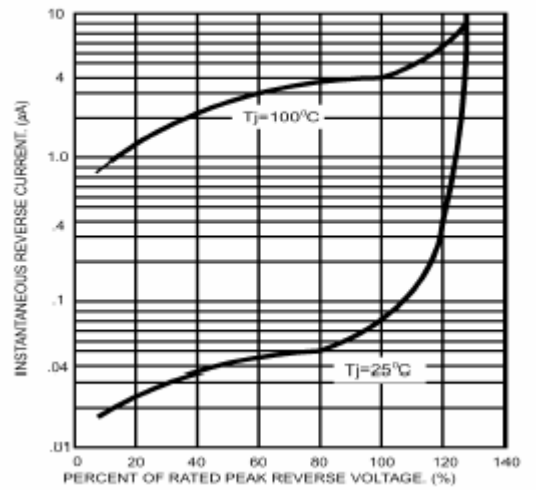
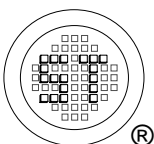
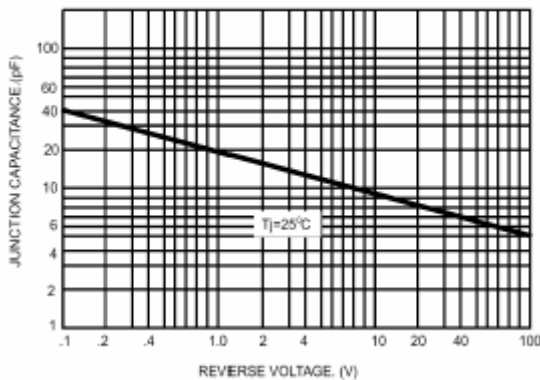


FIG.5- TYPICAL JUNCTION CAPACITANCE



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