



1N5391 THRU 1N5399

1.5 AMP.Plastic silicon Rectifier

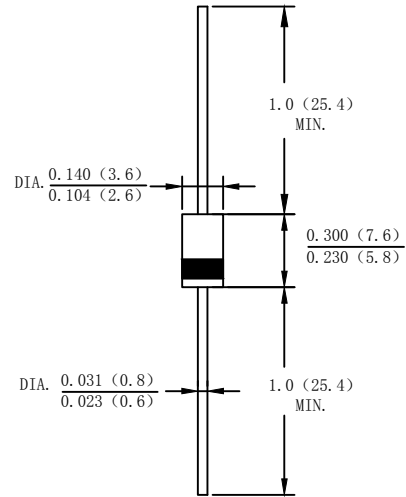
Features

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

Mechanical Data

- Case: Molded plastic DO-15
- Terminals: Axial leads solderable to MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any

DO-15



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified

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

For capacitive load derate current by 20%

Type Number	SYMBOL	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RM}	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
Average Rectified Output Current (Note 1) @ $T_L=90^\circ C$	$I_{F(AV)}$	1.5									A
Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50									A
I^2t Rating for Fusing ($t < 8.3ms$)	I^2t	10.375									A^2s
Forward Voltage @ $I_F=1.5A$	V_{FM}	1.1									V
Peak Reverse Current @ $T_A=25^\circ C$	I_R	5.0									uA
At Rated DC Blocking Voltage @ $T_A=100^\circ C$		100									
Typical Junction Capacitance (Note 2)	C_j	12									pF
Typical Thermal Resistance Junction to Ambient (Note 3)	$R_{\theta JA}$	65									$^\circ C/W$
Operating Temperature Range	T_j	-55 to +150									$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150									$^\circ C$

Note: 1. Leads maintained at ambient temperature at a distance of 9.5mm from the case

2. Measured at 1.0 MHz and Applied reverse Voltage of 4.0V D.C

3.P.C.B.mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas



1N5391 THRU 1N5399

FIG. 1 – FORWARD CURRENT DERATING CURVE

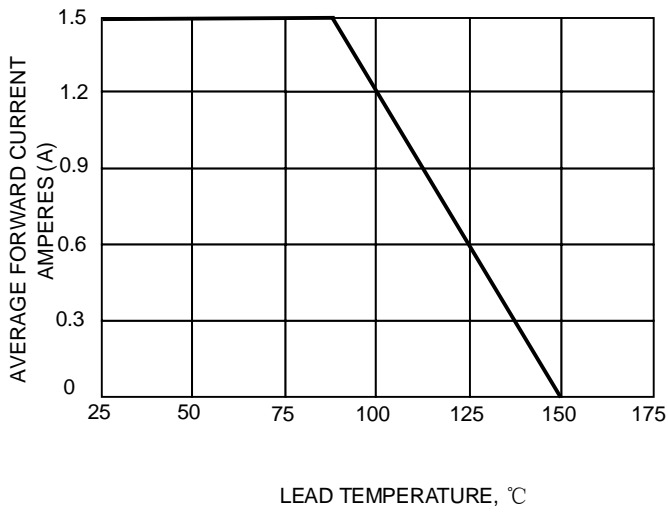


FIG.2-TYPICAL FORWARD CHARACTERISTICS

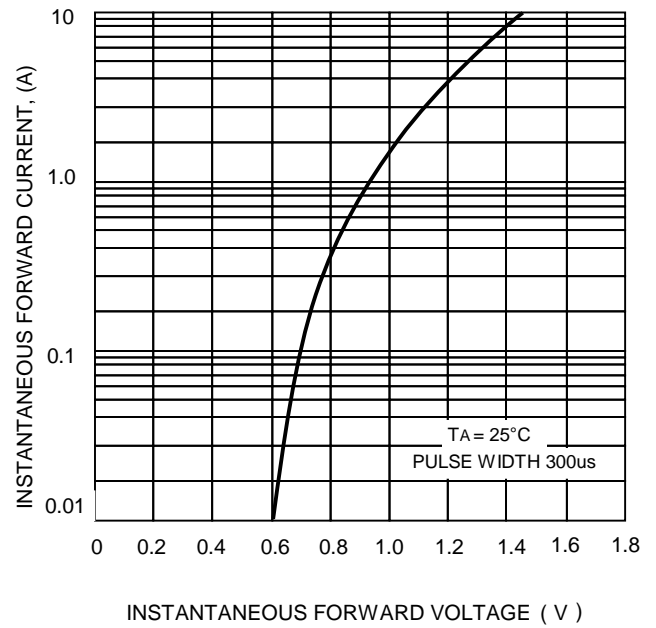


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

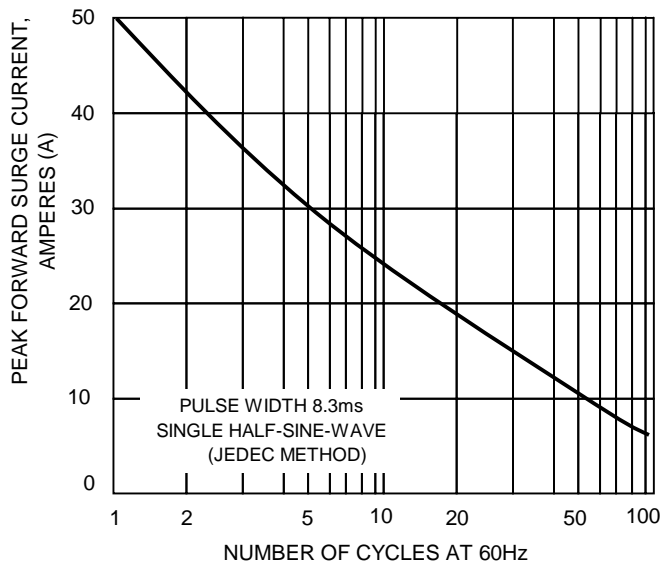
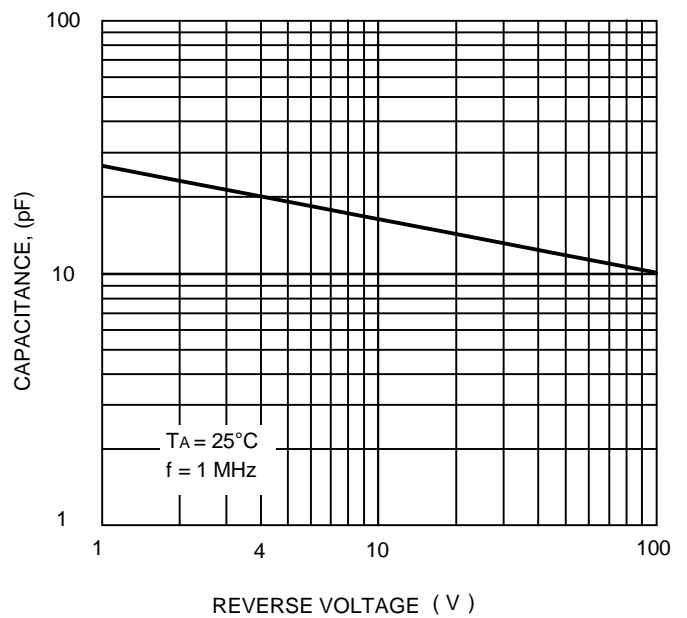


FIG.4 – TYPICAL JUNCTION CAPACITANCE





1N5391 THRU 1N5399

Important Notice and Disclaimer

- Reproducing and modifying information of the document is prohibited without permission from XINNUO
- XINNUO reserves the right to make changes to this document and its products and specifications at any time without notice. Customers should obtain and confirm the latest product information and specifications before final design, purchase or use.
- XINNUO disclaims any and all liability arising out of the application or use of any product including damages incidentally and consequentially occurred.
- XINNUO does not assume any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.
- Applications shown on the here in document are examples of standard use and operation. Customers are responsible in comprehending the suitable use in particular applications.

XINNUO makes no representation or warranty that such applications will be suitable for the specified use without further testing or modification.
- The products shown here in are not designed and authorized for equipments requiring high level of reliability or relating to human life and for any applications concerning life-saving or life-sustaining, such as medical instruments, transportation equipment, aerospace machinery et cetera. Customers using or selling these products for use in such applications do so at their own risk and agree to fully indemnify XINNUO for any damages resulting from such improper use or sale.
- Since XINNUO uses lot number as the tracking base, please provide the lot number for tracking when complaining.