

# 1N5391 THRU 1N5399

1.5 AMP.Plastic silicon Rectifier

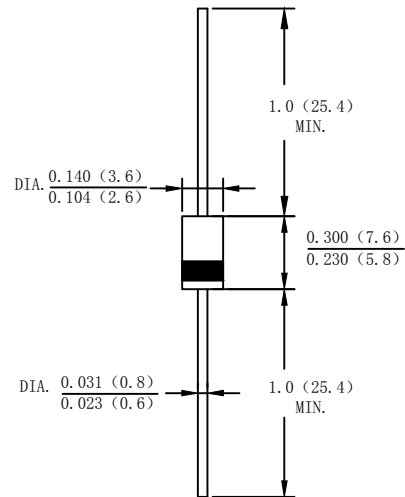
## Features

- 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) @ $T_L=100^\circ\text{C}$	$I_{F(AV)}$	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 ( $t < 8.3\text{ms}$ )	$I^2t$	10.375									$\text{A}^2\text{s}$
Forward Voltage @ $I_F=1.5\text{A}$	$V_{FM}$	1.1									V
Peak Reverse Current @ $T_A=25^\circ\text{C}$	$I_R$	5.0									uA
At Rated DC Blocking Voltage @ $T_A=100^\circ\text{C}$		100									
Typical Junction Capacitance (Note 2)	$C_j$	20									pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	26									$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_j$	-55 to +125									$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to +150									$^\circ\text{C}$

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

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FIG. 1 – FORWARD CURRENT DERATING CURVE

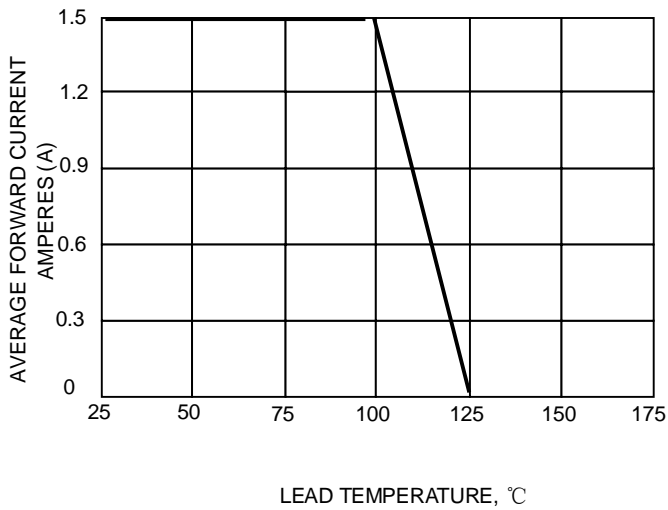


FIG.2-TYPICAL FORWARD CHARACTERISTICS

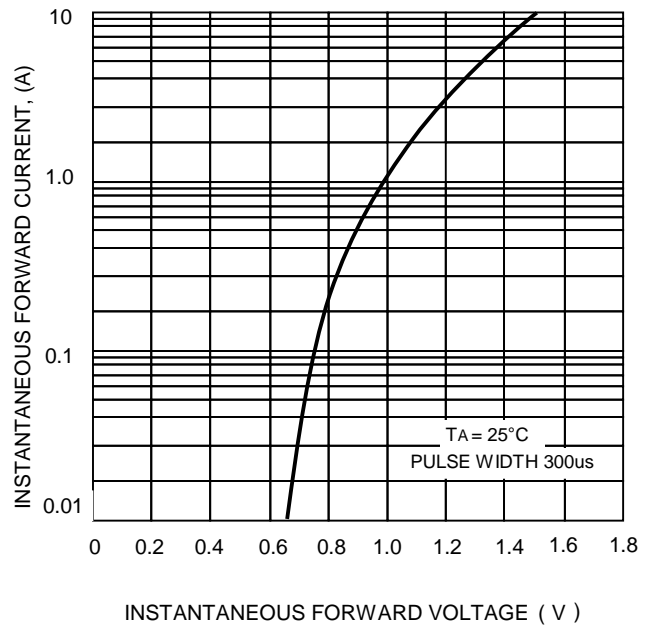


FIG. 3 – MAXIMUM NON-REPETITIVE SURGE CURRENT

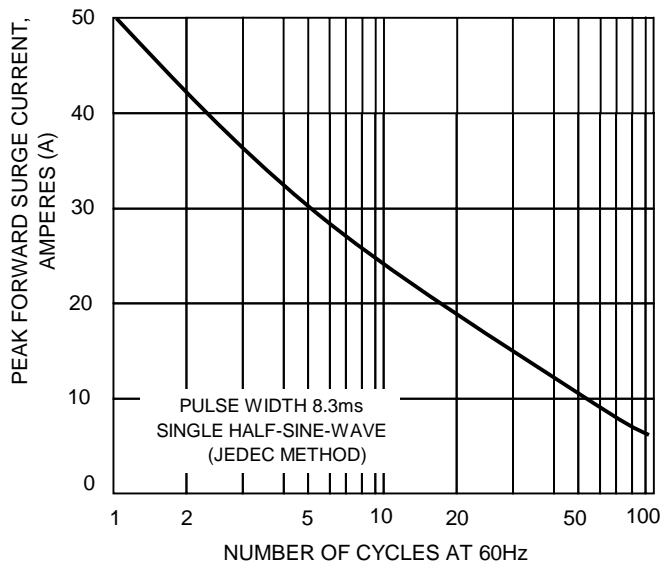
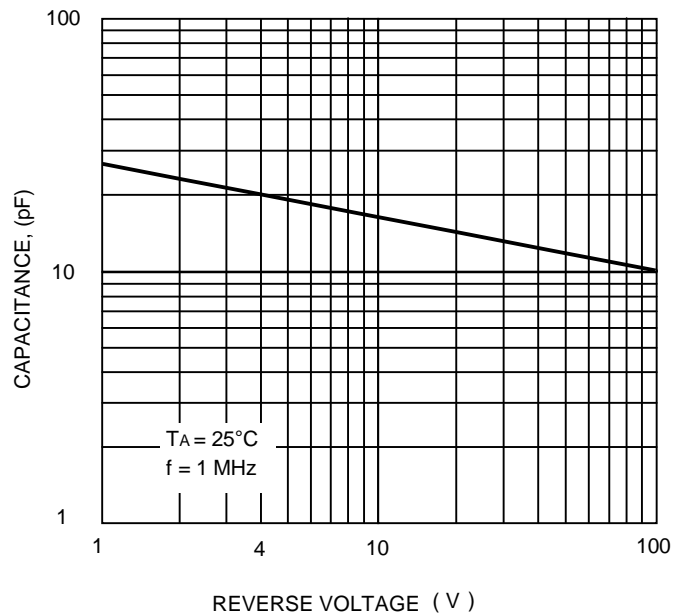


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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