



# 1N5391 - 1N5399

## Features

- 1.5 ampere operation at  $T_A = 70^\circ\text{C}$  with no thermal runaway.
- High current capability.
- Low leakage.



**DO-15**  
COLOR BAND DENOTES CATHODE

## General Purpose Rectifiers

### Absolute Maximum Ratings\*

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Value										Units
		5391	5392	5393	5394	5395	5396	5397	5398	5399		
V <sub>RRM</sub>	Peak Repetitive Reverse Voltage	50	100	200	300	400	500	600	800	1000	V	
I <sub>F(AV)</sub>	Average Rectified Forward Current, .375 " lead length @ T <sub>A</sub> = 75°C	1.5										A
I <sub>FSM</sub>	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	50										A
T <sub>stg</sub>	Storage Temperature Range	-55 to +150										°C
T <sub>J</sub>	Operating Junction Temperature	-55 to +150										°C

\* These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

## Thermal Characteristics

Symbol	Parameter	Value	Units
$P_D$	Power Dissipation	4.8	W
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	26	$^\circ\text{C/W}$

## Electrical Characteristics

$T_A = 25^\circ\text{C}$  unless otherwise noted

Symbol	Parameter	Device									Units
		5391	5392	5393	5394	5395	5396	5397	5398	5399	
V <sub>F</sub>	Forward Voltage @ 1.5 A	1.4									V
I <sub>R</sub>	Reverse Current @ rated V <sub>R</sub> T <sub>A</sub> = 25°C T <sub>A</sub> = 100°C	5.0 300									μA μA
C <sub>T</sub>	Total Capacitance V <sub>P</sub> = 4.0 V, f = 1.0 MHz	25									pF

## Typical Characteristics

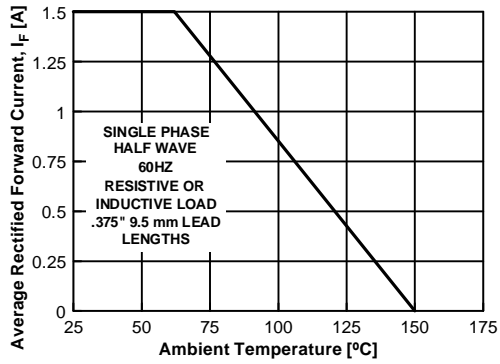


Figure 1. Forward Current Derating Curve

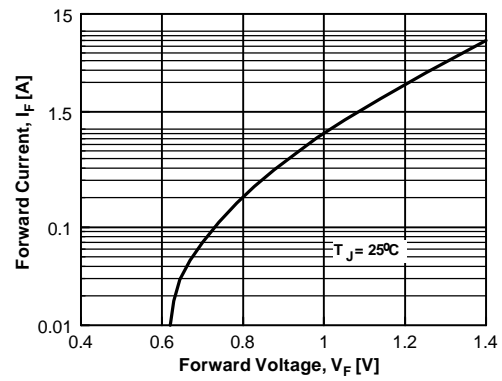


Figure 2. Forward Voltage Characteristics

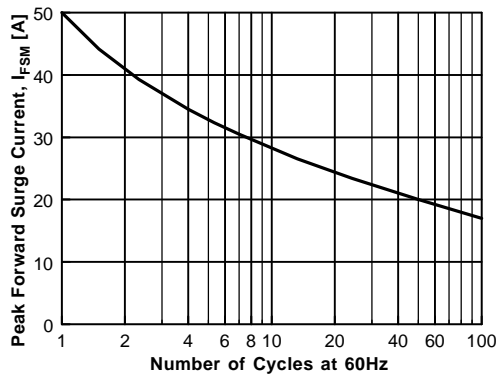


Figure 3. Non-Repetitive Surge Current

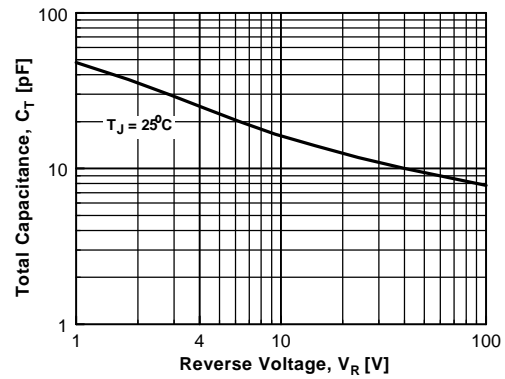


Figure 4. Total Capacitance

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