

1N5391 - 1N5399

General Purpose Rectifiers

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

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 _{RRM}	Peak Repetitive Reverse Voltage	50	100	200	300	400	500	600	800	1000	V	
I _{F(AV)}	Average Rectified Forward Current .375 " lead length @ T _A = 75°C	1.5										A
I _{FSM}	Non-repetitive Peak Forward Surge Current 8.3 ms Single Half-Sine-Wave	50										A
T _{STG}	Storage Temperature Range	-55 to +150										°C
T _J	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
$R_{\theta JL}$	Thermal Resistance, Junction to Lead *	26	$^\circ\text{C/W}$

* Mounted on 0.375" (9.5mm) PCB

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

Symbol	Parameter	Value										Units
		5391	5392	5393	5394	5395	5396	5397	5398	5399		
V _F	Forward Voltage @1.5A	1.4										V
I _R	Reverse Leakage @rated V _R T _A =25°C T _A =100°C	5.0 300										μA μA
C _T	Total Capacitance V _R =4.0 V, f=1.0MHz	25										pF

Typical Performance Characteristics

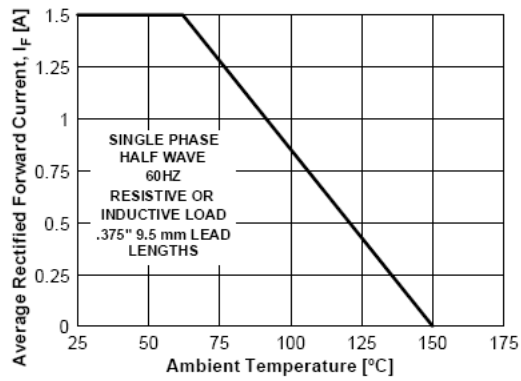


Figure 1. Forward Current Derating Curve

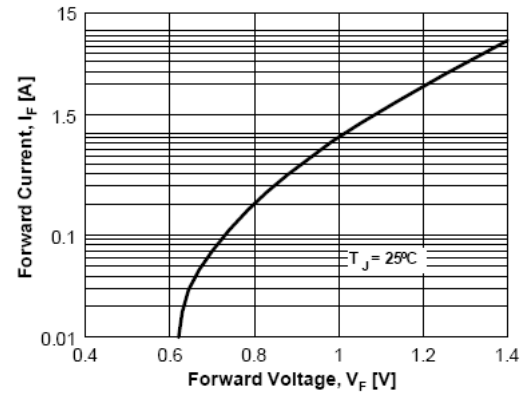


Figure 2. Forward Voltage Characteristics

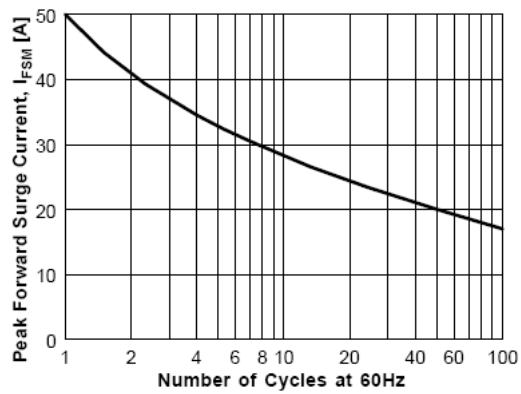


Figure 3. Non-Repetitive Surge Current

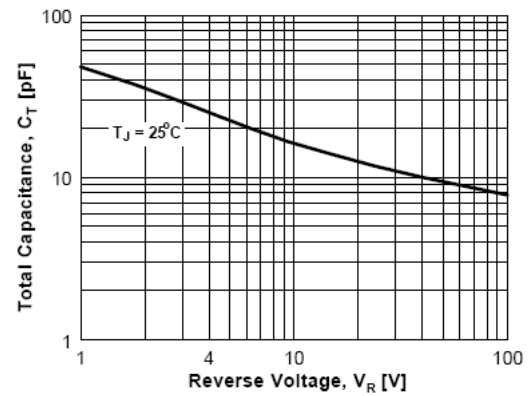


Figure 4. Total Capacitance



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