

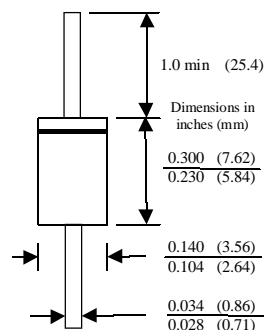
1N5391 - 1N5399

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



1.5 Ampere General Purpose Rectifiers

Absolute Maximum Ratings* $T_A = 25^\circ\text{C}$ unless otherwise noted

Symbol	Parameter	Value	Units
I_O	Average Rectified Current .375" lead length @ $T_A = 75^\circ\text{C}$	1.5	A
$i_{f(\text{surge})}$	Peak Forward Surge Current 8.3 ms single half-sine-wave Superimposed on rated load (JEDEC method)	50	A
P_D	Total Device Dissipation Derate above 25°C	4.8 38	W mW/ $^\circ\text{C}$
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	26	$^\circ\text{C}/\text{W}$
T_{stg}	Storage Temperature Range	-55 to +150	$^\circ\text{C}$
T_J	Operating Junction Temperature	-55 to +150	$^\circ\text{C}$

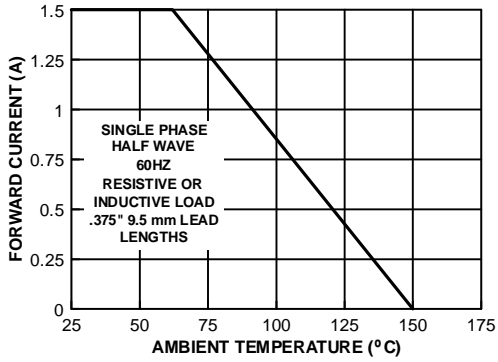
*These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

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

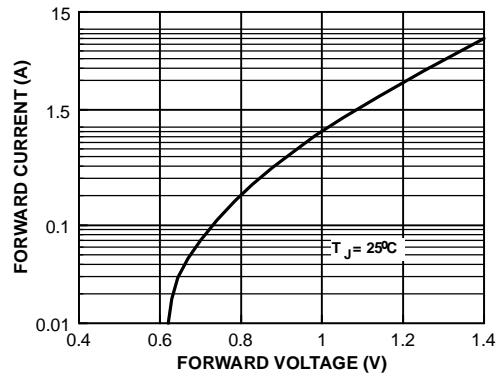
Parameter	Device									Units
	5391	5392	5393	5394	5395	5396	5397	5398	5399	
Peak Repetitive Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V
DC Reverse Voltage (Rated V_R)	50	100	200	300	400	500	600	800	1000	V
Maximum Reverse Current @ rated V_R $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	5.0 300									μA μA
Maximum Forward Voltage @ 1.5 A	1.4									V
Typical Junction Capacitance $V_R = 4.0 \text{ V}$, $f = 1.0 \text{ MHz}$	25									pF

Typical Characteristics

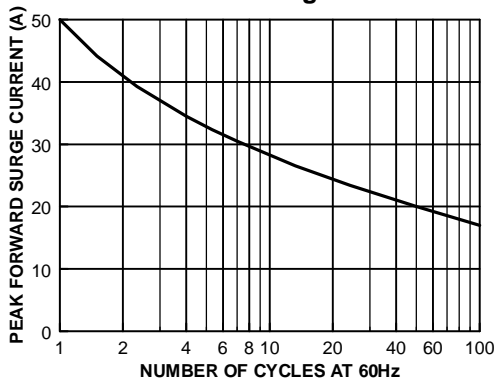
Forward Current Derating Curve



Forward Characteristics



Peak Forward Surge Current



Junction Capacitance

