

### Features

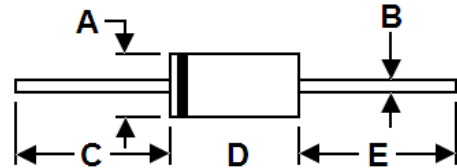
- \* Low Forward Voltage Drop
- \* High Current Capability
- \* High Reliability
- \* High Surge Current Capability



**RoHS**  
COMPLIANT

### Package Outline Dimensions

DO-15:



DIM.	Unit (mm)		Unit (inch)	
	Min	Max	Min	Max
A	2.6	3.6	0.102	0.142
B	0.7	0.9	0.027	0.035
C	25.4	-	1.0	-
D	5.8	7.6	0.228	0.300
E	25.4	-	1.0	-

### Mechanical Data

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting Position: Any

### Maximum Ratings and Electrical Characteristics

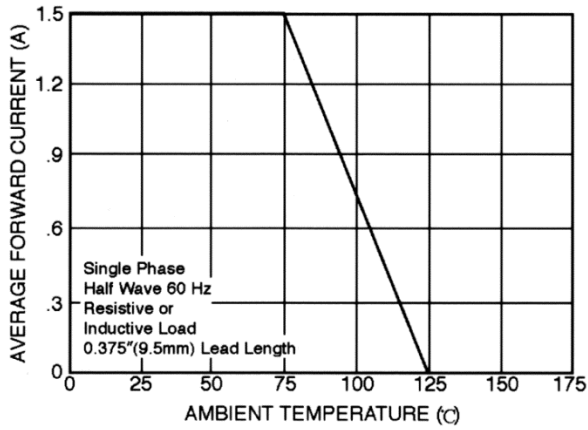
Rating at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Type Number	Symbol	1N 5391	1N 5392	1N 5393	1N 5395	1N 5397	1N 5398	1N 5399	Unit
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum D.C Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375" (9.5mm)Lead Length @ $T_A=75^\circ C$	$I_{F(AV)}$	1.5							A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	$I_{FSM}$	50							A
Maximum Instantaneous Forward Voltage at 1.5A	$V_F$	1.0							V
Maximum D.C Reverse Current @ $T_A=25^\circ C$ at Rated D.C Blocking Voltage @ $T_A=100^\circ C$	$I_R$	5.0 50.0							$\mu A$
Typical Junction Capacitance(Note1)	$C_J$	30							pF
Typical Thermal Resistance(Note2)	$R_{\theta JA}$	50							$^\circ C/W$
Operating and Storage Temperature Range	$T_J/T_{STG}$	-55 to +125 / -55 to +150							$^\circ C$

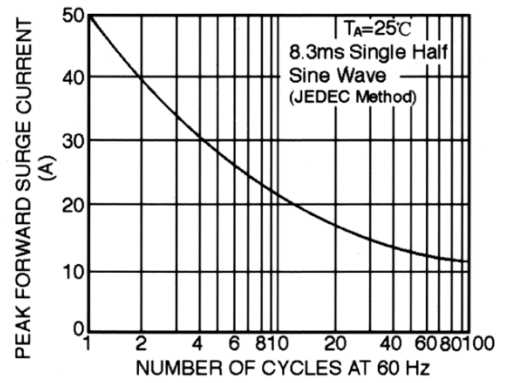
Note:1、 Measured at 1MHz and Applied Reverse Voltage of 4.0V D.C. 2、 Thermal Resistance From Junction to Ambient 0.375"(9.5mm) Lead Length.

**Ratings and Characteristic Curves**

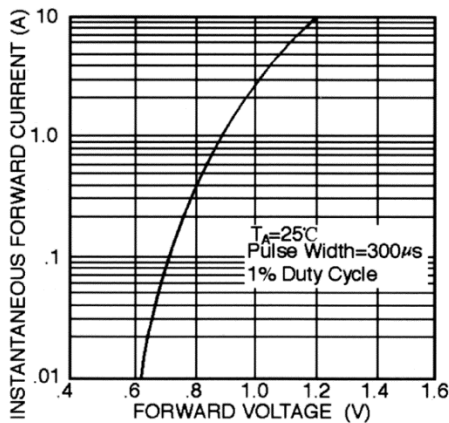
**FIG. 1 – TYPICAL FORWARD CURRENT DERATING CURVE**



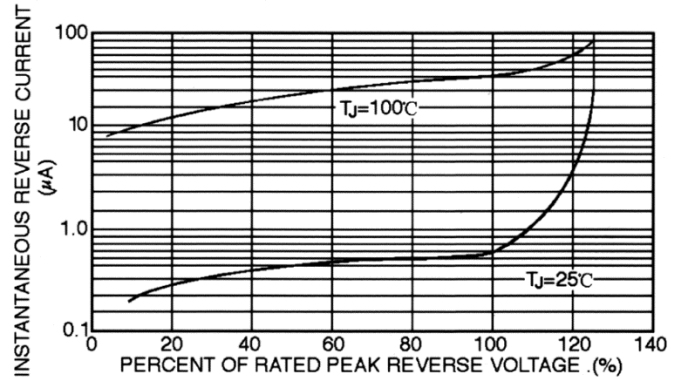
**FIG. 2 – MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT**



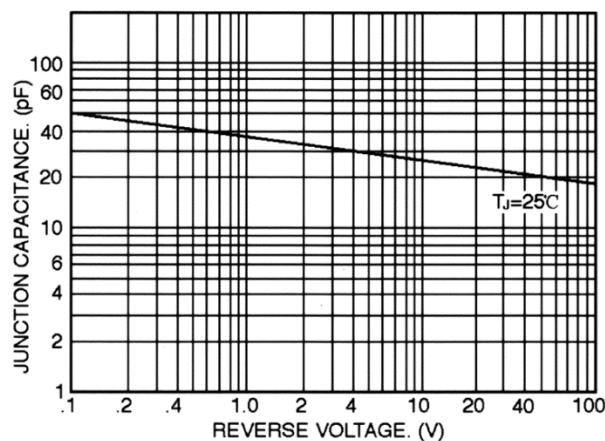
**FIG. 3 – TYPICAL FORWARD CHARACTERISTICS**



**FIG. 4 – TYPICAL REVERSE CHARACTERISTICS**



**FIG. 5 – TYPICAL JUNCTION CAPACITANCE**





**1N5391 THRU 1N5399**  
**1.5 Amps. Silicon Rectifiers**

**Ordering Information**

<b>Part No.</b>	<b>Package</b>	<b>Packing</b>
1N5391~1N5399	DO-15	2K/AMMO box
1N5391~1N5399	DO-15	3K/AMMO box
1N5391~1N5399	DO-15	4K/13" Paper reel
1N5391~1N5399	DO-15	0.5K/Bulk packing