### **Features**

- Glass Passivated Die Construction
- High Current Capability and Low Forward Voltage Drop
- Surge Overload Rating to 50A Peak
- Low Reverse Leakage Current
- Lead Free Finish, RoHS Compliant (Note 3)

### **Mechanical Data**

Case: DO-15

Case Material: Molded Plastic. UL Flammability

Classification Rating 94V-0

Moisture Sensitivity: Level 1 per J-STD-020C

Terminals: Finish - Tin. Solderable per MIL-STD-202,

Method 208 @3 Polarity: Cathode Band

Marking: Type Number

Weight: 0.4 grams (approximate)

	DO-15				
Dim	Min	Max			
Α	25.40	/ –			
В	5.50	7.62			
С	0.686	0.889			
D	2.60	3.6			
All Dimensions in mm					

### **Maximum Ratings and Electrical Characteristics**

@TA = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	1N53 91G	1N53 92G	1N53 93G	1N53 95G	1N53 97G	1N53 98G	1N53 99G	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	35	70	140	280	420	560	700	V
Average Rectified Output Current (Note 1) @ T <sub>A</sub> = 55°C	lo				1.5				Α
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>				50				Α
Forward Voltage @ I <sub>F</sub> = 1.5A	V <sub>FM</sub>				1.1				V
Peak Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 100°C	I <sub>RM</sub>				5.0 200				μΑ
I <sup>2</sup> t Rating for Fusing (t < 8.3ms)	l <sup>2</sup> t				10.4				A <sup>2</sup> s
Typical Total Capacitance (Note 2)	Ст				15				pF
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$				80				°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>			-	65 to +175				°C

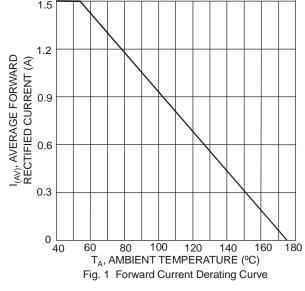
Notes:

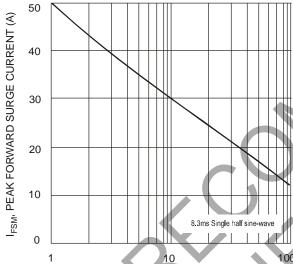
- 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.
- Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.
- 3. RoHS revision 13.2.2003. Glass and high temperature solder exemptions applied, see EU Directive Annex Notes 5 and 7.

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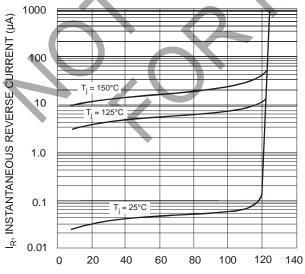


# NOT RECOMMENDED FOR NEW DESIGN

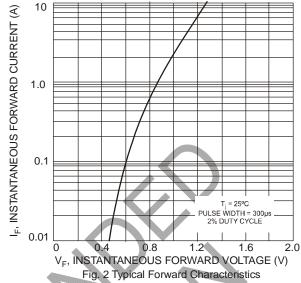


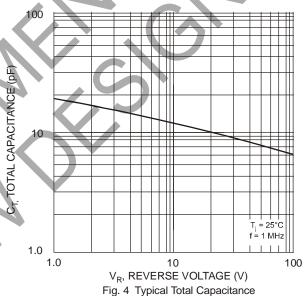


NUMBER OF CYCLES AT 60 Hz
Fig. 3 Max Non-Repetitive Peak Fwd Surge Current



PERCENT OF RATED PEAK REVERSE VOLTAGE (%) Fig. 5 Typical Reverse Characteristics







## NOT RECOMMENDED FOR NEW DESIGN

### Ordering Information (Note 4)

Device	Packaging	Shipping
1N5391G-T	DO-15	4K/Tape & Reel, 13-inch
1N5392G-T	DO-15	4K/Tape & Reel, 13-inch
1N5393G-T	DO-15	4K/Tape & Reel, 13-inch
1N5395G-T	DO-15	4K/Tape & Reel, 13-inch
1N5397G-T	DO-15	4K/Tape & Reel, 13-inch
1N5398G-T	DO-15	4K/Tape & Reel, 13-inch
1N5399G-T	DO-15	4K/Tape & Reel, 13-inch

Notes: 4. For packaging details, visit our website at http://www.diodes.com/datasheets/ap02008.pdf.

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