

## 1N5391G thru 1N5399G

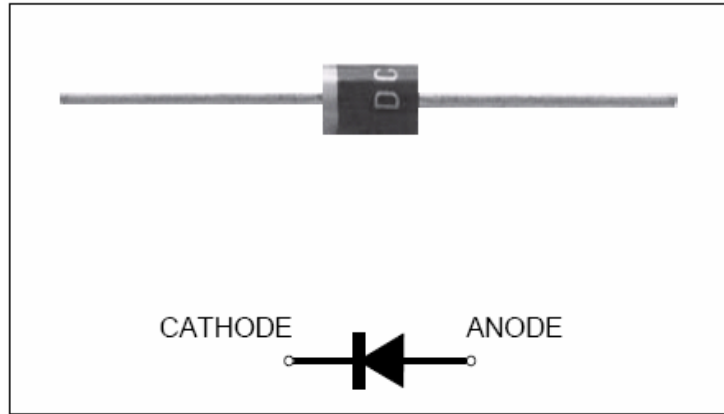
### 1.FEATURES

- \* Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- \* Construction utilizes void-free molded plastic technique
- \* Low reverse leakage
- \* High forward surge capability
- \* Cavity-free glass passivated junction
- \* High temperature soldering guaranteed:  
260°C/10 seconds, 0.375" (9.5mm) lead length,  
5 lbs. (2.3kg) tension

### General Purpose Plastic Rectifiers

Reverse Voltage 50 to 1000V

Forward Current 1.5A



### 2.Mechanical Data

**Case:** JEDEC DO-15, molded plastic body

**Terminals:** Plated axial leads, solderable per MIL-STD-750, Method 2026

**Polarity:** Color band denotes cathode end

**Mounting Position:** Any

**Weight:** 0.015 oz., 0.40 g

**Handling precaution:** None

We declare that the material of product compliance with RoHS requirements.

### 3.Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N53 91G	1N53 92G	1N53 93G	1N53 94G	1N53 95G	1N53 96G	1N53 97G	1N53 98G	1N53 99G	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	210	280	350	420	560	700	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	300	400	500	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1.5									A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50									A
Maximum full load reverse current, full cycle average, 0.375"(9.5mm) lead lengths at $T_A = 70^\circ\text{C}$	$I_{R(AV)}$	300									$\mu\text{A}$
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50									$^\circ\text{C}/\text{W}$
Maximum DC blocking voltage temperature	$T_A$	150									$^\circ\text{C}$
Operating junction and storage temperature range	$T_J, T_{STG}$	-50 to +150									$^\circ\text{C}$

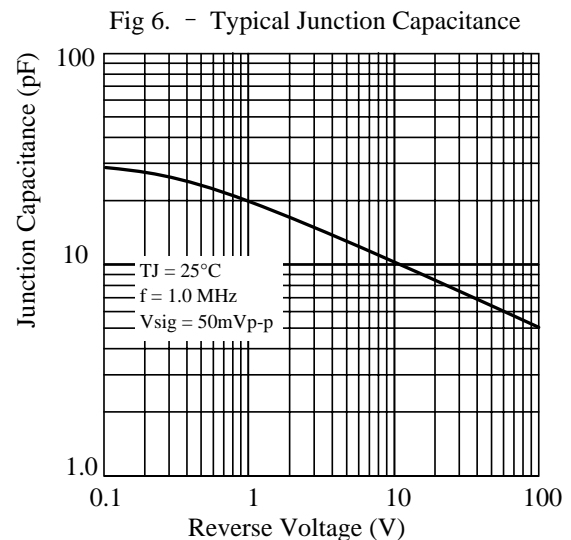
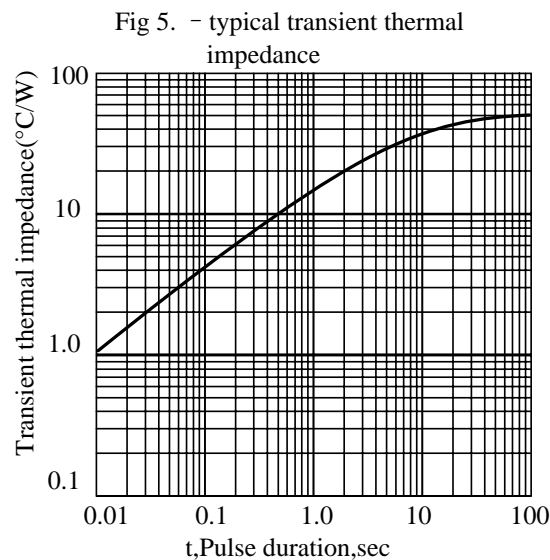
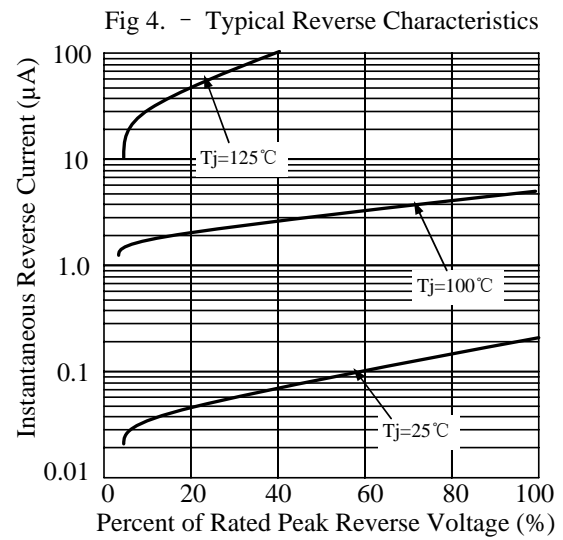
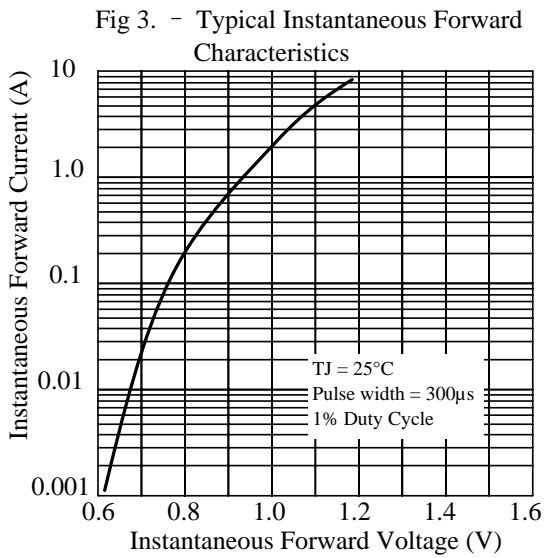
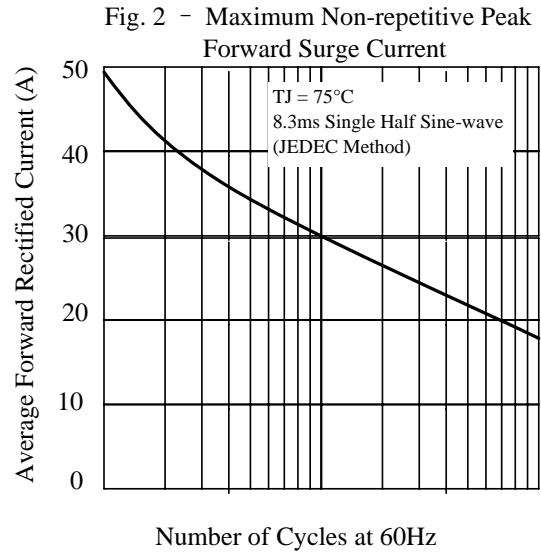
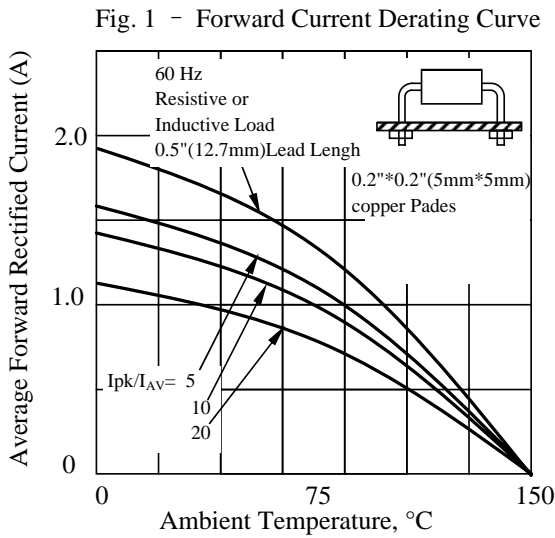
### Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N53 91G	1N53 92G	1N53 93G	1N53 94G	1N53 95G	1N53 96G	1N53 97G	1N53 98G	1N53 99G	Unit
Maximum instantaneous forward voltage at 1.5A	$V_F$	1.40									V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_A = 125^\circ\text{C}$	$I_R$	5.0 300									$\mu\text{A}$
Typical junction capacitance at 4.0V, 1MHz	$C_J$	15									PF

#### NOTES:

1. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted

### 4. Ratings and Characteristic Curves (TA = 25°C unless otherwise noted)



**5.Package Dimensions in inches and (millimeters)**
