



## AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

**1N5391G THRU 1N5399G**

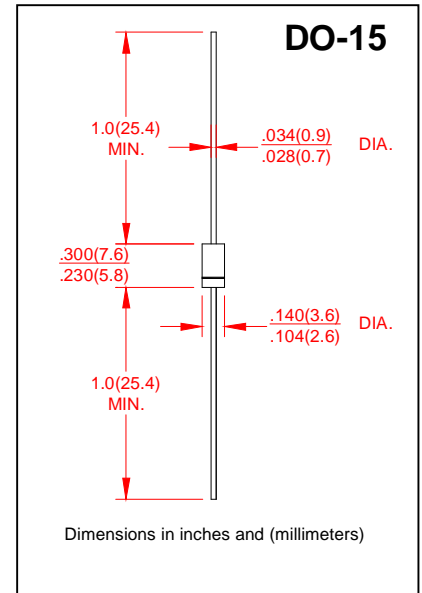
**VOLTAGE RANGE** 50 to 1000 Volts  
**CURRENT** 1.5 Ampere

### FEATURES

- Glass passivated chip junction
- Low forward voltage drop
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed  
 260°C/10 secods, 0.375"(9.5mm) lead length at 5 lbs(2.3kg) tension

### MECHANICAL DATA

- Case: Transfer molded plastic
- Epoxy: UL94V-0 rate flame retardant
- Polarity: Color band denotes cathode end
- Lead: Plated axial lead, solderable per MIL-STD-202E method 208C
- Mounting position: Any
- Weight: 0.012ounce, 0.39 grams



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	1N 5391G	1N 5392G	1N 5393G	1N 5394G	1N 5395G	1N 5396G	1N 5397G	1N 5398G	1N 5399G	UNIT	
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	300	400	500	600	800	1000	Volts	
Maximum RMS Voltage	$V_{RMS}$	35	70	140	210	280	350	420	560	700	Volts	
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	300	400	500	600	800	1000	Volts	
Maximum Average Forward Rectified Current 0.375"(9.5mm) lead length at $T_A=75^\circ\text{C}$	$I_{(AV)}$	1.5									Amps	
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50									Amps	
Maximum Instantaneous Forward Voltage at 1.5A	$V_F$	1.1									Volts	
Maximum DC Reverse Current at rated DC blocking Voltage at	$T_A = 25^\circ\text{C}$	$I_R$									5.0	$\mu\text{A}$
	$T_A = 125^\circ\text{C}$										50	
Maximum Full Load Reverse Current, full cycle Average 0.375(9.5mm) lead length at $T_L=75^\circ\text{C}$	$I_{R(AV)}$	30									$\mu\text{A}$	
Typical Junction Capacitance (NOTE 1)	$C_J$	20									pF	
Typical Thermal Resistance (NOTE 2)	$R_{\theta JA}$	50									$^\circ\text{C}/\text{W}$	
Operating Temperature Range	$T_J$	(-55 to +150)									$^\circ\text{C}$	
Storage Temperature Range	$T_{STG}$	(-55 to +150)									$^\circ\text{C}$	

#### Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
2. Thermal Resistance from Junction to Ambient at. 375"(9.5mm) lead length, P.C. board mounted.



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## RATING AND CHARACTERISTIC CURVES 1N5391G THRU 1N5399G

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

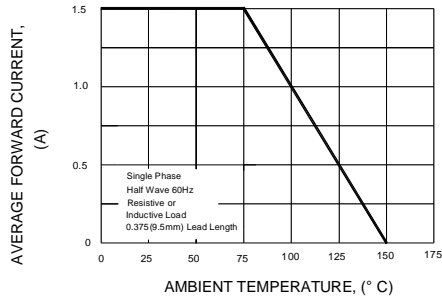


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

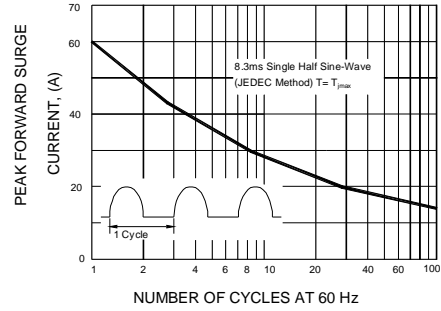


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

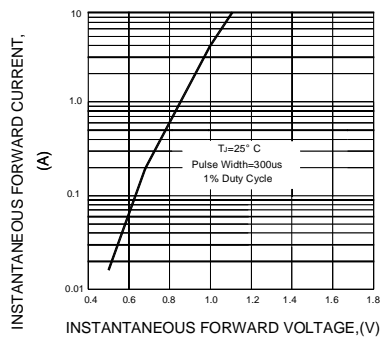


FIG.4-TYPICAL REVERSE CHARACTERISTICS

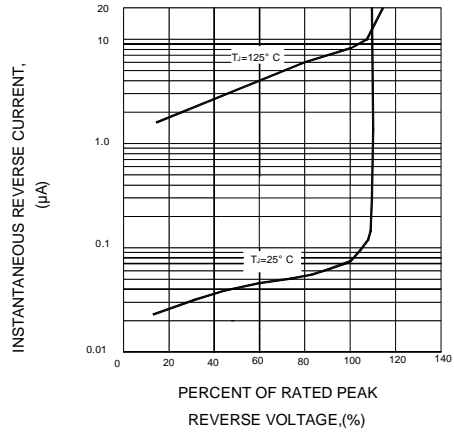


FIG.5-TYPICAL JUNCTION CAPACITANCE

