



AXIAL SILASTIC GUARD JUNCTION STANDARD RECTIFIER

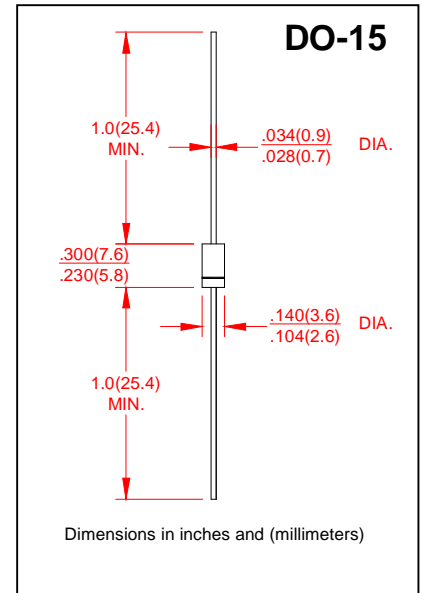
1N5391G THRU 1N5399G

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	μA
	$T_A = 125^\circ\text{C}$										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									μA	
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

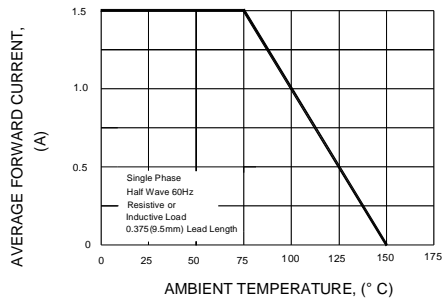


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

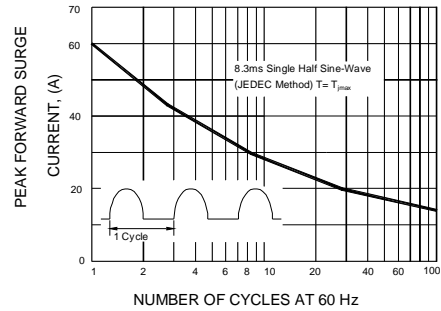


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

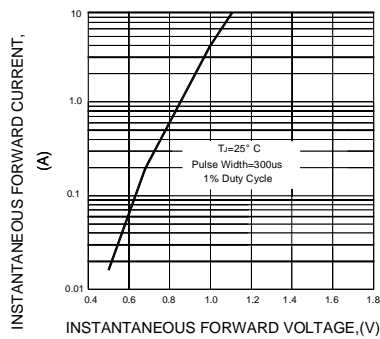


FIG.4-TYPICAL REVERSE CHARACTERISTICS

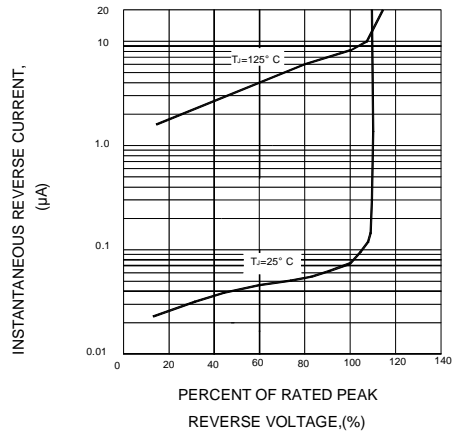


FIG.5-TYPICAL JUNCTION CAPACITANCE

