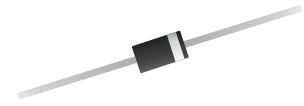


# 1N5391-G Thru. 1N5399-G

**Voltage: 50 to 1000 Volts**  
**Forward Current: 1.5 Amps**  
**RoHS Device**

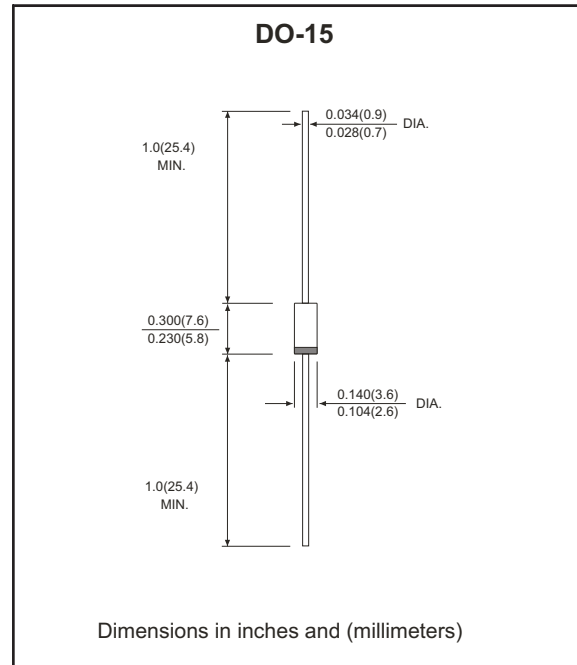


## Features

- Low cost construction.
- Low forward voltage drop.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guarantee: 260°C/10 seconds, 0.375" (9.5mm) lead length at 5lbs (2.3kg) tension.

## Mechanical Data

- Case: transfer-molded plastic.
- Epoxy: UL94V-0 rate flame retardant.
- Lead: Plated axial lead, solderable per MIL-STD-202E, method 208C.
- Polarity: Cathode indicated by polarity band.
- Mounting position: Any.
- Weight: 0.012 ounce, 0.33grams.



## 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%.

Parameter	Symbol	1N5391 -G	1N5392 -G	1N5393 -G	1N5394 -G	1N5395 -G	1N5396 -G	1N5397 -G	1N5398 -G	1N5399 -G	Unit
Max.repetitive peak reverse voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	V
Max.RMS voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	V
Max.DC blocking voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	V
Max. average forward rectified current , 0.375"(9.5mm) lead length at T <sub>A</sub> =75 °C	I <sub(av)< sub=""></sub(av)<>	1.5									A
Peak forward surge current, 8.3mS single half sine wave superimpose on rated load (JEDEC method)	I <sub>FSM</sub>	30									A
Max. instantaneous forward voltage at I <sub>F</sub> =1.0A	V <sub>F</sub>	1.1									V
Max. DC reverse current at T <sub>A</sub> =25 °C rated DC blocking voltage T <sub>A</sub> =100 °C	I <sub>R</sub>	5.0 50									μA
Max. full load reverse current, full cycle average 0.375"(9.5mm) lead length at T <sub>L</sub> =75 °C	I <sub>R(AV)</sub>	30									μA
Typical junction capacitance (Note 1)	C <sub>J</sub>	13									pF
Typical thermal resistance (Note 2)	R <sub>θJA</sub>	50									°C/W
Operating junction temperature range	T <sub>J</sub>	-55 to +150									°C
Storage temperature range	T <sub>STG</sub>	-55 to +150									°C

Notes:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
2. Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C. board mounted with 0.2"×0.2" (5.0×5.0mm) copper pads.

## Rating and Characteristic Curves (1N5391-G Thru. 1N5399-G)

Fig.1 Typical Forward Current Derating Curve

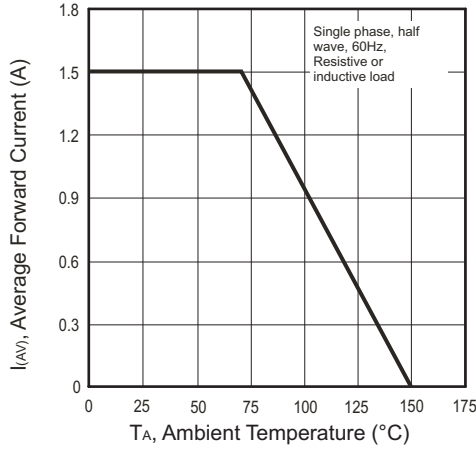


Fig.2 Max. Non-Repetitive Peak Forward Surge Current

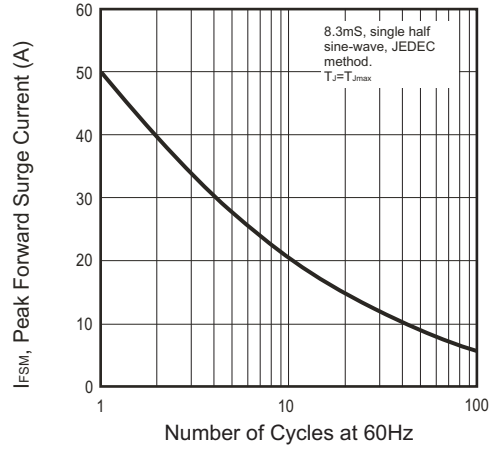


Fig.3 Typical Instantaneous Forward Characteristics

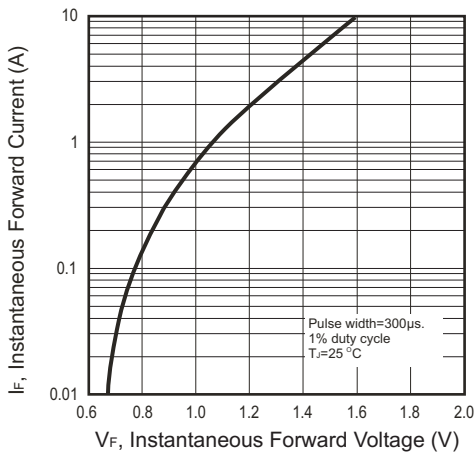


Fig.4 Typical Reverse Characteristics

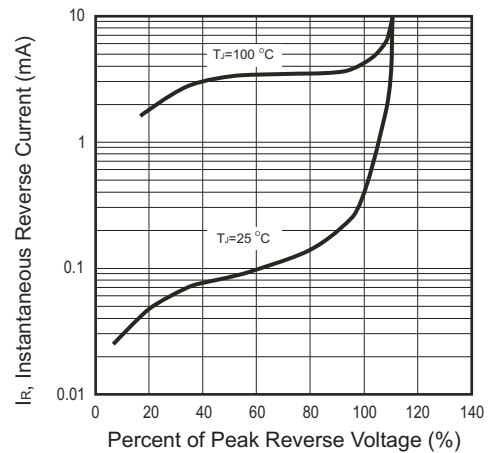


Fig.5 Typical Junction Capacitance

