

# 1N5391G - 1N5399G

## GLASS PASSIVATED JUNCTION SILICON RECTIFIERS

**PRV : 50 - 1000 Volts**

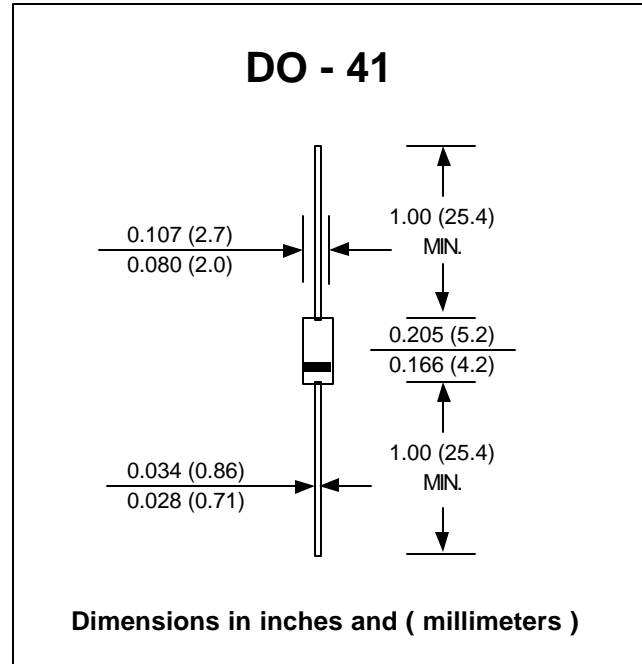
**Io : 1.5 Amperes**

### FEATURES :

- \* Glass passivated chip
- \* High current capability
- \* High reliability
- \* Low reverse current
- \* Low forward voltage drop

### MECHANICAL DATA :

- \* Case : DO-41 Molded plastic
- \* Epoxy : UL94V-O rate flame retardant
- \* Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- \* Polarity : Color band denotes cathode end
- \* Mounting position : Any
- \* Weight : 0.339 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

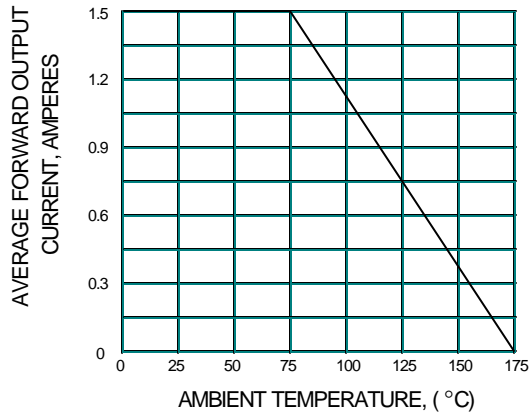
RATING	SYMBOL	1N 5391G	1N 5392G	1N 5393G	1N 5394G	1N 5395G	1N 5396G	1N 5397G	1N 5398G	1N 5399G	UNIT
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	300	400	500	600	800	1000	Volts
Maximum Average Forward Current 0.375" (9.5mm) Lead Length Ta = 75°C	I <sub>F(AV)</sub>	1.5									Amps.
Peak Forward Surge Current 8.3ms Single half sine wave Superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50									Amps.
Maximum Forward Voltage at I <sub>F</sub> = 1.5 Amps.	V <sub>F</sub>	1.1									Volts
Maximum DC Reverse Current Ta = 25 °C at rated DC Blocking Voltage Ta = 100 °C	I <sub>R</sub>	5.0									μA
	I <sub>R(H)</sub>	50									μA
Typical Junction Capacitance (Note1)	C <sub>J</sub>	15									pF
Typical Thermal Resistance (Note2)	R <sub>θJA</sub>	30									°C/W
Junction Temperature Range	T <sub>J</sub>	- 65 to + 175									°C
Storage Temperature Range	T <sub>STG</sub>	- 65 to + 175									°C

#### Notes :

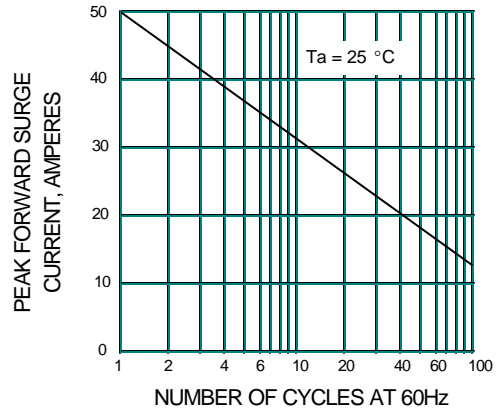
- (1) Measured at 1.0 MHz and applied reverse voltage of 4.0Vdc
- (2) Thermal resistance from Junction to Ambient at 0.375" (9.5mm) Lead Lengths, P.C. Board Mounted.

## RATING AND CHARACTERISTIC CURVES ( 1N5391G - 1N5399G )

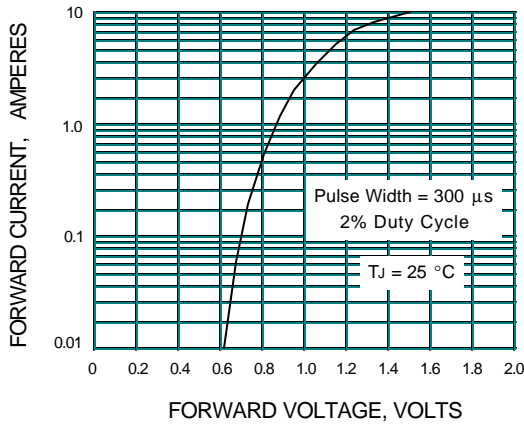
**FIG.1 - DERATING CURVE FOR OUTPUT RECTIFIED CURRENT**



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



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

