

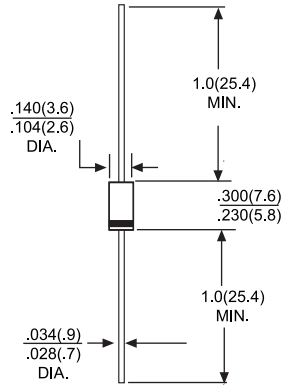


# 1N5391 THRU 1N5399

**1.5 AMPS.SILICON  
RECTIFIERS**

**Voltage Range  
50 to 1000 Volts  
Current  
1.5 Amperes**

DO-15



Dimensions in inches and (millimeters)

**Features**

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability

**Mechanical Data**

- Cases: Molded plastic
- Epoxy: UL 94V-O rate flame retardant
- Lead: Axial leads, solderable per MIL-STD-202, Method 208 guaranteed
- Polarity: Color band denotes cathode end
- High temperature soldering guaranteed:  
250°C/10 seconds/.375"(.9.5mm) lead lengths at 5 lbs.(2.3kg) tension
- Weight: 0.40 gram

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

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

Type Number		1N 5391	1N 5392	1N 5393	1N 5395	1N 5397	1N 5398	1N 5399	UNITS
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current .375"(9.5mm) Lead Length @T <sub>A</sub> = 75°C	I <sub>F(AV)</sub>	1.5							A
Peak Forward Surge Current, 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method)	I <sub>FSM</sub>	50							A
Maximum Instantaneous Forward Voltage @1.5A	V <sub>F</sub>	1.1	1.0					V	
Maximum DC Reverse Current @ T <sub>A</sub> = 25°C at Rated DC Blocking Voltage @ T <sub>A</sub> = 125°C	I <sub>R</sub>					5.0 50			µA µA
Maximum Full Load Reverse Current, Full Cycle Average .375"(9.5mm) Lead Length @T <sub>L</sub> =75°C	I <sub>R</sub>					30			µA
Typical Junction Capacitance (Note 1)	C <sub>J</sub>					30			pF
Typical Thermal Resistance (Note 2)	R <sub>θJA</sub>					50			°C/W
Operating Temperature Range	T <sub>J</sub>					-55 to +125		°C	
Storage Temperature Range	T <sub>STG</sub>					-55 to +150		°C	

NOTES: 1. Measured at 1 MHz and Applied Reverse Voltage of 4.0 Volts D.C.  
2. Thermal Resistance from Junction to Ambient .375"(9.5mm) Lead Length.

# RATING AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399



FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

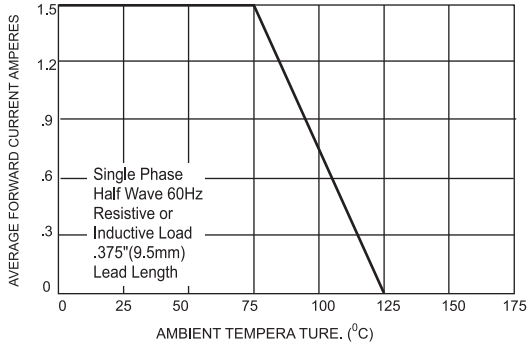


FIG.2- TYPICAL FORWARD CHARACTERISTICS

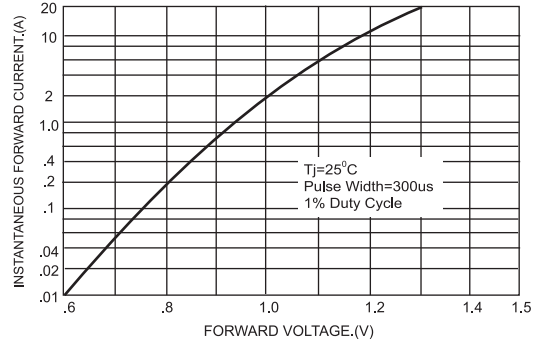


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

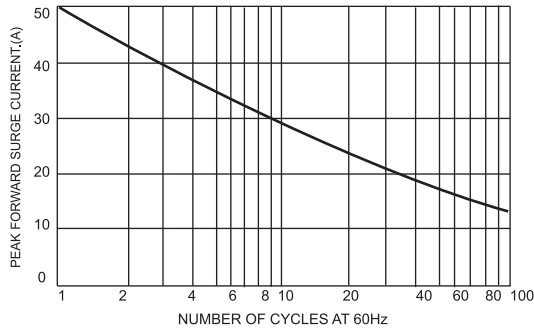


FIG.4- TYPICAL REVERSE CHARACTERISTICS

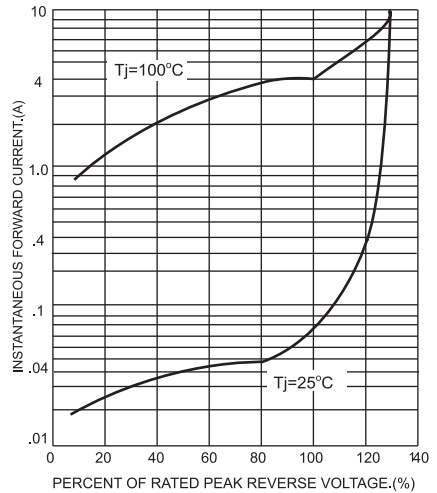


FIG.5- TYPICAL JUNCTION CAPACITANCE

