# 1N5391 THRU 1N5399



## 1.5 AMP SILICON RECTIFIERS



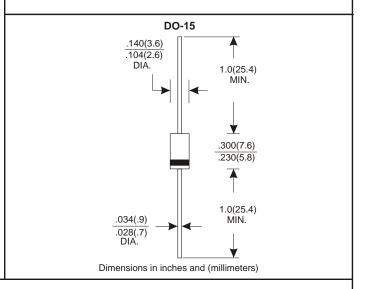
- \* Low forward voltage drop
- \* High current capability
- \* High reliability
- \* High surge current capability

### **MECHANICAL DATA**

- \* Case: Molded plastic
- \* Epoxy: UL 94V-0 rate flame retardant
- \* Lead: Axial leads, solderable per MIL-STD-202, method 208 guranteed
- \* Polarity: Color band denotes cathode end
- \* Mounting position: Any
- \* Weight: 0.40 grams

# **VOLTAGE RANGE** 50 to 1000 Volts **CURRENT**

1.5 Amperes



# MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

TYPE NUMBER	1N5391	1N5392	1N5393	1N5395	1N5397	1N5398	1N5399	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current								
.375"(9.5mm) Lead Length at Ta=50°C		1.5						
Peak Forward Surge Current, 8.3 ms single half sine-wave								
superimposed on rated load (JEDEC method)		50					Α	
Maximum Instantaneous Forward Voltage at 1.5A		1.0					V	
Maximum DC Reverse Current Ta=25°C		5.0						mA
at Rated DC Blocking Voltage Ta=100°C		50						
Typical Junction Capacitance (Note 1)		20						pF
Typical Thermal Resistance RqJA (Note 2)		50						°C/W
Operating and Storage Temperature Range TJ, Tsto		-65—+175						°C

#### NOTES:

- 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 2. Thermal Resistance from Junction to Ambient .375" (9.5mm) lead length.

### RATING AND CHARACTERISTIC CURVES (1N5391 THRU 1N5399)

FIG.1-TYPICAL FORWARD **CHARACTERISTICS** 50 INSTANTANEOUS FORWARD CURRENT, (A) 10 3.0 1.0 Pulse Width 300us 1% Duty Cycle 0.1 .01

1.0

FORWARD VOLTAGE,(V)

.6



