### 1N5391 THRU 1N5399

# PLASTIC SILICON RECTIFIER VOLTAGE - 50 to 1000 Volts CURRENT - 1.5 Amperes

### **FEATURES**

- Low cost
- High current capability
- High reliability
- Plastic package has Underwriters Laboratory
   Flammability Classification 94V-O utilizing
   Flame Retardant Epoxy Molding Compound
- 1.5 ampere operation at T<sub>L</sub>=70 with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage

### **MECHANICAL DATA**

Case: Molded plastic, DO-15

Terminals: Plated axial leads, solderable per MIL-STD-202,

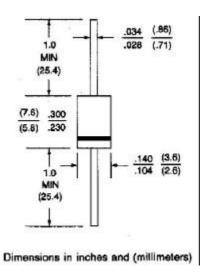
Method 208

Polarity: Color band denotes cathode

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram

## <u>DO-15</u>



### **MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 ambient temperature unless otherwise specified.

Single phase, half wave, 60 Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

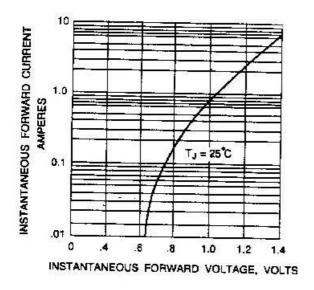
	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	UNITS
Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified					1.5					Α
Current .375"(9.5mm) Lead Length at										
T <sub>A</sub> =60										
Peak Forward Surge Current 8.3ms single	50									Α
half sine-wave superimposed on rated load										
(JEDEC method)										
Maximum Forward Voltage at 1.5A	1.4									V
Maximum Reverse Current Rated T <sub>A</sub> =25	5.0									Α
DC Blocking Voltage T <sub>A</sub> =100	500									Α
Typical Junction capacitance (Note 1)	25									₽F
Typical Thermal Resistance (Note 2)	26.0									/W
Operating and Storage Temperature Range	-55 TO +150									
$T_{J}, T_{STG}$										

#### NOTES:

- 1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
- Thermal Resistance Junction to Ambient and from junction to lead at 0.375"(9.5mm) lead length P.C.Board mounted.

### RATING AND CHARACTERISTIC CURVES

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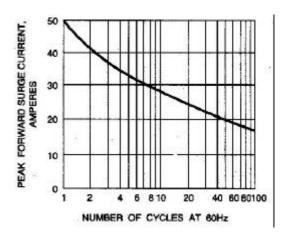
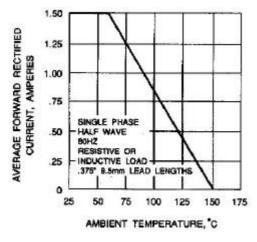


Fig. 1-TYPICAL FORWARD CHARACTERISTICS

Fig. 2-PEAK FORWARD SURGE CURRENT



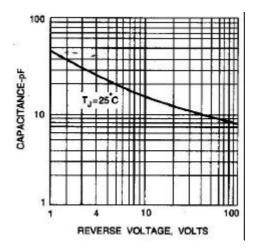


Fig. 3-FORWARD CURRENT DERATING CURVE

Fig. 4-TYPICAL JUNCTION CAPACITANCE