1N5391 THRU 1N5399

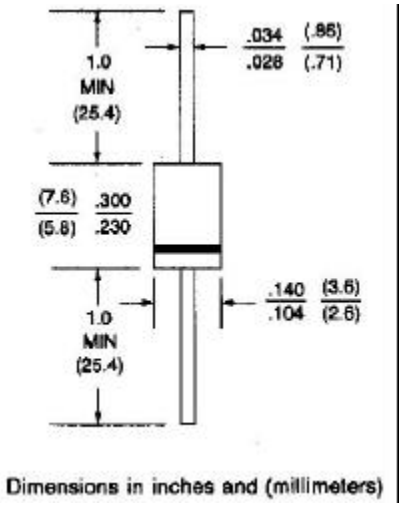
PLASTIC SILICON RECTIFIER

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_L=70 with no thermal runaway
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage

DO-15



Dimensions in inches and (millimeters)

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

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 Current .375"(9.5mm) Lead Length at T_A=60	1.5									A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	50									A
Maximum Forward Voltage at 1.5A	1.4									V
Maximum Reverse Current Rated T_A=25 DC Blocking Voltage T_A=100	5.0 500									A A
Typical Junction capacitance (Note 1)	25									$_P$F
Typical Thermal Resistance (Note 2)	26.0									/W
Operating and Storage Temperature Range T_J,T_{STG}	-55 TO +150									

NOTES:

1. Measured at 1 MHz and applied reverse voltage of 4.0 VDC.
2. 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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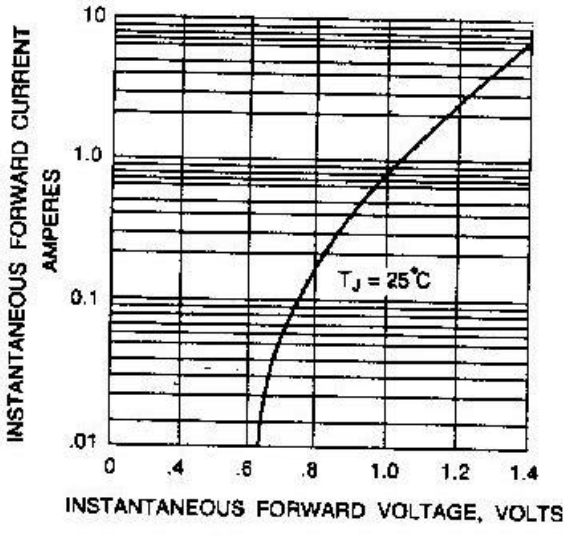

Fig. 1-TYPICAL FORWARD CHARACTERISTICS

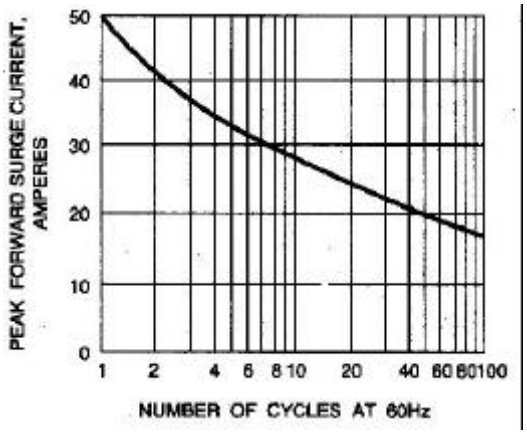

Fig. 2-PEAK FORWARD SURGE CURRENT

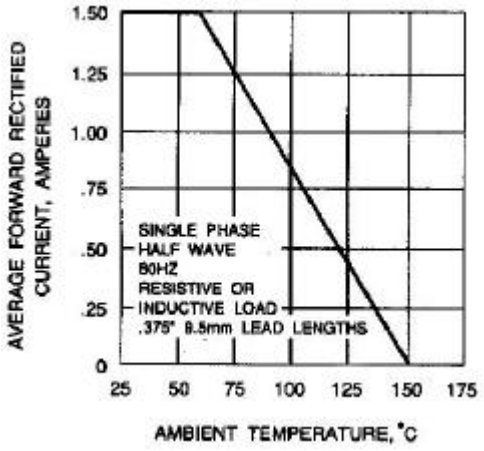

Fig. 3-FORWARD CURRENT DERATING CURVE

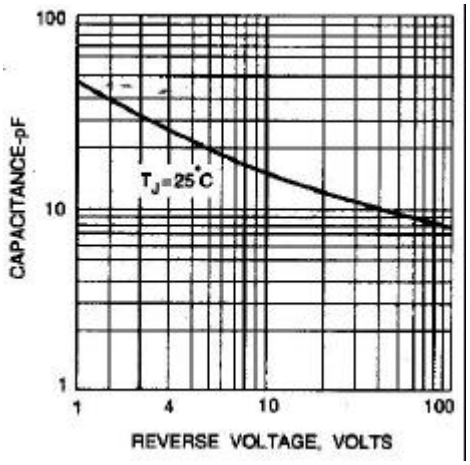

Fig. 4-TYPICAL JUNCTION CAPACITANCE