



DATA SHEET

1N5391~1N5399

PLASTIC SILICON RECTIFIER

VOLTAGE 50 to 1000 Volts **CURRENT** 1.5 Amperes

DO-15

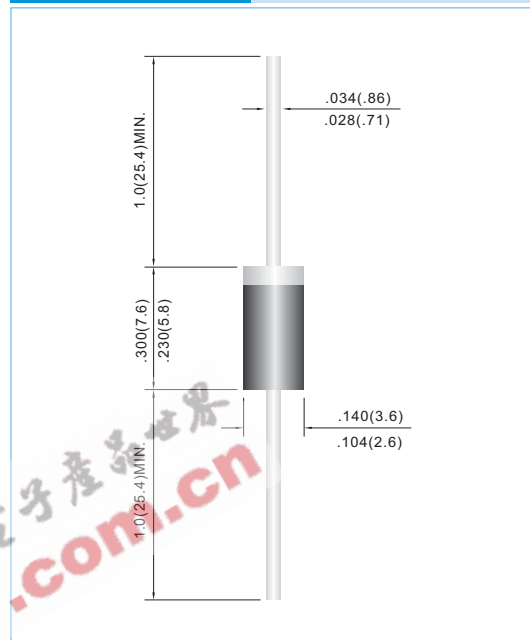
Unit: inch(mm)

FEATURES

- Plastic package has Underwriters Laboratories Flammability Classification 94V-O utilizing Flame Retardant Epoxy Molding Compound.
- Exceeds environmental standards of MIL-S-19500/228
- Low leakage.
- Both normal and Pb free product are available :
Normal : 80~95% Sn, 5~20% Pb
Pb free: 98.5% Sn above

MECHANICAL DATA

Case: Molded plastic, DO-15
Terminals: Axial leads, solderable to MIL-STD-202, Method 208
Polarity: Color Band denotes cathode end
Mounting Position: Any
Weight: 0.015 ounce, 0.4 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

PARAMETER	SYMBOL	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Current .375"(9.5mm) lead length at TA=60°C	I _{AV}	1.5									A
Peak Forward Surge Current :8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I _{FSM}	50									A
Maximum Forward Voltage at 1.5A	V _F	1.4									V
Maximum DC Reverse Current TA=25°C at Rated DC Blocking Voltage TA=100°C	I _R	5.0 500									uA
Typical Junction capacitance (Note 1)	C _J	25									pF
Typical Thermal Resistance(Note 2)	R _{θJA} R _{θJL}	45 28									°C / W
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 TO +150									°C

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

2. Thermal resistance from junction to ambient and from junction to lead length 0.375"(9.5mm) P.C.B. mounted



RATING AND CHARACTERISTIC CURVES

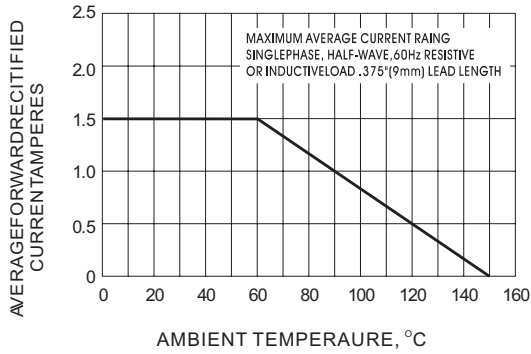


Fig.1- FORWARD CURRENT DERATING CURVE

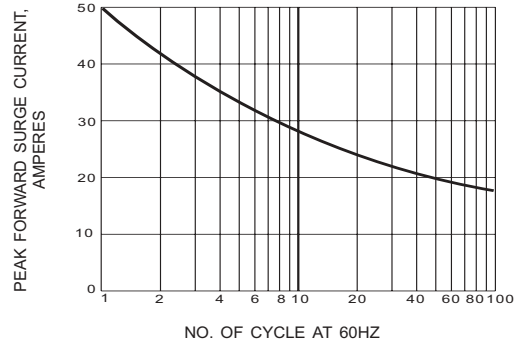


Fig.2- MAXIMUM OVERLOAD SURGE CURRENT

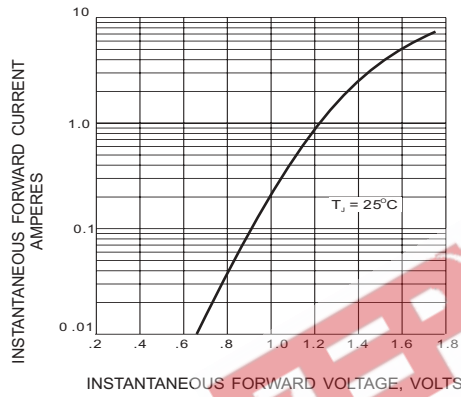


Fig.3- TYPICAL FORWARD CHARACTERISTIC

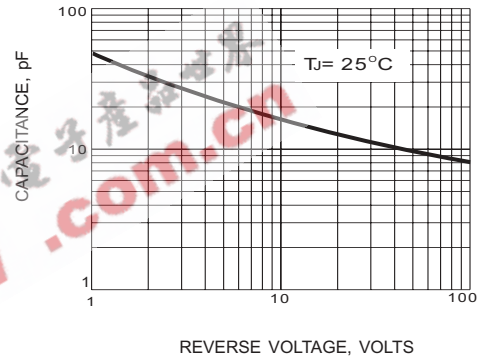


Fig.4- TYPICAL JUNCTION CAPACITANCE