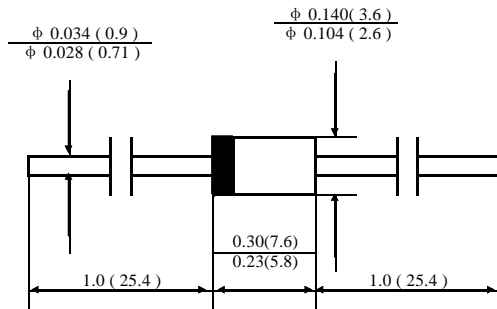


1N5391 THRU 1N5399

1.5AMP PLASTIC SILICON RECTIFIERS

VOLTAGE RANGE: 50 TO 1000 VOLTS

DO-15



inch (mm)

FEATURES

- . Diffused junction
- . Low Leakage
- . Low forward voltage drop
- . High current capability
- . Easily cleaned with Freon, Alcohol, Isopropanol and similar solvents
- . The plastic material carries U/L recognition 94V-0

MECHANICAL DATA

- . Case: JEDEC DO-15, molded plastic
- . Terminals: Axial leads, Solderable per MIL - STD - 750, Method 2026
- . Polarity: Color band denotes cathode
- . Weight: 0.014 ounce, 0.39grams
- . Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

Single phase, half wave, 60HZ, resistive or inductive load. For capacitive load, derate current by 20%

	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	700	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	700	1000	V
Maximum Average Forward Rectified Current 12.7mm Lead Length, T _L = 55°C	I <sub(av)< sub=""></sub(av)<>	1.5									A
Peak Forward Surge Current 8.3ms Single half-sine-wave superimposed on rated T _A = 50°C	I _{FSM}	50									A
Maximum Forward Voltage at 1.5A DC	V _F	1.4									V
Maximum Reverse Current T _A = 25°C at Rated DC Blocking Voltage T _A = 150°C	I _R	5.0 300.0									μ A
Typical Junction Capacitance (Note 1)	C _j	15.0									pF
Typical Thermal Resistance (Note 2)	R _{QJA}	50									°C/W
Operating Junction Temperature Range	T _j	-55 to 125									°C
Storage Temperature Range	T _{STG}	-55 to 150									°C

- NOTE:**
1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC.
 2. Thermal resistance junction to ambient.

FIG. 1 -- TYPICAL FORWARD CHARACTERISTIC

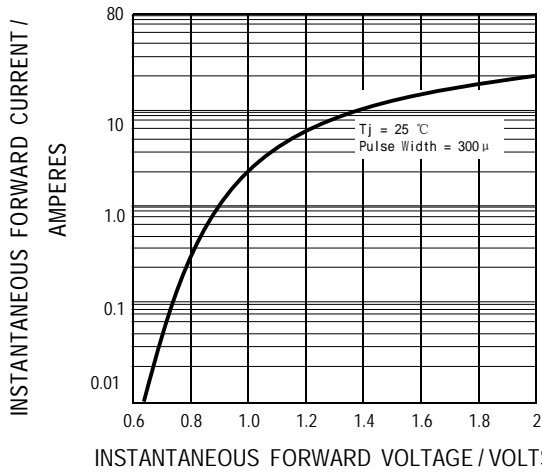


FIG. 2 -- TYPICAL JUNCTION CAPACITANCE

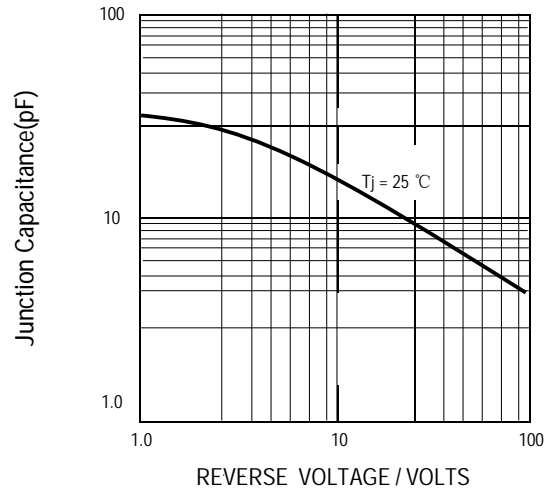


FIG. 3 -- FORWARD CURRENT DERATING CURVE

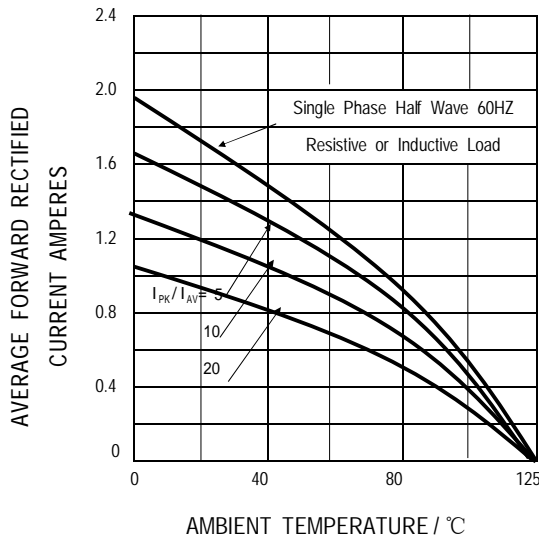


FIG. 4 -- PEAK FORWARD SURGE CURRENT

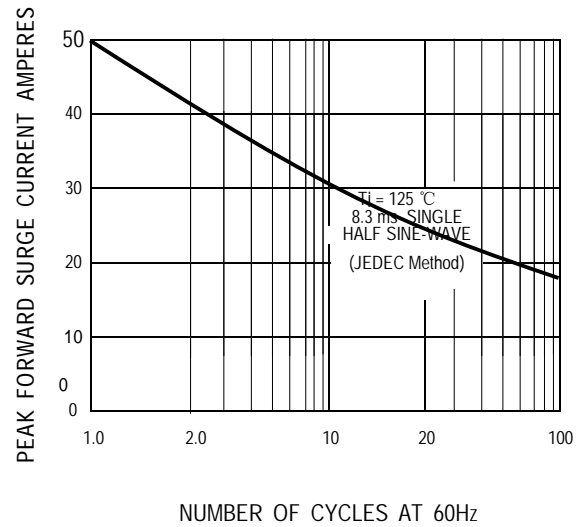


Fig.5-Typical Reverse Characteristics

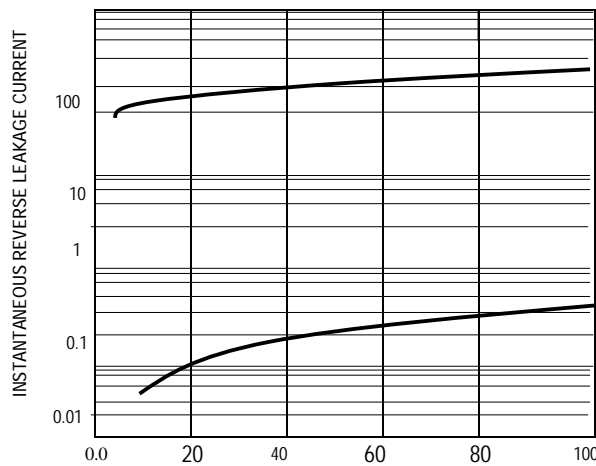


Fig.6-Transient Thermal Impedance

