

I. General Purpose Rectifier

1.5A Silicon Rectifier

1N5391~1N5399

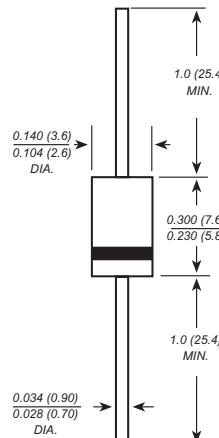
(Package: DO-15)

FEATURES

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed : 250 /10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- Case : JEDEC DO-15 molded plastic body
- Terminals : Plated axial leads, solderable per MIL-STD-750, Method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.014 ounce, 0.40 grams



Case: DO-15
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25° ambient temperature unless otherwise specified.

Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristic	Symbol	1N 5391	1N 5392	1N 5393	1N 5394	1N 5395	1N 5396	1N 5397	1N 5398	1N 5399	Units
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS voltage	V _{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC blocking voltage	V _{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at Ta = 75	I _O	1.5									Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50.0									Amps
Maximum instantaneous forward voltage at 1.5 A	V _F	1.4									Volts
Maximum DC reverse current Ta = 25 at rated DC blocking voltage Ta = 100	I _R	5.0 100.0									µA
Typical junction capacitance (Note 1)	C _j	20.0									PF
Typical thermal resistance (Note 2)	R _{th-JA}	50.0									/ W
Operating junction and storage temperature range	T _j , T _{stg}	- 65 to +175									

Note :

1. Measured at 1MHz and applied reverse voltage of 4.0 V D.C.

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

Ratings and Characteristic Curves of 1N5391~1N5399

AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES

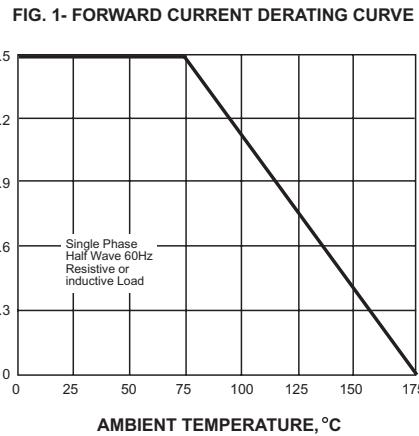
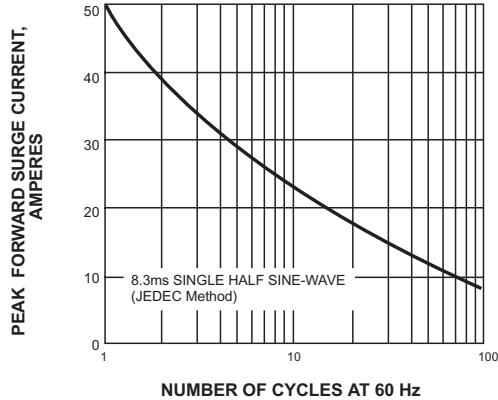


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT



INSTANTANEOUS FORWARD CURRENT, AMPERES

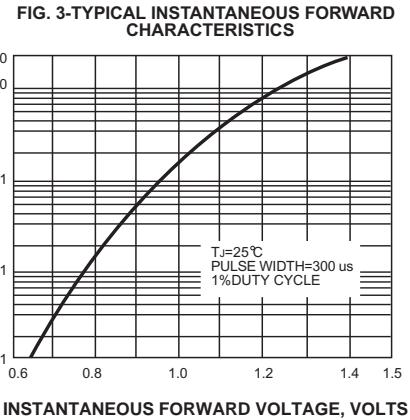
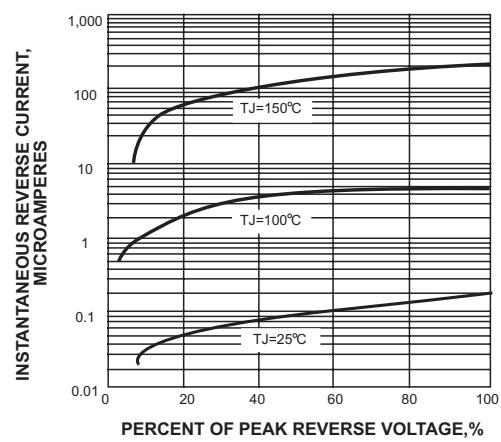
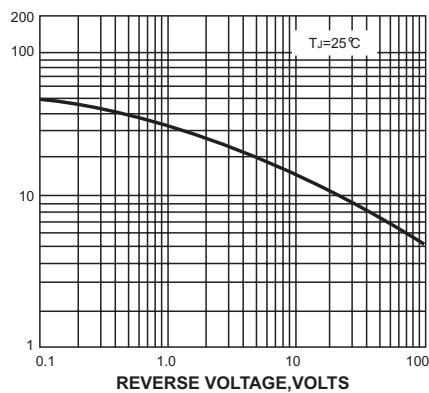


FIG. 4-TYPICAL REVERSE CHARACTERISTICS



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

