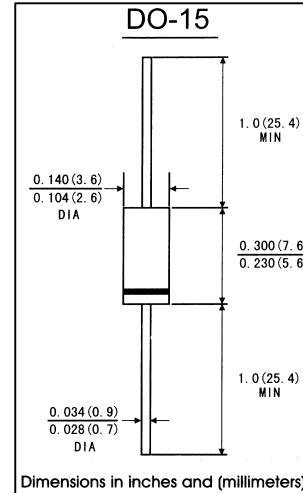


FEATURES

- . The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- . Construction utilizes void-free molded plastic technique
- . 1.5A operation at $T_L=70^{\circ}\text{C}$ with no thermal runaway
- . Low reverse leakage
- . High forward surge current capability
- . High temperature soldering guaranteed: $250^{\circ}\text{C}/10$ seconds, $0.375''(9.5\text{mm})$ lead length,5lbs.(2.3kg)tension

MECHANICAL DATA

- . **Case:** JEDEC DO-15 molded plastic body
- . **Terminals:** lead solderable per MIL-STD-750,method 2026
- . **Polarity:** Color band denotes cathode end
- . **Mounting Position:** Any
- . **Weight:** 0.014 ounce, 0.33 gram



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 by 20%)

	Symbols	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
Macimum average forward rectified current $0.375''(9.5\text{mm})$ lead length at $T_A=70^{\circ}\text{C}$	$I_{(AV)}$	1.5									Amps
Peak forward surge current 8.3ms sing-wave superimposed on rated load (JEDEC method) $T_A=70^{\circ}\text{C}$	I_{FSM}	50.0									Amps
Maximum instantaneous forward voltage at 1.5 A	V_F	1.4									Volts
Maximum reverse current at rated DC blocking voltage	$T_A=25^{\circ}\text{C}$	5.0									μA
	$T_A=100^{\circ}\text{C}$										
Typeical thermal resistance(Note 2)	$R\theta_{JA}$	50.0									$^{\circ}\text{C}/\text{W}$
	$R\theta_{JL}$	25.0									
Typical junction Capacitance(Note 1)	C_J	20.0									pF
Maximum DC Blocking Voltage temperature	T_A	+150									$^{\circ}\text{C}$
Operating and storage temperature range	T_J	-65 to +175									$^{\circ}\text{C}$
	T_{STG}										

Notes: 1. Measured at 1MHz and applied reverse voltage of 4.0V DC

2.Thermal resistance from junction to ambient and from junction lead at $0.375''(9.5\text{mm})$ lead length, P.C.B. Mounted

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

FIG.1-FORWARD CURRENT DERATING CURVE

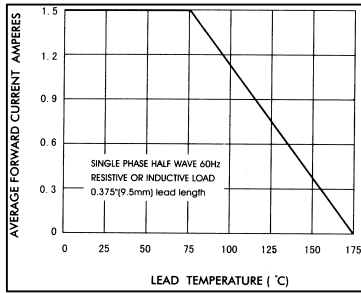


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

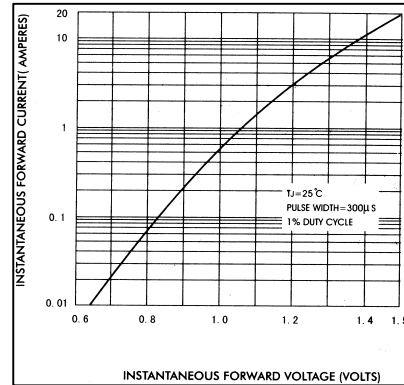


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

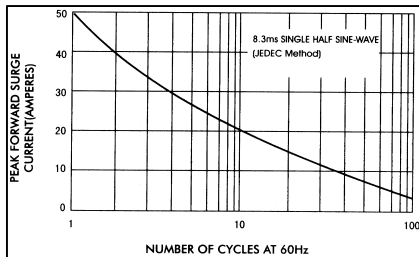


FIG.4-TYPICAL REVERSE CHARACTERISTICS

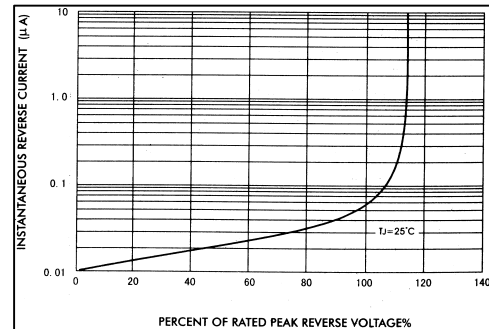


FIG.5-TYPICAL JUNCTION CAPACITANCE

