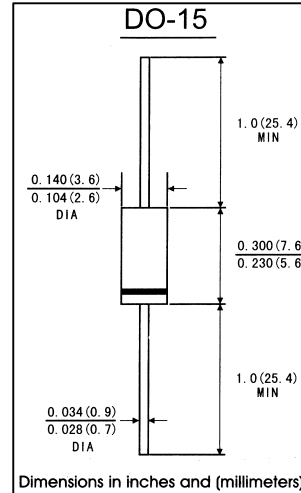


FEATURES

- . 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"(9.5mm)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"(9.5mm)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									$^{\circ}\text{C}/\text{W}$
	$R\theta_{JL}$										
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"(9.5mm)lead length, P.C.B. Mounted

RATINGS AND CHARACTERISTIC CURVES 1N5391 THRU 1N5399

FIG.1-FORWARD CURRENT DERATING CURVE

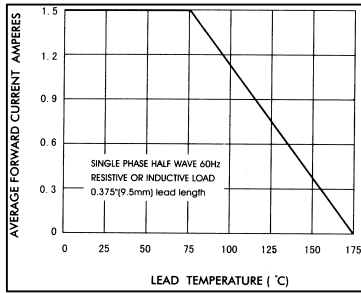


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

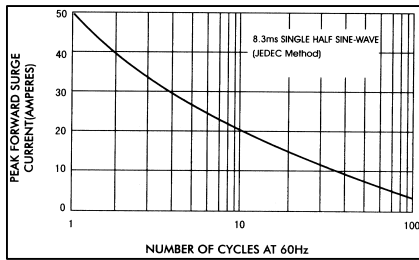


FIG.5-TYPICAL JUNCTION CAPACITANCE

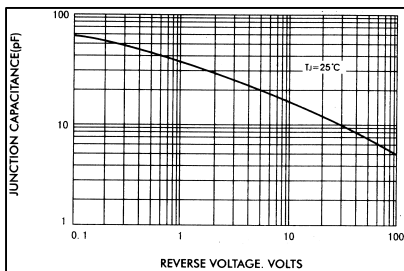


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

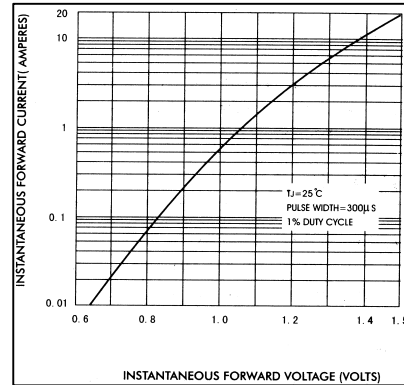


FIG.4-TYPICAL REVERSE CHARACTERISTICS

