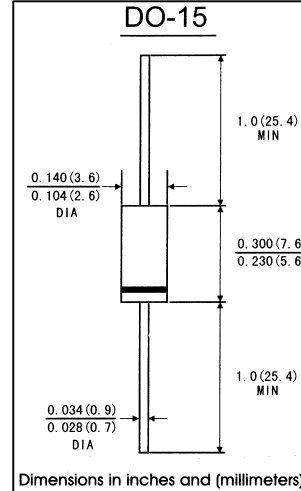


FEATURES

- . 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

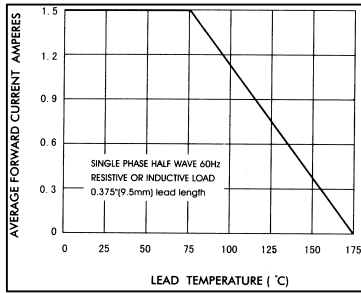


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

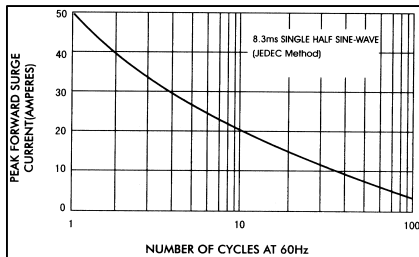


FIG.5-TYPICAL JUNCTION CAPACITANCE

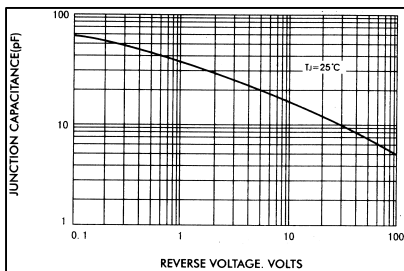


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

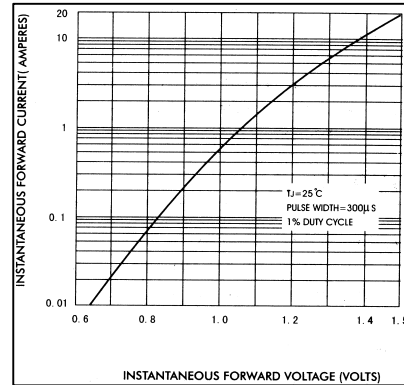


FIG.4-TYPICAL REVERSE CHARACTERISTICS

