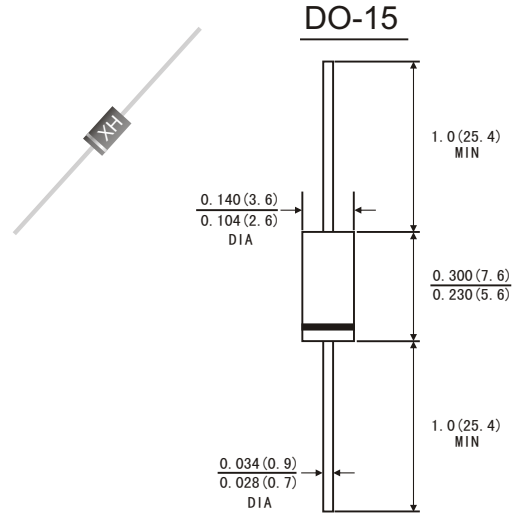


FEATURES

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- 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: $260^{\circ}\text{C}/10$ seconds at terminals
- 0.375"(9.5mm) lead length, 5lbs.(2.3kg)tension
- Component in accordance to RoHs 2002/95/EC and WEEE 2002/96/EC

MECHANICAL DATA

- *Case*KJEDEC DO-15 molded plastic body
- *Terminals*KLead solderable per MIL-STD-750,method 2026
- *Polarity*K1Color band denotes cathode end
- *Mounting Position*KAny
- *Weight*K0.014ounce, 0.33 gram



Dimensions in inches and (millimeters)

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 Recurrent 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 $T_A=75^{\circ}\text{C}$ | | $I_{(AV)}$ | 1.5 | | | | | | | | | Amps |
| Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method) | | I_{FSM} | 50.0 | | | | | | | | | Amps |
| Maximum Instantaneous Forward Voltage at 1.5 A | | V_F | 1.1 | | | | | | | | | Volts |
| Maximum Reverse current at rated DC Blocking Voltage | $T_c = 25^{\circ}\text{C}$ | I_R | 5.0 | | | | | | | | | μA |
| | $T_c = 100^{\circ}\text{C}$ | | 50.0 | | | | | | | | | |
| Typical Thermal Resistance(Note 2) | | $R_{\theta JA}$ | 60.0 | | | | | | | | | $^{\circ}\text{C}/\text{W}$ |
| Typical Junction Capacitance(Note 1) | | C_J | 50.0 | | | | | | | | | pF |
| Operating and Storage Temperature Range | | T_J T_{STG} | -65 to+150 | | | | | | | | | $^{\circ}\text{C}$ |

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

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

FIG.1-FORWARD CURRENT DERATING CURVE

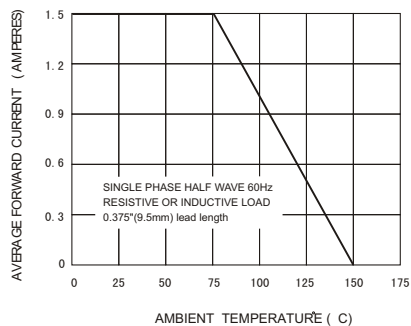


FIG.2-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

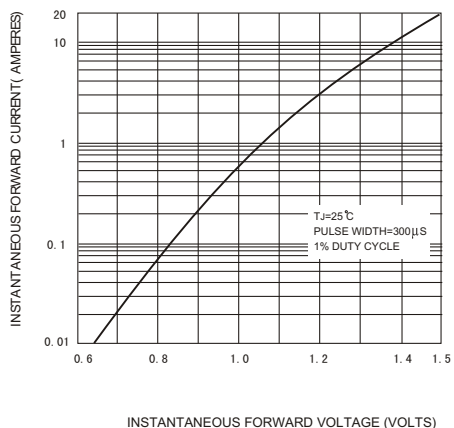


FIG.3-MAXIMUM NON-REPETITIVE PEA FORWARD SURGE CURRENT

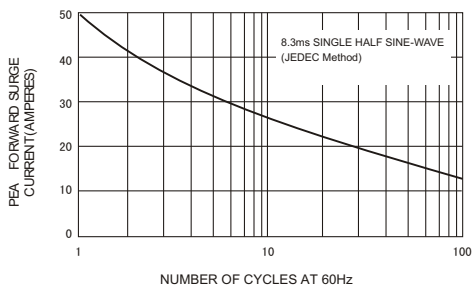


FIG.4-TYPICAL REVERSE CHARACTERISTICS

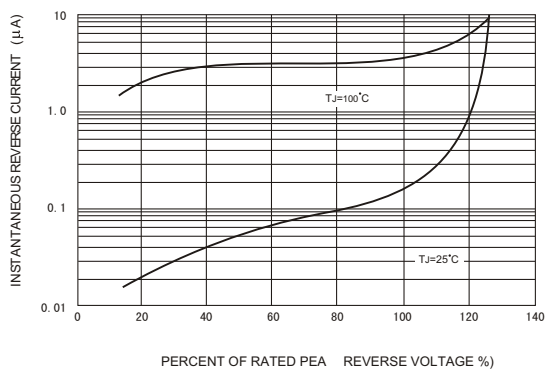


FIG.5-TYPICAL JUNCTION CAPACITANCE

