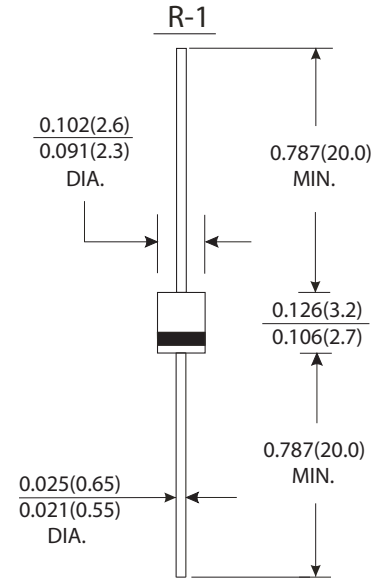


Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Low forward voltage drop
- High current capability
- High reliability
- Low power loss, high efficiency
- High surge current capability
- High speed switching
- Low leakage

Mechanical Data

- Case : R-1 molded plastic body
- Epoxy : UL94V-0 rate flame retardant
- Lead : Plated axial lead solderable per MIL-STR-750, method 2026
- Polarity : Color band denotes cathode end
- Mounting Position : Any
- Weight : 0.007 ounce, 0.19 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 | 1H1G | 1H2G | 1H3G | 1H4G | 1H5G | 1H6G | 1H7G | 1H8G | Units |
|---|------------------------------------|-------------|------|------|------|------|------|------|-------|-------|
| Maximum recurrent peak reverse voltage | V _{RRM} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum RMS voltage | V _{RMS} | 35 | 70 | 140 | 210 | 280 | 420 | 560 | 700 | Volts |
| Maximum DC blocking voltage | V _{DC} | 50 | 100 | 200 | 300 | 400 | 600 | 800 | 1000 | Volts |
| Maximum average forward rectified current 0.375"(9.5mm) lead length T _A =55°C | I <sub(av)< sub=""></sub(av)<> | 1.0 | | | | | | | | Amp |
| Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I _{FSM} | 25.0 | | | | | | | | Amps |
| Maximum instantaneous forward voltage at 1.0A | V _F | 1.0 | | 1.3 | | 1.7 | | | Volts | |
| Maximum DC Reverse Current at rated DC blocking voltage | I _R | 5.0 | | | | | | | | μA |
| Maximum full load reverse current full cycle average. 0.375"(9.5mm) lead length at T _L =55°C | | 100 | | | | | | | | |
| Maximum reverse recovery time (Note 1) | T _{rr} | 50 | | | | 70 | | | ns | |
| Typical junction capacitance (Note 2) | C _J | 20 | | | | 15 | | | pF | |
| Operating Junction and Storage temperature Range | T _J T _{STG} | -65 to +150 | | | | | | | | °C |

Notes:

- (1) Test conditions: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- (2) Measured at 1MHz and applied reverse voltage of 4.0 Volts.



RATINGS AND CHARACTERISTIC CURVES 1H1G THRU 1H8G

FIG.1-TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC

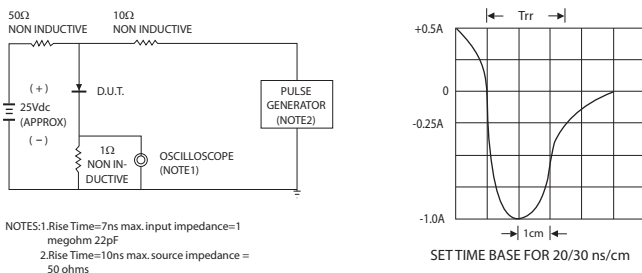


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

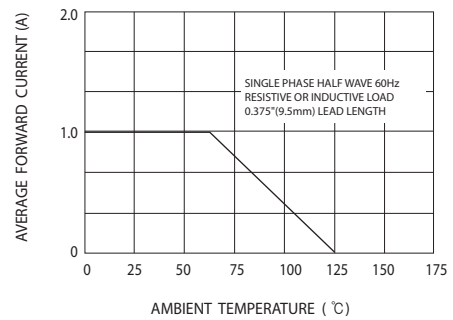


FIG.3-TYPICAL FORWARD CHARACTERISTICS

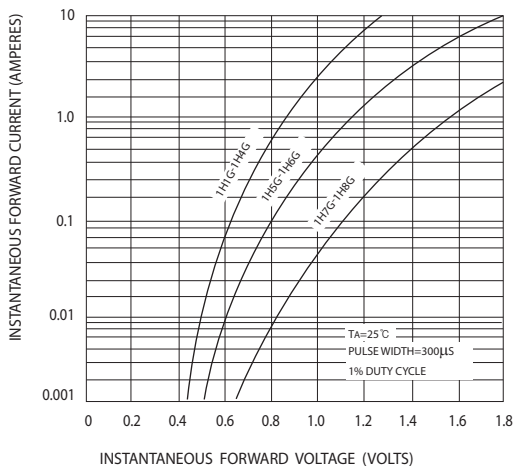


FIG.4-TYPICAL REVERSE CHARACTERISTICS

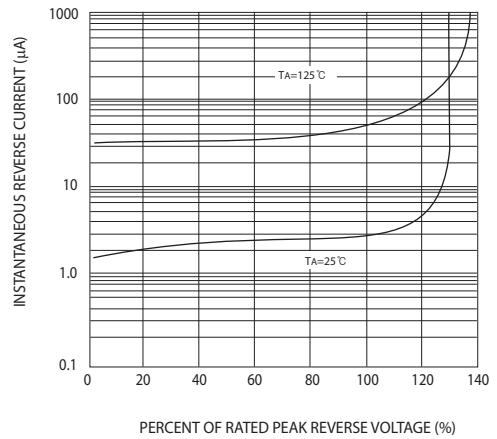


FIG.5-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

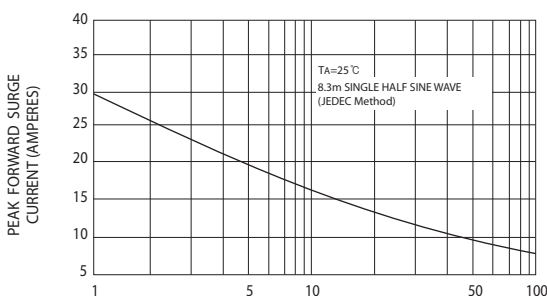


FIG.6-TYPICAL JUNCTION CAPACITANCE

