

1F1G THRU 1F7G**FAST RECOVERY PLASTIC RECTIFIER**

VOLTAGE: 50-1000V

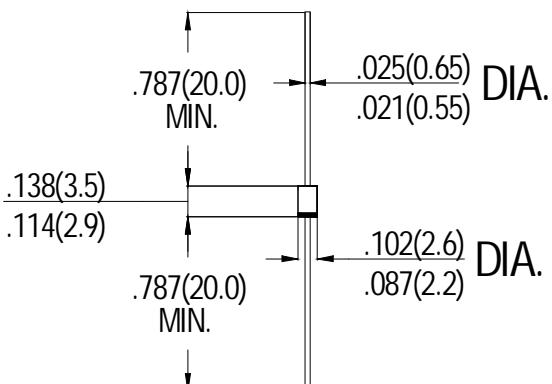
CURRENT: 1.0A

FEATURES

- High reliability
- Low leakage
- Low forward voltage drop
- High current capability

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 0.19 grams

R-1

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRONICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

| | SYMBOL | 1F1G | 1F2G | 1F3G | 1F4G | 1F5G | 1F6G | 1F7G | units | |
|---|-----------------|------|------|------|------|------|------|---------|--------------|--|
| Maximum Recurrent Peak Reverse Voltage | V_{RRM} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum RMS Voltage | V_{RMS} | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V | |
| Maximum DC Blocking Voltage | V_{DC} | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V | |
| Maximum Average Forward rectified Current at $T_A=50^\circ C$ | I_o | 1.0 | | | | | | | A | |
| Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method) | I_{FSM} | 30 | | | | | | | A | |
| Maximum Instantaneous forward Voltage at 0.5A DC | V_F | 1.3 | | | | | | | V | |
| Maximum DC Reverse Current @ $T_A=25^\circ C$ | I_R | 5.0 | | | | | | μA | | |
| at Rated DC Blocking Voltage @ $T_A=100^\circ C$ | | 500 | | | | | | | | |
| Maximum Full Load Reverse Current Average Full Cycle .375"(9.5mm) lead length at $T_L=75^\circ C$ | | 30 | | | | | | | | |
| Typical Junction Capacitance (Note) | C_J | 15 | | | | | | | pF | |
| Maximum Reverse Recovery Time | t_{rr} | 150 | | 250 | | 500 | | | nS | |
| Typical Thermal Resistance | $R_{\theta JA}$ | 60 | | | | | | | $^\circ C/W$ | |

Notes: Measured at 1MHz and applied reverse voltage of 4.0 volts