

1F1G THRU 1F7G

FAST RECOVERY PLASTIC RECTIFIER

VOLTAGE: 50-1000V

CURRENT: 1.0A

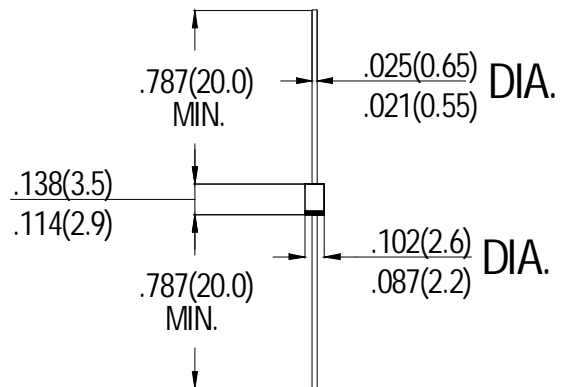
FEATURES

- 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 ELECTRICAL 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 $T_A=50^\circ\text{C}$	I_o	1.0							A	
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30							A	
Maximum Instantaneous forward Voltage at 0.5A DC	V_F	1.3							V	
Maximum DC Reverse Current at Rated DC Blocking Voltage	I_R	@ $T_A=25^\circ\text{C}$	5.0							μA
		@ $T_A=100^\circ\text{C}$	500							
Maximum Full Load Reverse Current Average Full Cycle .375"(9.5mm) lead length at $T_L=75^\circ\text{C}$		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							$^\circ\text{C/W}$	

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