

**DESCRIPTION**

This is a high radiance InGaAs IR LED for applications requiring 1050 nm emission and a fast response time.

**FEATURES**

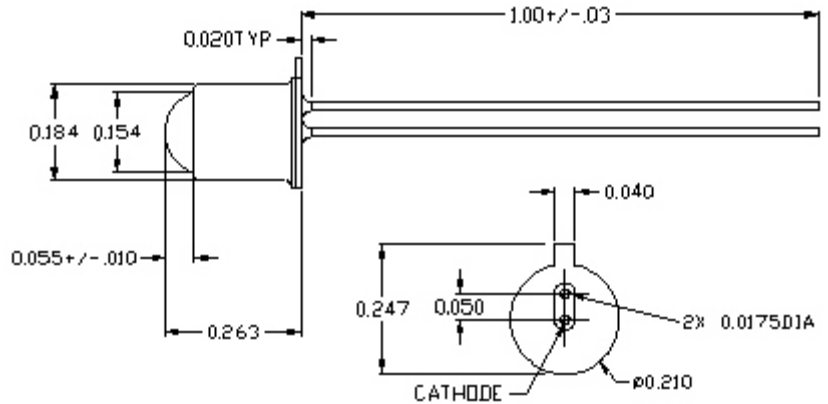
- 12 Degree Half Angle of light emission
- High Electrical Bandwidth/Fast response time
- High Reliability
- Hermetic Package

**ABSOLUTE MAXIMUM RATINGS**

- Storage temperature.....-65°C to +125°C
- Case operating temperature.. -40°C to +85°C
- Lead solder temperature..... 260°C, 10 seconds
- Continuous forward current..... 100 mA
- Reverse Voltage..... 3 Volts

**OUTLINE DIMENSIONS**

Tolerances are +/-0.005 inches, except as noted



**Pinout**

1. Cathode
2. Anode

The case is electrically isolated from the pins.

**ELECTRO-OPTICAL CHARACTERISTICS (Case T = 25°C)**

| PARAMETER                | TEST CONDITION                  | SYMBOL           | MIN  | TYP  | MAX  | UNIT  |
|--------------------------|---------------------------------|------------------|------|------|------|-------|
| Forward Voltage          | I <sub>f</sub> = 100 mA         | V <sub>f</sub>   |      | 1.2  | 2.0  | Volts |
| Reverse Voltage          | I <sub>r</sub> = 10 μA          | BVR              | 3.0  |      |      | Volts |
| Half Angle at Half Power |                                 | θ <sub>1/2</sub> |      | 6    | 12   | DEG   |
| Capacitance              | V <sub>r</sub> = 0 V, f = 1 MHz | C                |      | 70   |      | pF    |
| Total Optical Power      | I <sub>f</sub> = 100 mA         | P <sub>out</sub> | 0.1  | 0.3  |      | mW    |
| Response Time            | 10%-90%, 1V Prebias             | t <sub>r</sub>   |      | 20   |      | nsec  |
|                          | I <sub>f</sub> = 100 mA         | t <sub>f</sub>   |      | 20   |      | nsec  |
| Peak Wavelength          | I <sub>f</sub> = 100 mA         | λ <sub>p</sub>   | 1020 | 1050 | 1080 | nm    |
| Spectral Bandwidth       | I <sub>f</sub> = 100 mA         | Δλ               |      | 145  |      | nm    |
| Electrical Bandwidth     | I <sub>f</sub> = 100 mA         | BWE              |      | 85   |      | MHz   |

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