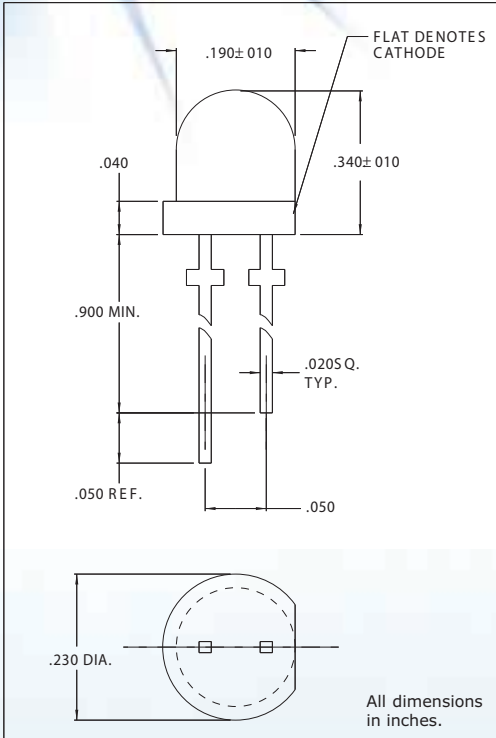


**T-1 3/4 Ultrabright LED Lamps**  
**DESCRIPTION AND FEATURES**



The Ultrabright HLMP3X50 series are direct pin for pin replacements for Hewlett Packard's HLMP3X50 series. These LED lamps provide a very narrow viewing angle in a clear tinted non-diffused package and are excellent for small area backlighting. A pale tint aids in identification. The High Efficiency Red and Yellow lamps are produced with GaAsP/GaP and the High Efficiency Green lamp is produced with GaP/GaP. All feature an 80 mcd minimum luminous intensity.

**ELECTRO-OPTICAL CHARACTERISTICS AND RATINGS**

| PART NUMBER  | HLMP3750    | HLMP3850    | HLMP3950    |
|--|-------------|-------------|-------------|
| Output Color   | H.E.Red     | Yellow      | H.E.Green   |
| Package Type   | Tint N.D.   | Tint N.D.   | Tint N.D.   |
| Package Color  | Clear       | Clear       | Clear       |
| Test Current (mA)                                      | 20          | 20          | 20          |
| Forward Voltage Typ. (V)                               | 2.2         | 2.2         | 2.2         |
| Forward Voltage Max. (V)                               | 3.0         | 3.0         | 3.0         |
| Luminous Intensity Min. (mcd)                          | 80.0        | 80.0        | 80.0        |
| Luminous Intensity Typ. (mcd)                          | 150.0       | 150.0       | 150.0       |
| Luminous Intensity Max. (mcd)                          | -           | -           | -           |
| Peak Wavelength (nm)                                   | 635         | 585         | 565         |
| Viewing Angle $2\theta$ 1/2 (degrees)                  | 24          | 24          | 24          |
| Power Dissipation (mW)                                 | 135         | 85          | 135         |
| Operating Temperature (°C)                             | -55 to +100 | -55 to +100 | -55 to +100 |
| Storage Temperature (°C)                               | -55 to +100 | -55 to +100 | -55 to +100 |
| Peak Forward Current Max. (1µs @ 0.3% duty cycle) (mA) | 90          | 60          | 90          |
| Reverse Voltage (IR=100µA) (V)                         | 5           | 5           | 5           |
| Lead Solder Time @ 260°C                               | 5           | 5           | 5           |