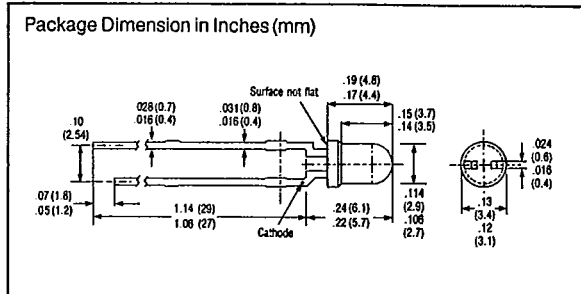


**SIEMENS**

**RED LDR 1101/1102/1103**  
**HIGH EFFICIENCY RED LDH 1111/1112/1113**  
**HIGH EFFICIENCY YELLOW LDY 1131/1132/1133**  
**HIGH EFFICIENCY GREEN LDG 1151/1152/1153**  
**T1 LED LAMP**

T-41-21



**FEATURES**

- High Light Output
- Diffused Lens
- Wide Viewing Angle 70°
- T 1 Size
- 1" Lead Length
- Front Panel Mounting
- Snap-in Mounting Clips Available
- Clip/Collar #2004-9016 Clear
- #2004-9015 Black
- I/C Compatible

**Maximum Ratings**

|                                     |       | LDR 110X    | LDH 111X<br>LDY 113X<br>LDG 115X |     |
|-------------------------------------|-------|-------------|----------------------------------|-----|
| Reverse voltage                     | VR    | 5           | 5                                | V   |
| Forward current                     | IF    | 100         | 60                               | mA  |
| Surge current (≤10μs)               | IFS   | 2           | 1                                | A   |
| Storage temperature range           | Tstg  | -55 to +100 |                                  | °C  |
| Junction temperature                | Tj    | 100         | 100                              | °C  |
| Total power dissipation (Tamb=25°C) | Ptot  | 200         | 200                              | mW  |
| Thermal resistance junction to air  | RthJA | 375         | 375                              | K/W |

**Characteristics (Tamb=25°)**

|  |                   | LDR 110X  | LDH 111X | LDY 113X  | LDG 115X |      |
|--|-------------------|-----------|----------|-----------|----------|------|
| Wavelength at peak emission                            | λ <sub>peak</sub> | 665±15    | 645±15   | 590±10    | 560±15   | nm   |
| Dominant wavelength                                    | λ <sub>dom</sub>  | 645       | 638      | 592       | 561      | nm   |
| Viewing angle  | φ                 | 70        | 70       | 70        | 70       | Deg. |
| (Limits for 50% of luminous intensity I <sub>v</sub> ) |                   |           |          |           |          |      |
| Forward voltage (I <sub>F</sub> = 20mA)                | V <sub>F</sub>    | 1.6(±2.0) |          | 2.4(±3.0) |          | V    |
| Reverse current (V <sub>R</sub> = 5V)                  | I <sub>R</sub>    | 0.01(±10) |          | 0.01(±10) |          | μA   |
| Rise time  | t <sub>r</sub>    | 5         | 100      | 200       | 50       | ns   |
| Fall time  | t <sub>f</sub>    | 5         | 100      | 200       | 50       | ns   |
| Capacitance (VR = 0V, f = 1 MHz)                       | C <sub>0</sub>    | 40        | 12       | 10        | 45       | pF   |

**DESCRIPTION**

The LDR 110X Series is a standard red gallium arsenide phosphide (GaAsP) LED lamp. The LDH111X high efficiency red and LDY13X yellow are premium high efficiency light emitting diode lamps fabricated with TSN (transparent substrate nitrogen) technology. The LDG 115X green Series is a gallium phosphide (GaP) lamp. All have a diffused plastic lens which emits a full flooded intense light.

See graph numbers on pages 4-27 - 4-34.  
 Red: 1D, 2D, 3D, 6B, 6C, 7B, 8B, 9B, 10B  
 HER: 1A, 2E, 3A, 6A, 6A, 7A, 8A, 9A, 10A  
 Yellow: 1A, 2E, 3A, 6A, 6A, 7A, 8A, 9B, 10A  
 Green: 1A, 2F, 3B, 6A, 6A, 7C, 8A, 9A, 10A

**Luminous Intensity**

| P/N      | mcd (MIN) | Test conditions |
|----------|-----------|-----------------|
| LDR 1101 | 1.0       | 20mA            |
| LDR 1102 | 2.0       | 20mA            |
| LDR 1103 | 4.0       | 20mA            |
| LDH 1111 | 2.5       | 10mA            |
| LDH 1112 | 4.0       | 10mA            |
| LDH 1113 | 6.0       | 10mA            |
| LDY 1131 | 1.0       | 10mA            |
| LDY 1132 | 2.0       | 10mA            |
| LDY 1133 | 4.0       | 10mA            |
| LDG 1151 | 2.5       | 20mA            |
| LDG 1152 | 6.0       | 20mA            |
| LDG 1153 | 10        | 20mA            |