

Description

The SY413D and SY413T are full resin-molded LED lamps which emit bright, brilliant, uniform amber light proportional to the forward current (I_F). They are especially suitable for electronic equipment which require bright, vivid displays. The SY413T is especially suitable as a backlighting source.

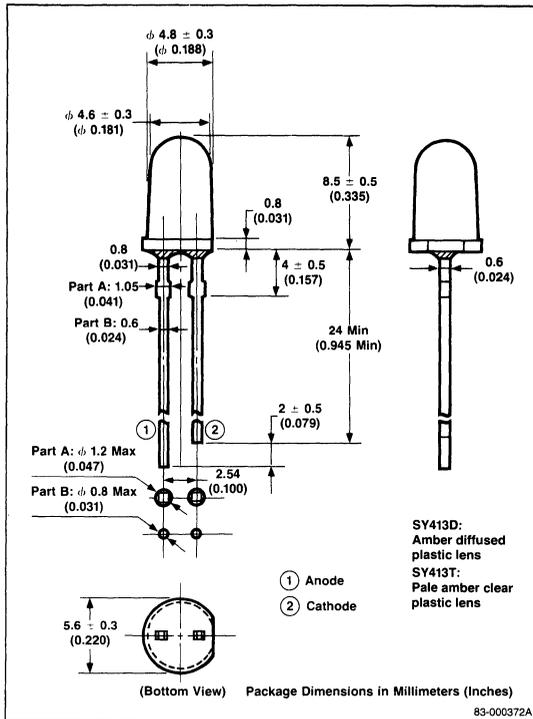
Features

- High intensity
- Bright amber
- Long lead
- Low cost
- Compatible with integrated circuits

Applications

- Visual displays
- Guard systems
- Mobile equipment indicators
- Stereo equipment indicators
- Transceiver indicators

Package Dimensions



Absolute Maximum Ratings

$T_A = +25^\circ\text{C}$

| | |
|--------------------------------|-----------------|
| Power Dissipation, P_D | 100mW |
| Forward Current, I_F | 40mA |
| Reverse Voltage, V_R | 5V |
| Junction Temperature, T_J | 100°C |
| Storage Temperature, T_{STG} | -40°C to +100°C |

Electro-Optical Characteristics

$T_A = +25^\circ\text{C}$

| Parameters | Symbol | Limits | | | Unit | Test Conditions |
|-----------------------------|------------------|--------|-----|-----|---------------|----------------------------------|
| | | Min | Typ | Max | | |
| Forward Voltage | V_F | 2.0 | 2.5 | | V | $I_F = 10\text{mA}$ |
| Reverse Current | I_R | 0.01 | 10 | | μA | $V = 4.5\text{V}$ |
| Capacitance | C_T | 60 | | | pF | $V = 0$, $f = 1.0\text{MHz}$ |
| Peak Emission Wavelength | λ_{PEAK} | 590 | | | nm | $I_F = 10\text{mA}$ |
| Spectral Line Half Width | $\Delta\lambda$ | 40 | | | nm | $I_F = 10\text{mA}$ |
| Luminous Intensity (SY413D) | I_V | 4 | 10 | | mcd | $I_F = 10\text{mA}$ |
| Luminous Intensity (SY413T) | I_V | 12 | 30 | | mcd | $I_F = 10\text{mA}$ |

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Typical Characteristics

$T_A = +25^\circ\text{C}$

