

Description

These three LEDs are full resin-molded LED lamps with flat circular faces which uniformly emit brilliant red, green and amber light. They are especially suitable for electronic equipment in audio applications which require fancy displays.

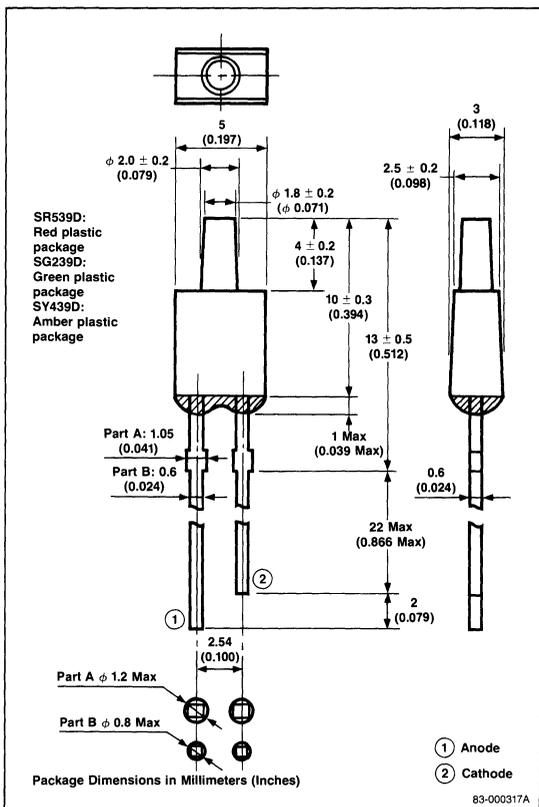
Features

- Flat circular face
- Low cost
- Long lead
- Bright red, green or amber
- Compatible with integrated circuits

Applications

- Visual displays
- Radio and stereo equipment indicators
- Measuring instrument terminals

Package Dimensions



Absolute Maximum Ratings

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

| | |
|--------------------------------|-----------------|
| Power Dissipation, P_D | 60/100mW |
| Forward Current, I_F | 30/40mA |
| Reverse Voltage, V_R | 5V |
| Junction Temperature, T_J | 100°C |
| Storage Temperature, T_{STG} | -40°C to +100°C |

Note: 1. SR539D/SG239D, SY439D

Electro-Optical Characteristics

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

| Parameters | Symbol | Limits | | | Unit | Test Conditions |
|---------------------------------|------------------|--------|-----|-----|---------------|----------------------------------|
| | | Min | Typ | Max | | |
| Forward Voltage | | | | | | |
| SR539D | V_F | 2.0 | 2.5 | | V | $I_F = 10\text{mA}$ |
| SG239D | V_F | 2.0 | 2.5 | | V | $I_F = 10\text{mA}$ |
| SY439D | V_F | 2.0 | 2.4 | | V | $I_F = 10\text{mA}$ |
| Reverse Current | | | | | | |
| SR539D | I_R | 0.01 | 10 | | μA | $V_R = 4.5\text{V}$ |
| SG239D | I_R | 0.01 | 10 | | μA | $V_R = 4.5\text{V}$ |
| SY439D | I_R | 0.01 | 10 | | μA | $V_R = 4.5\text{V}$ |
| Capacitance | | | | | | |
| SR539D | C_T | 100 | | | pF | $V = 0$, $f = 1.0\text{MHz}$ |
| SG239D | C_T | 100 | | | pF | $V = 0$, $f = 1.0\text{MHz}$ |
| SY439D | C_T | 60 | | | pF | $V = 0$, $f = 1.0\text{MHz}$ |
| Peak Emission Wavelength | | | | | | |
| SR539D | λ_{PEAK} | 695 | | | nm | $I_F = 10\text{mA}$ |
| SG239D | λ_{PEAK} | 565 | | | nm | $I_F = 10\text{mA}$ |
| SY439D | λ_{PEAK} | 590 | | | nm | $I_F = 10\text{mA}$ |
| Spectral Line Half Width | | | | | | |
| SR539D | $\Delta\lambda$ | 100 | | | nm | $I_F = 10\text{mA}$ |
| SY239D | $\Delta\lambda$ | 40 | | | nm | $I_F = 10\text{mA}$ |
| SR439D | $\Delta\lambda$ | 40 | | | nm | $I_F = 10\text{mA}$ |
| Luminous Intensity | | | | | | |
| SR539D | I_V | 0.2 | 0.5 | | mcd | $I_F = 10\text{mA}$ |
| SG239D | I_V | 0.2 | 0.7 | | mcd | $I_F = 10\text{mA}$ |
| SY439D | I_V | 0.2 | 0.7 | | mcd | $I_F = 10\text{mA}$ |

Typical Characteristics

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

