

### 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.

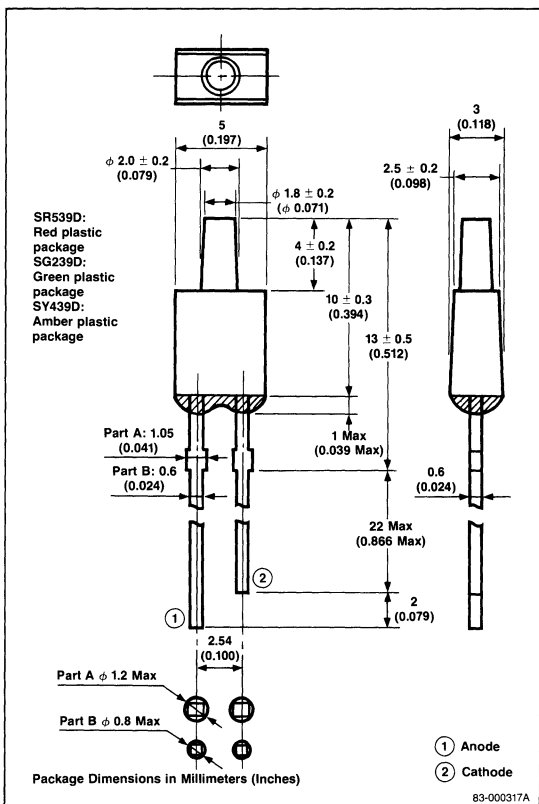
### Features

- ☐ 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 <sub>F</sub>    |        | 2.0  | 2.5 | V    | I <sub>F</sub> = 10mA |
| SG239D                   | V <sub>F</sub>    |        | 2.0  | 2.5 | V    | I <sub>F</sub> = 10mA |
| SY439D                   | V <sub>F</sub>    |        | 2.0  | 2.4 | V    | I <sub>F</sub> = 10mA |
| Reverse Current          |                   |        |      |     |      |                       |
| SR539D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| SG239D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| SY439D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| Capacitance              |                   |        |      |     |      |                       |
| SR539D                   | C <sub>T</sub>    |        | 100  |     | pF   | V = 0,<br>f = 1.0MHz  |
| SG239D                   | C <sub>T</sub>    |        | 100  |     | pF   | V = 0,<br>f = 1.0MHz  |
| SY439D                   | C <sub>T</sub>    |        | 60   |     | pF   | V = 0,<br>f = 1.0MHz  |
| Peak Emission Wavelength |                   |        |      |     |      |                       |
| SR539D                   | λ <sub>PEAK</sub> |        | 695  |     | nm   | I <sub>F</sub> = 10mA |
| SG239D                   | λ <sub>PEAK</sub> |        | 565  |     | nm   | I <sub>F</sub> = 10mA |
| SY439D                   | λ <sub>PEAK</sub> |        | 590  |     | nm   | I <sub>F</sub> = 10mA |
| Spectral Line Half Width |                   |        |      |     |      |                       |
| SR539D                   | Δλ                |        | 100  |     | nm   | I <sub>F</sub> = 10mA |
| SY239D                   | Δλ                |        | 40   |     | nm   | I <sub>F</sub> = 10mA |
| SR439D                   | Δλ                |        | 40   |     | nm   | I <sub>F</sub> = 10mA |
| Luminous Intensity       |                   |        |      |     |      |                       |
| SR539D                   | I <sub>V</sub>    | 0.2    | 0.5  |     | mcd  | I <sub>F</sub> = 10mA |
| SG239D                   | I <sub>V</sub>    | 0.2    | 0.7  |     | mcd  | I <sub>F</sub> = 10mA |
| SY439D                   | I <sub>V</sub>    | 0.2    | 0.7  |     | mcd  | I <sub>F</sub> = 10mA |

Typical Characteristics

T<sub>A</sub> = +25°C

