

### Description

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

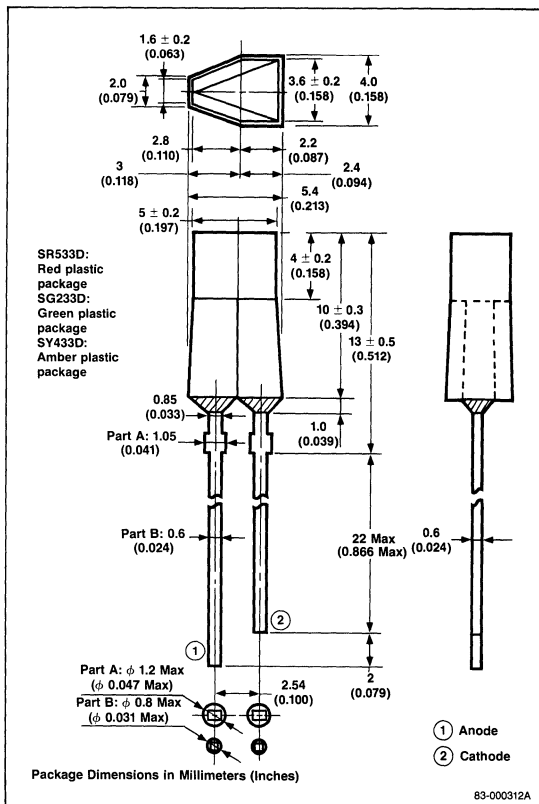
### Features

- ☐ Flat triangular 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
- ☐ Direction indicators

### Package Dimensions



### Absolute Maximum Ratings

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

|                                |                 |
|--------------------------------|-----------------|
| Power Dissipation, $P_{D1}$    | 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. SR533D/SG233D, SY433D.

### Electro-Optical Characteristics

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

| Parameters               | Symbol            | Limits |      |     | Unit | Test Conditions       |
|--------------------------|-------------------|--------|------|-----|------|-----------------------|
|                          |                   | Min    | Typ  | Max |      |                       |
| Forward Voltage          |                   |        |      |     |      |                       |
| SR533D                   | V <sub>F</sub>    |        | 2.0  | 2.5 | V    | I <sub>F</sub> = 10mA |
| SG233D                   | V <sub>F</sub>    |        | 2.0  | 2.5 | V    | I <sub>F</sub> = 10mA |
| SY433D                   | V <sub>F</sub>    |        | 2.0  | 2.4 | V    | I <sub>F</sub> = 10mA |
| Reverse Current          |                   |        |      |     |      |                       |
| SR533D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| SG233D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| SY433D                   | I <sub>R</sub>    |        | 0.01 | 10  | μA   | V <sub>R</sub> = 4.5V |
| Capacitance              |                   |        |      |     |      |                       |
| SR533D                   | C <sub>T</sub>    |        | 100  |     | pF   | V = 0,<br>f = 1.0MHz  |
| SG233D                   | C <sub>T</sub>    |        | 100  |     | pF   | V = 0,<br>f = 1.0MHz  |
| SY433D                   | C <sub>T</sub>    |        | 60   |     | pF   | V = 0,<br>f = 1.0MHz  |
| Peak Emission Wavelength |                   |        |      |     |      |                       |
| SR533D                   | λ <sub>PEAK</sub> |        | 695  |     | nm   | I <sub>F</sub> = 10mA |
| SG233D                   | λ <sub>PEAK</sub> |        | 565  |     | nm   | I <sub>F</sub> = 10mA |
| SY433D                   | λ <sub>PEAK</sub> |        | 590  |     | nm   | I <sub>F</sub> = 10mA |
| Spectral Line Half Width |                   |        |      |     |      |                       |
| SR533D                   | Δλ                |        | 100  |     | nm   | I <sub>F</sub> = 10mA |
| SY233D                   | Δλ                |        | 40   |     | nm   | I <sub>F</sub> = 10mA |
| SR433D                   | Δλ                |        | 40   |     | nm   | I <sub>F</sub> = 10mA |
| Luminous Intensity       |                   |        |      |     |      |                       |
| SR533D                   | I <sub>V</sub>    | 0.2    | 0.5  |     | mcd  | I <sub>F</sub> = 10mA |
| SG233D                   | I <sub>V</sub>    | 0.2    | 0.7  |     | mcd  | I <sub>F</sub> = 10mA |
| SY433D                   | I <sub>V</sub>    | 0.2    | 0.7  |     | mcd  | I <sub>F</sub> = 10mA |

## Typical Characteristics

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

