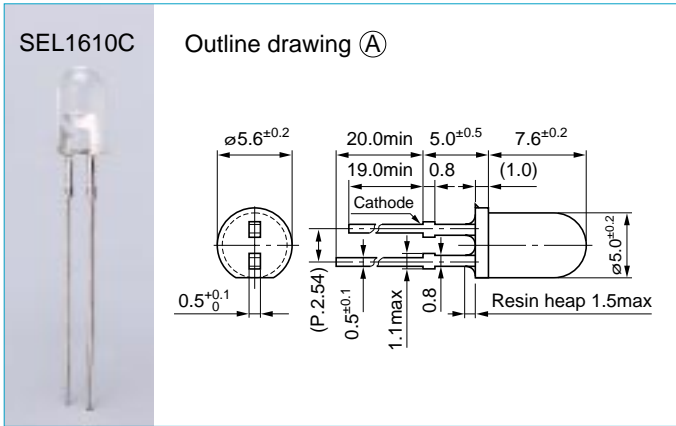
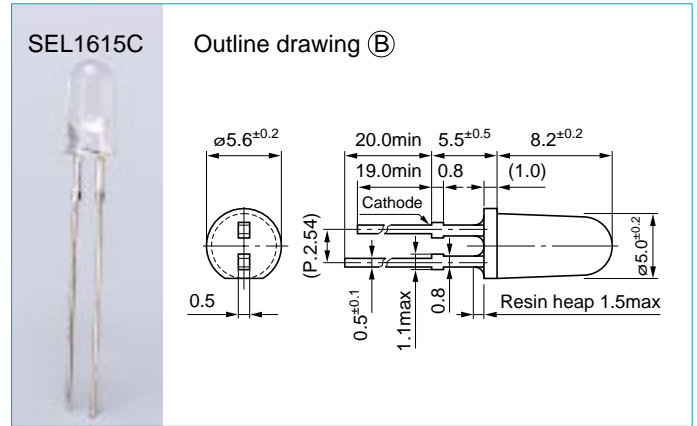


# Ultra-high intensity LEDs (SEL1600 series)

## SEL1610 series



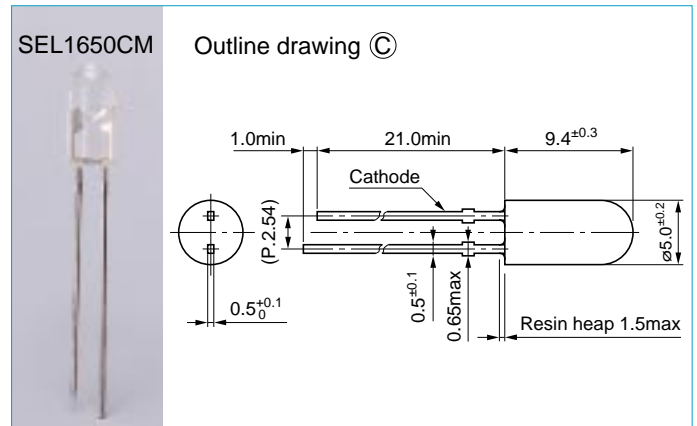
## SEL1615 series



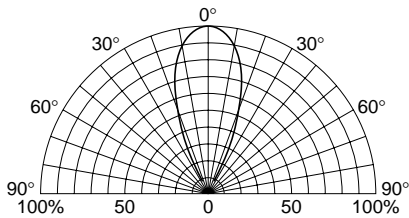
### Absolute maximum ratings (Ta=25°C)

| Symbol          | Unit | Ratings     |
|-----------------|------|-------------|
| I <sub>F</sub>  | mA   | 30          |
| I <sub>FP</sub> | mA   | 100         |
| V <sub>R</sub>  | V    | 3           |
| Top             | °C   | -30 to +85  |
| Tstg            | °C   | -30 to +100 |

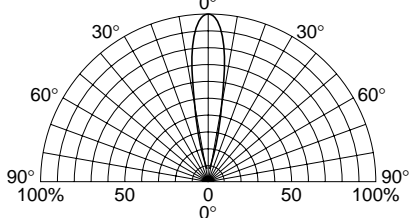
## SEL1650 series



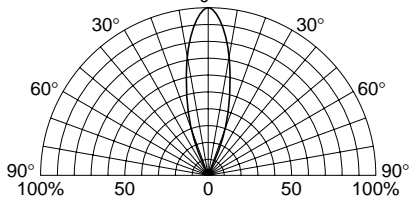
### Viewing angle SEL1610C



### SEL1615C



### SEL1650CM



External dimensions: Unit: mm Tolerance: ±0.3

| Type No.  | Display form<br>(ø: mm) | Type of lens            | Emitting color           | Electro-optical characteristics (Ta=25°C) |     |                               |                     |                              |                      |                     |          | Outline drawing |                               |
|-----------|-------------------------|-------------------------|--------------------------|---|-----|-------------------------------|---------------------|------------------------------|----------------------|---------------------|----------|-----------------|-------------------------------|
|           |                         |                         |                          | V <sub>F</sub> (V)                        |     | Condition I <sub>F</sub> (mA) | I <sub>R</sub> (μA) | Condition V <sub>R</sub> (V) | I <sub>v</sub> (mcd) | λ <sub>p</sub> (nm) | Δλ (typ) |                 |                               |
|           |                         |                         |                          | typ                                       | max |                               | max                 |                              | typ                  |                     |          |                 | Condition I <sub>F</sub> (mA) |
| SEL1610C  | ● 5                     | Un-tinted, non-diffused | Ultra-high intensity red | 1.75                                      | 2.2 | 10                            | 100                 | 3                            | 800                  | 30                  | 660      | 30              | (A)                           |
| SEL1615C  |                         |                         |                          |   |     |                               |                     |                              |                      |                     |          |                 | (B)                           |
| SEL1650CM |                         |                         |                          |   |     |                               |                     |                              |                      |                     |          |                 | (C)                           |