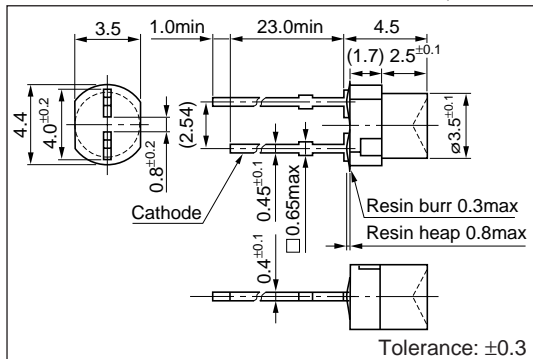


# 3 $\phi$ Inverted-cone LED for surface illumination (Direct Mount)

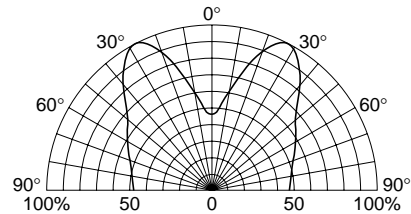
## SEL6013 Series

### External Dimensions

(Unit: mm)



### Directivity (Typical)



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

| Symbol          | Unit  | Rating      | Condition        |
|-----------------|-------|-------------|------------------|
| I <sub>F</sub>  | mA    | 30          |                  |
| ΔI <sub>F</sub> | mA/°C | -0.45       | Above 25°C       |
| I <sub>FP</sub> | mA    | 100         | f=1kHz, tw≤100μs |
| V <sub>R</sub>  | V     | 3           |                  |
| Top             | °C    | -30 to +85  |                  |
| Tstg            | °C    | -30 to +100 |                  |

### Electrical Optical characteristics (Ta=25°C)

| Emitting color | Part Number | Lens color        | Forward voltage    |     | Reverse current               |                    | Intensity            |                               | Peak wavelength     |                               | Spectrum half width |                               | Chip material |     |
|----------------|-------------|-------------------|--------------------|-----|-------------------------------|--------------------|----------------------|-------------------------------|---------------------|-------------------------------|---------------------|-------------------------------|---------------|-----|
|                |             |                   | V <sub>F</sub> (V) |     | I <sub>R</sub> (μA)           | V <sub>R</sub> (V) | I <sub>v</sub> (mcd) | I <sub>F</sub> (mA)           | λ <sub>P</sub> (nm) | I <sub>F</sub> (mA)           | Δλ (nm)             | I <sub>F</sub> (mA)           |               |     |
|                |             |                   | typ                | max | Condition I <sub>F</sub> (mA) | max                | typ                  | Condition I <sub>F</sub> (mA) | typ                 | Condition I <sub>F</sub> (mA) | typ                 | Condition I <sub>F</sub> (mA) |               |     |
| Green          | SEL6413E    | Transparent green | 2.0                | 2.5 | 10                            | 50                 | 3                    | 14                            | 20                  | 560                           | 10                  | 20                            | 10            | GaP |
| Pure green     | SEL6513C    | Clear             | 2.0                | 2.5 | 10                            | 50                 | 3                    | 5.0                           | 20                  | 555                           | 10                  | 20                            | 10            |     |