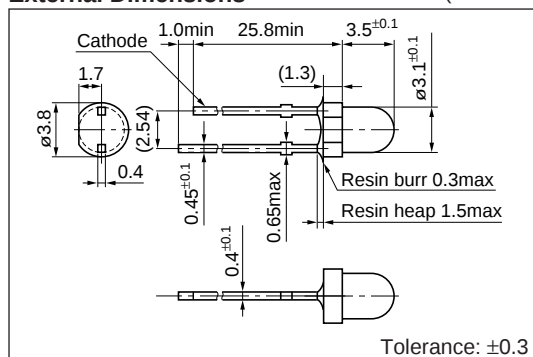


# 3 $\phi$ Round Infrared LED

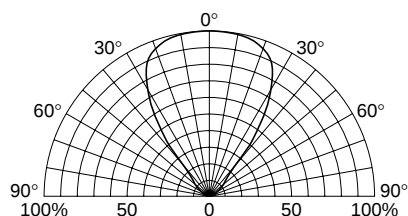
## SID2010 Series

### External Dimensions

(Unit: mm)



### Directivity (Typical)



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

| Symbol       | Unit  | Rating      | Condition                                  |
|--------------|-------|-------------|--------------------------------------------|
| $I_F$        | mA    | 150         |                                            |
| $\Delta I_F$ | mA/°C | -1.33       | Above 25°C                                 |
| $I_{FP}$     | mA    | 1000        | $f=1\text{kHz}$ , $t_w \leq 10\mu\text{s}$ |
| $V_R$        | V     | 5           |                                            |
| Top          | °C    | -30 to +85  |                                            |
| Tstg         | °C    | -30 to +100 |                                            |

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

| Part Number | Lens color | Forward voltage |     |           | Reverse current |           | Optical Power  |                      | Peak wavelength |           | Spectrum half width |           | Chip material |
|-------------|------------|-----------------|-----|-----------|-----------------|-----------|----------------|----------------------|-----------------|-----------|---------------------|-----------|---------------|
|             |            | V <sub>F</sub>  |     | Condition | I <sub>R</sub>  | Condition | I <sub>e</sub> | Condition            | λ <sub>P</sub>  | Condition | Δλ                  | Condition |               |
|             |            | (V)             |     |           |                 |           |                |                      |                 |           |                     |           |               |
|             |            | typ             | max | (mA)      | max             | (V)       | typ            | typ                  | (mA)            | typ       | (mA)                |           |               |
| SID2010C    | Clear      | 1.3             | 1.5 | 50        | 10              | 5         | 7.0            | I <sub>F</sub> =50mA | 940             | 50        | 50                  | 50        | GaAs          |
| SID2K10C    | Clear      | 1.3             | 1.5 | 50        | 10              | 5         | 14             | I <sub>F</sub> =50mA | 940             | 50        | 50                  | 50        |               |