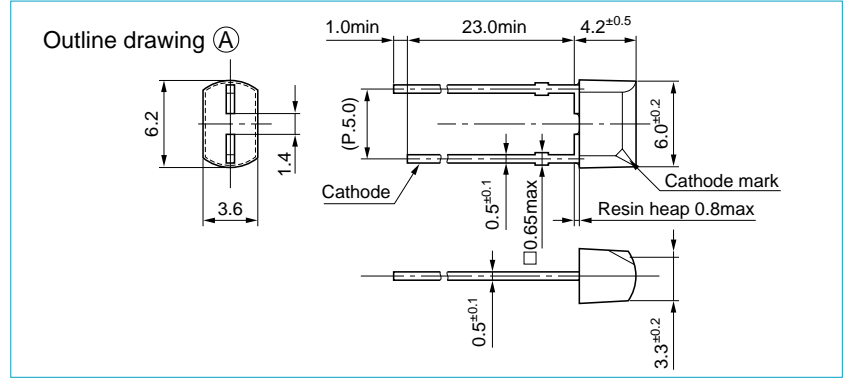
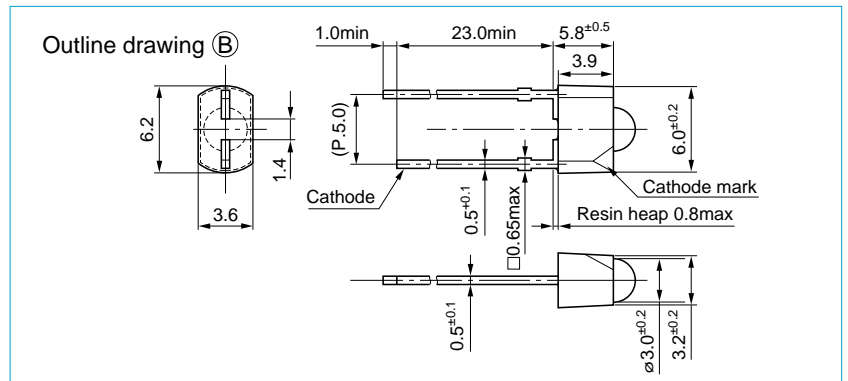


## 5-mm pitch lead contact mount LEDs (for automatic insertion)

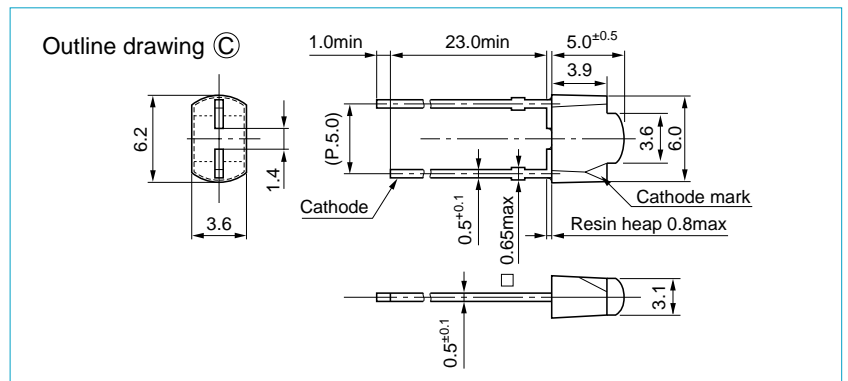
### SEL5020 series (Flat type)



### SEL5021 series (∅3 lens type)

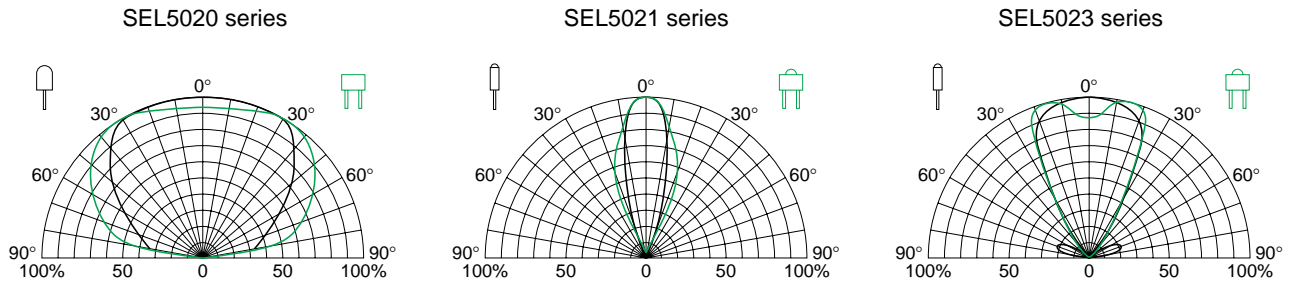


### SEL5023 series (Bow-lens type)



External dimensions: Unit: mm Tolerance: ±0.3

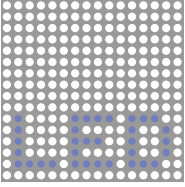
## Viewing angle



## Absolute maximum ratings (Ta=25°C)

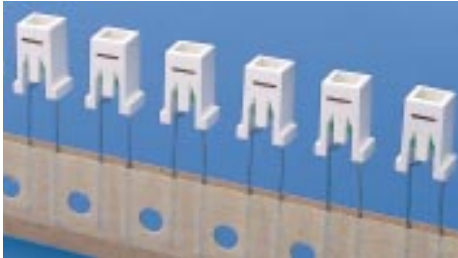
| Symbol          | Unit | Ratings     |
|-----------------|------|-------------|
| I <sub>F</sub>  | mA   | 30          |
| I <sub>FP</sub> | mA   | 100         |
| V <sub>R</sub>  | V    | 3           |
| Top             | °C   | -30 to +85  |
| Tstg            | °C   | -30 to +100 |

| Type No. | Display form<br>( $\phi$ : 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> ( $\mu$ A) | Condition V <sub>R</sub> (V) | I <sub>V</sub> (mcd) |                               | $\lambda_p$ (nm) |                 | $\Delta\lambda$ (nm) |
|          |                                |                             |                    | typ                                       | max |                               |                           |                              | typ                  | Condition I <sub>F</sub> (mA) |                  |                 |                      |
| SEL5220S | 3.3×6                          | Red tinted, non-diffused    | High intensity red | 1.9                                       | 2.5 | 10                            | 50                        | 3                            | 2.8                  | 20                            | 630              | 35              | Ⓐ                    |
| SEL5420E | 3.3×6                          | Green tinted, non-diffused  | Green              | 2.0                                       |     |                               |                           |                              | 6.8                  |                               | 560              | 20              |                      |
| SEL5520C | 3.3×6                          | Un-tinted, non-diffused     | Pure green         | 1.9                                       |     |                               |                           |                              | 2.4                  |                               | 555              | 35              |                      |
| SEL5820A | 3.3×6                          | Orange tinted, non-diffused | Amber              | 1.9                                       |     |                               |                           |                              | 6.0                  |                               | 610              | 33              |                      |
| SEL5920A | 3.3×6                          | Orange tinted, non-diffused | Orange             | 1.9                                       |     |                               |                           |                              | 4.4                  |                               | 587              | 33              |                      |
| SEL5221S | $\phi$ 3                       | Red tinted, non-diffused    | High intensity red | 1.9                                       | 2.5 | 10                            | 50                        | 3                            | 14                   | 20                            | 630              | 35              | Ⓑ                    |
| SEL5421E | $\phi$ 3                       | Green tinted, non-diffused  | Green              | 2.0                                       |     |                               |                           |                              | 36                   |                               | 560              | 20              |                      |
| SEL5521C | $\phi$ 3                       | Un-tinted, non-diffused     | Pure green         | 1.9                                       |     |                               |                           |                              | 14                   |                               | 555              | 35              |                      |
| SEL5821A | $\phi$ 3                       | Orange tinted, non-diffused | Amber              | 1.9                                       |     |                               |                           |                              | 22                   |                               | 610              | 33              |                      |
| SEL5921A | $\phi$ 3                       | Orange tinted, non-diffused | Orange             | 1.9                                       |     |                               |                           |                              | 22                   |                               | 587              | 33              |                      |
| SEL5223S | 3.1×3.6                        | Red tinted, non-diffused    | High intensity red | 1.9                                       | 2.5 | 10                            | 50                        | 3                            | 6                    | 20                            | 630              | 35              | Ⓒ                    |
| SEL5423E | 3.1×3.6                        | Green tinted, non-diffused  | Green              | 2.0                                       |     |                               |                           |                              | 14                   |                               | 560              | 20              |                      |
| SEL5823A | 3.1×3.6                        | Orange tinted, non-diffused | Amber              | 1.9                                       |     |                               |                           |                              | 9                    |                               | 610              | 35              |                      |
| SEL5923A | 3.1×3.6                        | Orange tinted, non-diffused | Orange             | 1.9                                       |     |                               |                           |                              | 9                    |                               | 587              | 33              |                      |

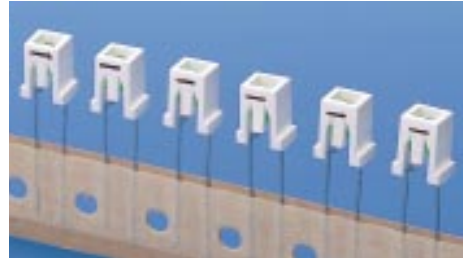


## Taping of packaged LEDs with holder (for automatic insertion)

### TH12E

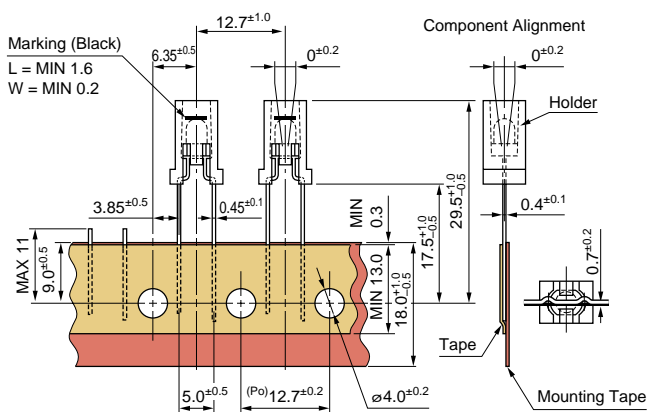


### TH10D



#### Outline drawing (A)

##### TH12E

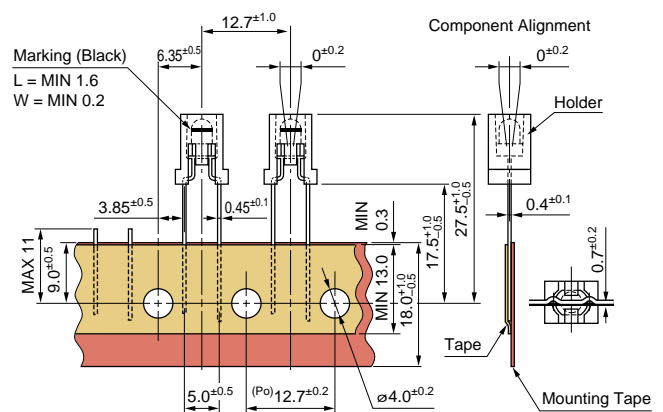


(Po): Cumulative pitch tolerance shall not exceed  $\pm 1.0$ mm over 20 consecutive pitches.

Tolerance:  $\pm 0.3$

#### Outline drawing (B)

##### TH10D



(Po): Cumulative pitch tolerance shall not exceed  $\pm 1.0$ mm over 20 consecutive pitches.

Tolerance:  $\pm 0.3$

External dimensions: Unit: mm Tolerance:  $\pm 0.3$

- Eliminates the cumbersome need to attach holders.
- Available in heights of 12 mm, 10 mm and 8 mm with a luminous area of 4.0 mm × 4.0 mm.
- Available in radial taping configuration with a lead pitch of 5 mm allowing mounting by inserters.

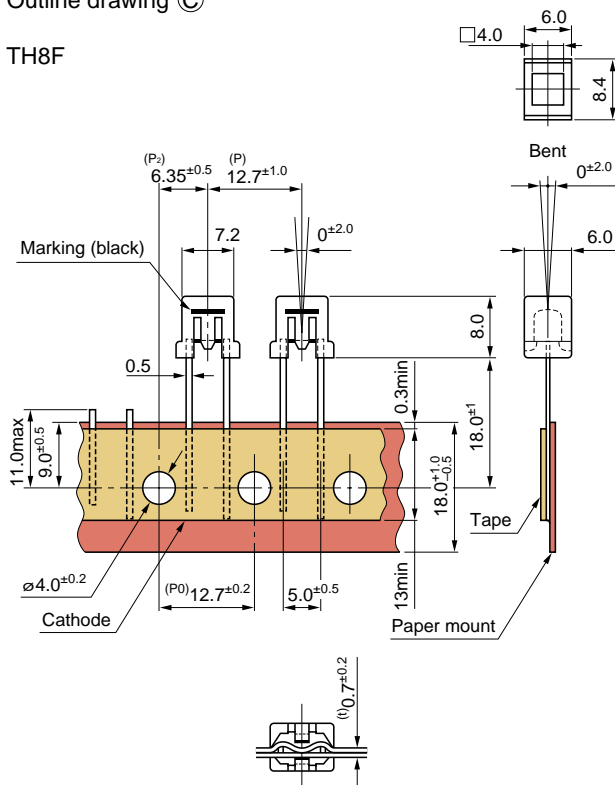
- Available in different colors.
- TH10D and TH12E are holders used for the SEL6010 series. TH8F is a holder used for the SEL5020 and SEL5021 series.

■TH8F



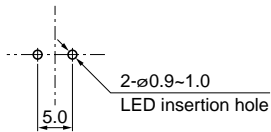
Outline drawing ©

TH8F



■External dimensions: Unit: mm Tolerance:  $\pm$ 0.3

Recommended dimensions of insertion holes on printed circuit boards (common)



(P0): The cumulative pitch error must be within  $\pm$ 1.0 for 2.0 pitches.

Product list

| Type No.       | Emitting color     |
|----------------|--------------------|
| SEL6210S TH12E | High intensity red |
| SEL6410E TH12E | Green              |
| SEL6510C TH12E | Pure green         |
| SEL6710K TH12E | Yellow             |
| SEL6810A TH12E | Amber              |
| SEL6910A TH12E | Orange             |
| SEL6210S TH10D | High intensity red |
| SEL6410E TH10D | Green              |
| SEL6510C TH10D | Pure green         |
| SEL6710K TH10D | Yellow             |
| SEL6810A TH10D | Amber              |
| SEL6910A TH10D | Orange             |
| SEL5220S TH8F  | High intensity red |
| SEL5420E TH8F  | Green              |
| SEL5520C TH8F  | Pure green         |
| SEL5820A TH8F  | Amber              |
| SEL5920A TH8F  | Orange             |
| SEL5221S TH8F  | High intensity red |
| SEL5421E TH8F  | Green              |
| SEL5521C TH8F  | Pure green         |
| SEL5821A TH8F  | Amber              |
| SEL5921A TH8F  | Orange             |

Quantity per box: 1,200