

L6287



## Miniature LED

High-power infrared LED having the same type of package that emits light at a peak wavelength of 940 nm.

### Features

- High-power
- Peak emission wavelength: 940 nm
- Miniature plastic package with lens

### Applications

- Displacement meters
- Optical proximity switches

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

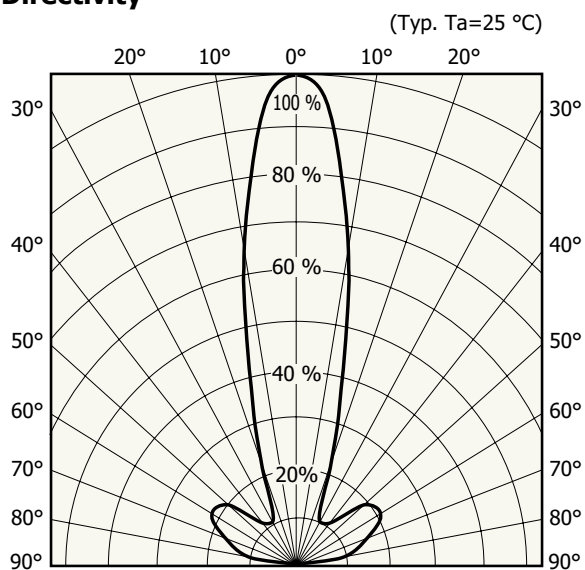
| Parameter             | Symbol           | Condition                              | Value      | Unit |
|-----------------------|------------------|----------------------------------------|------------|------|
| Forward current       | I <sub>F</sub>   |                                        | 60         | mA   |
| Reverse voltage       | V <sub>R</sub>   |                                        | 5          | V    |
| Pulse forward current | I <sub>FP</sub>  | Pulse width: 100 μs<br>Duty ratio: 1 % | 1.0        | A    |
| Power dissipation     | P                |                                        | 90         | mW   |
| Operating temperature | T <sub>opr</sub> |                                        | -25 to +85 | °C   |
| Storage temperature   | T <sub>stg</sub> |                                        | -30 to +85 | °C   |

Note: Exceeding the absolute maximum ratings even momentarily may cause a drop in product quality. Always be sure to use the product within the absolute maximum ratings.

### Electrical and optical characteristics (Ta=25 °C)

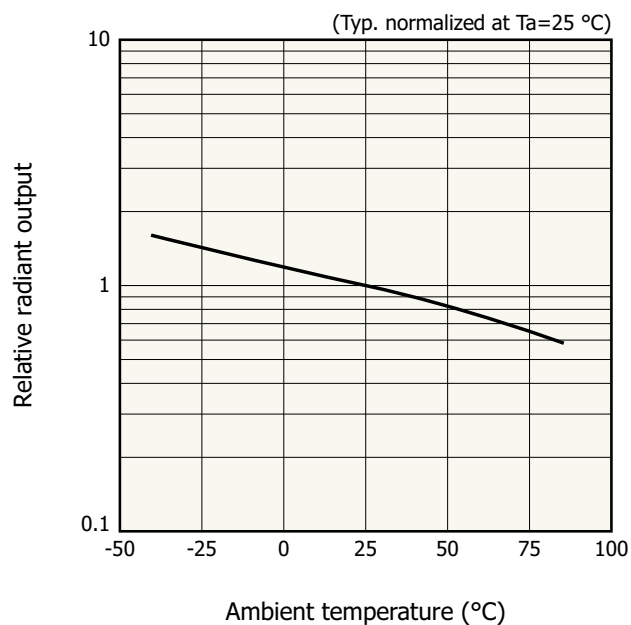
| Parameter                | Symbol         | Condition                    | Min. | Typ. | Max. | Unit |
|--------------------------|----------------|------------------------------|------|------|------|------|
| Peak emission wavelength | λ <sub>p</sub> | I <sub>F</sub> =20 mA        | -    | 940  | -    | nm   |
| Spectral half width      | Δλ             | I <sub>F</sub> =20 mA        | -    | 60   | -    | nm   |
| Forward voltage          | V <sub>F</sub> | I <sub>F</sub> =20 mA        | -    | 1.25 | 1.45 | V    |
| Reverse current          | I <sub>R</sub> | V <sub>R</sub> =5 V          | -    | -    | 10   | μA   |
| Radiant flux             | φ <sub>e</sub> | I <sub>F</sub> =20 mA        | 1.4  | -    | -    | mW   |
| Terminal capacitance     | C <sub>t</sub> | V <sub>R</sub> =0 V, f=1 MHz | -    | 20   | -    | pF   |

### Directivity



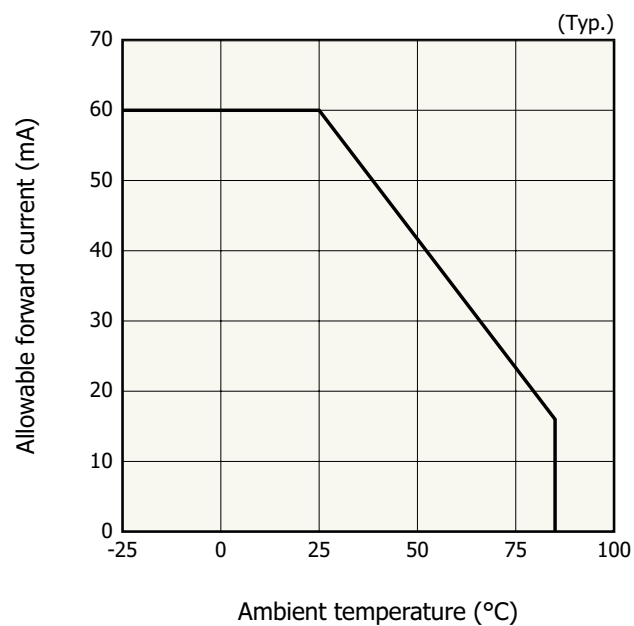
KLEDB0061EB

### Radiant output vs. ambient temperature



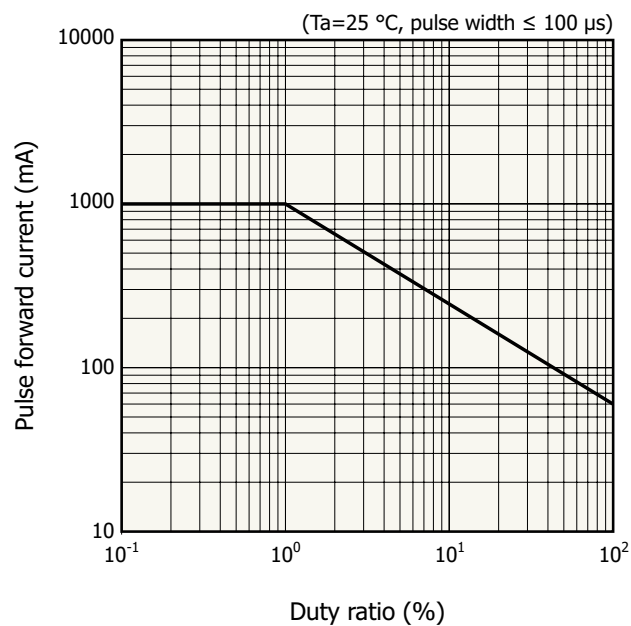
KLEDB0106EC

### Allowable forward current vs. ambient temperature



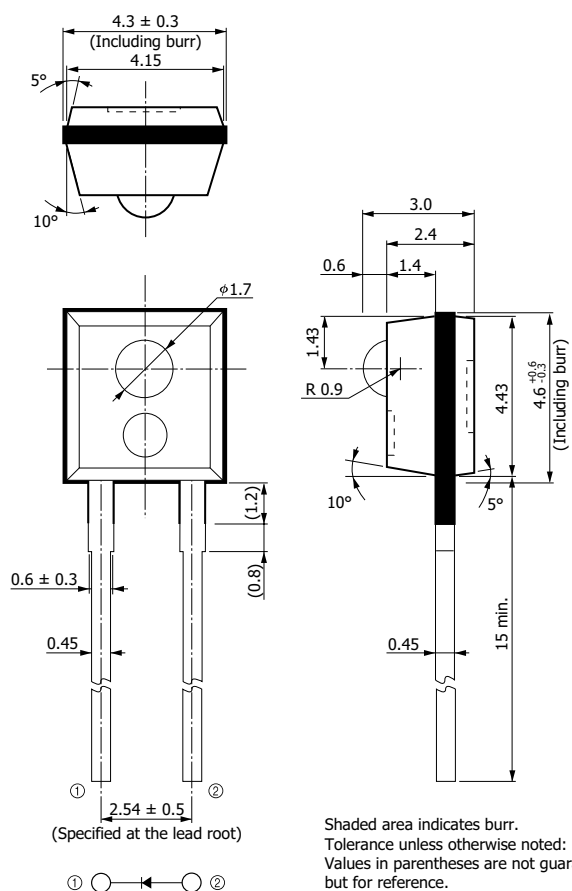
KLEDB0083EB

### Pulse forward current vs. duty ratio



KLEDB0107EC

### Dimensional outline (unit: mm)



Shaded area indicates burr.  
Tolerance unless otherwise noted:  $\pm 0.2$ ,  $\pm 2^\circ$   
Values in parentheses are not guaranteed,  
but for reference.

Packing type: Polyethylene bag (antistatic type)

KLEDA0024EE

### Recommended soldering conditions

| Parameter          | Specification     | Remarks                                   |
|--------------------|-------------------|-------------------------------------------|
| Solder temperature | 260 °C max. (3 s) | at least 2.5 mm away from package surface |

Note: When setting the soldering conditions, check for any problems by testing out the soldering methods in advance.

 **Related information**

[www.hamamatsu.com/sp/ssd/doc\\_en.html](http://www.hamamatsu.com/sp/ssd/doc_en.html)

■ Precautions

- Disclaimer
- Precaution / Metal, ceramic, plastic package products

■ Catalogs

- Technical note / LED

Information described in this material is current as of September 2026.

Product specifications are subject to change without prior notice due to improvements or other reasons. This document has been carefully prepared and the information contained is believed to be accurate. In rare cases, however, there may be inaccuracies such as text errors. Before using these products, always contact us for the delivery specification sheet to check the latest specifications.

The product warranty is valid for one year after delivery and is limited to product repair or replacement for defects discovered and reported to us within that one year period. However, even if within the warranty period we accept absolutely no liability for any loss caused by natural disasters or improper product use. Copying or reprinting the contents described in this material in whole or in part is prohibited without our prior permission.