

KLB-16AI-88

The KLB-16I-88 is GaAlAs infrared emitting diode and has the optimized optical characteristics.

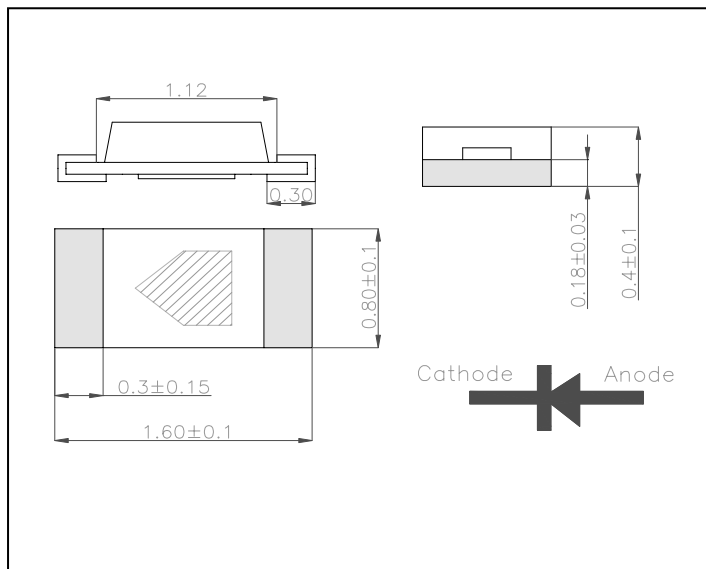
Features

- Ultra Wide Viewing Angle
- 880nm wavelength
- Low forward voltage

Applications

- Display
- Indicator
- Key Pad Back Light
- Car CCD Camera

DIMENSIONS



Maximum Ratings

[Ta=25°C]

| Parameter | Symbol | Ratings | Unit |
|--------------------------|------------|------------|------|
| Reverse Voltage | V_R | 5 | V |
| Forward current | I_F | 50 | mA |
| Pulse forward current *1 | I_{FP} | 0.7 | A |
| Power dissipation | P_D | 75 | mW |
| Operating temperature | $T_{opr.}$ | -20 ~ +85 | °C |
| Storage temperature | $T_{stg.}$ | -30 ~ +100 | °C |
| Soldering Temperature *2 | $T_{sol.}$ | 260 | °C |

*1. I_{FP} Measured under duty $\leq 1/10$ @ 1KHz

*2. Soldering time ≤ 5 Sec

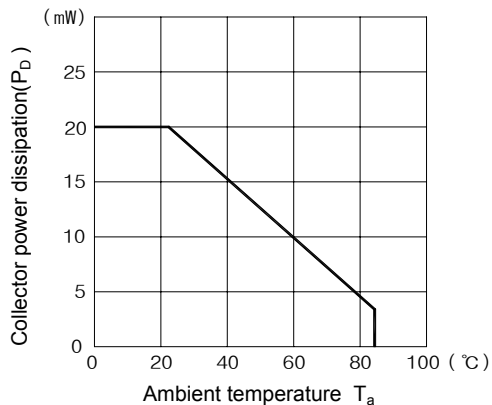
Electro-Optical Characteristics

[Ta=25°C]

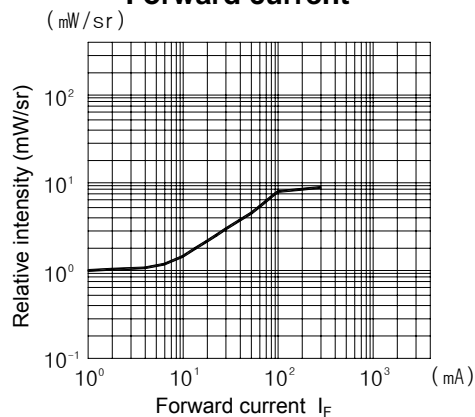
| Parameter | Symbol | Conditions | Min | Typ | Max | Unit |
|--------------------------|-----------------|---------------|-----|------|-----|---------|
| Forward voltage | V_F | $I_F = 20$ mA | - | 1.30 | 1.5 | V |
| Reverse current | IR | $V_R = 5$ V | - | - | 10 | μ A |
| Radiant intensity | I_e | $I_F = 20$ mA | 1.0 | 1.5 | - | mW/sr |
| Radiant Power | P_o | $I_F = 20$ mA | - | 1.3 | - | mW |
| Peak emission wavelength | λ_p | $I_F = 20$ mA | - | 880 | - | nm |
| Spectral bandwidth | $\Delta\lambda$ | $I_F = 20$ mA | - | 45 | - | nm |
| Half angle | $\Delta\theta$ | $I_F = 20$ mA | - | 160 | - | deg. |

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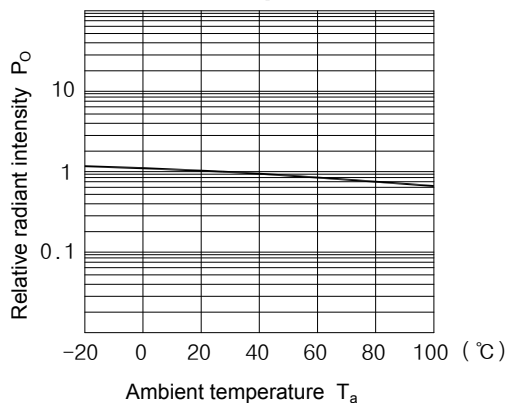
Collector power dissipation Vs Ambient temperature



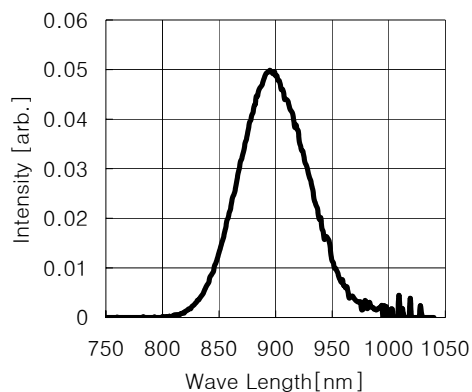
Radiant Intensity vs. Forward current



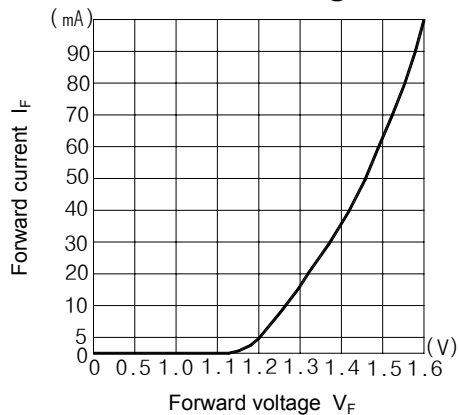
Relative radiant intensity vs. Ambient temperature



Relative intensity vs. Wavelength



Forward current vs. Forward voltage



Radiant Pattern

