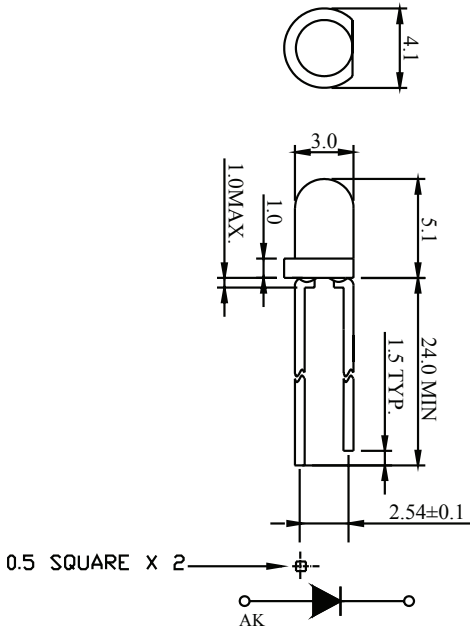


3mm Round LED Lamp



Package Dimensions:



Features:

- Red lamp
- Made with AlGaAs / GaAs chip and red clear epoxy resin

All dimensions are in mm
Tolerance: ± 0.25 mm

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

| Parameter | Symbol | Rating | Unit |
|---|--------------|---|------------------|
| Power Dissipation | P_D | 66 | mW |
| Reverse Voltage | V_R | 4 | V |
| D.C. Forward Current | I_f | 30 | mA |
| Reverse (Leakage) Current | I_r | 100 | μA |
| Peak Current (1 / 10 Duty Cycle, 0.1ms Pulse Width) | I_f (Peak) | 100 | mA |
| Operating Temperature Range | T_{opr} | -25 to + 85 | $^\circ\text{C}$ |
| Storage Temperature Range | T_{stg} | -40 to +100 | $^\circ\text{C}$ |
| Soldering Temperature (1.6mm from body) | T_{sol} | Dip Soldering: 260°C for 5sec. Hand Soldering: 350°C for 3sec. | |



3mm Round LED Lamp

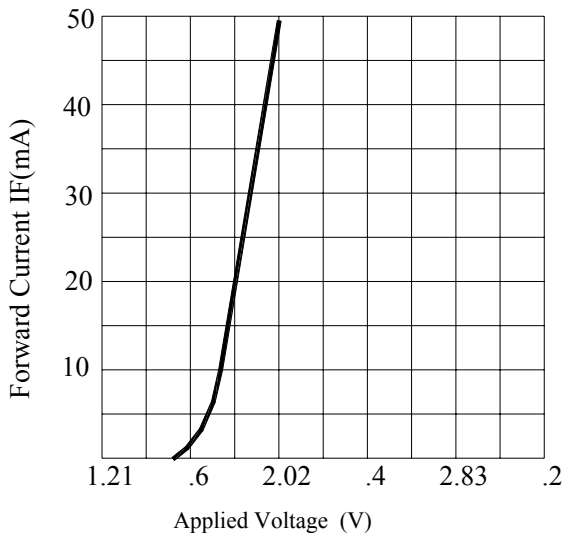


Electrical & Optical Characteristics:

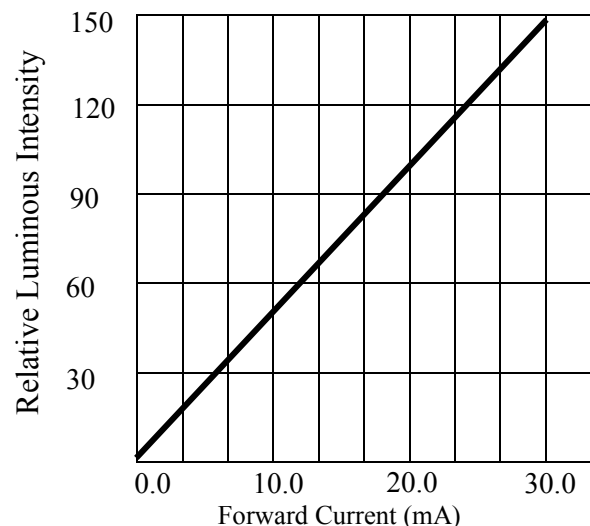
| Parameter | Symbol | Condition | Min. | Typ. | Max. | Unit |
|---------------------------|-----------------|---------------------|------|------|------|---------------|
| Luminous Intensity | I_v | $I_f = 20\text{mA}$ | 45 | 100 | | mcd |
| Forward Voltage | V_f | $I_f = 20\text{mA}$ | | 1.8 | 2.2 | V |
| Peak Wavelength | λ_p | $I_f = 20\text{mA}$ | | 660 | | nm |
| Dominant Wavelength | λ_d | $I_f = 20\text{mA}$ | | 643 | | nm |
| Reverse (Leakage) Current | I_r | $V_r = 5\text{V}$ | | | 100 | μA |
| Viewing Angle | $2\theta_{1/2}$ | $I_f = 20\text{mA}$ | | 35 | | deg |
| Spectrum Line Halfwidth | $\Delta\lambda$ | $I_f = 20\text{mA}$ | | 20 | | nm |

Notes: 1. The data is tested by IS tester.
 2. Customer's special requirements are also welcome.

Typical Electrical & Optical Characteristics Curves:



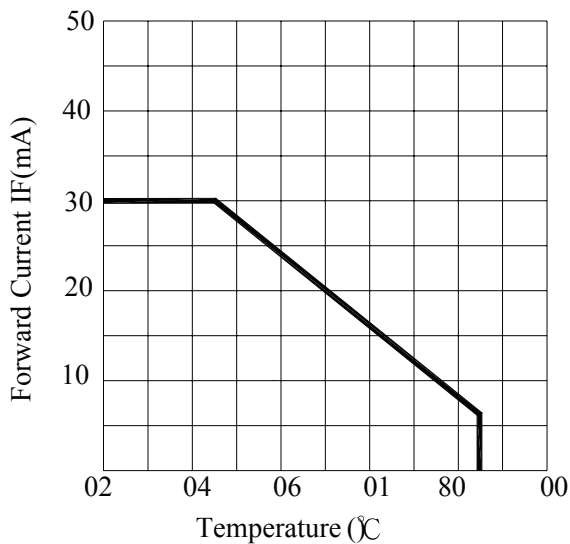
FORWARD CURRENT VS. APPLIED VOLTAGE



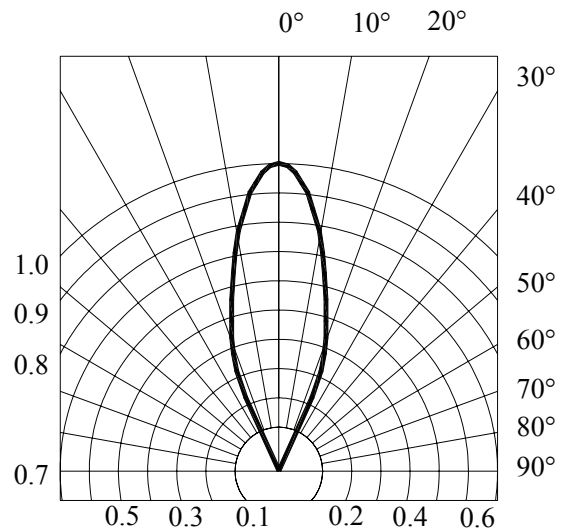
FORWARD CURRENT VS. LUMINOUS INTENSITY



3mm Round LED Lamp



FORWARD CURRENT VS. AMBIENT TEMPERATURE



RADIATION DIAGRAM

Part Number Table

| LED Chip | | Lens Colour | Part Number |
|---------------|-----------------|-------------|-------------|
| Material | Emitting Colour | | |
| AlGaAs / GaAs | Red | Red clear | 703-0090 |

Important Notice : This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell plc 2012.

