

Standard LED

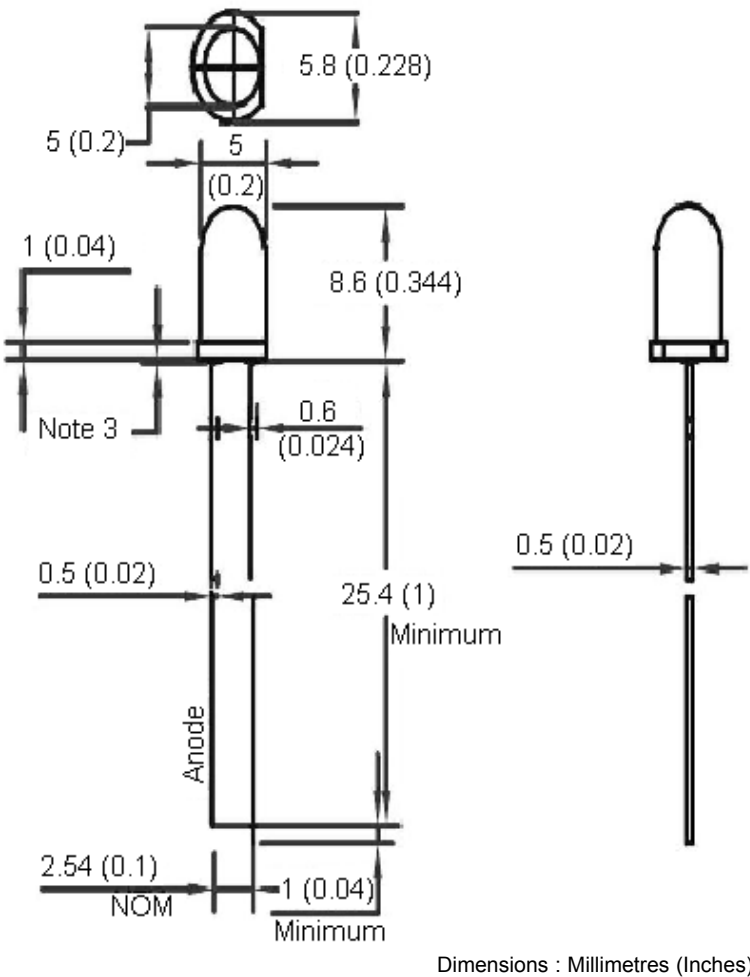


Red Emitting Colour

Features:

- High intensity
- Standard T-1 3/4 diameter package
- General purpose leads
- Reliable and rugged

Package Dimensions:



Specification Table

| Chip Material | Lens Colour | Source Colour | Part Number |
|---------------|-------------|---------------|-------------|
| AlGaAs | Diffused | Red | MV5754A |

Notes:

1. Tolerance is ± 0.25 mm (0.01") unless otherwise noted
2. Protruded resin under flange is 1 mm (0.04") maximum
3. Lead spacing is measured where the leads emerge from the package



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

| Parameter | Maximum | Unit |
|---|---|-----------------------|
| Power Dissipation | 80 | mW |
| Peak Forward Current (1/10 Duty Cycle, 0.1 ms Pulse Width) | 100 | mA |
| Continuous Forward Current | 20 | |
| Derating Linear From 50°C | 0.4 | mA / $^\circ\text{C}$ |
| Reverse Voltage | 5 | V |
| Operating Temperature Range | -25°C to $+80^\circ\text{C}$ | |
| Storage Temperature Range | -40°C to $+100^\circ\text{C}$ | |
| Lead Soldering Temperature (4 mm (0.157) Inches from Body) | 260 $^\circ\text{C}$ for 5 s | |

Electrical Optical Characteristics at $T_a = 25^\circ\text{C}$

| Parameter | Symbol | Minimum | Typical | Maximum | Unit | Test Condition |
|--------------------------|-----------------|---------|---------|---------|---------------|-------------------------------|
| Luminous Intensity | I_v | | 40 | | mcd | $I_f = 20\text{ mA}$ (Note 1) |
| Viewing Angle | $2\theta_{1/2}$ | | 25 | | Deg | (Note 2) |
| Peak Emission Wavelength | λ_p | | 640 | | nm | $I_f = 20\text{ mA}$ |
| Dominant Wavelength | λ_d | | 635 | | nm | $I_f = 20\text{ mA}$ (Note 3) |
| Spectral Line Half-Width | $\Delta\lambda$ | | 25 | | nm | $I_f = 20\text{ mA}$ |
| Forward Voltage | V_f | | 2 | 2.5 | V | $I_f = 20\text{ mA}$ |
| Reverse Current | I_R | - | - | 100 | μA | $V_R = 5\text{ V}$ |

Notes:

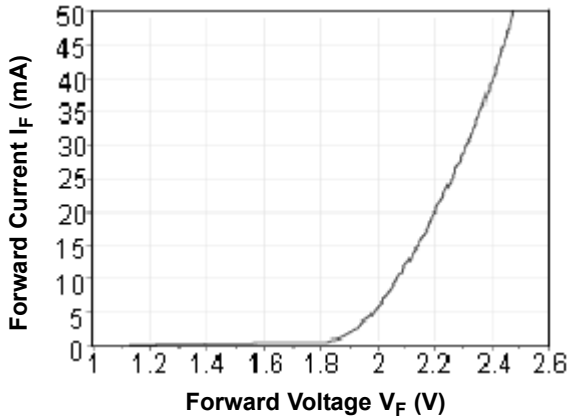
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve
2. $\theta_{1/2}$ is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3. The dominant wavelength (λ_d) is derived from the CIE chromaticity diagram and represents the single wavelength which defines the colour of the device

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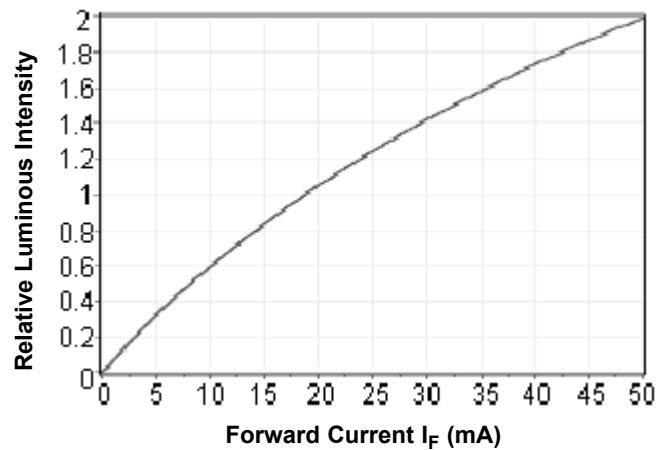
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Typical Characteristics

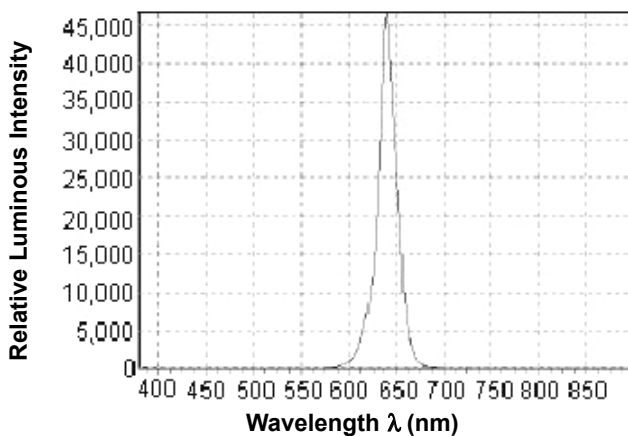
$I_F - V_F$ ($T_a = 25^\circ\text{C}$)



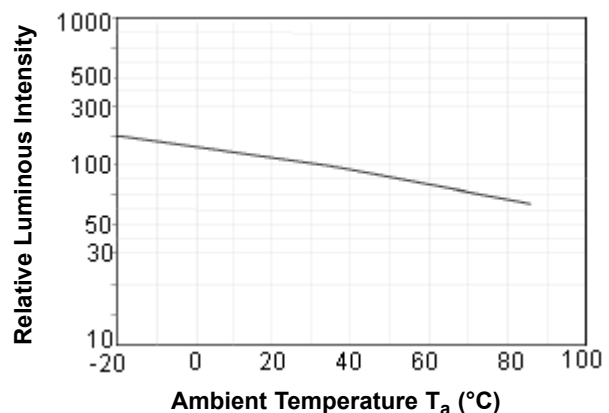
Relative Luminous Intensity - I_F ($T_a = 25^\circ\text{C}$)



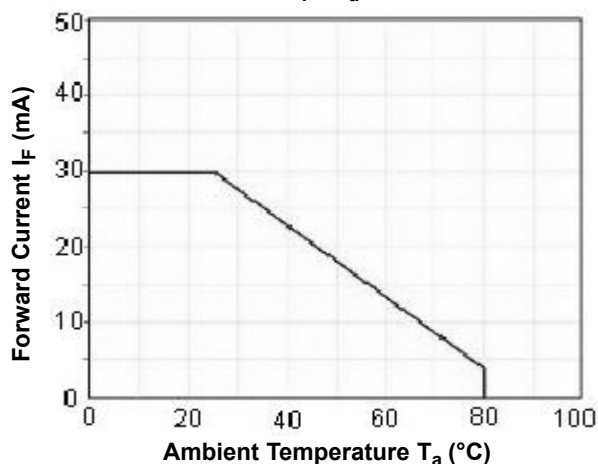
Wavelength Characteristics ($T_a = 25^\circ\text{C}$)



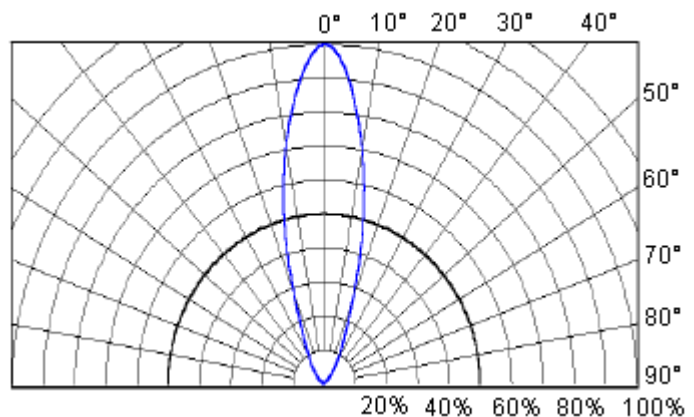
Relative Luminous Intensity - T_a



$I_F - T_a$



Directive Characteristics ($T_a = 25^\circ\text{C}$)



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