

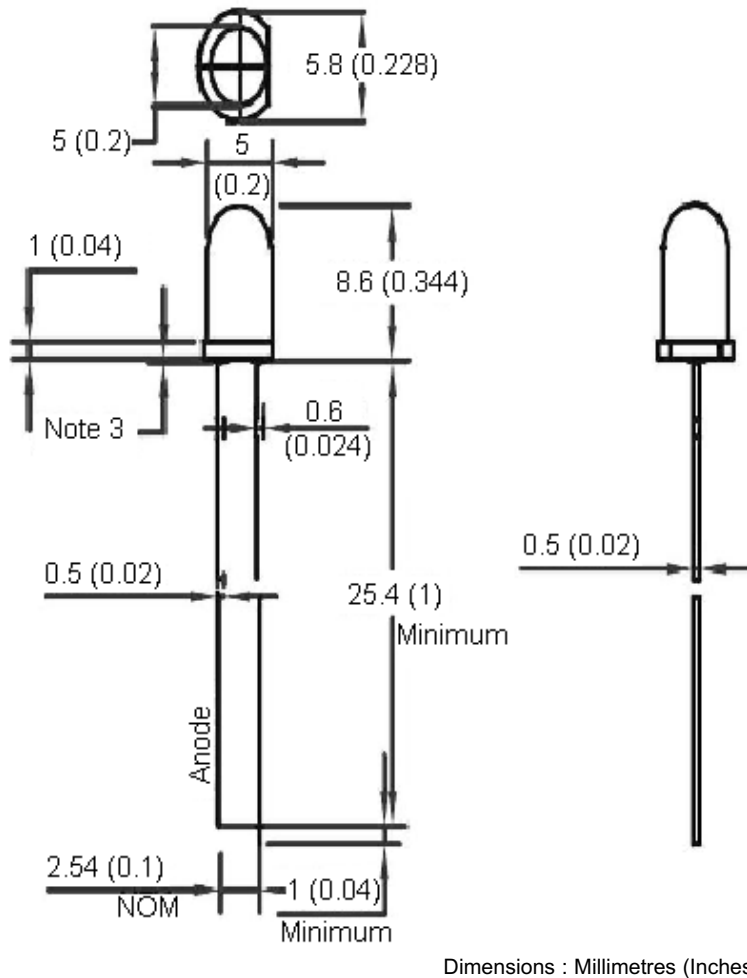
# Standard LED

## 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  $\pm 0.25$  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 $50^\circ\text{C}$	0.4	$\text{mA} / ^\circ\text{C}$
Reverse Voltage	5	V
Operating Temperature Range	$-25^\circ\text{C}$ to $+80^\circ\text{C}$	
Storage Temperature Range	$-40^\circ\text{C}$ to $+100^\circ\text{C}$	
Lead Soldering Temperature (4 mm (0.157) Inches from Body)	260°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	$\lambda_p$		640		nm	$I_f = 20 \text{ mA}$
Dominant Wavelength	$\lambda_d$		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	$\mu\text{A}$	$V_R = 5 \text{ V}$

#### Notes:

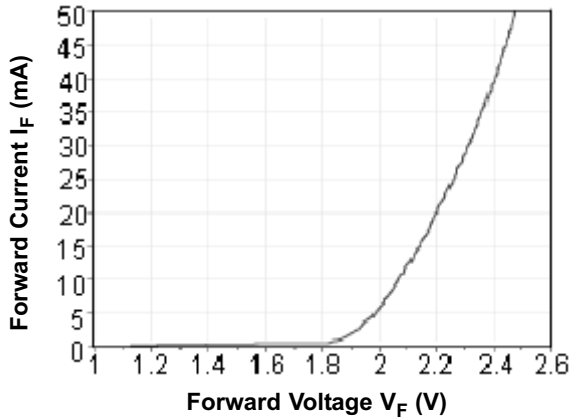
1. Luminous intensity is measured with a light sensor and filter combination that approximates the CIE eye-response curve
2.  $\theta_{1/2}$  is the off-axis angle at which the luminous intensity is half the axial luminous intensity
3. The dominant wavelength ( $\lambda_d$ ) is derived from the CIE chromaticity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

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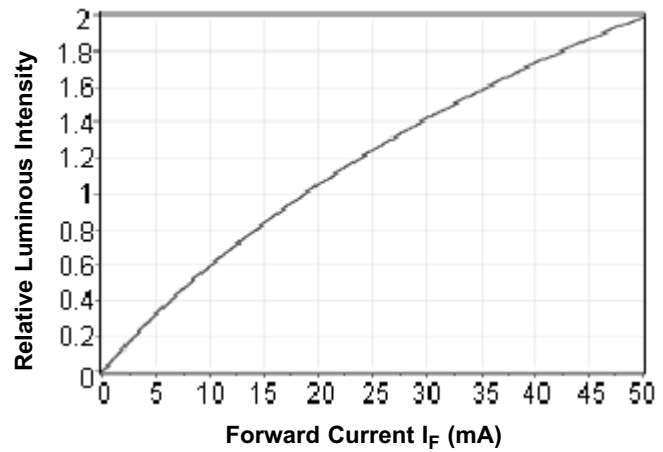
## Red Emitting Colour

### Typical Characteristics

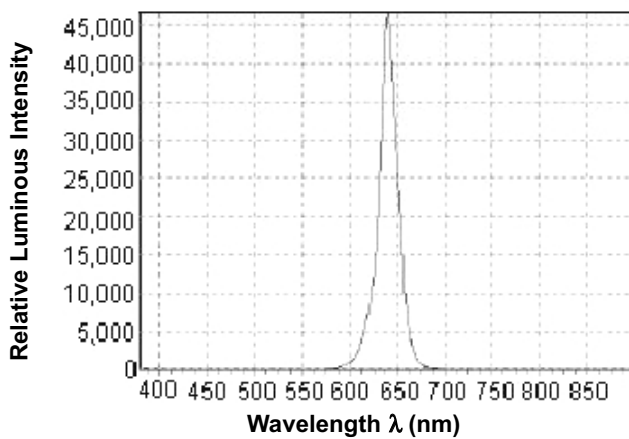
$I_F - V_F$  ( $T_a = 25^\circ\text{C}$ )



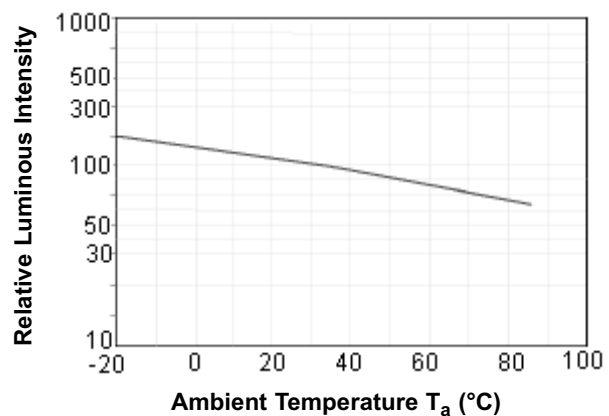
Relative Luminous Intensity -  $I_F$  ( $T_a = 25^\circ\text{C}$ )



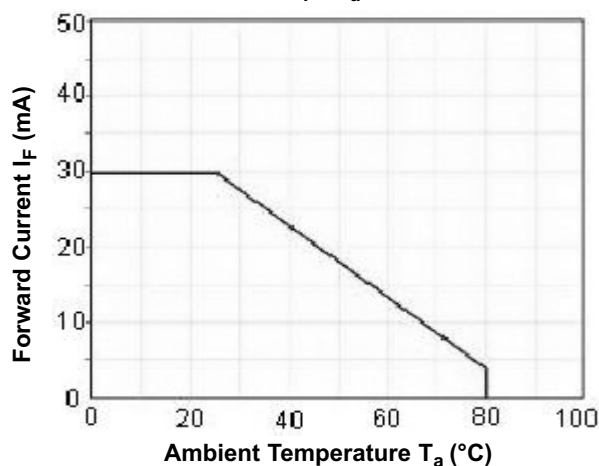
Wavelength Characteristics ( $T_a = 25^\circ\text{C}$ )



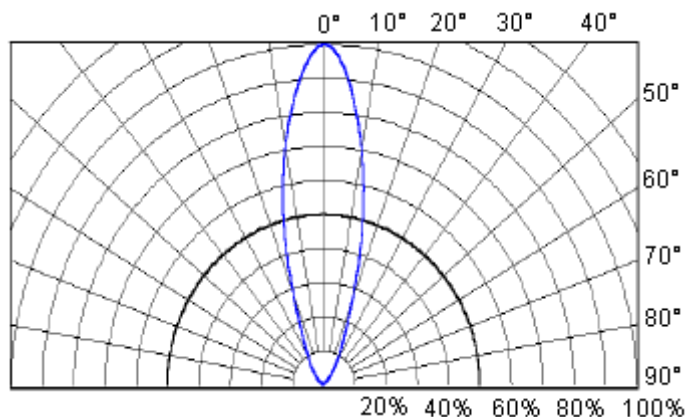
Relative Luminous Intensity -  $T_a$



$I_F - T_a$



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



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