

# Flangeless Rectangular LED

## Super Red, 2mm x 7mm

**multicomp** PRO

**RoHS  
Compliant**

### Specifications

Dice Material : AlInGaP  
Emitted colour : Super Red  
Lens colour : Red Diffused  
Peak wavelength : 653nm  
Viewing angle : 120°  
Luminous intensity (IV) : 60mcd

#### Electrical / Optical Characteristics at Ta = 25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	IV	40	60	80	mcd	IF = 20mA
Viewing Angle	2θ1/2		120		deg	
Peak Emission Wavelength	λp		653		nm	
Dominant Wavelength	λD	632	637	643	nm	
Spectral Line Half-Width	Δλ		19		nm	
Forward Voltage	VF	1.7	1.9	2.4	V	VR=5V
Reverse Current	I <sub>r</sub>	-	-	10	uA	

▲ Luminous intensity (IV) ±10%, Forward Voltage (VF) ±0.1V, Wavelength (λd) ±0.5nm

#### Absolute Maximum Ratings: (Ta = 25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	P <sub>d</sub>	85	mW
Peak Forward Current ( Duty 1/10 @ 1KHZ )	IF (Peak)	100	mA
Recommended Operating Current	IF (Rec)	30	mA
Electrostatic Discharge	ESD <sub>HBM</sub>	2000	V
Operating Temperature Range	T <sub>OPR</sub>	-40 to +85	°C
Storage Temperature Range	T <sub>STG</sub>	-40 to +100	°C
Lead Soldering Temperature Range (1.6 mm (1/16 inch) from body)	Reflow Soldering: 260°C for 5 sec. Hand Soldering: 350°C for 3 sec.		

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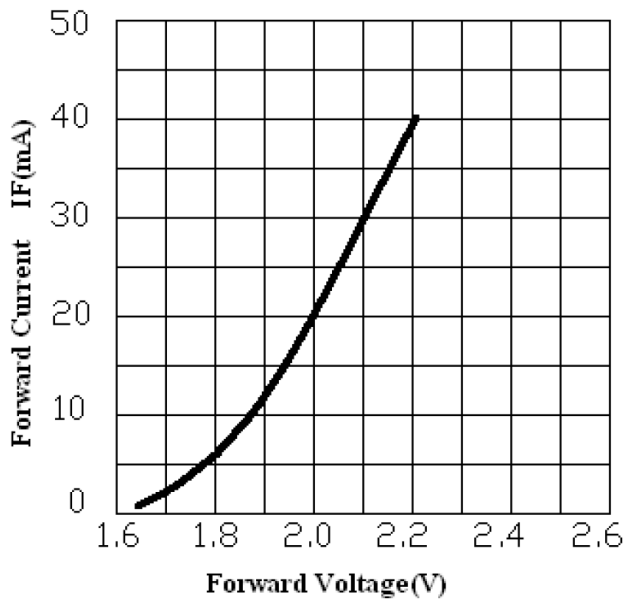
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## Super Red, 2mm x 7mm

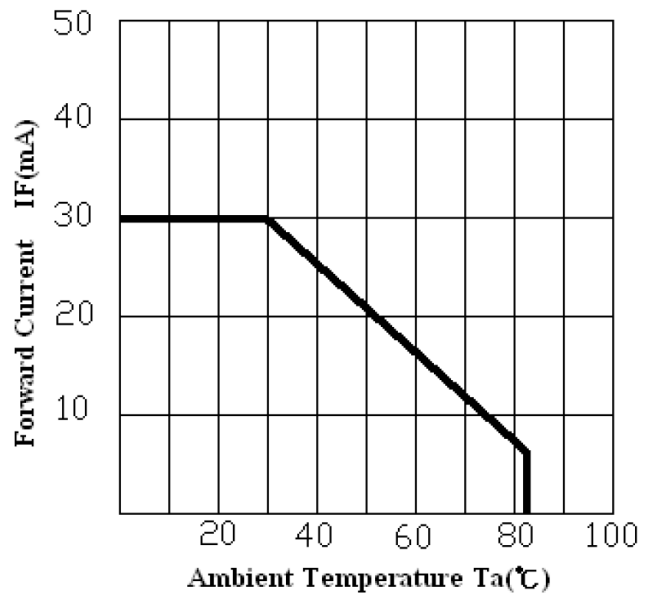
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### Typical Electro-Optical Characteristics Curves

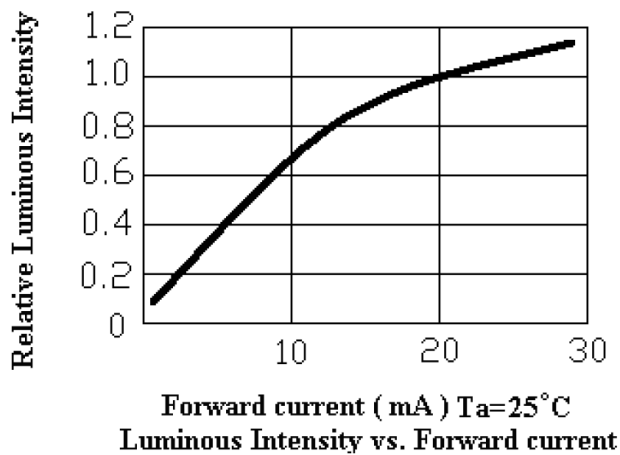
#### Ultra Red (AlInGaP $\lambda_P=653\text{nm}$ )



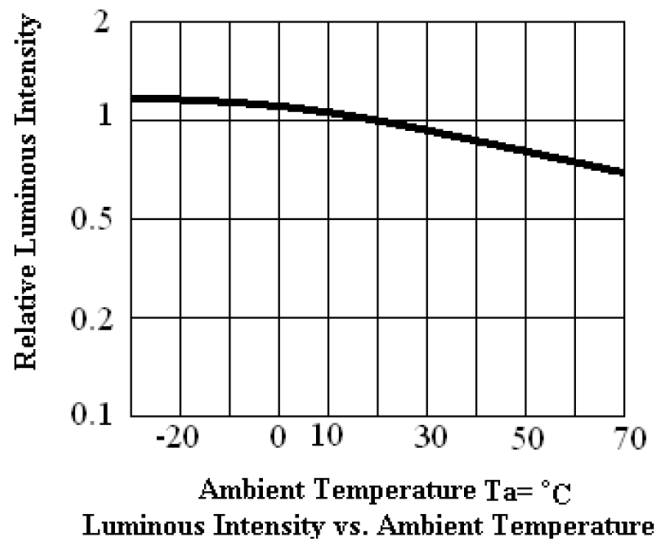
Forward Current vs. Forward Voltage



Forward Current Derating Curve



Luminous Intensity vs. Forward current

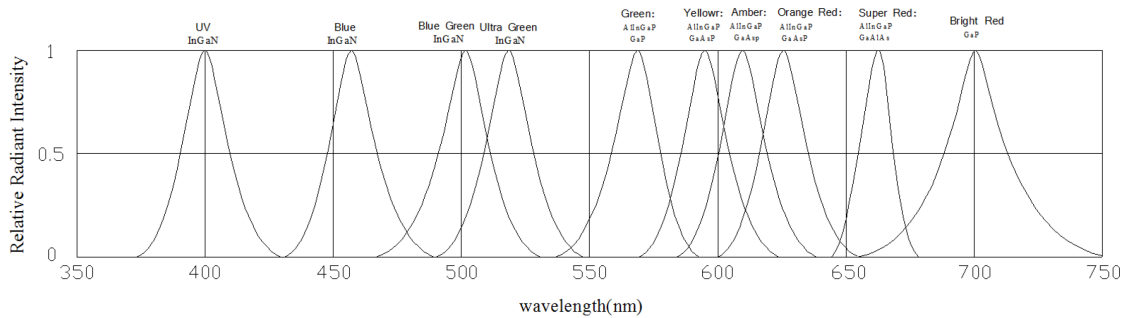


Luminous Intensity vs. Ambient Temperature

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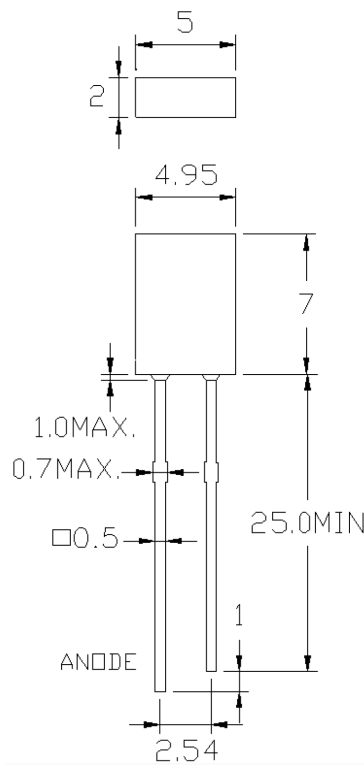
## Super Red, 2mm x 7mm

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Relative Intensity VS. wavelength

### Dimensions



Dimensions : Millimetres

### Part Number Table

Description	Part Number
Flangeless Rectangular LED, Super Red, 653nm, 120°, 60mcd, Through hole	MP007977

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