

# Round LED

## 5mm, Red/Green/Amber

**multicomp** PRO

**RoHS  
Compliant**



### Features

- 5mm Rounded LED Lamps
- Low power consumption
- Excellent product quality and reliability
- Lead-free device

### Applications

- Electronic signs and signals
- Bright ambient lighting conditions
- Backlight
- General purpose indicators

### Device Selection Guide

Part No.	Chip		Lens color
MP008551	Material	Emitted color	White Diffused
	AlGaInP	Red	
	InGaN	Green	
	AlGaInP	Amber	

### Absolute Maximum Ratings: (T<sub>A</sub> = 25°C)

Parameter	Symbol	Value			Unit
		Red	Green	Amber	
Power Dissipation	P <sub>D</sub>	50	120		mW
Forward Current	I <sub>F</sub>	30			mA
Peak Forward Current <sup>*1</sup>	I <sub>FP</sub>	100			mA
Reverse Voltage	V <sub>R</sub>	5			V
Operating Temperature	T <sub>OPR</sub>	-40 to +85			°C
Storage Temperature	T <sub>STG</sub>	-40 to +85			°C
Soldering Temperature <sup>*2</sup>	T <sub>SOI</sub>	260°C For 5 Seconds			

Notes:

\*1: Pulse width ≤ 0.1ms, Duty cycle ≤ 1/10

\*2: ΔAt the position of 3mm below package base.

\*3: ▲Please refer to the curve of forward current vs. temperature

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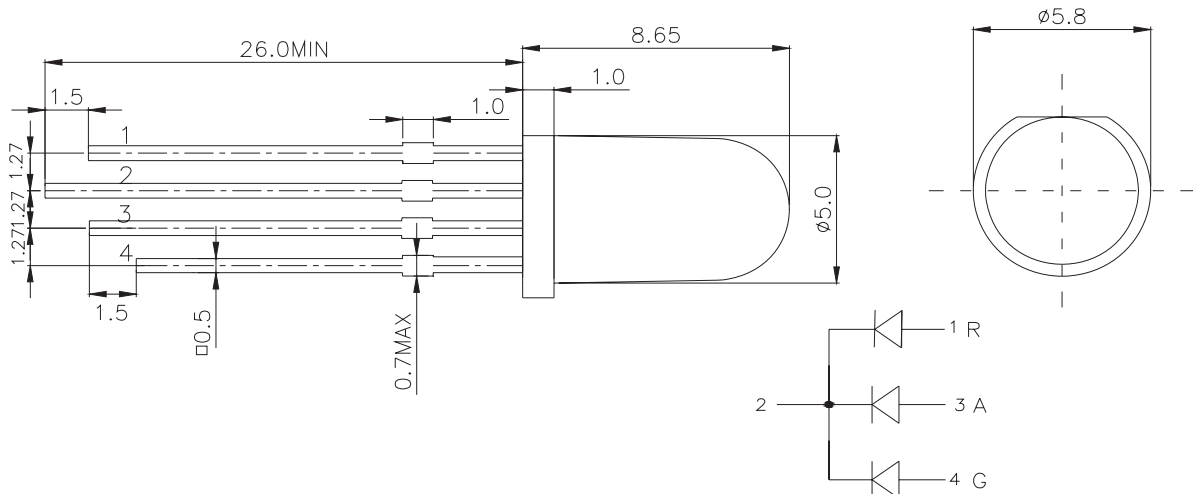
Electrical / Optical Characteristics at T <sub>A</sub> = 25°C								
Parameter		Symbol	Min.	Typ.	Max	Unit	Test Conditions	
Forward Voltage	Red	V <sub>F</sub>	—	2	—	V	IF=20mA	
	Green	V <sub>F</sub>		2.8	—	V		
	Amber	V <sub>F</sub>		2	—	V		
Reverse Current	Red	I <sub>R</sub>		—	—	10	μA	VR=5V
	Green	I <sub>R</sub>		—	—	10	μA	
	Amber	I <sub>R</sub>		—	—	10	μA	
Peak Wavelength	Red	λ <sub>d</sub>		—	622	—	nm	
	Green	λ <sub>d</sub>		—	522	—	nm	
	Amber	λ <sub>d</sub>		—	601	—	nm	
Luminous Intensity	Red	I <sub>v</sub>		—	320	—	mcd	
	Green	I <sub>v</sub>	—	2000	—	mcd		
	Amber	I <sub>v</sub>	—	500	—	mcd		
Power Angle		2θ1/2	—	—	—	Deg.		

**Remarks:**

If special sorting is required (e.g. binning based on forward voltage, luminous intensity, or dominant wavelength), the typical accuracy of the sorting process is as follows:

1. Dominant Wavelength: +/-1nm
2. Chromatic Coordinates: +/-0.01
3. Luminous Intensity: +/-15%
4. Forward Voltage: +/-0.1V

**Dimensions**



**Notes:**

1. Tolerance is ±0.25 unless otherwise noted.
2. Lead spacing is measured where the leads emerge from the package.
3. Specifications are subject to change without notice.
4. The design and working current for LED is not less than 2mA.

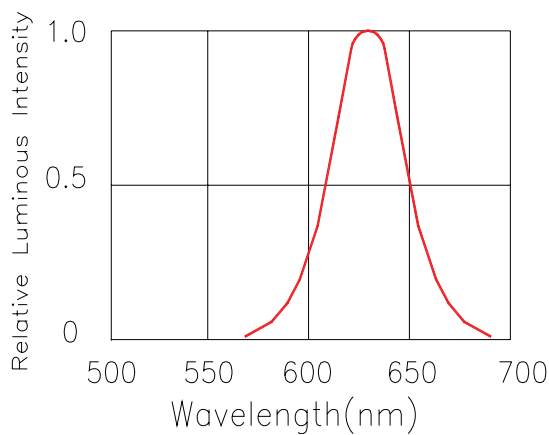
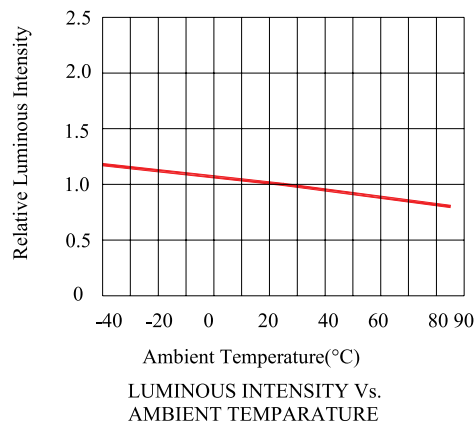
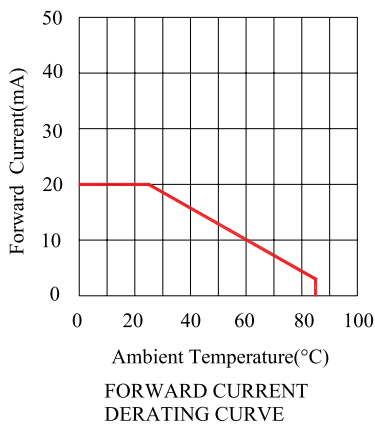
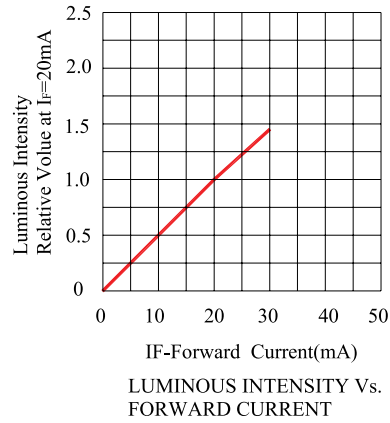
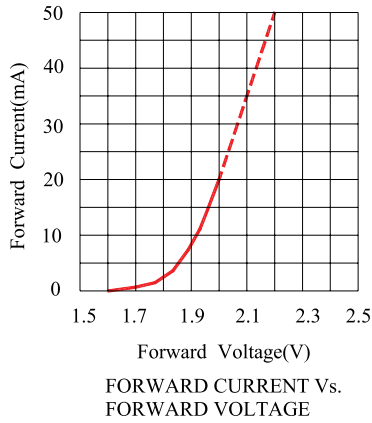
Dimensions : Millimetres

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### Typical Electrical/Optical Characteristics Curves

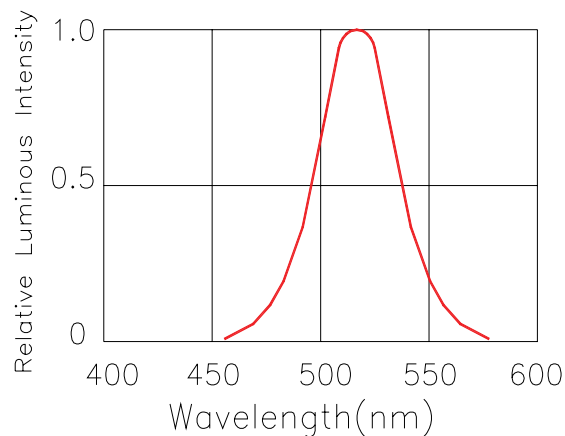
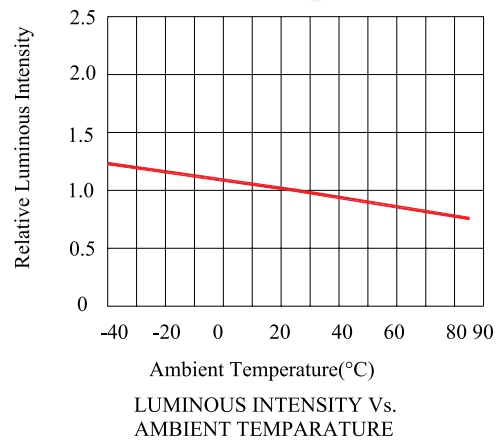
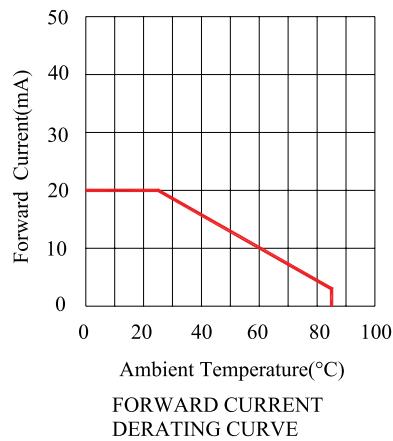
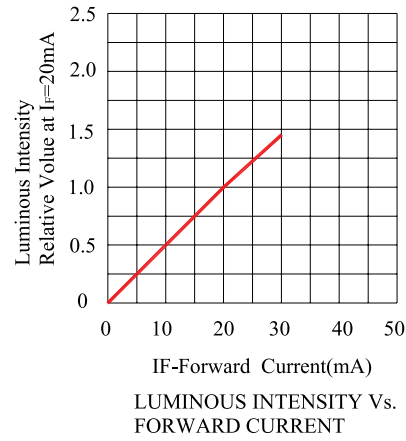
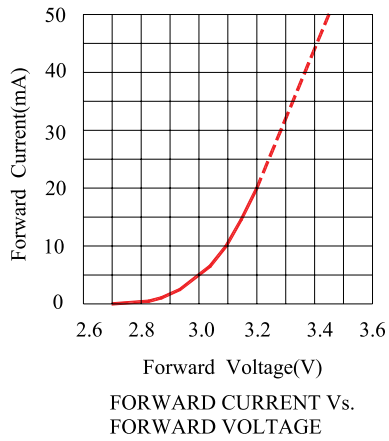
**Red**



# Round LED

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### Green

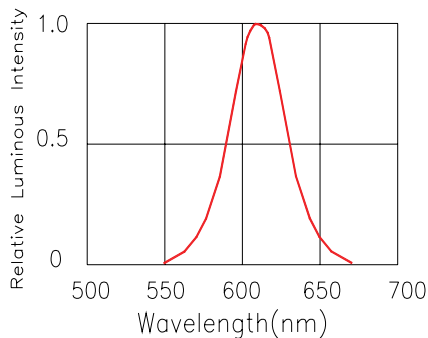
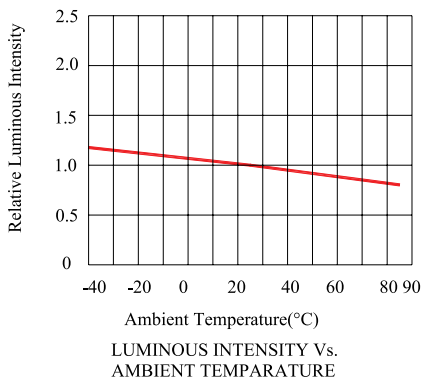
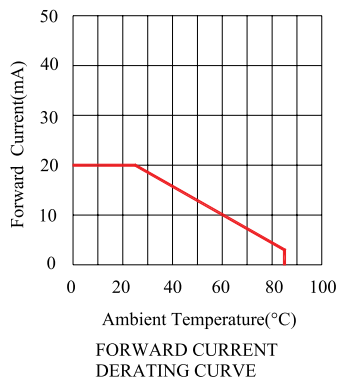
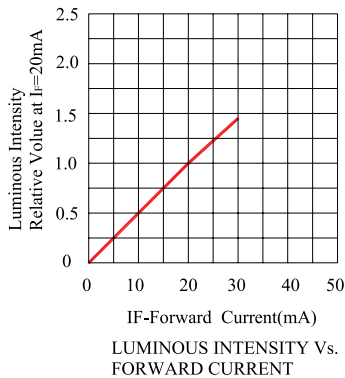
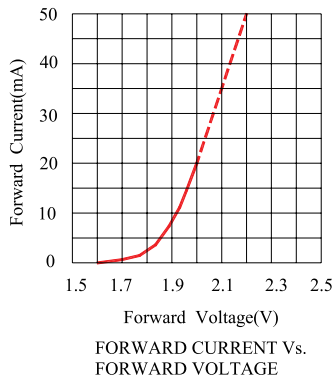


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### Green



### Part Number Table

Description	Part Number
Round LED, Red/Green/Amber, 622nm/522nm/601nm, 320mcd/2000mcd/500mcd, Through hole	MP008551

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