

Round LED

5mm, Red

multicomp **PRO**

RoHS
Compliant



Features

- Low power consumption
- Excellent product quality and reliability
- Lead-free device.

Applications

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

Device Selection Guide

Part No.	Chip		Lens color
MP008545	Material	Emitted color	Red Diffused
	AlGaInP	Red	

Absolute Maximum Ratings: (T_A = 25°C)

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	50	mW
Forward Current	I _F	30	mA
Peak Forward Current* ¹	I _{FP}	100	mA
Reverse Voltage	V _R	5	V
Operating Temperature	T _{OPR}	-40 to +85	°C
Storage Temperature	T _{STG}	-40 to +85	°C
Soldering Temperature* ²	T _{SOI}	260°C For 5 Seconds	

Notes:

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

*2: 1.6mm below package base.

Newark.com/multicomp-pro
Farnell.com/multicomp-pro
Element14.com/multicomp-pro

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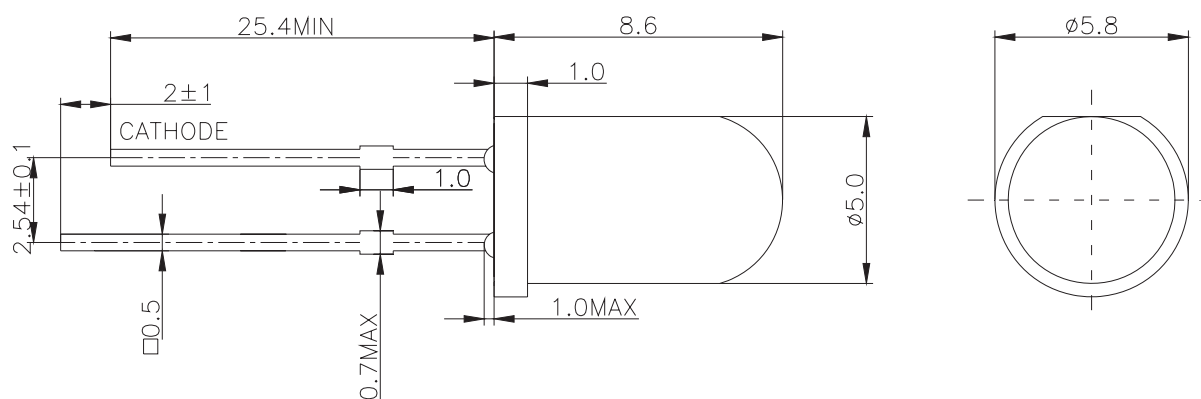
Electrical / Optical Characteristics at T _A = 25°C						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	V _F	1.8	2	2.6	V	I _F = 20mA
Reverse Current	I _R	-	-	10	uA	V _R =5V
Dominant Wavelength	λ _d	620	625	630	nm	I _F =20mA
Peak Wavelength	λ _p	-	635	-	nm	
Spectral Line Half-Width	Δλ	-	15	-	nm	
Luminous Intensity	I _V	3800	5700	8000	mcd	
Power Angle	2θ _{1/2}	-	50	-	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
5. The design and working current for LED is not less than 2mA.

Dimensions



Notes:

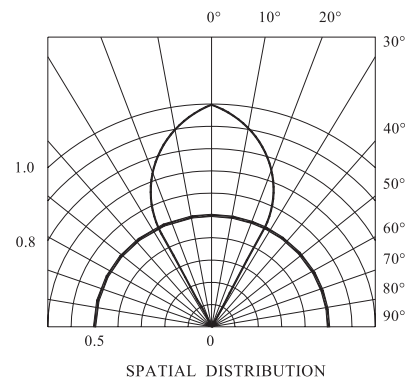
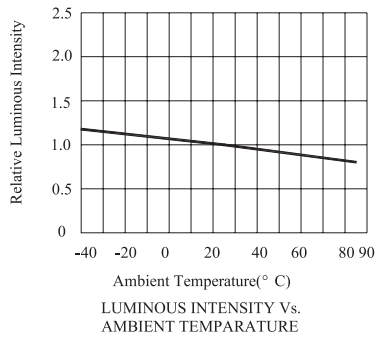
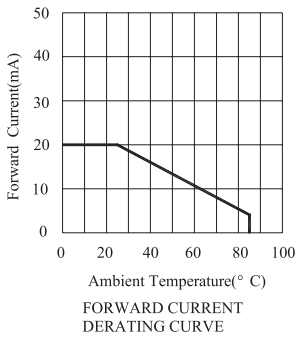
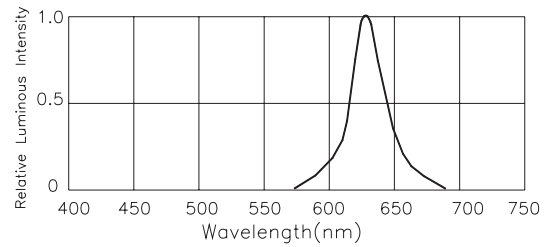
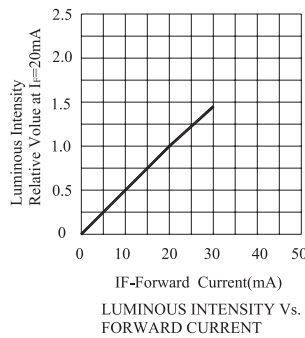
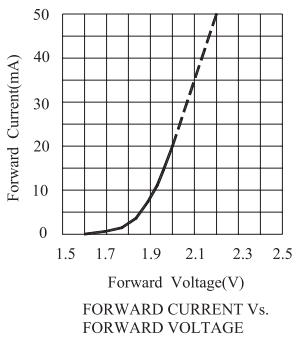
1. Tolerance is ±0.25 unless otherwise noted.
2. Lead spacing is measured where the leads emerge from the package.
3. Specifications are subject to change without notice.

Dimensions : Millimetres

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Typical Electrical/Optical Characteristics Curves (Ta=25°C Unless Otherwise Noted)



Part Number Table

Description	Part Number
Round LED, Red, 635nm, 50°, 5700mcd, Through hole	MP008545

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