

Round LED

5mm, 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
MP008537	Material	Emitted color	Amber Diffuse
	AlGaInP	Amber	

Absolute Maximum Ratings: (T_A = 25°C)

Parameter	Symbol	Value	Unit
Power Dissipation	P _D	120	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 Δ	

Notes:

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

*2: Δ At the position of 3mm below package base.

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

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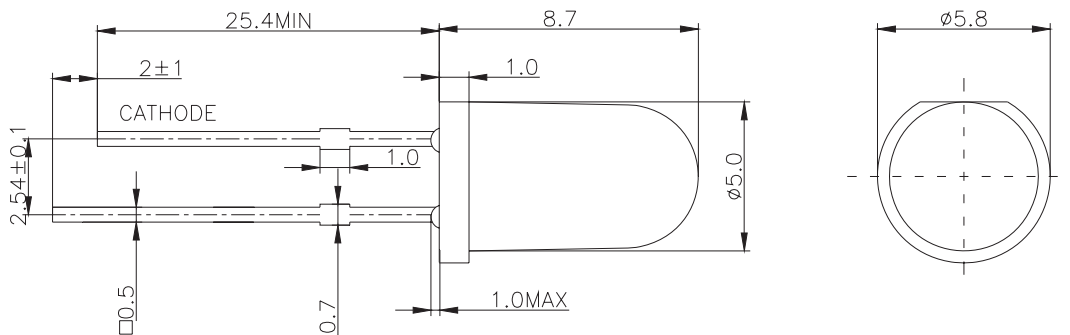
Electrical / Optical Characteristics at T _A = 25°C						
Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Forward Voltage	V _F	1.8	2	2.6	V	IF=20mA
Reverse Current	I _R	—	—	10	μA	VR=5V
Dominant Wavelength	λ _d	600	605	612	nm	IF=20mA
Peak Wavelength	λ _P	—	610	—	nm	
Spectral line Half-width	Δλ	—	15	—	nm	
Luminous Intensity	I _v	250	500	1000	mcd	
Power Angle	2θ _{1/2}	—	30	—	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



Dimensions : Millimetres

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.

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VF Rank

Rank	VF(V)		Condition
	Min	Max	
A2B1	1.8	2	IF=20mA
B2C1	2	2.2	
C2D1	2.2	2.4	
D2E1	2.4	2.6	

Tolerance : $\pm 0.1V$

λD Rank

Rank	λD (nm)		Condition
	Min	Max	
A1	600	603	IF=20mA
A2	603	606	
A3	606	609	
A4	609	612	

Tolerance : $\pm 0.1nm$

IV Rank

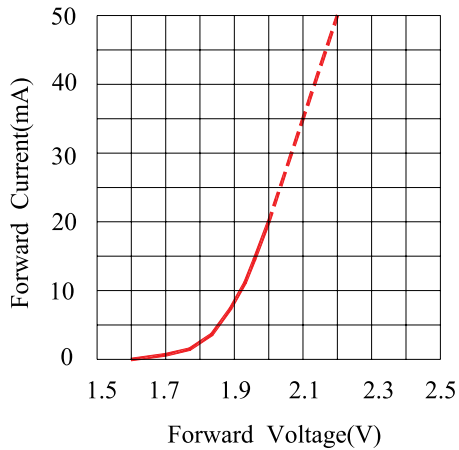
Rank	IV(mcd)		Condition
	Min	Max	
K	250	400	IF=20mA
L	400	600	
M	600	1000	

Tolerance : $\pm 15\%$

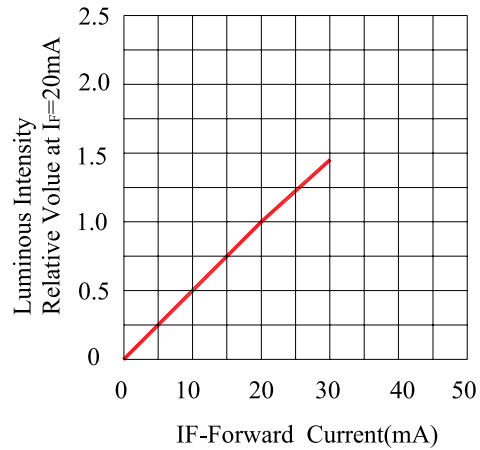
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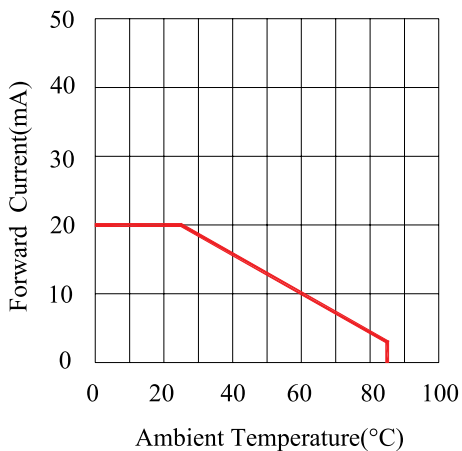
Typical Electrical/Optical Characteristics Curves



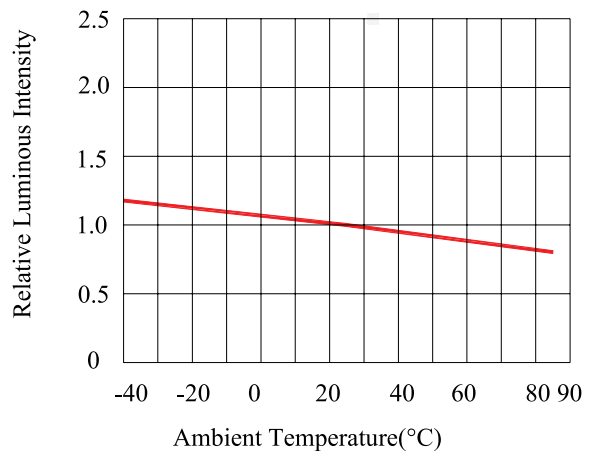
FORWARD CURRENT Vs. FORWARD VOLTAGE



LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE

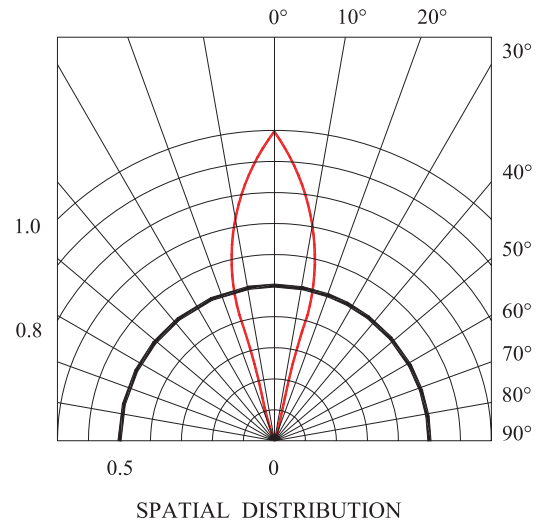
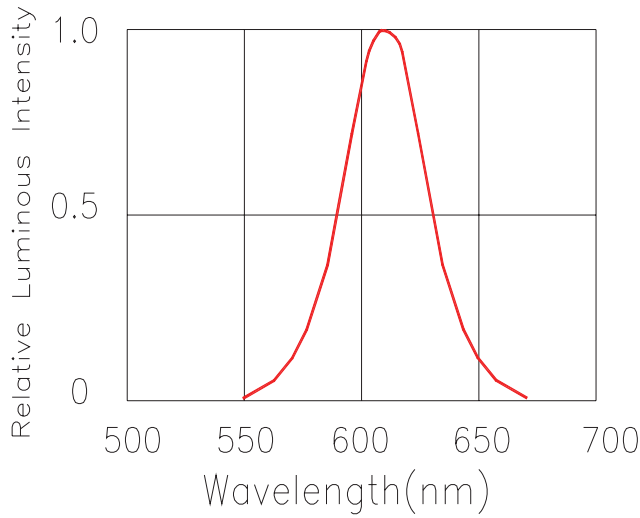


LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

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Part Number Table

Description	Part Number
Round LED, Amber, 610nm, 30°,500mcd, Through hole	MP008537

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