

Round LED

3mm, Red/Blue

multicomp^{PRO}

RoHS
Compliant



Features

- Low power consumption
- Excellent product quality and reliability
- I,c. compatible
- Lead-free device

Applications

- Status indicators
- Commercial use
- Backlights
- Advertising Signs

Device Selection Guide			
Part No.	Chip		Lens color
MP008534	Material	Emitted color	White Diffuse
	AlGaInP	Red	
	INGaN	Blue	

Absolute Maximum Ratings: (T _A = 25°C)				
Parameter	Symbol	Value		Unit
		Red	Blue	
Power Dissipation	P _D	50	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		

Notes:

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

*2: 1.66mm below package base.

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

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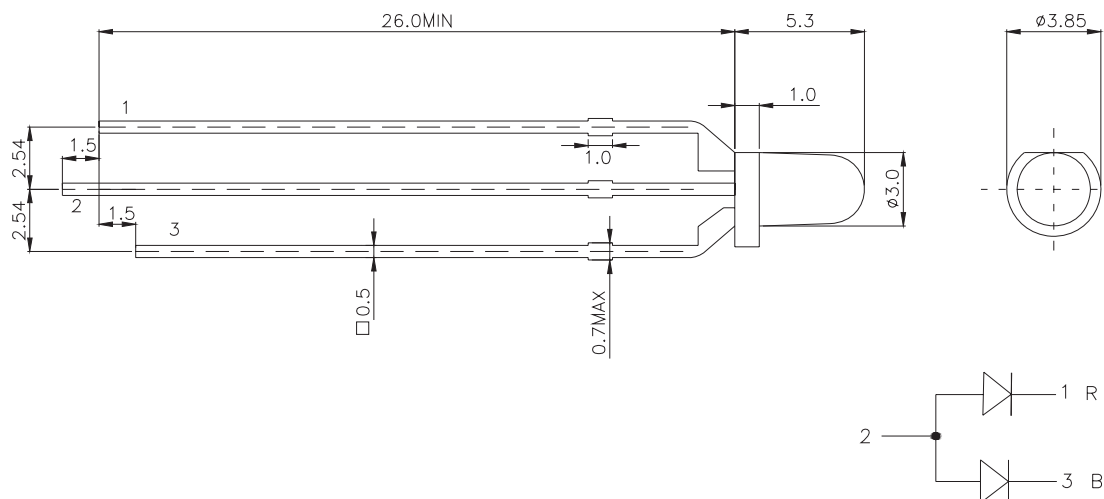
Electrical / Optical Characteristics at T _A = 25°C						
Parameter	Symbol	Min.	Typ.	Max	Unit	Test Conditions
Forward Voltage	Red	V _F	2	—	V	IF=20mA
	Blue	V _F	3	—	V	
Luminous Intensity	Red	I _R	—	10	μA	VR=5V
	Blue	I _R	—	10	μA	
Dominant Wavelength	Red	λ _d	625	—	nm	IF=20mA
	Blue	λ _d	470	—	nm	
Peak Wavelength	Red	λ _P	635	—	nm	
	Blue	λ _P	465	—	nm	
Spectral line Half-width	Red	Δλ	20	—	nm	
	Blue	Δλ	25	—	nm	
Luminous Intensity	Red	I _v	1500	—	mcd	
	Blue	I _v	600	—	mcd	
Power Angle		2θ1/2	60	—	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.

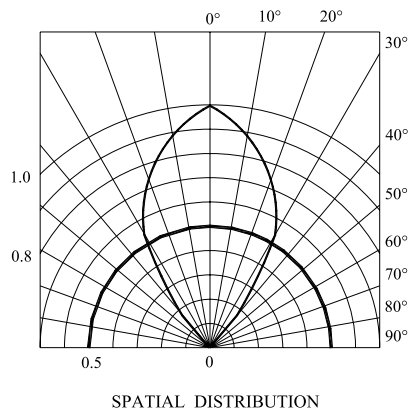
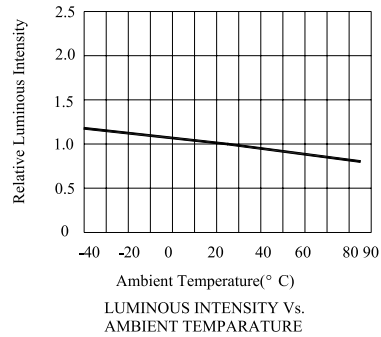
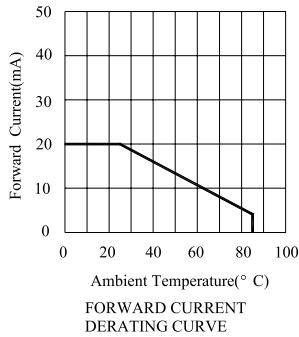
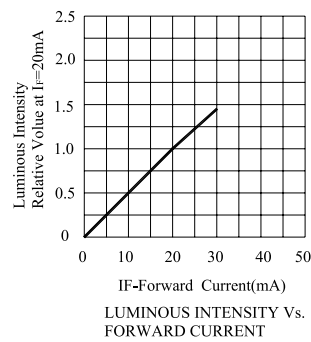
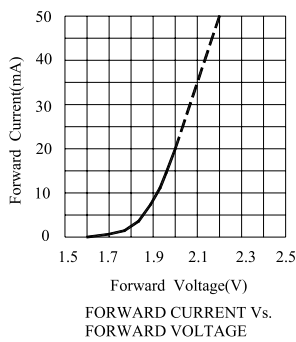
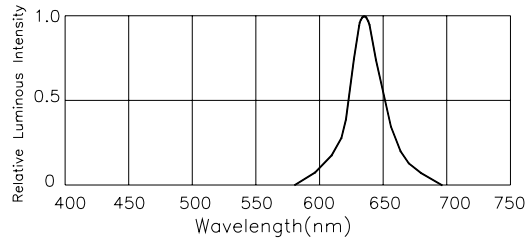
Dimensions : Millimetres

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

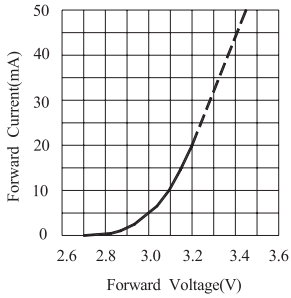
Red



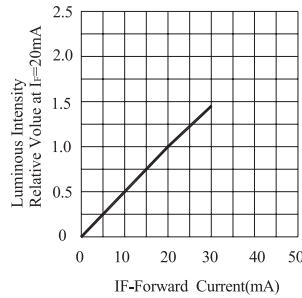
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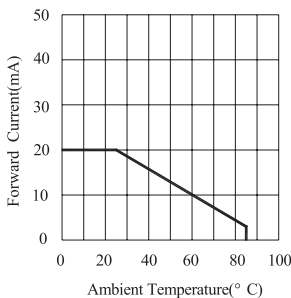
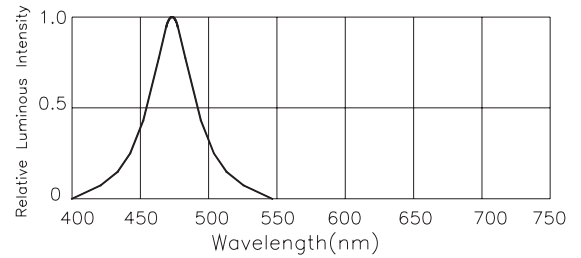
Blue



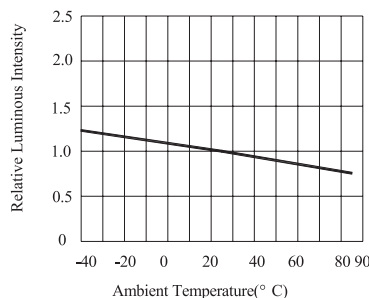
FORWARD CURRENT Vs. FORWARD VOLTAGE



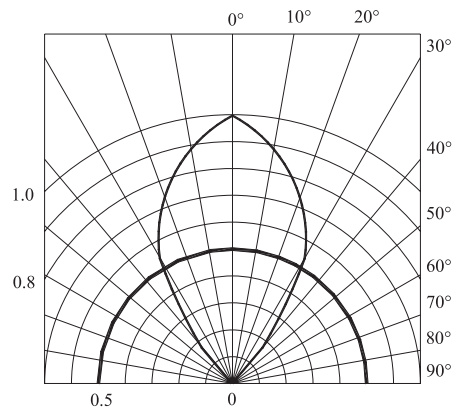
LUMINOUS INTENSITY Vs. FORWARD CURRENT



FORWARD CURRENT DERATING CURVE



LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Part Number Table

Description	Part Number
Round LED, Red/Blue, 635nm/465nm, 60°, 1500mcd/600mcd, Through hole	MP008534

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