

Round LED

5mm, White

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
MP008548	Material	Emitted color	White Diffuse
	InGaN	White	

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	

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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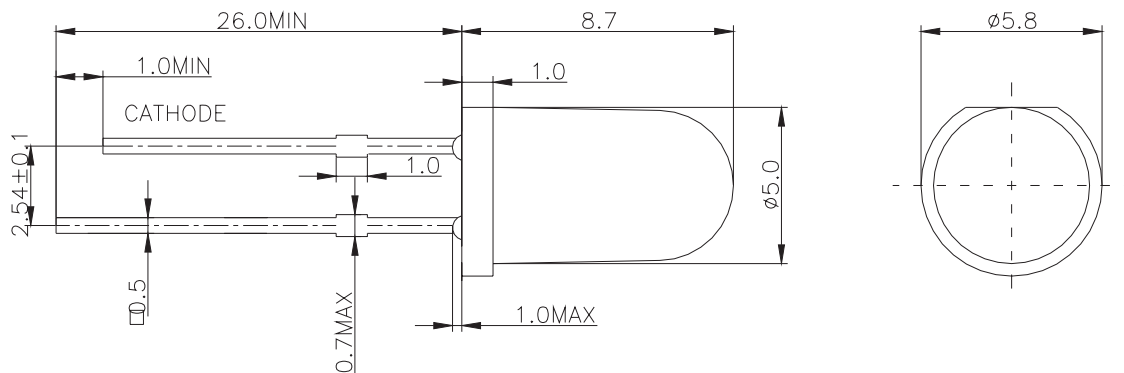
Electrical / Optical Characteristics at T _A = 25°C						
Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Forward Voltage	V _F	—	3.2	—	V	IF = 20mA
Reverse Current	I _R	—	-	10	uA	VR=5V
Chromaticity Coordinates	X	—	0.27	—	nm	IF=20mA
	Y	—	0.28	—	nm	
Luminous Intensity	I _V	—	2500	—	mcd	
Power Angle	2θ1/2	—	35	—	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



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.

VF Rank

Rank	VF(V)		Condition
	Min	Max	
F	2.8	3	IF=20mA
G	3	3.2	
H	3.2	3.4	
I	3.4	3.6	

Tolerance: ±0.1V

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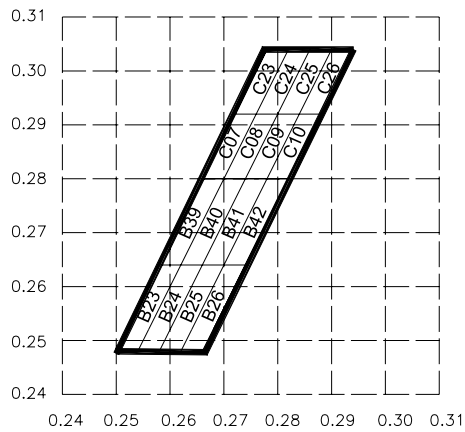
5mm, White

IV Rank

Rank	IV(mcd)		Condition
	Min	Max	
O	1700	2500	IF=20mA
P	2500	3800	

Tolerance: ±15%

X/Y Rank

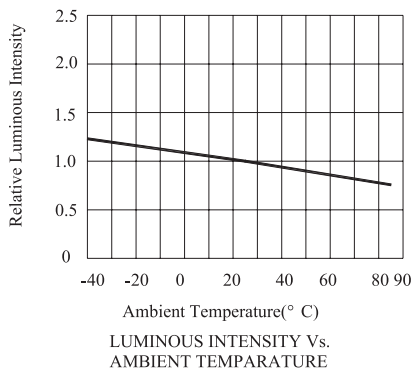
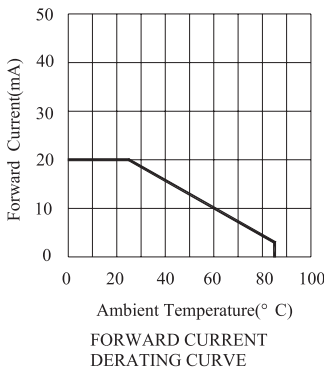
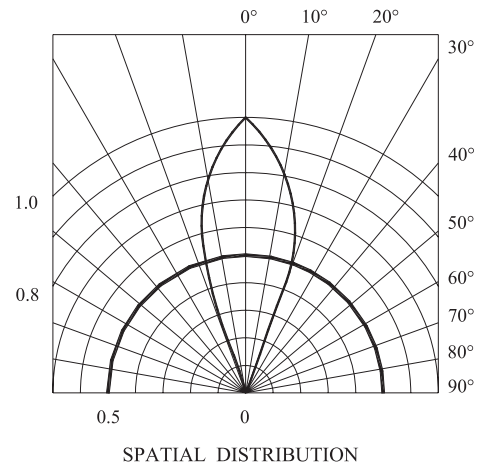
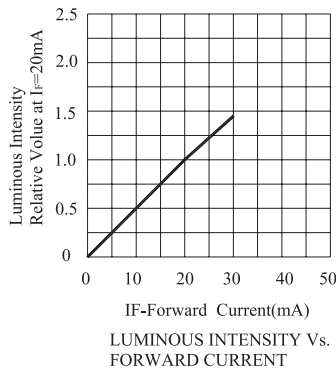
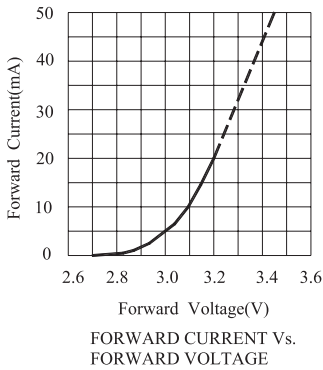


B23	X	0.250	0.258	0.262	0.254	C07	X	0.266	0.272	0.276	0.270
	Y	0.248	0.264	0.264	0.248		Y	0.280	0.292	0.292	0.280
B24	X	0.254	0.262	0.266	0.258	C08	X	0.270	0.276	0.280	0.274
	Y	0.248	0.264	0.264	0.248		Y	0.280	0.292	0.292	0.280
B25	X	0.258	0.266	0.270	0.262	C09	X	0.274	0.280	0.284	0.278
	Y	0.248	0.264	0.264	0.248		Y	0.280	0.292	0.292	0.280
B26	X	0.262	0.270	0.274	0.266	C10	X	0.278	0.284	0.288	0.282
	Y	0.248	0.264	0.264	0.248		Y	0.280	0.292	0.292	0.280
B39	X	0.258	0.266	0.270	0.262	C23	X	0.272	0.278	0.282	0.276
	Y	0.264	0.280	0.280	0.264		Y	0.292	0.304	0.304	0.292
B40	X	0.262	0.270	0.274	0.266	C24	X	0.276	0.282	0.286	0.280
	Y	0.264	0.280	0.280	0.264		Y	0.292	0.304	0.304	0.292
B41	X	0.266	0.274	0.278	0.270	C25	X	0.280	0.286	0.290	0.284
	Y	0.264	0.280	0.280	0.264		Y	0.292	0.304	0.304	0.292
B42	X	0.270	0.278	0.282	0.274	C26	X	0.284	0.290	0.294	0.288
	Y	0.264	0.280	0.280	0.264		Y	0.292	0.304	0.304	0.292

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



Part Number Table

Description	Part Number
Round LED, White, 120mW, 35°, 2500mcd, Through hole	MP008548

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