

# 10mm Round Super Bright LED Lamp



## Specifications

Dice Material	: AlInGaP
Peak Wave Length	: 655nm
Emitted Colour	: Ultra Red
Viewing Angle (deg)	: 20
Lens Colour	: Water Clear
IV(mcd)	: 6000

## Electrical / Optical Characteristics at $T_A = 25^\circ\text{C}$

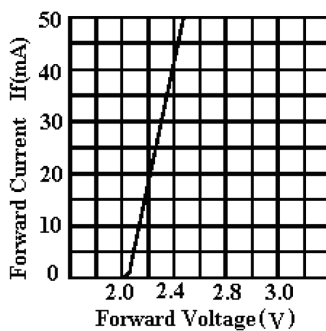
Parameter	Symbol	Min.	Typ.	Max.	Unit	Test
Luminous Intensity	IV	5000	6000	8500	mcd	IF = 20mA
Viewing Angle	$2\Theta_{1/2}$	-	20	-	deg	
Peak Emission Wavelength	$\lambda_p$	650	655	660	nm	
Dominant Wavelength	$\lambda_D$	-	645	-	nm	
Spectral Line Half-Width	$\Delta\lambda$	-	20	-	nm	
Forward Voltage	VF	2	2.2	2.4	V	
Power Dissipation	Pd	-	-	85	mW	
Peak Forward Current (Duty1/10 @ 1kHz)	IF (Peak)	-	-	100	mA	
Recommended Operating Current	IF (Rec)	-	20	-	mA	

## Absolute Maximum Rating $T_A = 25^\circ\text{C}$

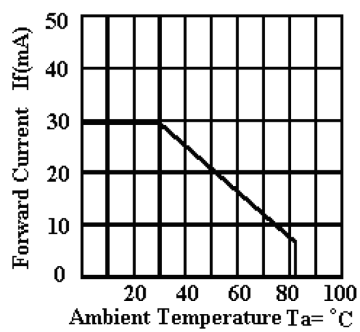
Reverse Voltage	5 Volt
Reverse Current	10 $\mu$ A (VR=5V)
Operating Temperature Range	-40 $^\circ\text{C}$ to +85 $^\circ\text{C}$
Storage Temperature Range	-40 $^\circ\text{C}$ to +100 $^\circ\text{C}$
Lead Soldering Temperature Range (1.6mm (1/16 inch) from body)	260 $^\circ\text{C}$ For 5 Seconds

## Typical Electro-Optical Characteristics Curves

Ultra Red (AlGaInP)  $\lambda_P=660\text{nm}$

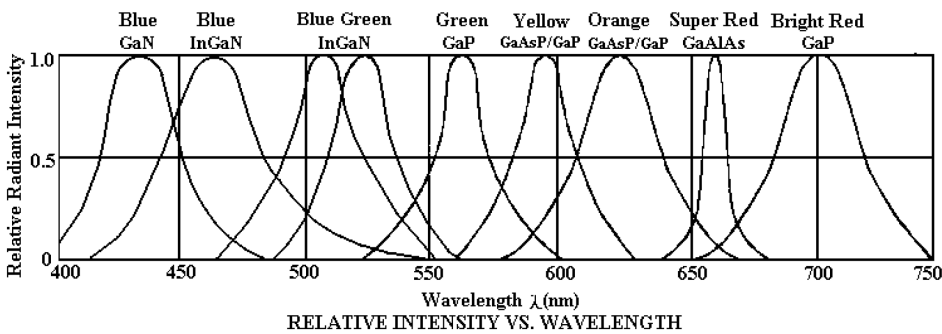
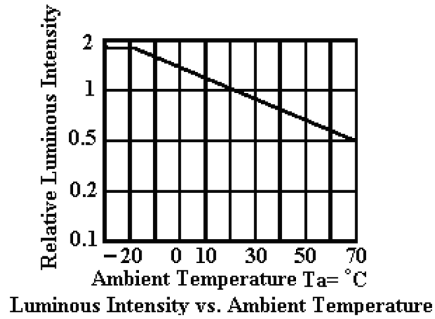
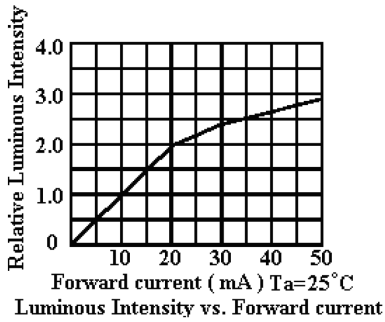


Forward current vs. Forward Voltage

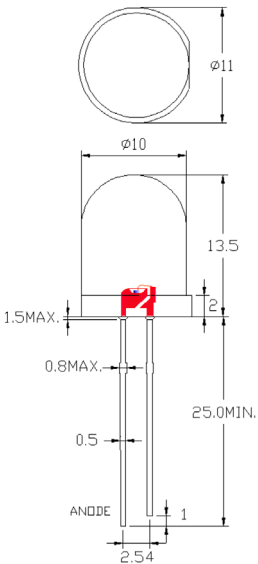


Forward current Derating curve

# 10mm Round Super Bright LED Lamp



## Dimensions



Dimensions : Millimetres  
Tolerance :  $\pm 0.25\text{mm}$

## Part Number Table

Description	Part Number
LED, 10mm, 20°, Super-Red	MCL103RHC

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