

Round LED Lamp

White, 5mm



**RoHS
Compliant**



Specifications:

Dice Material	: InGaN
Emitted Colour	: White
Lens Colour	: Water clear
Peak Wavelength	: $\lambda = 0.32$
Viewing Angle	: 16°
Luminous Intensity (IV)	: 10,000mcd

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

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test
Luminous Intensity	IV	4,500	10,000	15,000	mcd	IF = 20mA
Viewing Angle	2θ 1/2	-	16	-	degrees	
Peak Emission Wavelength	X	-	0.30	-	nm	-
Dominant Wavelength	Y	-	0.32	-		-
Spectral Line Half-Width	$\Delta\lambda$	-	-	-		-
Forward Voltage	VF	2.7	3.4	4	V	IF = 20mA
Power Dissipation	Pd	-	-	85	-	-
Peak Forward Current (Duty 1/10 at 1kHz)	IF (Peak)	-	-	100	-	-
Recommended Operating Current	IF (Rec)	-	20	-	mA	-

Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Reverse Voltage	5V
Reverse Current	10 μ A (VR = 5V)
Electrostatic Discharge (ESD)	200V
Operating Temperature Range	-40°C to +85°C
Storage Temperature Range	-40°C to +100°C
Lead Soldering Temperature Range 1.6mm (1/16") from body	260°C for 5 Seconds

Round LED Lamp

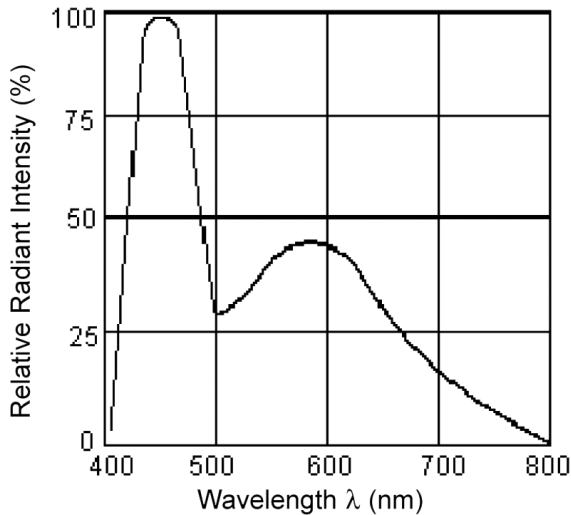
White, 5mm



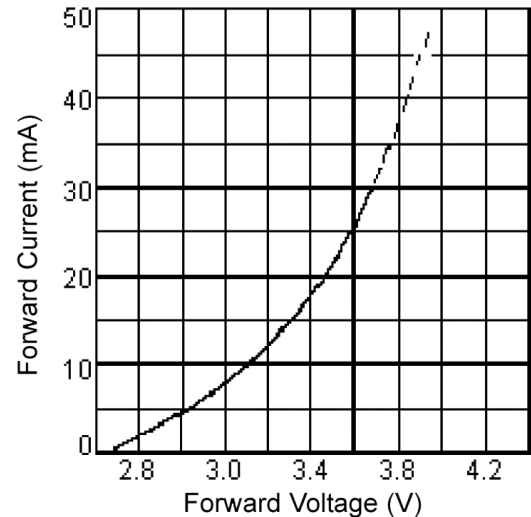
White Typical Electrical Optical Characteristics Curves

(Ta = 25°C Ambient Temperature Unless Otherwise Noted)

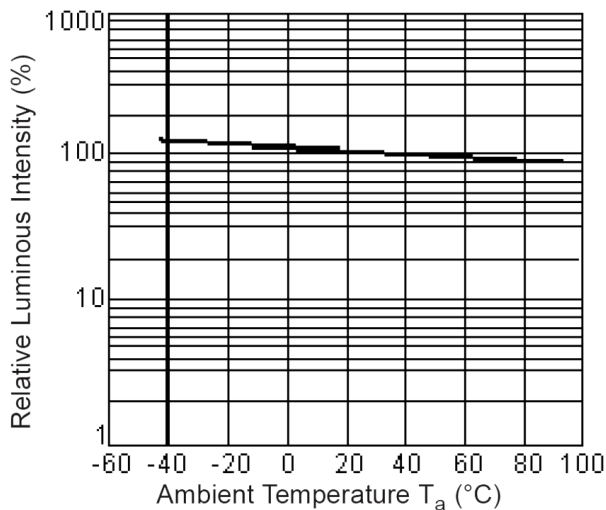
Relative Radiant Intensity vs. Wavelength



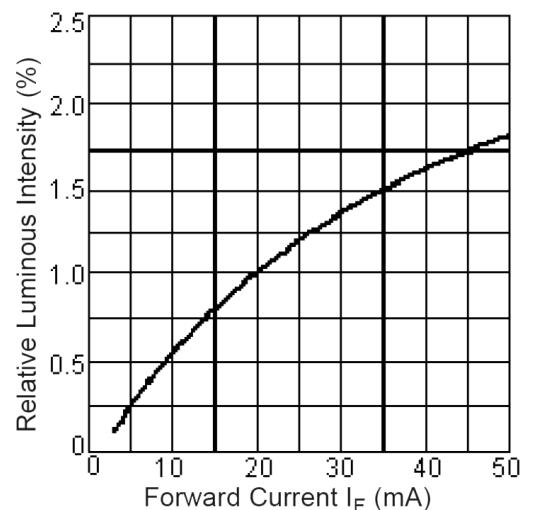
Forward Current vs. Forward Voltage



Relative Luminous Intensity vs. Ambient Temperature



Relative Luminous Intensity vs. Forward Current

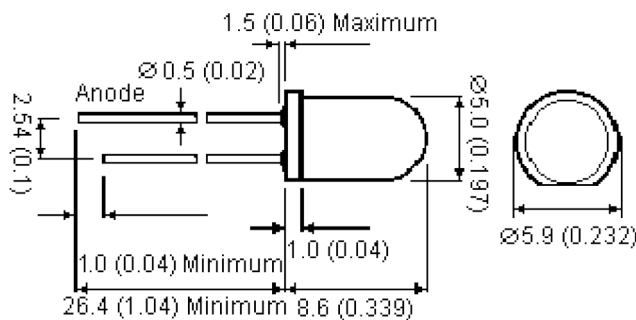
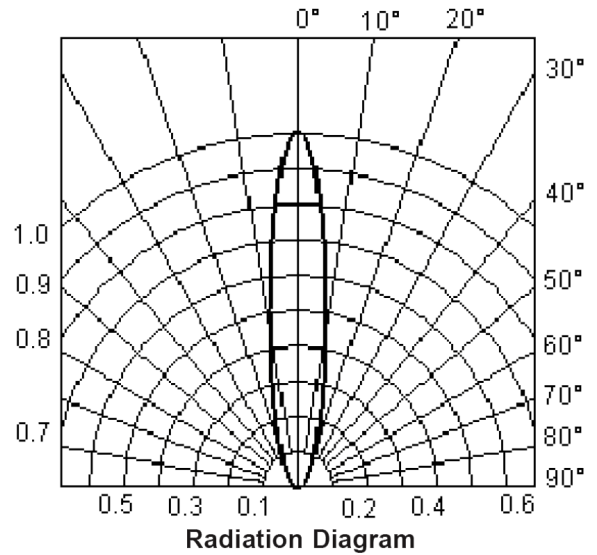
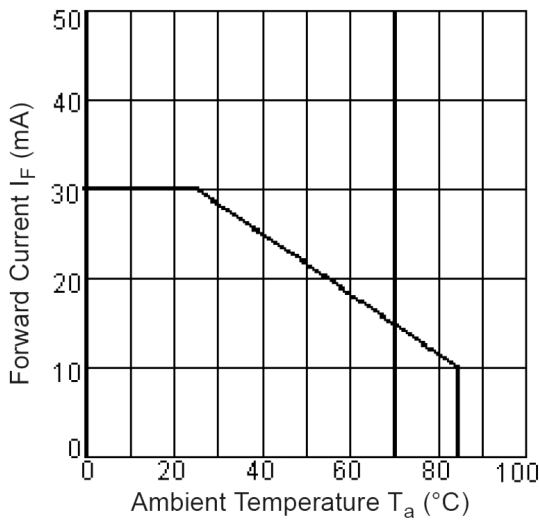


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White, 5mm



Forward Current Derating Curve



Dimensions: Millimeteres (Inches)

Part Number Table

Description	Part Number
Led, 5mm, 16°, White	MCL053SWC-YH1

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