LED, 2.9mm





Electrical/Optical characteristics at T_A = 25°C

Parameter	Symbol	Min.	Type	Max.	Unit	Test
Luminous Intensity	IV	1,800	2,500	3,800	mcd	
Viewing Angle	2θ½		36		Deg.	
Peak Emission Wavelength	λр		525		nm	IF = 20mA
Dominant Wavelength	λD		527		nm	IF = 2011A
Spectral Line Half-Width	Δλ		36		nm	
Forward Voltage	VF	2.9	3.2	3.6	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 Ratings : $(T_A = 25^{\circ}C)$

Reverse Voltage : 5 Volt

Reverse Current : $10\mu\text{A}$ (VR = 5V) Electrostatics Discharge (ESD) : 2,000 Volt Operating Temperature Range : -40°C to $+85^{\circ}\text{C}$ Storage Temperature Range : -40°C to $+100^{\circ}\text{C}$

Lead Soldering Temperature Range {1.6mm (1/16 inch) from body}

: 260°C For 5 Seconds

Reliability test For LED Lamps

Item	Test Conditions	Test Time/Cycle	Sample Size	Ac/Re
DC Operating Life	Temperature : 25°C IF : 20mA			0/1
High Temperature High Humidity	Temperature : 85°C 85%RH	1,000 Hrs.		
High Temperature Storage	Temperature : 100°C			
Low Temperature Storage	Temperature : -40°C		76 Pcs.	
Temperature Cycling	85°C~ 25°C~-35°C 15min~ 5min~ 15min	15 Cycles		
Thermal Shock	85°C~ 25°C~-10°C 5min~ 10sec ~ 5min	15 Cycles		
Solder Heat	Temperature : 260°C ±5°C	10 Sec.		

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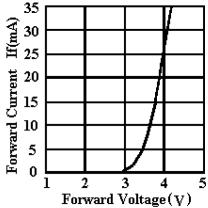


LED, 2.9mm

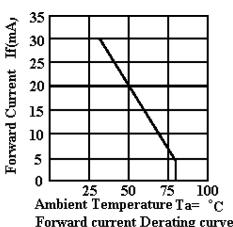


Typical Electro-Optical Characteristics Curves

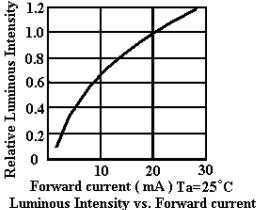
Ultra Green (InGaN λ P = 525nm)

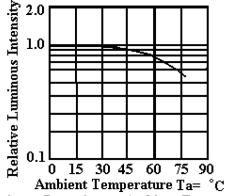


Forward current vs. Forward Voltage

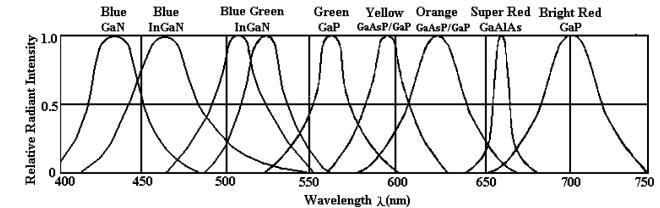


Forward current Derating curve





Luminous Intensity vs. Ambient Temperature



RELATIVE INTENSITY VS. WAVELENGTH

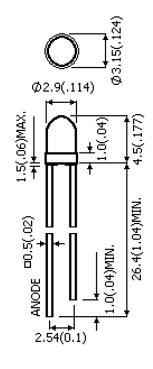


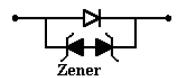


LED, 2.9mm



Dimensions:





Dimensions: Inches (Millimetres)

All tolerance shall be ±0.01 inch (0.25mm)

Part Number Table

Description	Part Number		
LED, 2.9mm, Green, 2,500mcd, 525nm	MCL394UGC-2Z		

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