LED, 2.9mm

Electrical/Optical characteristics at T_A = 25°C

Parameter	Symbol	Min.	Type	Max.	Unit	Test
Luminous Intensity	IV	25	35	45	mcd	IF = 20mA
Viewing Angle	2θ½		70		Deg.	IF = 20mA
Peak Emission Wavelength	λp		635		nm	
Dominant Wavelength	λD		625		nm	IF = 20mA
Spectral Line Half-Width	Δλ		45		nm	
Forward Voltage	VF	1.8	2	2.6	V	IF = 20mA
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°C)

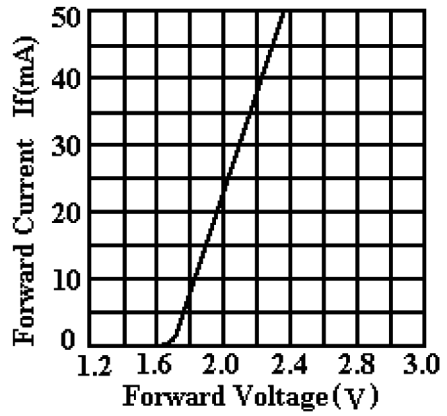
Reverse Voltage	: 5 Volt
Reverse Current	: 10μA (V_R = 5V)
Operating Temperature Range	: -40°C to +85°C
Storage Temperature Range	: -40°C to +100°C
Lead Soldering Temperature Range {1.6mm (1/16 inch) from body}	: 260°C For 5 Seconds

Reliability test For LED Lamps

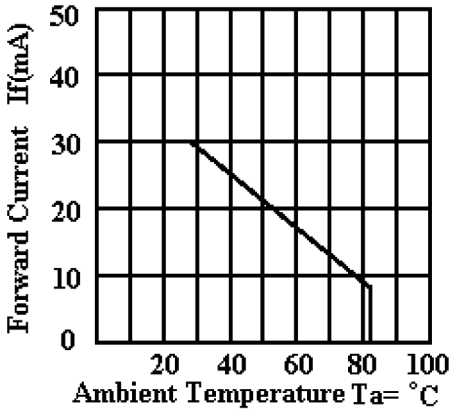
Item	Test Conditions	Test Time/Cycle	Sample Size	Ac/Re
DC Operating Life	Temperature : 25°C IF : 20mA	1,000 Hrs.	76 Pcs.	0/1
High Temperature High Humidity	Temperature : 85°C 85%RH			
High Temperature Storage	Temperature : 100°C			
Low Temperature Storage	Temperature : -40°C			
Temperature Cycling	85°C~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

Typical Electro-Optical Characteristics Curves

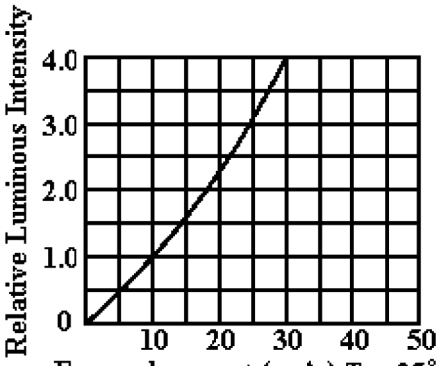
Orange (GaAsP/GaP λP=635nm)



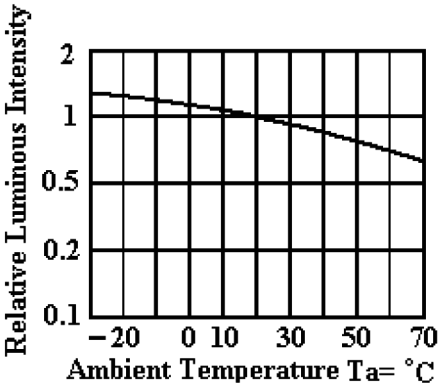
Forward current vs. Forward Voltage



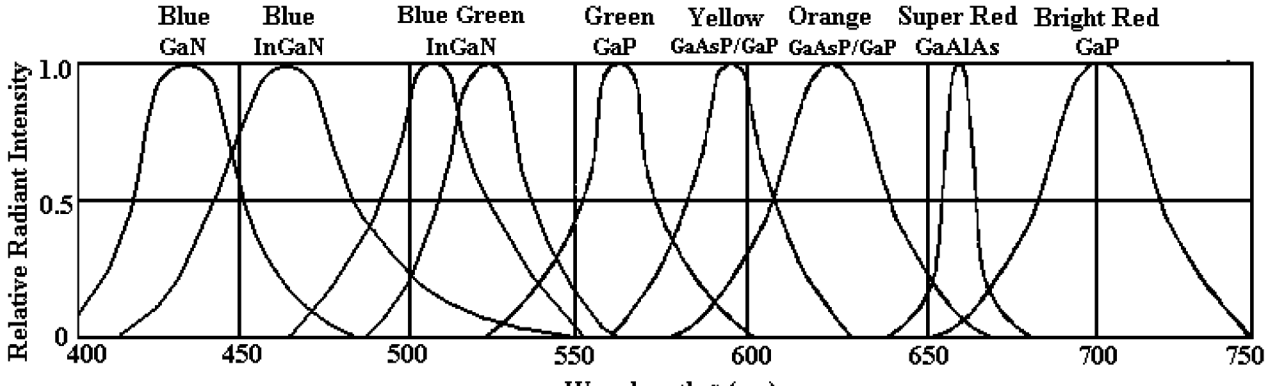
Forward current Derating curve



Luminous Intensity vs. Forward current



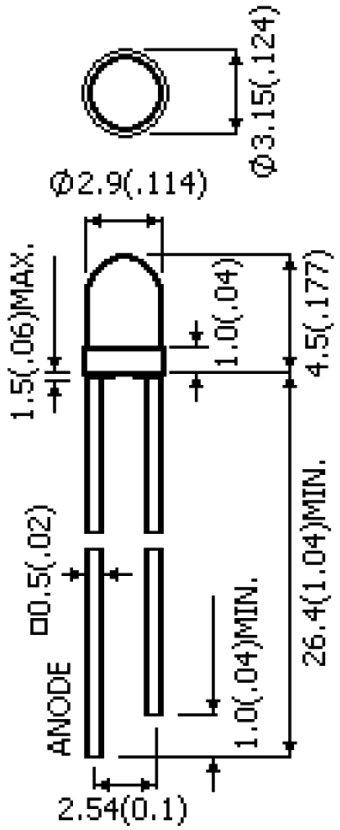
Luminous Intensity vs. Ambient Temperature



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, Orange-Red, 35mcd, 635nm	MCL394AD