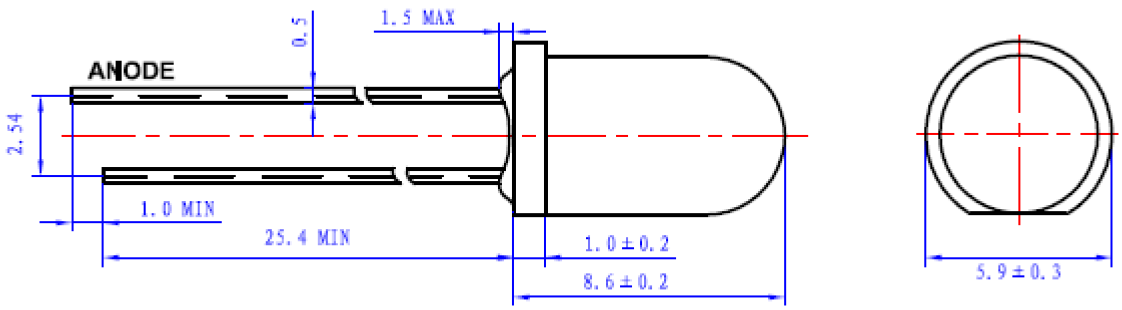
5.0mm Round Standard LEDs

MODEL NO : EC – 333EC

Features

- High efficiency.
- Low power consumption.
- Choice of various viewing angles.
- Pb-free.
- The product itself will remain within RoHS complaint version.

Package Dimensions



Part No.	Chip		Lens Color
	Material	Emitted color	
EC-333EC	GaP	Red	Water Clear

Note:

1. All dimensions are in millimeters.
2. Protruded resin under flange 1.5mm (0.059”) Max.

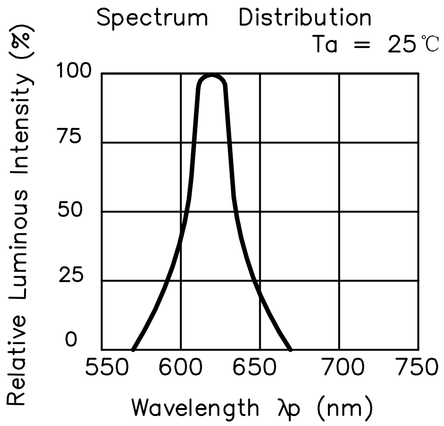
Absolute maximum Ratings (Ta = 25℃)

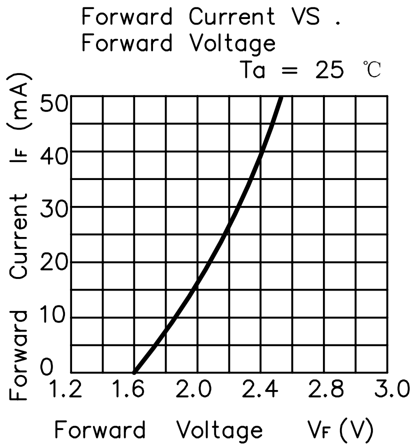
Parameter	Symbol	Max	Unit
Forward current	I_F	30	mA
Reverse voltage	V_R	5	V
Power dissipation	Pd	100	mW
Peak forward current	IFP	160	mA
Operating temperature	Topr	-40℃ ~ 85℃	
Storage temperature	Tstg	-40℃ ~ 90℃	
Soldering temperature	Tsol	260℃ for 5 Seconds	

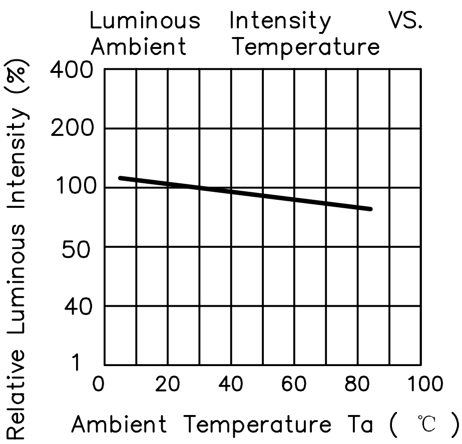
Electro / Optical Characteristics (Ta = 25℃)

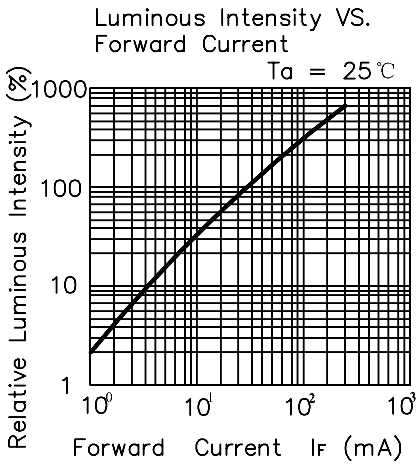
Parameter	Symbol	Condition	Min	Tpy	Max	Unit
Luminous Intensity	Iv	IF = 20mA	20.0	63.0	----	Mcd
Forward Voltage	V_F		----	2.0	2.6	V
Reverse Current	I_R	V_R = 5V	----	----	10	μA
View Angle	2θ 1/2	IF = 20mA	----	20	----	deg
Spectral Bandwidth	Δλ		----	30	----	nm
Dominant Wavelength	λd		----	625	----	nm

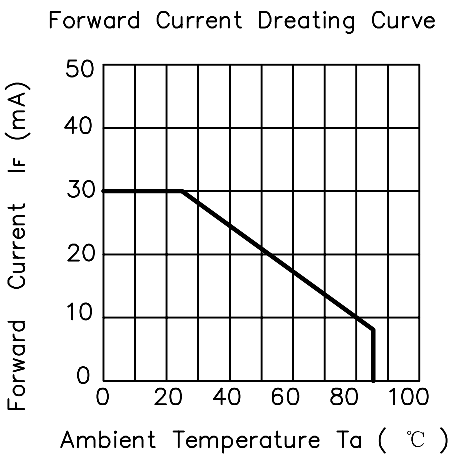
Typical Electro-Optical Dharacteristics Curves

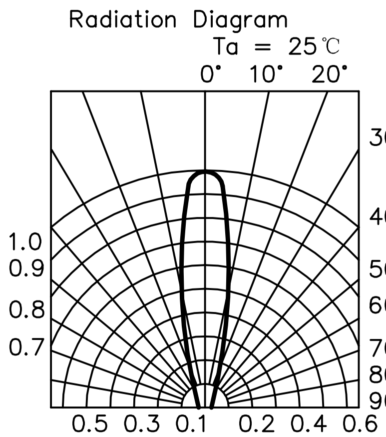












Reliability Test Items And Conditions

The reliability of products shall be satisfied with items listed below.
Confidence level 90%
LTPD 10%

NO.	Items	Test Condition	Test Hours/Cycles	Sample Size	Ac/Re
1	Soldering Heat	Temp:260℃±5℃	10±1 SEC	76 PCS	0/1
2	Temperature Cycle	H:+85℃ 30 min ∫ 5 min L:-55℃ 30 min	50 Cycles	76 PCS	0/1
3	Thermal Shock	H:+85℃ 30 min ∫ 5 min L:-55℃ 30 min	50 Cycles	76 PCS	0/1
4	High Temperature Storage	Temp. : 100℃	1000 Hrs	76 PCS	0/1
5	Low Temperature Storage	Temp. : -55℃	1000 Hrs	76 PCS	0/1
6	DC Operating Life	IF = 20 mA	1000 Hrs	76 PCS	0/1
7	High Temperature / High Humidity	+85℃/ 85%RH	1000 Hrs	76 PCS	0/1