

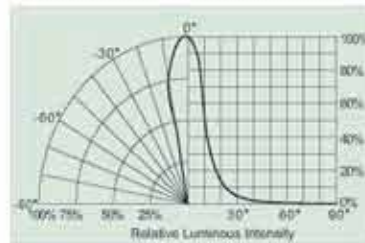
Φ 8.0mm Round Water Clear Lamp



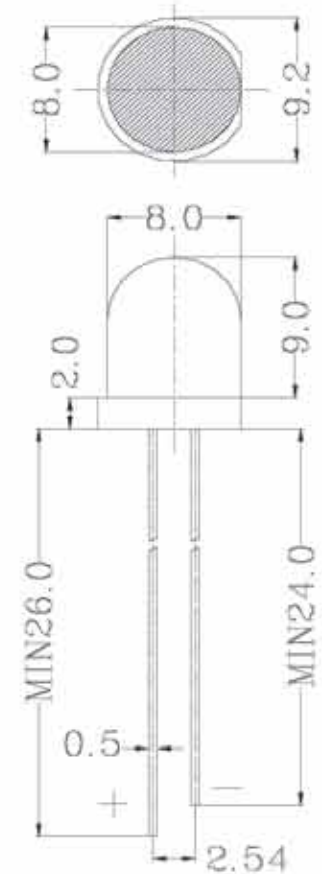
Characters

- Viewing angle 20°
- For LED light, indication, illumination
- UV resistant epoxy

Directive Characteristics



Package Outlines (Unit:mm)



General Tolerance: ±0.2
Unless note otherwise

Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Value		Unit
		Green/Blue/White	Red/Orange/Yellow	
Power Dissipation	P_D	100	125	mW
DC forward Current	I_F	30	50	mA
Pulsed Forward Current	I_{FP}	100	150	mA
Reverse Voltage	V_R	5	5	V
Operating Temperature	T_{opr}	-30~+80		°C
Storage Temperature	T_{stg}	-40~+100		°C

* Duty 1/10 Pulse Width 0.1ms

Electrical Optical Characteristics (Ta=25°C)

Part Number	Material	Chip $\Delta p(nm)$		Emitted Color	Lens Type	IF(mA)	VF(V)		IV(mcd)	
		Min	Max				Min	Max	Min	Max
RL80-UR543	AlGaInP/GaAs	625	635	Ultra Red	Water Clear	20	1.7	2.8	3000	5000
RL80-UO523	AlGaInP/GaAs	615	625	Ultra Orange	Transparent	20	1.7	2.8	2500	4000
RL80-UY543	InGaAlP/GaAs	585	595	Ultra Yellow	Water Clear	20	1.7	2.8	3000	5000
RL80-GH744D	InGaN/GaN	515	525	Pure Green	Water Clear	20	3.0	3.8	7000	11000
RL80-CB744D	InGaN/GaN	465	475	Blue	Water Clear	20	3.0	3.8	5000	8000
RL80-WH744D	InGaN/GaN	Typical.x=0.3 Typical.y=0.3		White	Water Clear	20	3.0	3.8	9000	16000

* Luminous intensity rank please see 《Standard Bin Grade》

Precautions in handling

- When soldering, leave 2.0mm of minimum clearance between the resin and the soldering point.
- Blue, Green and White products are so sensitive to ESD, that users required to handle with care.

Package

Bulk-----200Pcs/bag

Reliability Test

No	Item	Test Condition	Test Hours/Cycles	Samples Tested	Acc./Rej
1	Room Temperature DC Operating Life	Ta=25°C, IF=20mA	1000 Hrs	76	0/1
2	Thermal Shock	-10°C(5min)→(10sec)→+100°C(5min)	100 Cycles	76	0/1
3	Temperature ycle	-40°C(30min)→(5min)→+85°C(30min)	100 Cycles	76	0/1
4	High Temp./ High Humi. Test	85°C/85%RH	1000 Hrs	76	0/1
5	High Temperature Storage	Ta=100°C	1000 Hrs	76	0/1
6	Low Temperature Storage	Ta= - 40°C	1000 Hrs	76	0/1
7	Soldering Heat	260°C±5°C	5 Seconds	76	0/1

Typical Electrical / Optical Characteristics Curves
25°C Ambient Temperature Unless Otherwise Noted)

