

PART NO. : 55-557-0



## 5mm Ultra Red Water Clear LED; L/L

### SPECIFICATION

#### ABSOLUTE MAXIMUM RATING (Ta=25°C)

Item	Symbol	Rating	Unit
Power Dissipation	P <sub>D</sub>	60	mW
Forward Current	I <sub>F</sub>	20	mA
Peak Forward Current (1/10 Duty Cycle, 0.1 ms Pulse Width)	I <sub>FP</sub>	70	mA
Reverse Voltage	V <sub>R</sub>	5	V
Operating Temperature	T <sub>opr</sub>	-35~+85	°C
Storage Temperature	T <sub>stg</sub>	-40~+85	°C

#### ELECTRICAL/OPTICAL CHARACTERISTICS RATING (Ta=25°C)

Item	Symbol	Test Conditions	Rating			Unit
			Min.	Typ.	Max.	
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =20mA	---	2.0	2.4	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V	---		10	μA
Luminous Intensity	I <sub>V</sub>	I <sub>F</sub> =20mA	2500	3500		mcd
Dominant Wave Length	λ <sub>d</sub>	I <sub>F</sub> =20mA	---	625	---	nm
Viewing Angle 2θ <sub>1/2</sub>	2θ <sub>1/2</sub>	I <sub>F</sub> =20mA	30			deg.

#### Notes:-

- 1) θ<sub>1/2</sub> is the off-axis angle where the luminous intensity is half the optical centerline value.

**Soldering Conditions** : Soldering Temp. ≤ 260°C

Soldering Time ≤ 5 Sec.



**Caution** : ESD protection measures shall be considered and taken in the initial design stage, because static electricity and surge could damage the LED. A wrist band or an anti-electrostatic glove should be used when handling Electrostatic Sensitive Devices.

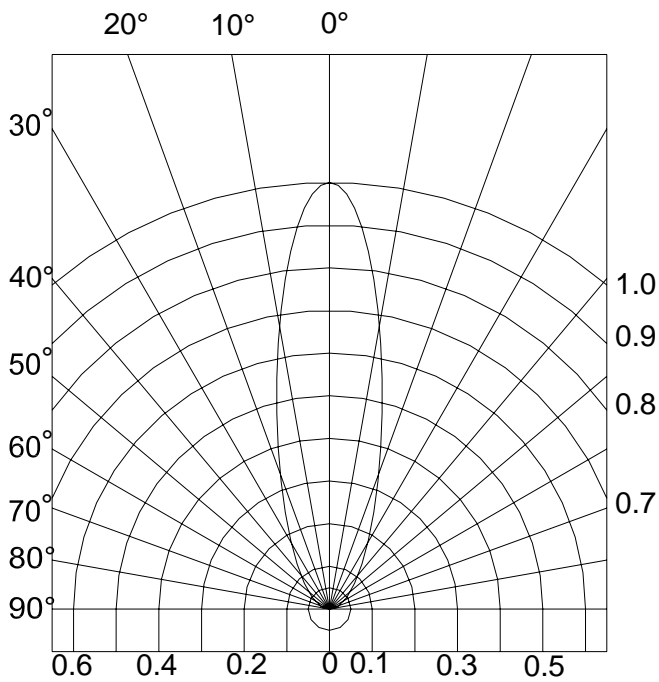
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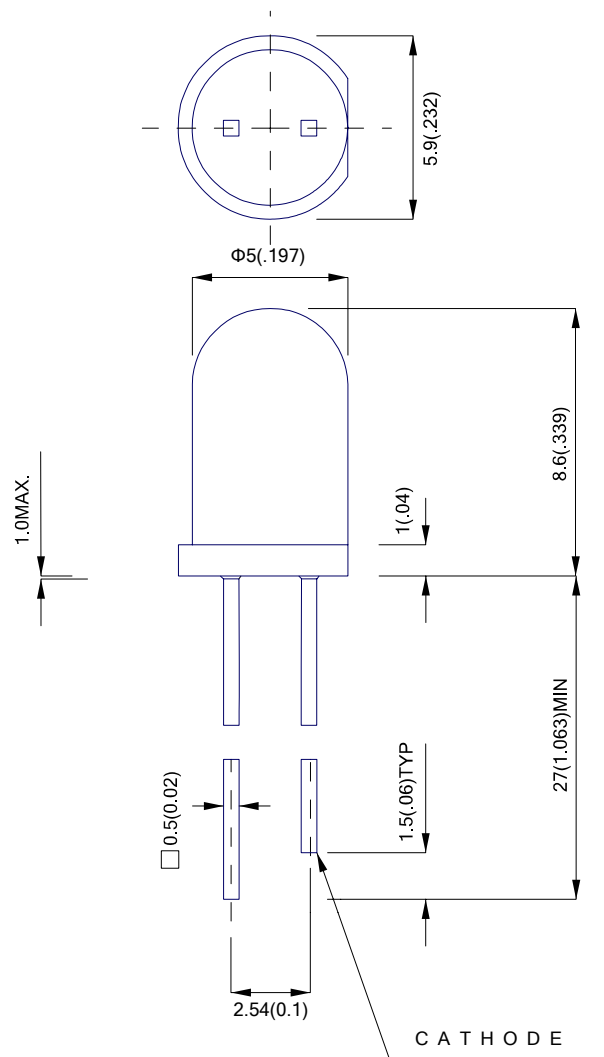
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**PACKAGE DIMENSION**

**Directivity Diagram**



Item	Materials
Resin (Mold)	Epoxy Resin
Lead Frame	Ag Plating Copper Alloy



**Tolerance:  $\pm 0.25(0.01)$   
Unit: mm(inch)**

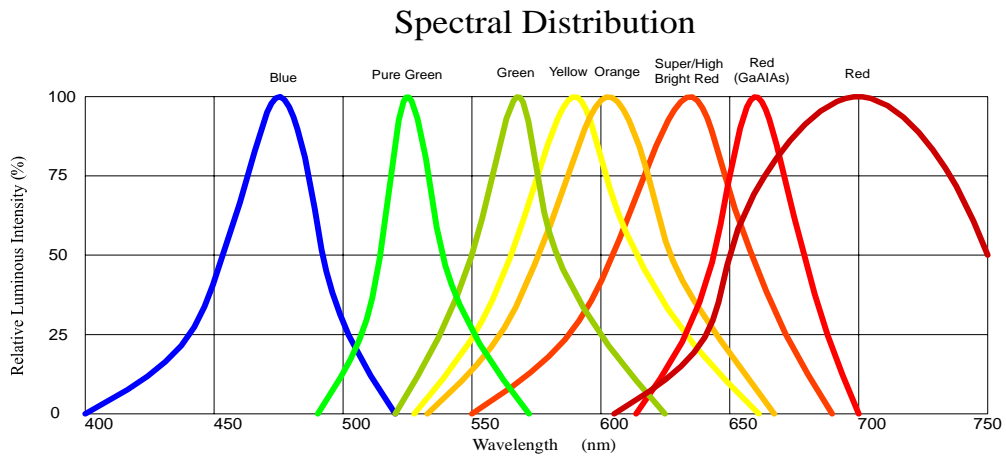
Part Number	Emitting Color	Lens Type
55-557-0	Ultra Red	Water Clear

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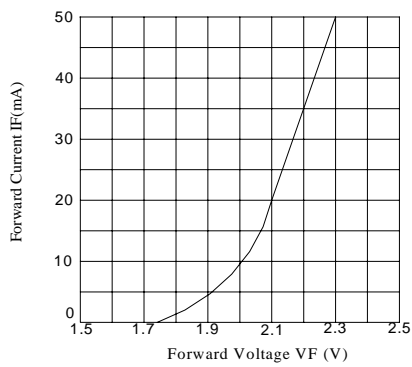


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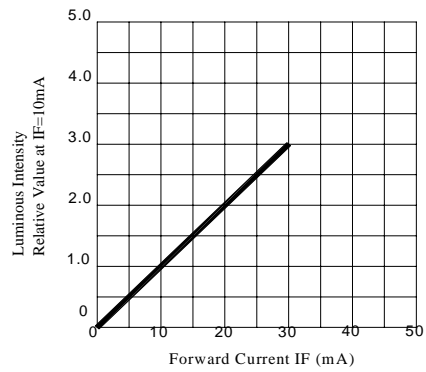
**Typical Electrical**



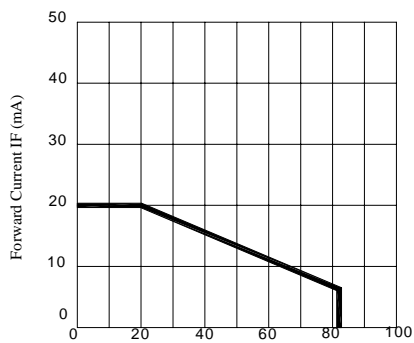
**FORWARD CURRENT vs FORWARD VOLTAGE**



**LUMINOUS INTENSITY vs FORWARD CURRENT**



**Forward Current Derating Curve**



**LUMINOUS INTENSITY vs AMBIENT TEMPERATURE**

