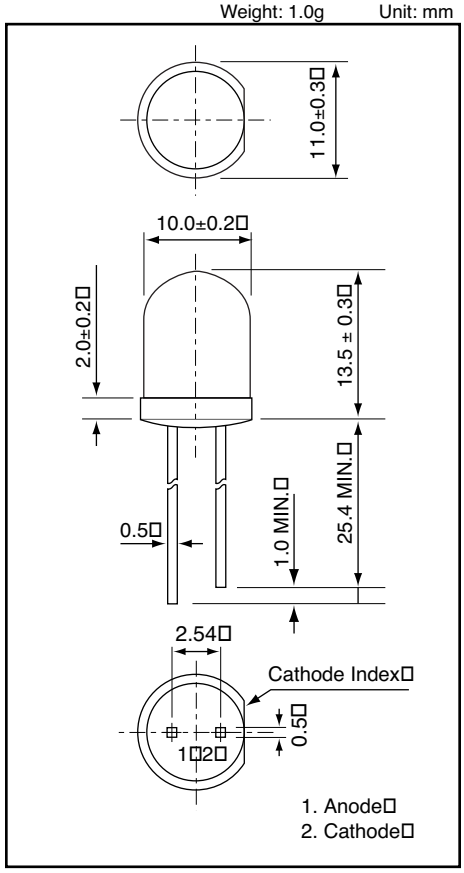
Weight: 1.0g Unit: mm



AND190HOP

InGaAlP High Brightness Orange Light Emission

T-3 Package (10 mm)

Features

- New emission material (InGaAlP) orange LED
- Peak wavelength (λp = 620 nm) high bright emission
- All plastic mold type, clear colorless lens
- Low drive current, (forward current = 1 to 20 mA)
- Excellent On-Off contrast ratio
- Fast response time, capable of pulse operation
- High power luminous intensity
- Suitable for Outdoor Message Signboards, Automotive use.
- **RoHS Compliant**

Maximum Ratings (T_a = 25°C)

Characteristics	Symbol	Rating	Unit
Forward Current	I_F	50	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_D	125	mW
Operating Temperature Range	T_{Opr}	-40 to 85	°C

Maximum Ratings (T_a = 25°C)

Characteristics	Symbol	Rating	Unit
Storage Temperature Range	T_{Stg}	-40 to 100	°C

Electro-Optical Characteristics (T_a = 25°C)

Characteristics	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	I_F = 20 mA	–	2.0	2.4	V
Reverse Current	I_R	V_R = 5 V	–	–	10	μA
Luminous Intensity	I_V	I_F = 20 mA	4,000	6,000	–	mcd
Peak Emission Wavelength	λ_P	I_F = 20 mA	–	620	–	nm
Spectral Line Half Width	$\Delta\lambda$	I_F = 20 mA	–	18	–	nm
Dominant Wavelength	λd	I_F = 20 mA	–	615	–	nm
Full Viewing Angle	θ	I_V = 1/2 Peak	–	6	–	degree

Precaution

Please be careful of the following:

1. Soldering temperature: 260°C max
   Soldering time: 5 sec. max
   Soldering portion of lead: up to 1.6 mm from the body of the device