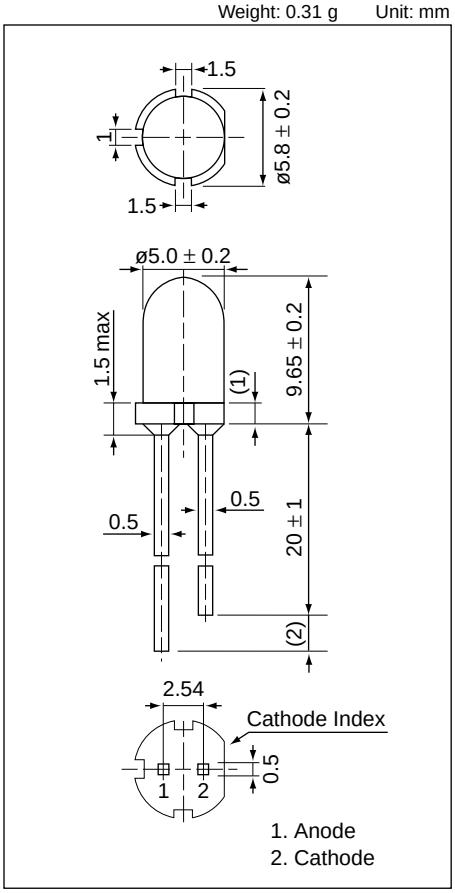
Weight: 0.31 g Unit: mm



AND180HSP

InGaAlP High Brightness Red Light Emission
T-1 3/4 Package (5 mm)

Features

- Peak wavelength (λp = 623 nm) high bright emission
- All plastic mold type, clear colorless lens
- Low drive current: 1 to 20 mA DC
- Excellent On-Off contrast ratio
- Fast response time, capable of pulse operation
- High power luminous intensity
- Suitable for Outdoor Message Signboards, Automotive Use

Maximum Ratings (T = 25°C)

Characteristics	Symbol	Rating	Unit
Forward Current	I_F	50	mA
Reverse Voltage	V_R	4	V
Power Dissipation	P_D	125	mW
Operating Temperature Range	T_{Opr}	-40 to 85	°C
Storage Temperature Range	T_{Stg}	-40 to 100	°C

Electro-Optical Characteristics (T = 25°C)

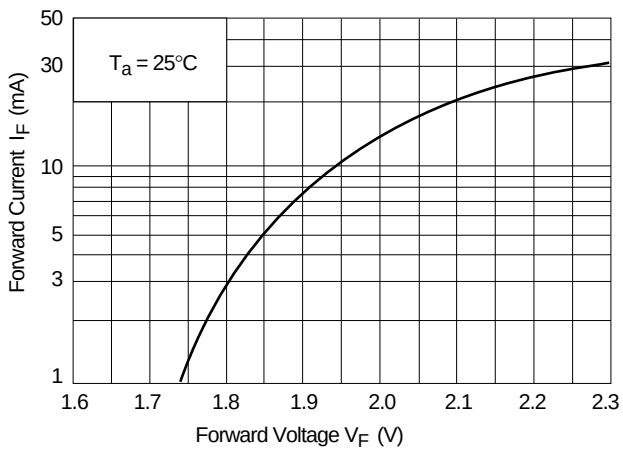
Characteristics	Symbol	Test Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V_F	I_F = 20 mA	–	2.1	2.5	V
Reverse Current	I_R	V_R = 4 V	–	–	50	µA
Luminous Intensity	I_V	I_F = 20 mA	3,200	8,000	–	mcd
Peak Emission Wavelength	I_P	I_F = 20 mA	–	623	–	nm
Spectral Line Half Width	Δλ	I_F = 20 mA	–	15	–	nm
Dominant Wavelength	λd	I_F = 20 mA	–	613	–	nm
Full Viewing Angle	θ	I_V = 1/2 Peak	–	8	–	degree

Precaution

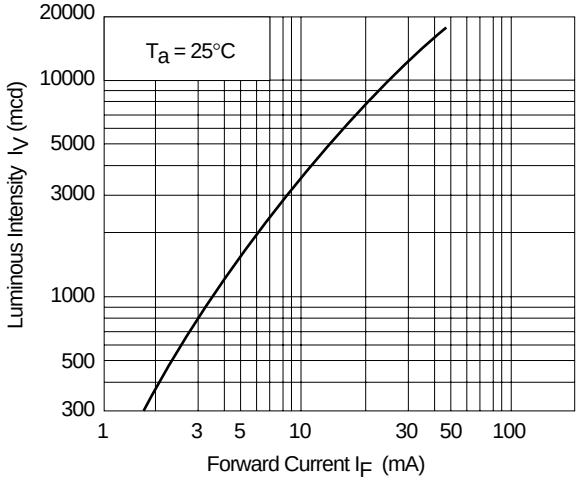
Please be careful of the following:

1. Soldering temperature: 260°C max
   Soldering time: 3 sec. max
   Soldering portion of lead: up to 2 mm from the body of the device
2. The lead can be formed up to 5 mm from the body of the device without forming stress.
   Soldering should be performed after the lead forming.

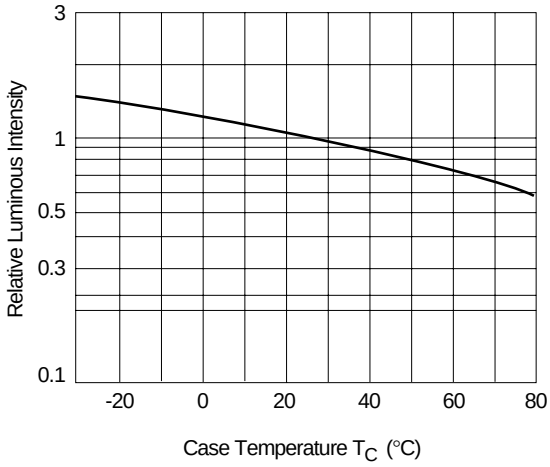
$I_F - V_F$



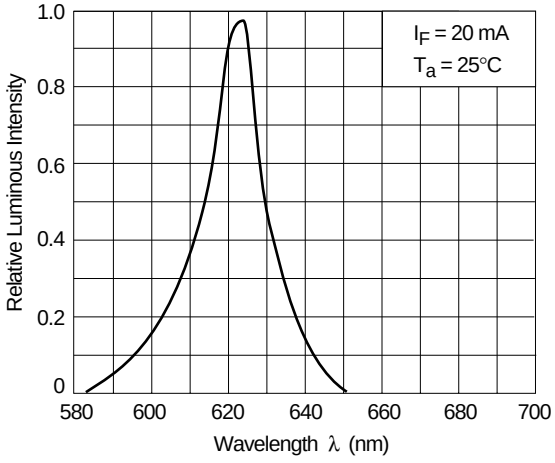
$I_V - I_F$



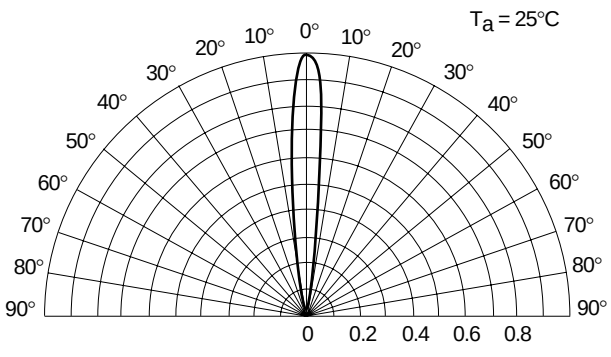
$I_V - T_C$



Relative Luminous Intensity – Wavelength



Radiation Pattern



$I_F - T_a$