Kingbright

T-1 3/4 (5mm) SOLID STATE LAMP

L-7113ND PURE ORANGE

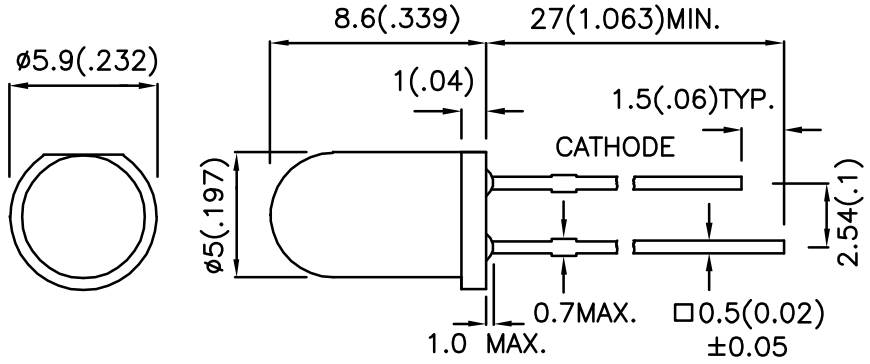
Features

- ●LOW POWER CONSUMPTION.
- ●POPULAR T-1 3/4 DIAMETER PACKAGE.
- ●GENERAL PURPOSE LEADS.
- ●RELIABLE AND RUGGED.
- ●LONG LIFE - SOLID STATE RELIABILITY.
- ●AVAILABLE ON TAPE AND REEL.
- ●RoHS COMPLIANT.

Description

The Pure Orange source color devices are made with Gallium Arsenide Phosphide on Gallium Phosphide Pure Orange Light Emitting Diode.

Package Dimensions



Notes:
1. All dimensions are in millimeters (inches).
2. Tolerance is ±0.25(0.01") unless otherwise noted.
3. Lead spacing is measured where the leads emerge from the package.
4. Specifications are subject to change without notice.

Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) @ 10mA		Viewing Angle
			Min.	Typ.	2 θ 1/2
L-7113ND	PURE ORANGE (GaAsP/GaP)	ORANGE DIFFUSED	12	30	30°

Note:
1. θ1/2 is the angle from optical centerline where the luminous intensity is 1/2 the optical centerline value.

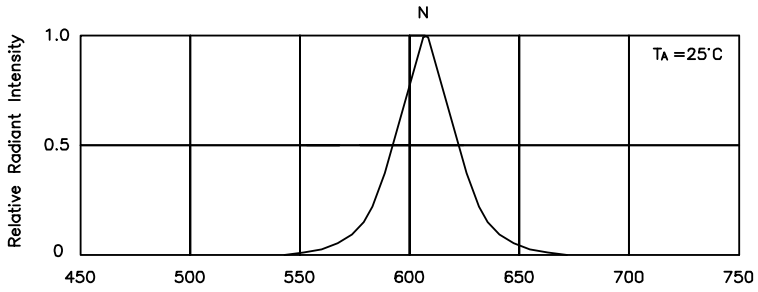
Electrical / Optical Characteristics at T_A=25°C

Symbol	Parameter	Device	Typ.	Max.	Units	Test Conditions
λpeak	Peak Wavelength	Pure Orange	607		nm	I_F=20mA
λD	Dominant Wavelength	Pure Orange	610		nm	I_F=20mA
Δλ1/2	Spectral Line Half-width	Pure Orange	35		nm	I_F=20mA
C	Capacitance	Pure Orange	15		pF	V_F=0V;f=1MHz
V_F	Forward Voltage	Pure Orange	2.05	2.5	V	I_F=20mA
I_R	Reverse Current	Pure Orange		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

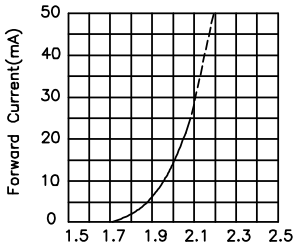
Parameter	Pure Orange	Units
Power dissipation	105	mW
DC Forward Current	25	mA
Peak Forward Current [1]	145	mA
Reverse Voltage	5	V
Operating/Storage Temperature	-40°C To +85°C	
Lead Solder Temperature [2]	260°C For 3 Seconds	
Lead Solder Temperature [3]	260°C For 5 Seconds	

Notes:
1. 1/10 Duty Cycle, 0.1ms Pulse Width.
2. 2mm below package base.
3. 5mm below package base.

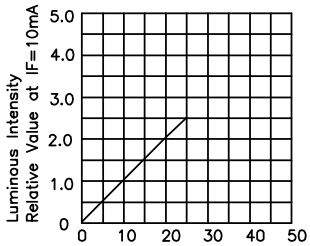


RELATIVE INTENSITY Vs. WAVELENGTH

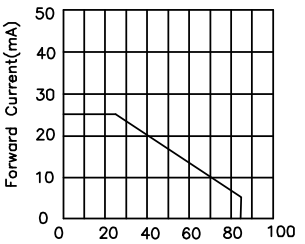
Pure Orange **L-7113ND**



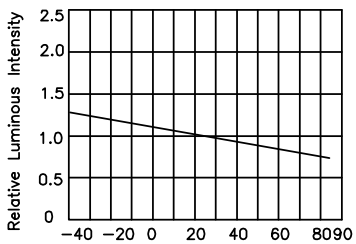
FORWARD CURRENT Vs.
FORWARD VOLTAGE



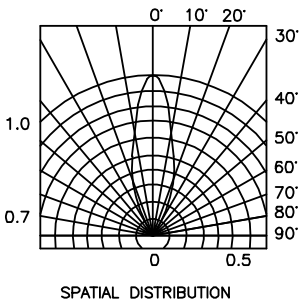
LUMINOUS INTENSITY Vs.
FORWARD CURRENT



FORWARD CURRENT
DERATING CURVE



LUMINOUS INTENSITY Vs.
AMBIENT TEMPERATURE



SPATIAL DISTRIBUTION

Remarks:

If special sorting is required (e.g. binning based on forward voltage, luminous intensity / luminous flux or wavelength), the typical accuracy of the sorting process is as follows:

1. Wavelength: +/-1nm
2. Luminous Intensity / Luminous Flux: +/-15%
3. Forward Voltage: +/-0.1V

Note: Accuracy may depend on the sorting parameters.