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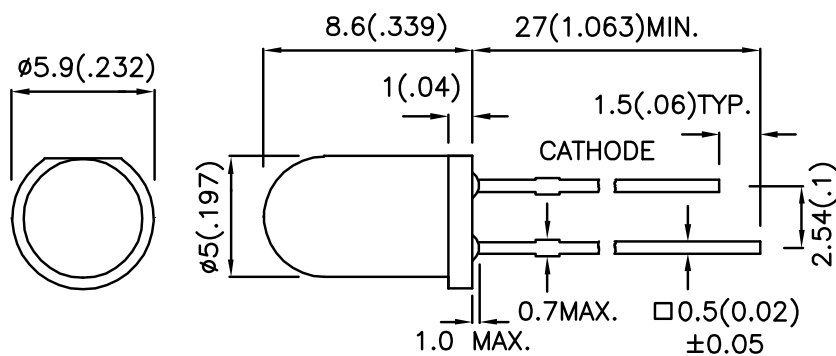
P/N: L-7113YD-12V   YELLOW

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.

● 12V INTERNAL RESISTOR.

● RoHS COMPLIANT.

Description

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

Package Dimensions

ø5.9(.232)

8.6(.339)

27(1.063)MIN.

1(.04)

1.5(.06)TYP.

CATHODE

ø5(.197)

2.54(.1)

0.7MAX.

□0.5(0.02) ±0.05

1.0 MAX.

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.

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Selection Guide

Part No.	Dice	Lens Type	Iv (mcd) V= 12V		Viewing Angle
			Min.	Typ.	2θ1/2
L-7113YD-12V	YELLOW (GaAsP/GaP)	YELLOW DIFFUSED	5	20	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	Yellow	590		nm	V_F=12V
λD	Dominant Wavelength	Yellow	588		nm	V_F=12V
$\Delta\lambda$1/2	Spectral Line Half-width	Yellow	35		nm	V_F=12V
I_F	Forward Current	Yellow	8.5	11.5	mA	V_F=12V
I_R	Reverse Current	Yellow		10	uA	V_R = 5V

Absolute Maximum Ratings at T_A=25°C

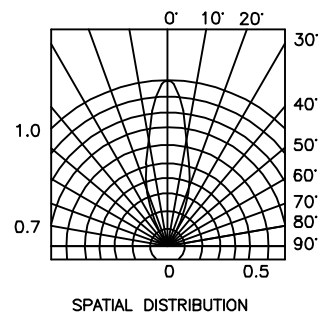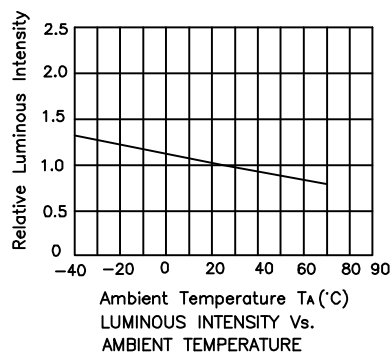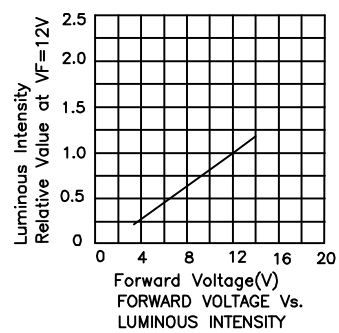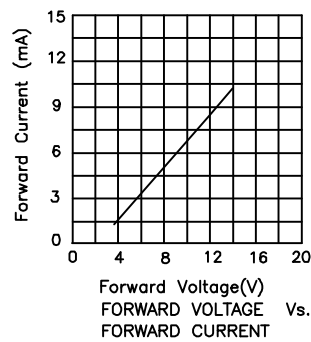| Parameter	Yellow	Units
Power dissipation	120	mW
Forward Voltage	14	V
Reverse Voltage	5	V
Operating Temperature	-40°C To +70°C	
Storage Temperature	-40°C To +85°C	
Lead Solder Temperature[1]	260°C For 3 Seconds	
Lead Solder Temperature[2]	260°C For 5 Seconds	

Notes:
1.2mm below package base.
2.5mm below package base.

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Relative Radiant Intensity vs. wavelength λ (nm)

$T_A = 25°C$

RELATIVE INTENSITY Vs. WAVELENGTH

Yellow   **L-7113YD-12V**

Forward Current (mA) vs. Forward Voltage(V)

FORWARD VOLTAGE Vs. FORWARD CURRENT

Luminous Intensity Relative Value at VF=12V vs. Forward Voltage(V)

FORWARD VOLTAGE Vs. LUMINOUS INTENSITY

Relative Luminous Intensity vs. Ambient Temperature T_A (°C)

LUMINOUS INTENSITY Vs. AMBIENT TEMPERATURE

SPATIAL DISTRIBUTION

Remarks:

If special sorting is required (e.g. binning based on 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%

Note: Accuracy may depend on the sorting parameters.