PARA LIGHT ELECTRONICS CO., LTD.
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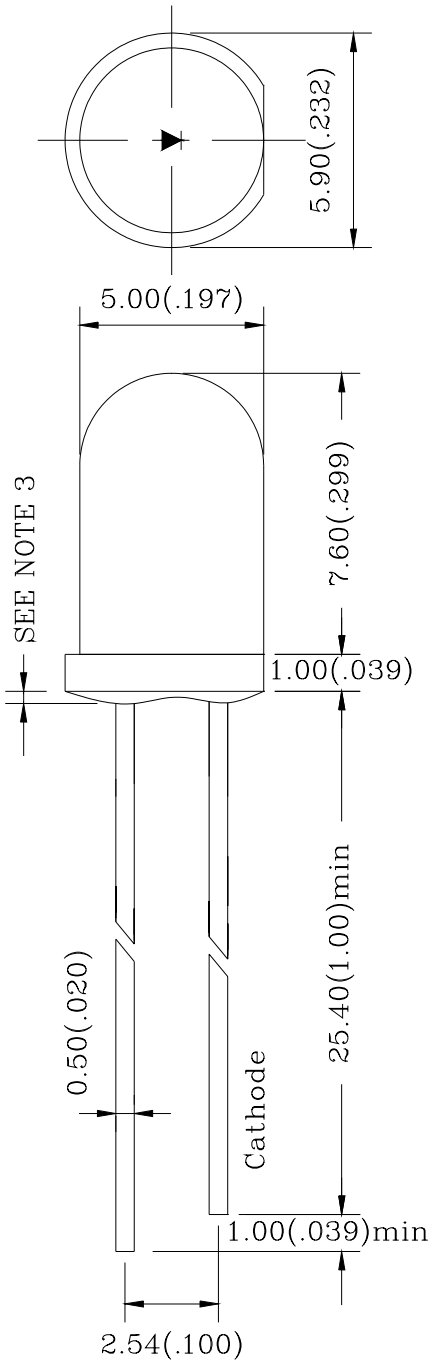
DATA SHEET

PART NO. : L-513LY4T

REV : A / 0

CUSTOMER'S APPROVAL : _____ DCC : _____

PACKAGE DIMENSIONS



Note:
1.All Dimensions are in millimeters.
2.Tolerance is ±0.25mm(0.010 ")
Unless otherwise specified.
3.Protruded resin under flange
is 1.5mm(0.059 ") max.
4.Lead spacing is measured where
the leads emerge from the package.
5.Specification are subject to change
without notice

FEATURES

* 5.0mm DIA LED LAMP
* HIGH LUMINOUS INTENSITY OUTPUT.
* LOW POWER CONSUMPTION.
* HIGH EFFICIENCY.
* VERSATILE MOUNTING ON P.C. BOARD OR PANEL.
* I.C. COMPATIBLE.

CHIP MATERIALS

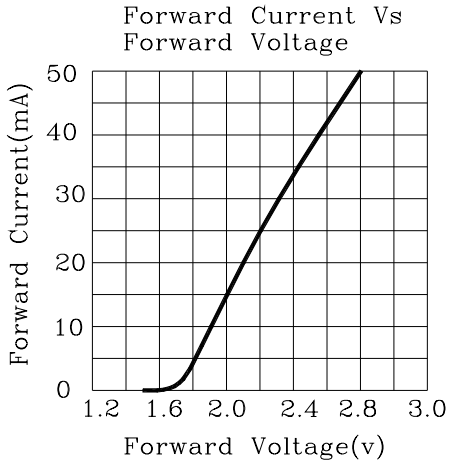
* Dice Material : GaAlInP/GaAs
* Light Color : ULTRA YELLOW
* Lens Color : YELLOW TRANSPARENT

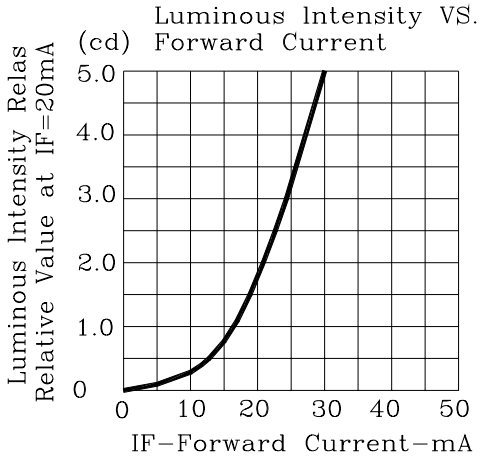
ABSOLUTE MAXIMUM RATING : (Ta = 25°C)

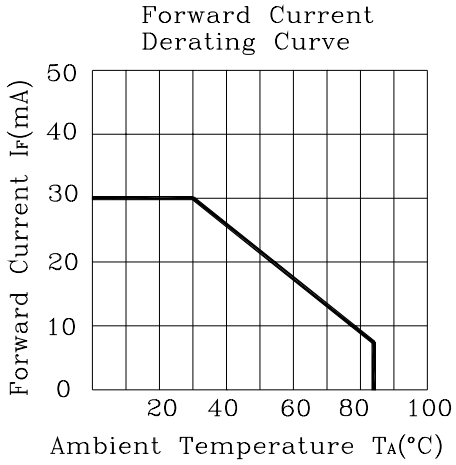
SYMBOL	PARAMETER	ULTRA YELLOW	UNIT
PAD	Power Dissipation Per Chip	80	mW
VR	Reverse Voltage Per Chip	5	V
IAF	Continuous Forward Current Per Chip	30	mA
IPF	Peak Forward Current Per Chip (Duty－0.1,1KHz)	80	mA
—	Derating Linear From 25°C Per Chip	0.40	mA/°C
Topr	Operating Temperature Range	-25°C to 85°C	
Tstg	Storage Temperature Range	-40°C to 85°C	
Lead Soldering Temperature ｛1.6mm(0.063 inch) From Body｝250°C ± 5°C for 3 Seconds			

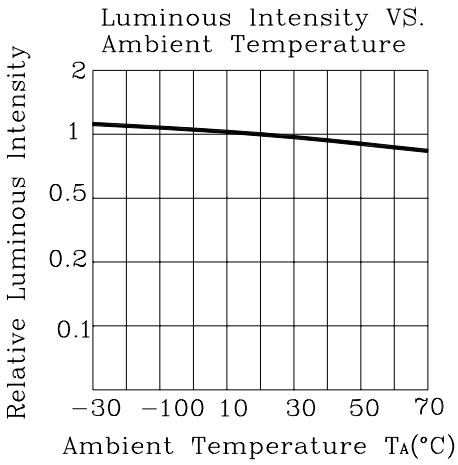
ELECTRO-OPTICAL CHARACTERISTICS : (Ta = 25°C)

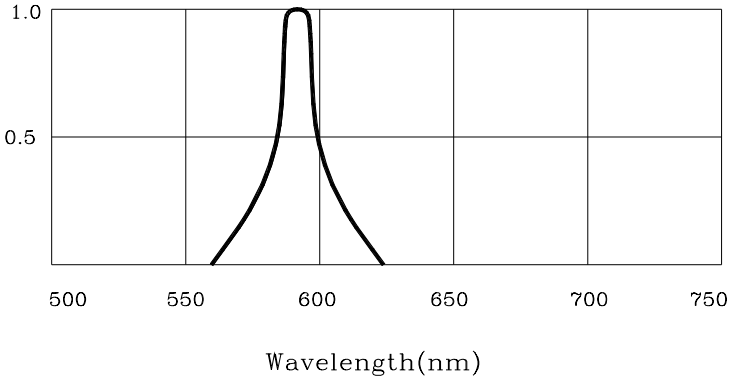
SYMBOL	PARAMETER	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
VF	Forward Voltage	IF = 20mA		2.1	2.6	V
IR	Reverse Current	VR = 5V			100	μA
λD	Dominant Wavelength	IF = 20mA		592		nm
Δλ	Spectral Line Half - Width	IF = 20mA		15		nm
2θ1/2	Half Intensity Angle	IF = 20mA		15		deg
IV	Luminous Intensity	IF = 20mA		1800		mcd

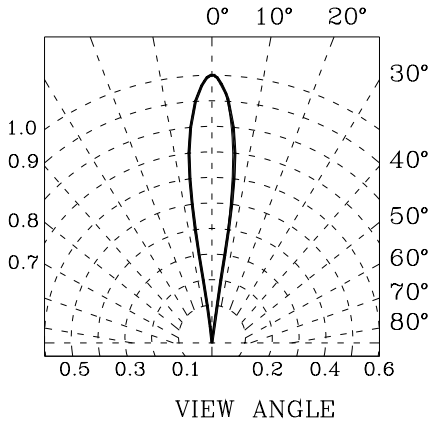

Forward Current Vs
Forward Voltage
Forward Current(mA)
50
40
30
20
10
0
1.2 1.6 2.0 2.4 2.8 3.0
Forward Voltage(v)


Luminous Intensity VS.
(cd) Forward Current
Luminous Intensity Relas
Relative Value at IF=20mA
5.0
4.0
3.0
2.0
1.0
0
0 10 20 30 40 50
IF-Forward Current-mA


Forward Current
Derating Curve
Forward Current IF(mA)
50
40
30
20
10
0
20 40 60 80 100
Ambient Temperature TA(°C)


Luminous Intensity VS.
Ambient Temperature
Relative Luminous Intensity
2
1
0.5
0.2
0.1
-30 -100 10 30 50 70
Ambient Temperature TA(°C)


1.0
0.5
500 550 600 650 700 750
Wavelength(nm)


0° 10° 20°
30°
40°
50°
60°
70°
80°
1.0
0.9
0.8
0.7
0.5 0.3 0.1 0.2 0.4 0.6
VIEW ANGLE