LEDTRONICS, INC.®

23105 Kashiwa Court, Torrance, CA 90505
Phone: (800) 579-4875 or (310) 534-1505 Fax: (310) 534-1424
E-mail: webmaster@ledtronics.com
Website: http://www.ledtronics.com

L190CWY3KF-50D

Super Yellow

5.1mm, Flanged Cylindrical, 7.6mm Height

60° viewing angle

DWG BY: BL / GP 09-29-06
CHK BY: PL 10-02-06
QA: __ 10-__-06
MFG: __ __-__-__
REVISION LTR: - 09-29-06

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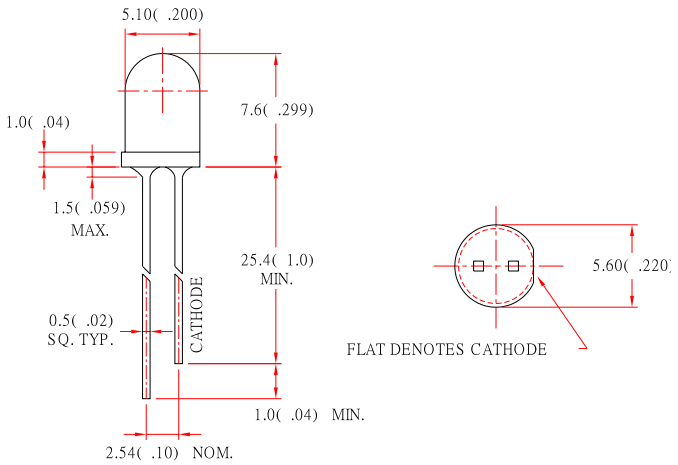
Features:

1. Chip material: AlInGaP/GaAs
2. Emitted color : Super Yellow
3. Lens Appearance : Water Clear
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. 5mm diameter package.
9. This product is RoHS compliant.

Package dimensions



Notes:

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

Applications:

1. TV set
2. Monitor
3. Telephone
4. Computer
5. Circuit board

Absolute maximum ratings(Ta=25℃)

Parameter	Symbol	Rating	Unit
Power Dissipation	Pd	80	mW
Forward Current	I_F	30	mA
Peak Forward Current* [1]	I_{FP}	150	mA
Reverse Voltage	V_R	5	V
Operating Temperature	Topr	-40℃~80℃	
Storage Temperature	Tstg	-40℃~85℃	
Soldering Temperature	Tsol	260℃(for 5 seconds)	

*[1] Condition for I_{FP} is pulse of 1/10 duty and 0.1msec width.

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● Electrical and optical characteristics(Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=20mA	-	2.1	2.6	V
Luminous Intensity	Iv	I_F=20mA	-	750	-	mcd
Reverse Current	I_R	V_R=5V	-	-	100	μA
Peak Wave Length	λp	I_F=20mA	-	597	-	nm
Dominant Wave Length	λd	I_F=20mA	-	593	-	nm
Spectral Line Half-width	Δλ	I_F=20mA	-	19	-	nm
Viewing Angle	$2\theta_{1/2}$	I_F=20mA	-	60	-	deg
Radiant Intensity		I_F=20mA	-	-	-	μW/sr
Chromaticity Coordinates	X	I_F=20mA	-	0.59	-	
	Y		-	0.40	-	

● Typical electro-optical characteristics curves

Fig.1 Relative intensity vs. Wavelength

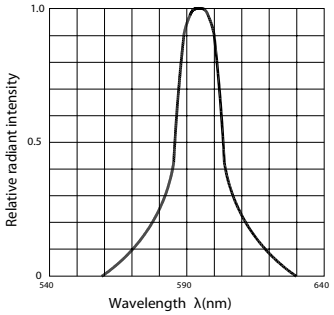


Fig.2 Forward current derating curve vs. Ambient temperature

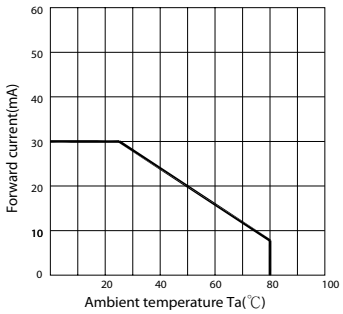


Fig.3 Forward current vs. Forward voltage

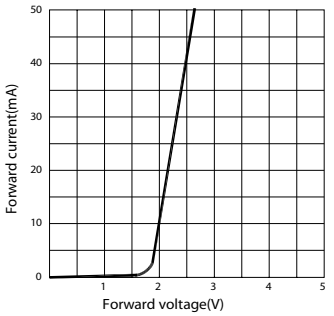


Fig.4 Relative luminous intensity vs. Ambient temperature

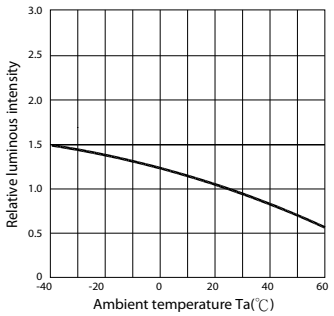


Fig.5 Relative luminous intensity vs. Forward current

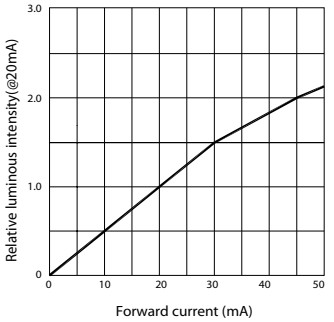
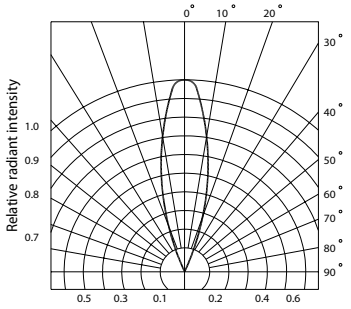


Fig.6 Radiation diagram



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● Bin Limits

1. Intensity Bin Limits (At I_F = 20mA)

Bin Code	Min. (mcd)	Max. (mcd)
:	:	:
W	930	1840
X	1390	2760
Y	2090	4260
Z	3220	6440
ZA	4880	9660
:	:	:

● **Bin** : x