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

L806CWR3K

Super Red

20mm, Big Dome 6-Chip LEDs, 13.7mm Height
160° viewing angle

DWG BY: BL / GP 07-22-08
CHK BY: PL 07-22-08
QA: __ __-__-__
MFG: __ __-__-__
REVISION LTR: - 07-22-08

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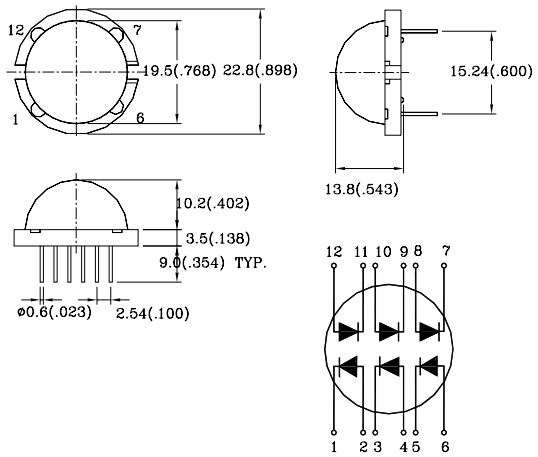
● Features:

1. Lens Appearance : water diffused
2. Low power requirement.
3. Excellent characters appearance.
4. Solid state reliability.
5. Seperately pin out
6. single color .
7. Versatile mounting on P.C. Board or panel.

● 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.

● Description:

1. 20.0mm diameter big lamps.
2. This product use super red chips, which are made from AlGaAs on AlGaAs substrate.
3. This product is RoHS compliant.

● 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℃~85℃	
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 (per LED)	V_F	I_F=20mA	-	2.1	2.6	V
Luminous Intensity (All LEDs)	Iv	I_F=20mA	-	500	-	mcd
Reverse Current	I_R	V_R=5V	-	-	100	μA
Peak Wave Length	λp	I_F=20mA	-	652	-	nm
Dominant Wave Length	λd	I_F=20mA	-	639	-	nm
Spectral Line Half-width	Δλ	I_F=20mA	-	22	-	nm
Viewing Angle	$2\theta_{1/2}$	I_F=20mA	-	160	-	deg
Radiant Intensity		I_F=20mA	-	6600	-	μW/sr
Chromaticity Coordinates	X	I_F=20mA	-	0.72	-	
	Y		-	0.28	-	

● Typical Electro-Optical Characteristics Curves

Fig.1 Relative intensity vs. Wavelength

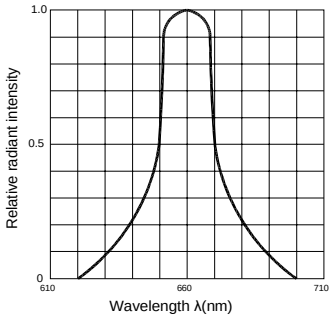


Fig.2 Forward current derating curve vs. Ambient temperature

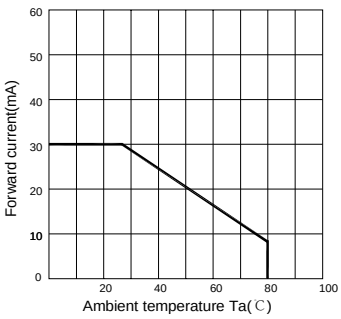


Fig.3 Forward current vs. Forward voltage

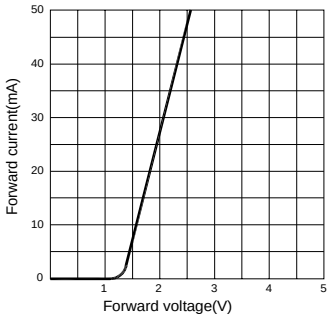


Fig.4 Relative luminous intensity vs. Ambient temperature

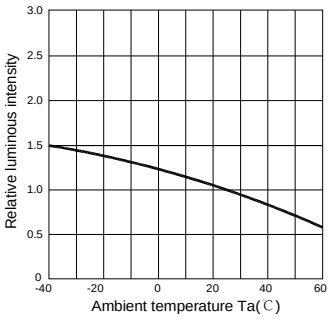


Fig.5 Relative luminous intensity vs. Forward current

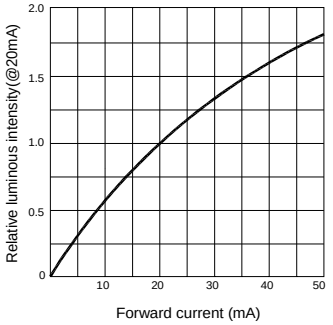
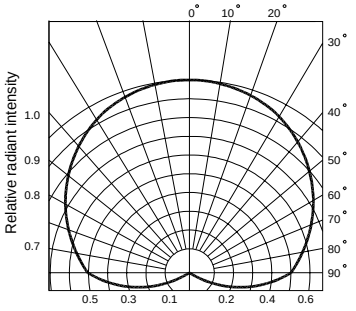


Fig.6 Radiation diagram



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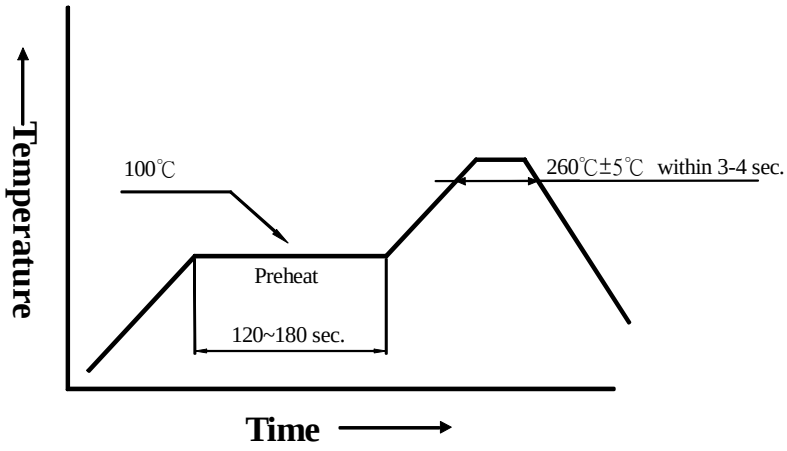
● **DIP soldering (Wave Soldering) :**

Preheating : 100℃,within 120~180 sec.
Operation heating : 260℃±5℃ within 3~4 sec.
Gradual Cooling (Avoid quenching).



● **IRON soldering**

350℃,with 4~5 sec.