

L200TWRGB1K-4C-IL

Super Red/Aqua Green/Blue

5mm, Flanged Cylindrical, 7.7mm Height

55° viewing angle

DWG BY:
BL / GP
11-10-06

CHK BY:
PL
09-30-08

QA:

__-__-__

MFG:

__-__-__

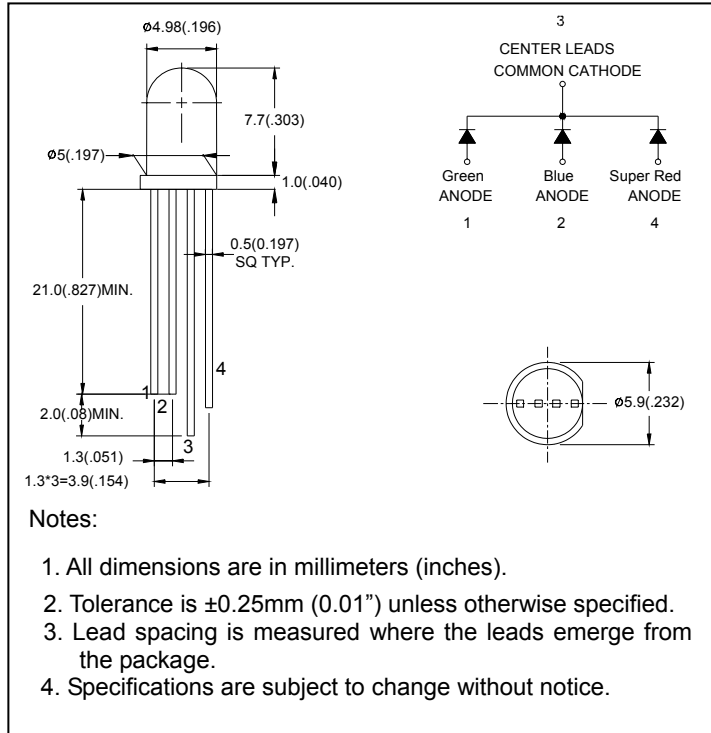
REVISION LTR: -

09-30-08

● **Features:**

1. Chip material: AlInGaN (Green)
and AlInGaN (Blue)
and AlGaInP/GaAs (Orange)
2. Emitted color :Green and Super Blue
and Super Orange
3. Lens Appearance : White Diffused
4. Low power consumption.
5. High efficiency.
6. Versatile mounting on P.C. Board or panel.
7. Low current requirement.
8. T-1 3/4 type package.
9. This product is RoHS compliant.

● **Package dimensions:**



● **Applications:**

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

● **Absolute Maximum Ratings(Ta=25°C)**

Parameter	Symbol	Green	Super Blue	Super Orange	Unit
Power Dissipation	Pd	120	120	100	mW
Forward Current	I _F	30	30	30	mA
Peak Forward Current* ¹	I _{FP}	150	150	150	mA
Reverse Voltage	V _R	5			V
Operating Temperature	Topr	-40°C~80°C			
Storage Temperature	Tstg	-40°C~85°C			
Soldering Temperature	Tsol	260°C (for 5 seconds)			

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

● **Electrical and optical characteristics(Ta=25°C)**

Parameter	Symbol	Condition	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20mA$	Green	-	3.1	4.0	V
			Blue	-	3.2	4.0	
			Red	-	2.0	2.6	
Luminous Intensity	I_v	$I_F=20mA$	Green	-	3200	-	mcd
			Blue	-	550	-	
			Red	-	800	-	
Reverse Current	I_R	$V_R=5V$	Green	-	-	100	μA
			Blue	-	-	-	
			Red	-	-	-	
Peak Wave Length	λ_p	$I_F=20mA$	Green	-	518	-	nm
			Blue	-	463	-	
			Red	-	630	-	
Dominant Wave Length	λ_d	$I_F=20mA$	Green	-	525	-	nm
			Blue	-	468	-	
			Red	-	622	-	
Spectral Line Half-width	$\Delta \lambda$	$I_F=20mA$	Green	-	32	-	nm
			Blue	-	25	-	
			Red	-	17	-	
Viewing Angle	$2\theta_{1/2}$	$I_F=20mA$	Green	-	55	-	deg
			Blue	-	55	-	
			Red	-	55	-	
Radiant Intensity		$I_F=20mA$	Green	-	6900	-	$\mu W/sr$
			Blue	-	7900	-	
			Red	-	4200	-	
Chromaticity Coordinates	X	$I_F=20mA$	Green	-	.15	-	
	Y				.72		
Chromaticity Coordinates	X	$I_F=20mA$	Blue	-	.13	-	
	Y				.06		
Chromaticity Coordinates	X	$I_F=20mA$	Red	-	.69	-	
	Y				.30		

● **Typical Electro-Optical Characteristics Curves**

Fig.1 Relative intensity vs. Wavelength

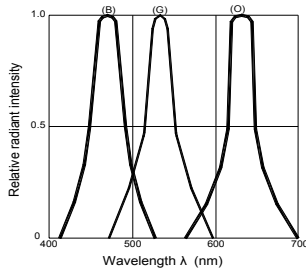


Fig.2 Forward current derating curve vs. Ambient temperature

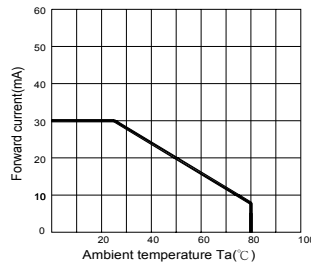


Fig.3 Forward current vs. Forward voltage

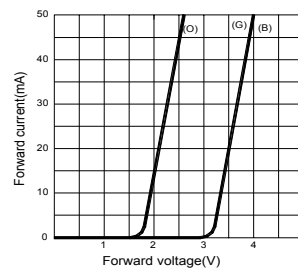


Fig.4 Relative luminous intensity vs. Ambient temperature

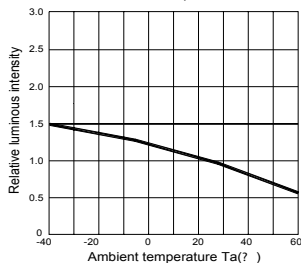


Fig.5 Relative luminous intensity vs. Forward current

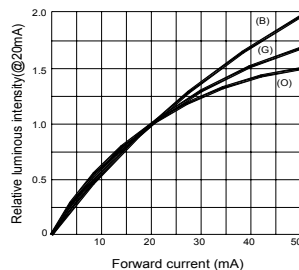


Fig.6 Radiation diagram

