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

L200TWGR4B

Hi-Eff Green/Hi-Eff Red

5mm, Flanged Cylindrical, 8.6mm Height
45° viewing angle

DWG BY: BL / GP 09-17-12
CHK BY: PL 09-17-12
REVISION LTR: - 09-17-12

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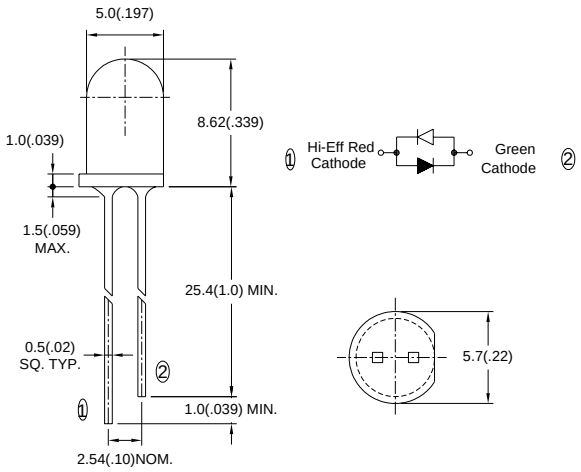
● Features:

1. Chip material: GaP/GaP (Green)
   and GaAsP/GaP (Hi-Eff Red)
2. Emitted color : Green and Hi-Eff Red
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. 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	Green	Hi-Eff Red	Unit
Power Dissipation	Pd	80	80	mW
Forward Current	I_F	30	30	mA
Peak Forward Current*[1]	I_{FP}	150	150	mA
Operating Temperature	Topr	-40℃ ~85℃		
Storage Temperature	Tstg	-40℃ ~100℃		
Soldering Temperature	Tsol	260℃max (for 5 seconds)		
Hand Soldering Temperature	Tsol	350℃ max(for 3 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	Color	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=20mA	Hi-Eff Green Hi-Eff Red	-	2.2 2.0	2.6 2.6	V
Luminous Intensity	Iv	I_F=20mA	Hi-Eff Green Hi-Eff Red	8 5	20 15	-	mcd
Reverse Current	I_R	V_R=5V	Hi-Eff Green Hi-Eff Red	-	-	100	μA
Peak Wave Length	λ p	I_F=20mA	Hi-Eff Green Hi-Eff Red	- -	568 640	- -	nm
Dominant Wave Length	λ d	I_F=20mA	Hi-Eff Green Hi-Eff Red	564 617	- -	574 638	nm
Spectral Line Half-width	Δ λ	I_F=20mA	Hi-Eff Green Hi-Eff Red	-	30 40	-	nm
Viewing Angle	$2\theta_{1/2}$	I_F=20mA	Hi-Eff Green Hi-Eff Red	-	45	-	deg
Chromaticity Coordinates	X Y	I_F=20mA	Hi-Eff Green	-	0.43 0.55	-	
Chromaticity Coordinates	X Y	I_F=20mA	Hi-Eff Red	-	0.70 0.29	-	

● Typical Electro-Optical Characteristics Curves

Fig.1 Relative intensity vs. Wavelength

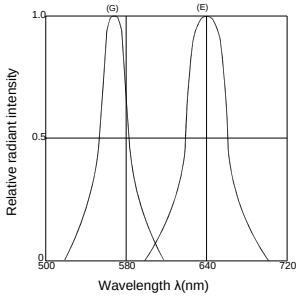


Fig.2 Forward current derating curve vs. Ambient temperature

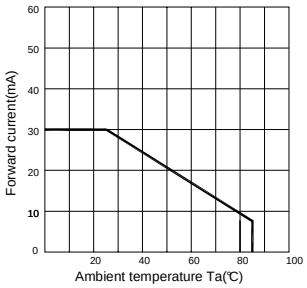


Fig.3 Forward current vs. Forward voltage

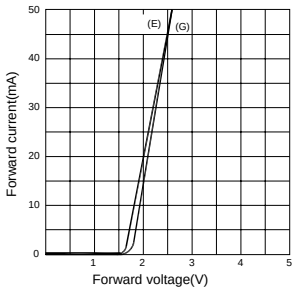


Fig.4 Relative luminous intensity vs. Ambient temperature

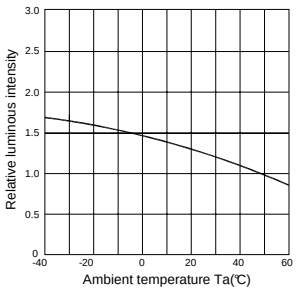


Fig.5 Relative luminous intensity vs. Forward current

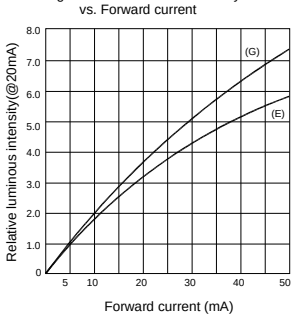
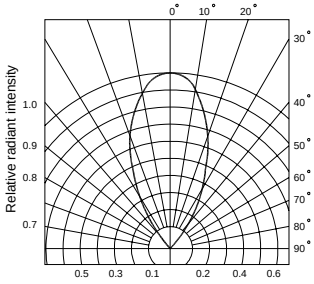


Fig.6 Radiation diagram



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●DIP soldering (Wave Soldering)

Preheating : 120℃,within 120~180 sec.
Operation heating : 255℃ ±5℃ within 5 sec.260℃ (Max)
Gradual Cooling (Avoid quenching).