



EVERLIGHT ELECTRONICS CO.,LTD.

Device Number : DLE-020-124 REV: 1.2

3mm Round Small Flange Without stand-off LEDs, T-1

PART NO : 204HGW ECN : _____ Page: 1/5

■ Features :

- Two chips are matched for uniform light output, wide viewing angle
- Long life-solid state reliability
- IC compatibl/Low power consuming

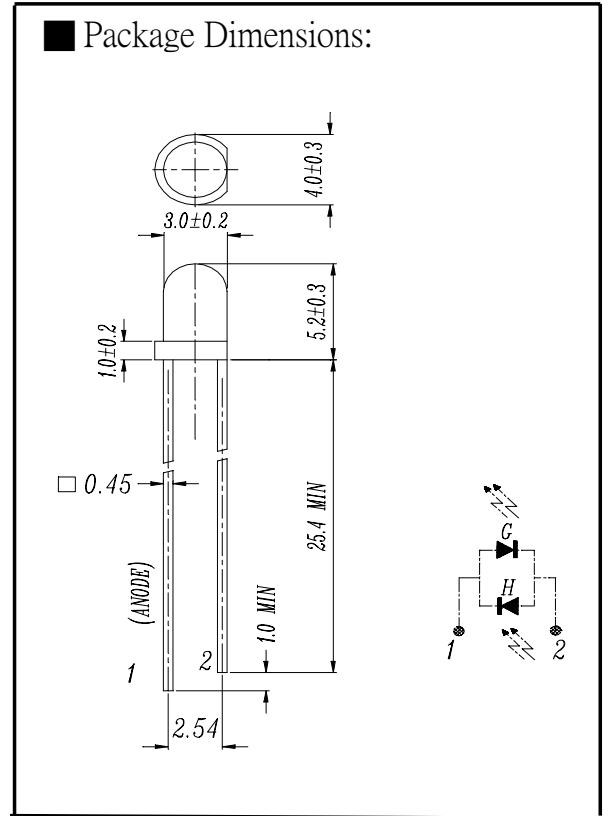
■ Descriptions :

- The 204 LED lamps contain two integral chips and is available as both bicolor and bipolrs types.
- The Bright and green Light is emitted by diodes of GaP and GaP respectively.

■ Applications :

- TV set
- Monitor
- Telephone
- Computer

■ Package Dimensions:



■ Notes :

- 1.All dimensions are in millimeters.
- 2.An epoxy meniscus may extend about 1.5mm(0.059") down to the lead.
- 3.Tolerances unless dimension ±0.25mm.

PART NO	Chip		Lens Color
	Material	Emitted Color	
204HGW	GaP	Bright Red	White Diffused
	GaP	Green	

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■ Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Rating	Unit
Forward Current	IF	H 15	mA
		G 30	
Operating Temperature	Topr	-40 to +85	°C
Storage Temperature	Tstg	-40 to +100	°C
Soldering Temperature	Tsol	260 ± 5	°C
Power Dissipation	Pd	H 45	mW
		G 100	
Peak Forward Current (Duty 1/10 @ 1KHz)	IF(Peak)	H 50	mA
		G 160	
Reverse Voltage	VR	5	V

■ Electronic Optical Characteristics :

Parameter	Symbol	Min.	Typ.	Max.	Unit	Condition
Luminous Intensity	Iv	H 0.4	1.0	/	mcd	IF= 10 mA
		G 1.1				
Viewing Angle	2θ 1/2	/	75	/	deg	IF= 20 mA
Peak Wavelength	λ p	H /	697	/	nm	IF= 10 mA
		G /				
Dominant Wavelength	λ d	H /	650	/	nm	IF= 10 mA
		G /				
Spectrum Radiation Bandwidth	△ λ	H /	90	/	nm	IF= 10 mA
		G /				
Forward Voltage	VF	H 1.5	2.0	2.4	V	IF= 10 mA
		G 1.7				
Reverse Current	IR	/	/	10	μ A	VR= 5 V



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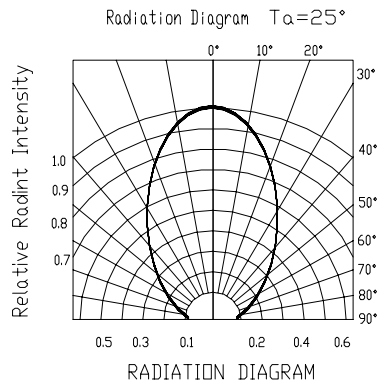
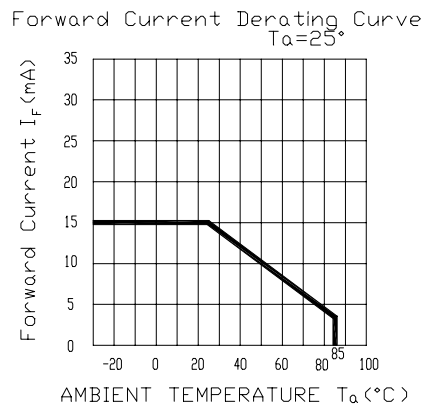
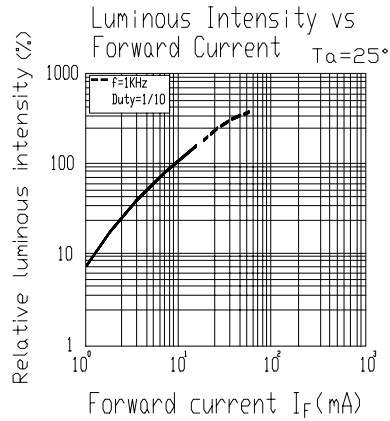
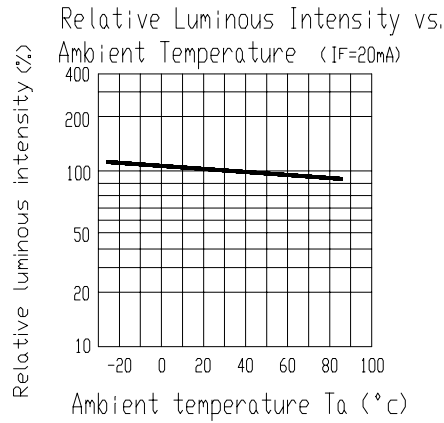
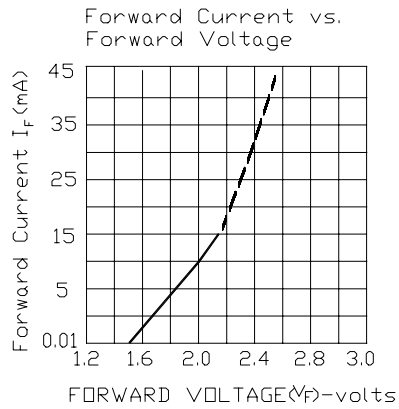
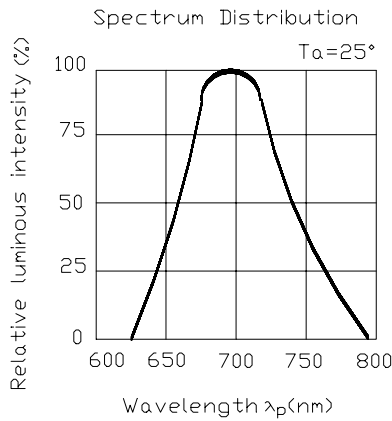
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■ Typical Electro-Optical Characteristic Curves

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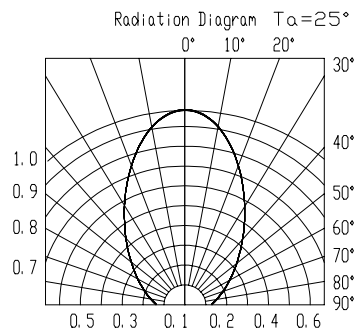
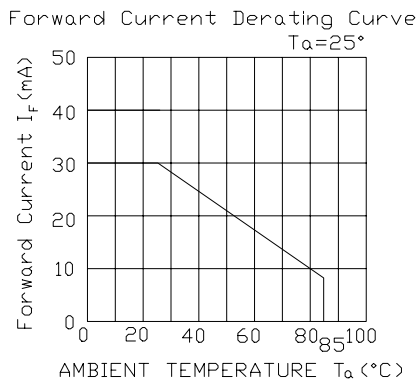
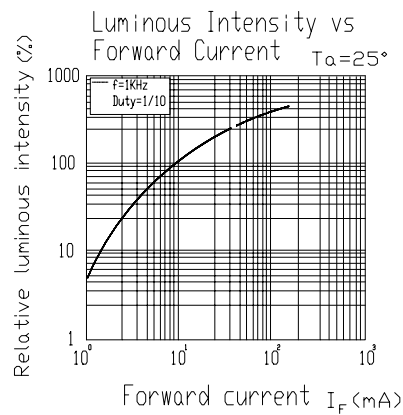
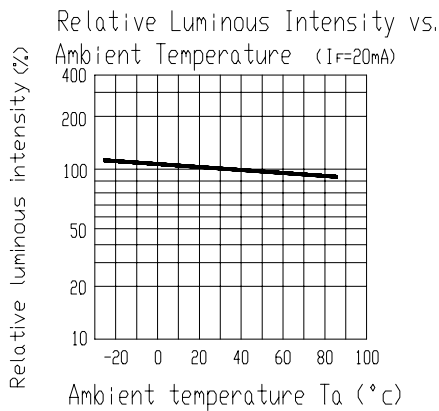
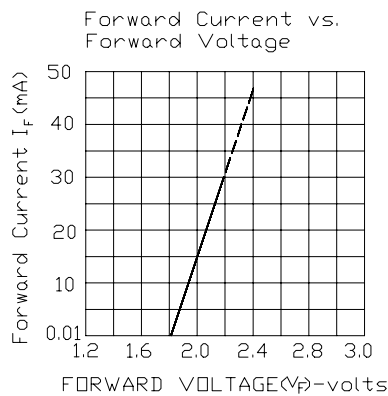
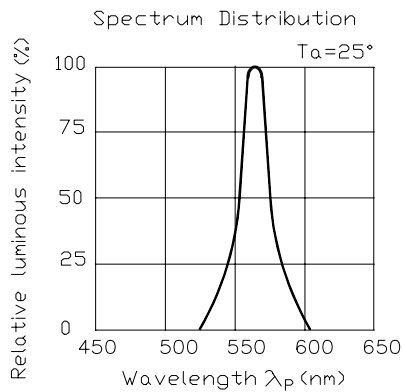
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■ Reliability test items and conditions

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260°C ± 5 °C	5 SEC	76 PCS	0/1
2	Temperature Cycle	H : +85°C 30min ∫ 5 min L : -55°C 30min	50 CYCLES	76 PCS	0/1
3	Thermal Shock	H : +100°C 5min ∫ 10 sec L : -10°C 5min	50 CYCLES	76 PCS	0/1
4	High Temperature Storage	TEMP : 100°C	1000 HRS	76 PCS	0/1
5	Low Temperature Storage	TEMP : -55°C	1000 HRS	76 PCS	0/1
6	DC Operating Life	TEMP : 25°C IF=20mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1