

Device Number: CDLE-420-033 REV.: 2

3.0mm Round Type LED Lamps

PART NO.: 4204-10GD ECN: Page: 1/4

Features:

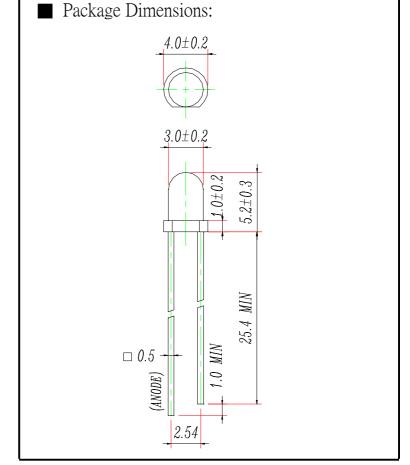
- Choice of various viewing angles
- Available on tape and reel.
- Reliable and robust

Descriptions:

- The series is specially designed for applications requiring higher brightness
- The led lamps are available with different colors, intensities, epoxy colors, etc.

Applications:

- TV set
- Monitor
- Telephone
- Computer



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 ± 0.25 mm.

PART NO.	Chip		Lens Color
	Material	Emitted Color	
4204-10GD	GaP	Green	Green Diffused

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■ Absolute Maximum Ratings at $Ta = 25^{\circ}C$

Parameter	Symbol	Rating	Unit
Forward Current	IF	30	mA
Operating Temperature	Topr	-40 to +85	$^{\circ}\!\mathbb{C}$
Storage Temperature	Tstg	-40 to +100	$^{\circ}\!\mathbb{C}$
Soldering Temperature	Tsol	260 ± 5	$^{\circ}\!\mathbb{C}$
Power Dissipation	Pd	100	mW
Peak Forward Current(Duty 1/10 @ 1KHz)	IF(Peak)	160	mA
Reverse Voltage	Vr	5	V

■ Electronic Optical Characteristics:

Parameter	Symbol	Min.	Тур.	Max.	Unit	Condition
Luminous Intensity	Iv	4.0	6.3	/	mcd	IF= 10 mA
Viewing Angle	2 θ 1/2	/	60	/	deg	IF= 20 mA
Peak Wavelength	λp	/	565	/	nm	IF= 20 mA
Dominant Wavelength	λd	/	570	/	nm	IF= 20 mA
Spectrum Radiation Bandwidth	Δλ	/	30	/	nm	IF= 20 mA
Forward Voltage	VF	1.7	2.1	2.4	V	IF= 20 mA
Reverse Current	Ir	/	/	10	μΑ	VR= 5 V



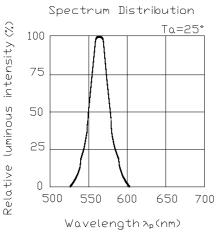
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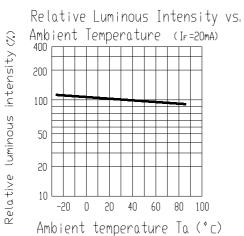
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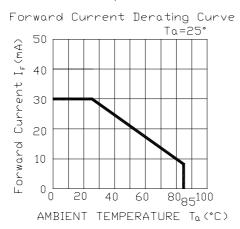
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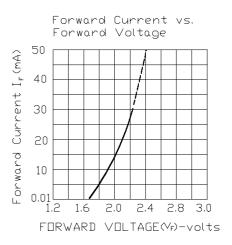
■ Typical Electro-Optical Characteristic Curves:

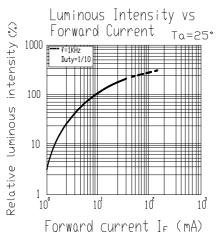
(G)

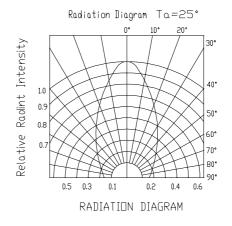














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■ Reliability test items and conditions:

NO	Item	Test Conditions	Test Hours/Cycle	Sample Size	Ac/Re
1	Solder Heat	TEMP : 260° C ± 5 $^{\circ}$ 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	$H: +100^{\circ}\mathbb{C}$ 5min $\int 10 \sec L: -10^{\circ}\mathbb{C}$ 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 = 20 mA	1000 HRS	76 PCS	0/1
7	High Temperature / High Humidity	85°C/85% RH	1000 HRS	76 PCS	0/1