

GM5WA06200Z

Chip LED

Built-in 3-chip, Super-luminosity Chip LED

Features

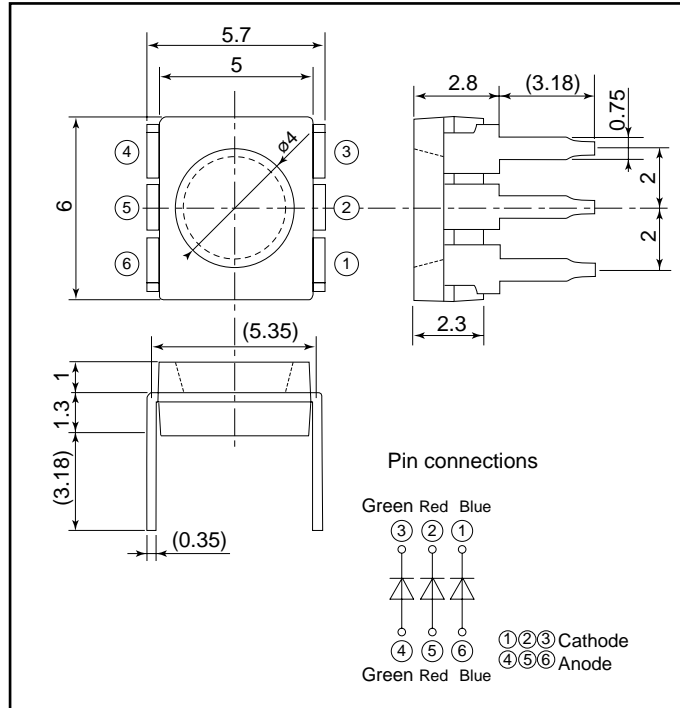
- (1) Super-luminosity chip LED
- (2) Built-in Blue, Green, Red LED chip
- (3) Using a package with high heat dissipation properties, it can be driven with a large current ($I_F=40$ mA)
- (4) Reduction of power consumption and adjusting each color is possible thanks to serial connection by 6 terminal connection (Individual driving by each terminal) in case of using several number of LED
- (5) Wide viewing angle (2θ 1/2): 120°
- (6) External dimensions: $6.0 \times 5.0 \times 2.3$ mm
- (7) Lead frame package with individual 6 pin

Applications

- (1) Amusement equipment
- (2) Information boards

Outline Dimensions

(Unit:mm)



Absolute Maximum Ratings

($T_a=25^\circ\text{C}$)

Model No.	Radiation color	Radiation material	Power dissipation P^{*1} (mW)	Forward current I_F (mA)	Peak forward current I_{FM}^{*2} (mA)	Derating factor (mA/ $^\circ\text{C}$)		Reverse voltage V_R (V)	Operating temperature T_{opr} ($^\circ\text{C}$)	Storage temperature T_{sig} ($^\circ\text{C}$)	Soldering temperature T_{sol}^{*3} ($^\circ\text{C}$)
						DC	Pulse				
GM5WA06200Z	Blue	InGaN	400	50	80	0.66	1.06	5	-30 to +85	-40 to +100	295
	Green	InGaN		50	80	0.66	1.06	5	-30 to +85	-40 to +100	295
	Red	AlGaInP		50	80	0.66	1.06	5	-30 to +85	-40 to +100	295

*1 Within 400 mW at all chips are lightened.

*2 Duty ratio=1/10, Pulse width=0.1ms.

*3 For 3s or less at the temperature of hand soldering.

Electro-optical Characteristics

($I_F=40$ mA, $T_a=25^\circ\text{C}$)

Lens type	Model No.	Radiation color	Forward voltage V_F (V) TYP	Peak emission wavelength λ_p (nm) TYP	Dominant wavelength λ_d (nm) TYP	Luminous intensity I_v (mcd) TYP	Spectrum radiation bandwidth $\Delta\lambda$ (nm) TYP	Reverse current	
								I_R (μA) MAX	V_R (V)
Colorless transparency	GM5WA06200Z	Blue	4.5	466	469	(150)	(26)	100	4
		Green	4.5	519	520	(500)	(35)	100	4
		Red	2.0	639	631	(300)	(18)	100	4

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(Internet)

•Data for Sharp's optoelectronic is provided on internet. (Address <http://sharp-world.com/ecg/>)

As of April 2001

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