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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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## GM5WA06200Z

## Chip LED

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

### Features

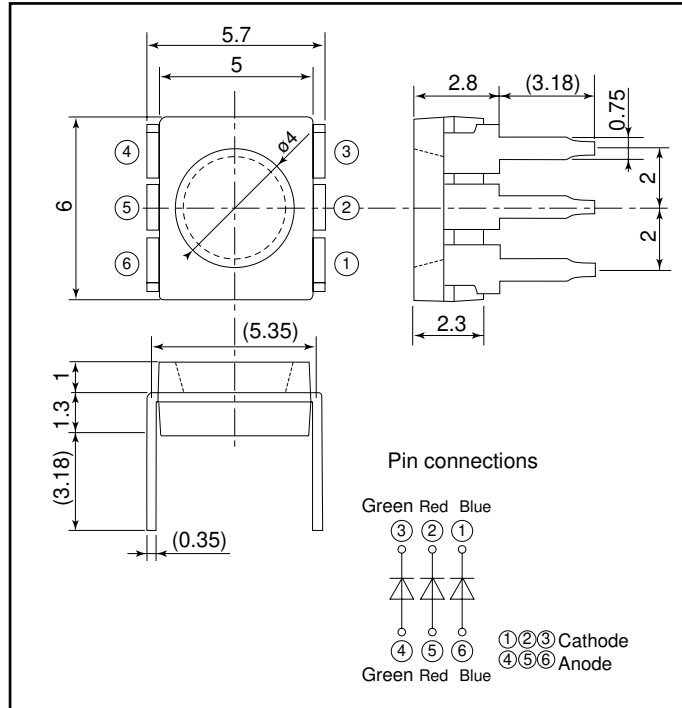
- (1) Super-luminosity chip LED
- (2) Built-in Blue, Green, Red LED chip
- (3) Using a package with high heat dissipation properties, it can be driven with a large current ( $I_F=40$  mA)
- (4) Reduction of power consumption and adjusting each color is possible thanks to serial connection by 6 terminal connection (Individual driving by each terminal) in case of using several number of LED
- (5) Wide viewing angle ( $2\theta$  1/2):  $120^\circ$
- (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/°C)		Reverse voltage $V_R$ (V)	Operating temperature $T_{opr}$ (°C)	Storage temperature $T_{sig}$ (°C)	Soldering temperature $T_{sol}^{*3}$ (°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 $\lambda_p$ (nm) TYP	Dominant wavelength $\lambda_d$ (nm) TYP	Luminous intensity $I_v$ (mcd) TYP	Spectrum radiation bandwidth $\Delta\lambda$ (nm) TYP	Reverse current	
								$I_R$ ( $\mu\text{A}$ ) 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

(Notice)

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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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