

GM5WA06260A

Chip LED

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

Features

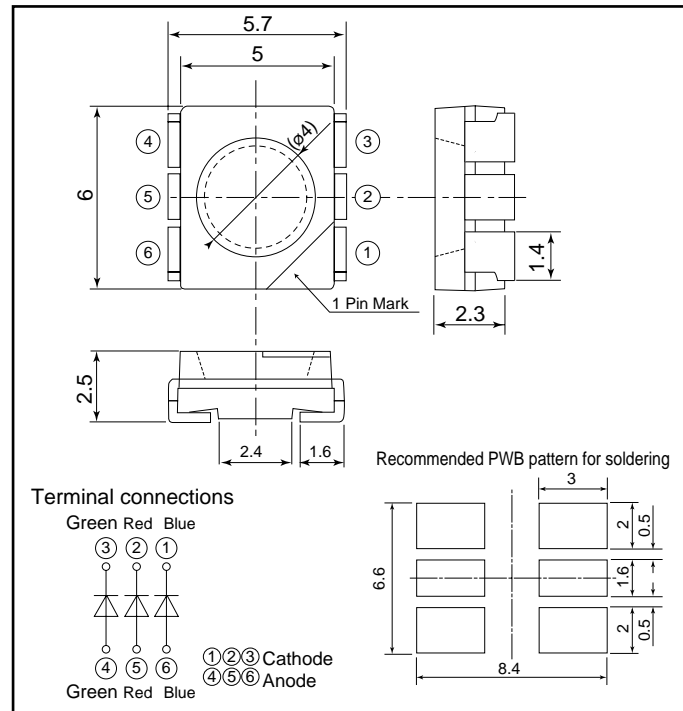
- (1) Super-luminosity chip LED
- (2) Built-in Blue, Green, Red LED chip
- (3) Using a package with high heat dissipation properties, it can be driven with a large current ($I_F=40$ mA)
- (4) Reduction of power consumption and adjusting each color is possible thanks to serial connection by 6 terminal connection (Individual driving by each terminal) in case of using several number of LED
- (5) Wide viewing angle (2θ 1/2): 120°
- (6) Surface-mount, leadless chip LED device
- (7) Outline dimensions: $6.0 \times 5.0 \times 2.5$ mm
- (8) Lead frame package with individual 6 pin
- (9) Taped product (800 pcs/reel)

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 | | | | |
| GM5WA06260A | Blue | InGaN | 400 | 50 | 80 | 0.83 | 1.33 | 5 | -30 to +85 | -40 to +85 | 295 |
| | Green | InGaN | | 50 | 80 | 0.83 | 1.33 | 5 | -30 to +85 | -40 to +85 | 295 |
| | Red | AlGaInP | | 40 | 80 | 0.83 | 1.33 | 5 | -30 to +85 | -40 to +85 | 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

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

| Lens type | Model No. | Radiation color | Forward voltage V_F (V) | | | Dominant wavelength | | Luminous intensity (mixed color) | | Reverse current | |
|------------------------|-------------|-----------------|---------------------------|-----|------------|----------------------|------------|----------------------------------|------------|-----------------------------|-----------|
| | | | TYP | MAX | I_F (mA) | λ_d (nm) TYP | I_F (mA) | I_v (mcd) TYP | I_F (mA) | I_R (μA) MAX | V_R (V) |
| | | | | | | | | | | | |
| Colorless transparency | GM5WA06260A | Blue | 4.6 | 5.2 | 35 | 469 | 40 | 1 725 | 20 | 100 | 4 |
| | | Green | 4.4 | 5.2 | 35 | 520 | 40 | | 40 | 100 | 4 |
| | | Red | 2.3 | 2.9 | 35 | 617 | 40 | | 40 | 100 | 4 |

(Notice)

•In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.

•Specifications are subject to change without notice for improvement.

(Internet)

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

As of July 2002