

SHARP

GM5BC01200AC

GM5GC01200AC

Under development

New product

Chip LED

Large Current DriveType Super-Luminosity Blue/Green Chip LED

Features

- (1) Super-luminosity Blue/Green chip LED
- (2) Using a package with high heat dissipation properties, it can be driven with a large current ($I_F=50$ mA)
- (3) High electrostatic immunity equivalent to built-in Zener diode type
ESD ($C=200$ pF, $R=0$ k Ω) : TYP. 700 V(reference value)
- (4) Wide viewing angle (2θ 1/2): 120°
- (5) Surface-mount, leadless chip LED device
- (6) Outline dimensions: $6.0 \times 5.0 \times 2.4$ mm
- (7) Taped product (800 pcs/reel)

Applications

- (1) Amusement equipment
- (2) Information boards
- (3) Instrument panel for Car

Absolute Maximum Ratings

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

Model No.	Emitting color	Material	Power dissipation P (mW)	Forward current I_F (mA)	Peak forward current I_{FM}^{*1} (mA)	Derating factor (mA/ $^\circ\text{C}$)		Reverse voltage V_R (V)	Operating temperature T_{opr} ($^\circ\text{C}$)	Storage temperature T_{stg} ($^\circ\text{C}$)	Soldering temperature T_{sol}^{*2} ($^\circ\text{C}$)
						DC	Pulse				
GM5BC01200AC	Blue	InGaN	330	60	70	1.00	1.17	5	-30 to +85	-40 to +85	295
GM5GC01200AC	Green	InGaN	330	60	70	0.80	0.93	5	-30 to +85	-40 to +100	295

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

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

Electro-optical Characteristics

($I_F=50$ mA, $T_a=25^\circ\text{C}$)

Lens type	Model No.	Emitting color	Forward voltage V_F (V)		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	
			TYP	MAX					I_R (μA) MAX	V_R (V)
Colorless	GM5BC01200AC	Blue	4.6	5.5	467	470	200	27	100	4
transparency	GM5GC01200AC	Green	4.4	5.5	515	519	520	39	100	4

(Notice)

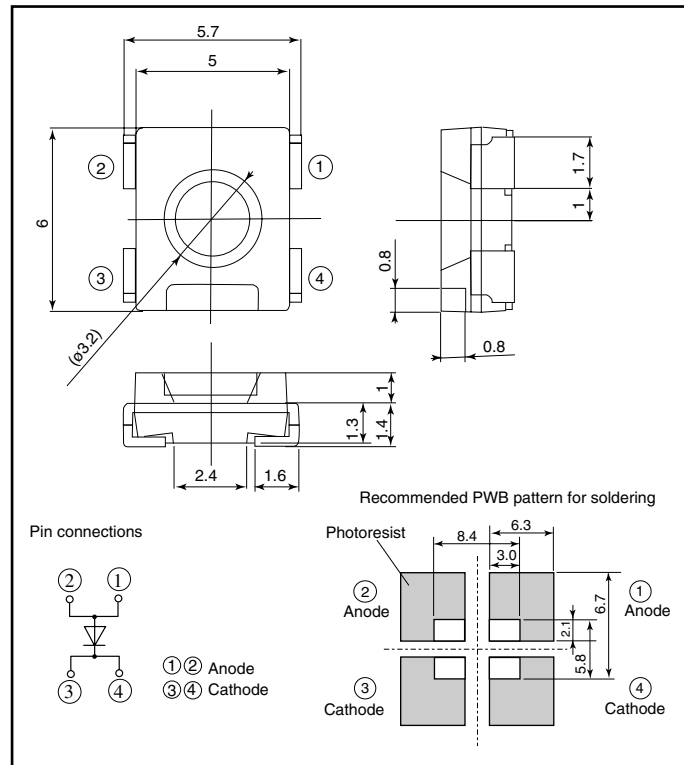
- In the absence of confirmation by device specification sheets, SHARP takes no responsibility for any defects that may occur in equipment using any SHARP devices shown in catalogs, data books, etc. Contact SHARP in order to obtain the latest device specification sheets before using any SHARP device.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

Outline Dimensions

(Unit:mm)



Pin connections

Recommended PWB pattern for soldering

Photoresist

Anode

Cathode

Anode

Cathode

Anode

Cathode

Anode

Cathode

Anode

Cathode

SHARP

As of March 2002