SHARP

GM5ZV03200Z Series

Through hole Type Large Current Drive Chip LED

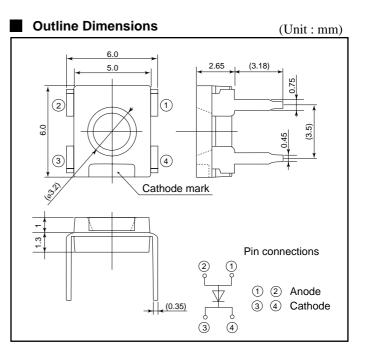
Features

- (1) Super-luminosity chip LED
- (2) Using a package with high heat dissipation properties, it can be driven with a large current.
- (3) Wide viewing angle $(2\theta 1/2)$: 120°
- (4) Outline dimensions (resin portion) : $6.0 \times 5.0 \times 2.3$ t mm
- (5) Applicable to soldering dip for through hole (with lead)

Applications

(1) Amusement equipment

(2) Information boards



Under development

Chin 1

New product

Absolute Maximum Ratings

(Ta=25°C) Derating factor Power dissipati Forward current Peak forward current Reverse voltage Operating temperature Storage temperature Soldering temperature (mA/°C) IFM*1 Tsol*2 Emitting color Р VR Tstg Model No. Material IF Ton (mW) (mA) (V) (mA)(°C) (°C) (°C) DC Pulse GM5ZR03200Z Red AlGaInP on GaAs 200 70 80 0.93 1.07 5 -30 to +85 -40 to +100 295 GM5ZJ03200Z Orange AlGaInP on GaAs 200 70 80 0.93 1.07 5 -30 to +85 -40 to +100 295 GM5ZS03200Z Sunset-orange AlGaInP on GaAs 200 70 80 0.93 1.07 5 -30 to +85 -40 to +100 295 GM5ZV03200Z Amber AlGaInP on GaAs 200 70 80 0.93 1.07 5 -30 to +85 -40 to +100 295 -40 to +100 GM5GC03200Z Green InGaP 240 50 60 0.40 0.67 5 -30 to +85 295 -40 to +100 GM5BC03200Z Blue InGaP 240 50 60 0.40 0.67 5 -30 to +85 295

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

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

Electro-optical Characteristics

Electro-optical Characteristics							(IF=60 mA(Blue,Green:IF=50 mA),Ta=25°C)			
Lens type	Model No.	Forward voltage $V_F(V)$		Peak emission wavelength λp (nm)	Dominant wavelength λd(nm)	Luminous intensity Iv(mcd)	Spectrum radiation bandwidth $\Delta\lambda(nm)$	Reverse currnt Ir(µA) Vr		
		TYP	MAX	TYP	TYP	TYP	TYP	MAX	(V)	
Colorless transparency	GM5ZR03200Z	2.2	2.9	647	635	400	18	100	4	
	GM5ZJ03200Z	2.2	2.9	627	618	500	18	100	4	
	GM5ZS03200Z	2.2	2.9	609	605	700	18	100	4	
	GM5ZV03200Z	2.2	2.9	591	588	500	18	100	4	
	GM5GC03200Z	4.4	5.5	513	519	520	36	100	4	
	GM5BC03200Z	4.6	5.5	467	470	200	27	100	4	

(Notice)

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•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 September 2001

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- Personal computers
- Office automation equipment
- Telecommunication equipment [terminal]
- Test and measurement equipment
- Industrial control
- Audio visual equipment
- Consumer electronics

(ii)Measures such as fail-safe function and redundant design should be taken to ensure reliability and safety when SHARP devices are used for or in connection with equipment that requires higher reliability such as:

- Transportation control and safety equipment (i.e., aircraft, trains, automobiles, etc.)
- Traffic signals
- Gas leakage sensor breakers
- Alarm equipment
- Various safety devices, etc.

(iii)SHARP devices shall not be used for or in connection with equipment that requires an extremely high level of reliability and safety such as:

- Space applications
- Telecommunication equipment [trunk lines]
- Nuclear power control equipment

- Medical and other life support equipment (e.g., scuba).

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