SHARP

Under development New product

GM1WA80350A

Built-in 3-chip Compact Size Chip LED

Features

(1) Surface mount type leadless chip LED

(2) Compact Size: 1.6 x 1.6 x 0.8 t mm

(3) Built-in Blue, Green, Orange LED chip

(4) Blue and Green: front and back electrode type

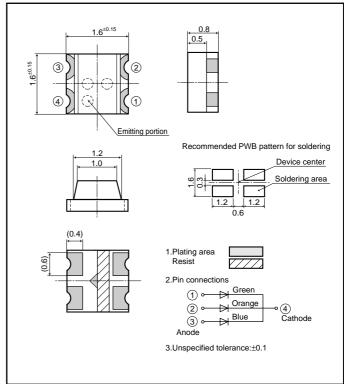
(5) Taped product (4 000 pcs/reel)

Applications

- (1) Amusement equipment
- (2) LCD backlight
- (3) Indicator

Absolute Maximum Ratings

Outline Dimensions (Unit:mm)



Soldering temperature $T_{sol}{}^{*3}$ Tstg (°C) (°C) 290

(Ta=25°C)

Derating factor Peak forward current Forward current Reverse voltage Power dissipation Operating temperature Storage temperature $(mA/^{\circ}C)$ Radiation color Radiation material P I_F^{*1} I_{FM}^{*2} V_R Topr Model No. (mW) (mA) (mA) (V) (°C) DC Pulse 40 5.0 -20 to +80 -40 to +100 Blue InGaN 20 0.27 0.53 78 GM1WA80350A InGaN 40 0.27 0.53 5.0 -40 to +100 290 Green 78 -20 to +80 20 50 5.0 290 Orenge AlGaInP 0.40 0.67 -20 to +80 -40 to +100

■ Electro-optical Characteristics

(IF=20 mA(Blue,Green:IF=10 mA),Ta=25°C)

Lens type	Model No.	Radiation color	Forward voltage V _F (V) TYP	Peak emission wavelength λ _P (nm) ΤΥΡ	Dominant wavelength \(\lambda_d(nm)\) TYP	Luminous intensity Iv(mcd) TYP	Spectrum radiation bandwidth Δλ(nm) ΤΥΡ	Reverse I _R (µA) MAX	v _R (V)
Colorless transparency	GM1WA80350A	Blue	3.2	470	472	30	26	100	4
		Green	3.2	528	530	92	36	100	4
		Orenge	2.1	627	618	100	15	100	4

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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 August 2001

^{*1} In case 2 or 3 chips are lightened,Blue:10mA,Green:10mA,Orange:15mA

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

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

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- 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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