SHARP

Under development	●
New product	

GM1WA80350A Chip LED

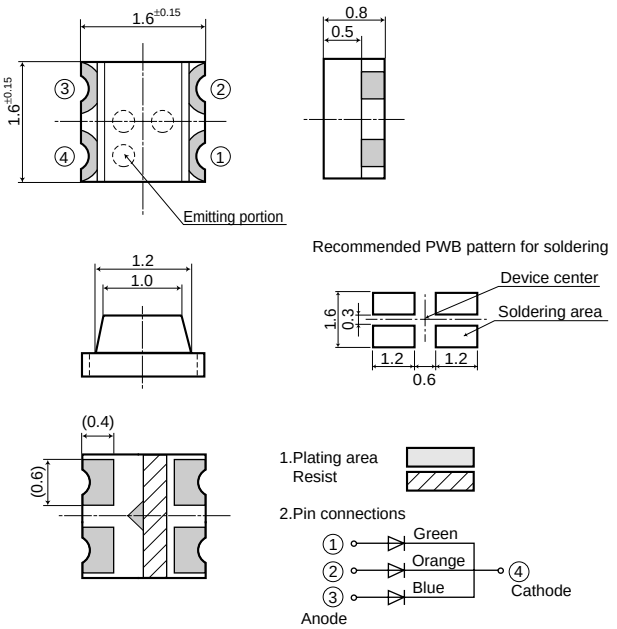
Built-in 3-chip Compact Size Chip LED

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)

Outline Dimensions

(Unit:mm)



Applications

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

Absolute Maximum Ratings

(T_a=25˚C)

Model No.	Radiation color	Radiation material	Power dissipation P (mW)	Forward current I_F*1 (mA)	Peak forward current I_{FM}*2 (mA)	Derating factor (mA/˚C) DC	Derating factor (mA/˚C) Pulse	Reverse voltage V_R (V)	Operating temperature T_{opr} (˚C)	Storage temperature T_{stg} (˚C)	Soldering temperature T_{sol}*3 (˚C)
GM1WA80350A	Blue	InGaN	78	20	40	0.27	0.53	5.0	-20 to +80	-40 to +100	290
	Green	InGaN	78	20	40	0.27	0.53	5.0	-20 to +80	-40 to +100	290
	Orenge	AlGaInP	78	20	50	0.40	0.67	5.0	-20 to +80	-40 to +100	290

*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.

Electro-optical Characteristics

(I_F=20 mA(Blue,Green:I_F=10 mA),Ta=25˚C)

Lens type	Model No.	Radiation color	Forward voltage V_F(V) TYP	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 I_R(μA) MAX	Reverse current 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

NOTICE

- The circuit application examples in this publication are provided to explain representative applications of SHARP devices and are not intended to guarantee any circuit design or license any intellectual property rights. SHARP takes no responsibility for any problems related to any intellectual property right of a third party resulting from the use of SHARP's devices.
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(i) The devices in this publication are designed for use in general electronic equipment designs such as:
- 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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