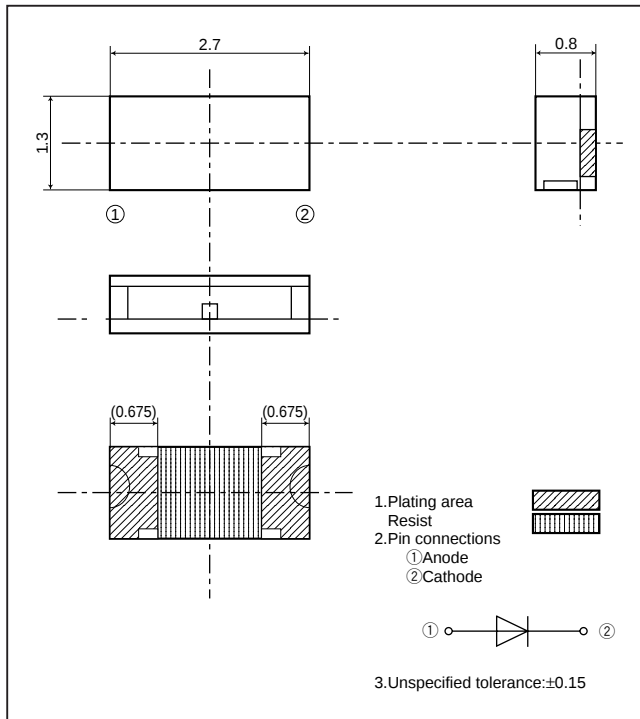


GM4J□80200AE series (Under development)

2713 Size, 0.8mm Thickness, Side
Emitting Leadless Chip LED

■ Outline Dimensions

(Unit : mm)



■ Absolute Maximum Ratings

(T_a=25°C)

Model No.	Radiation color	Radiation material	Forward current I _F (mA)	Peak forward current I _{FM} *1 (mA)	Reverse voltage V _R (V)	Operating temperature T _{opr} (°C)	Storage temperature T _{stg} (°C)	Soldering temperature T _{sol} *2 (°C)
GM4JR80200AE	Red	AlGaInP on GaAs	20	40	5	-30 to +85	-40 to +100	290
GM4JJ80200AE	Orange	AlGaInP on GaAs	20	40	5	-30 to +85	-40 to +100	290
GM4JS80200AE	Sunset orange	AlGaInP on GaAs	20	40	5	-30 to +85	-40 to +100	290
GM4JV80200AE	Amber	AlGaInP on GaAs	20	40	5	-30 to +85	-40 to +100	290

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

*2 For 3s or less at the temperature (290°C) of hand soldering. Temperature of reflow soldering is shown on the page 7.

■ Electro-optical Characteristics

(I_F=10mA, T_a=25°C)

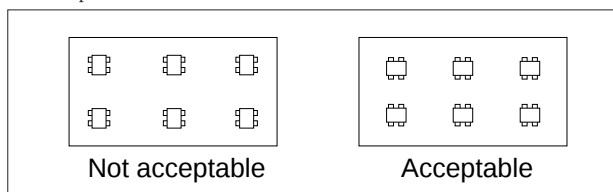
Lens type	Model No.	Forward voltage V _F (V)	Peak emission wavelength λ _p (nm)	Dominant wavelength λ _d (nm)	Luminous intensity I _v (mcd)	Page for characteristics diagrams
		TYP	TYP	TYP	TYP	
Colorless transparency	GM4JR80200AE	2.0	638	630	(6)	—
	GM4JJ80200AE	2.0	627	618	(11)	—
	GM4JS80200AE	2.0	609	605	(16)	—
	GM4JV80200AE	2.0	591	588	(13)	—

General Description of Light Emitting Diodes

E: Chip LED Device Type

■ Mounting to a PWB

Design the product so that the devices will not be mounted in the same direction as the warp of the PWB.

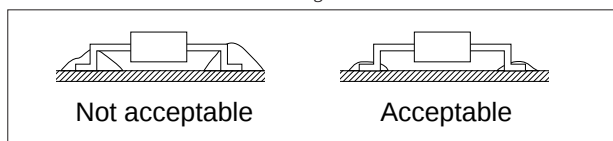


■ Soldering Conditions

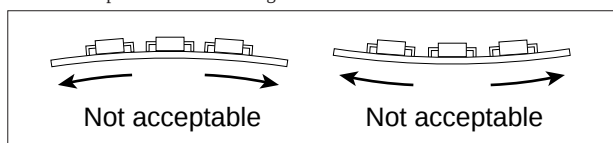
Solder the lead pins under the following conditions.

Type of Soldering	Conditions
1. Manual soldering	300°C ± 5°C within 5 seconds
2. Reflow soldering	Preheating 100°C to 150°C within 2 minutes Soldering 245°C ± 5°C within 5 seconds Gradual cooling (Avoid quenching)

- In manual soldering, do not move the lead pins with the soldering edge.
- Avoid applying excessive solder reinforcement.
- In using surface mount type numeric LEDs, please refer to the specification sheet because conditions shall be changed.



- Do not try to correct the position of the devices after soldering.
- Do not warp PWB after soldering.



■ Cleaning

(1) Solvents

The package resin may be penetrated by solvents used in cleaning. Refer to the table below for usable solvents.

Solvent	Usable
Ethyl alcohol	○
Isopropyl alcohol	○
Chlorosen	×
Acetone	×
Trichloroethylene	×

- : Acceptable
- × : Not acceptable

(Notes) • There is a world-wide movement to restrict the use of chlorofluorocarbon (CFC) based solvents and we recommend that you avoid their use. However, before using a CFC substitute solvent, carefully check that it will not penetrate the package resin.

(2) Cleaning Methods

Cleaning Method	Usable	Remarks
Solvent cleaning	○	Immersion up to one minute at room temperature
Ultrasonic cleaning	△	Test the cleaning under actual conditions and check for abnormalities before actual use.

- : Acceptable
- △ : Acceptability depends on device type and conditions

(Notes) • The affect on the device from ultrasonic cleaning differs depending on the size of the cleaning bath, ultrasonic output, duration, board size and device mounting method. Test the cleaning method under actual conditions and check for abnormalities before actual use.

- Please contact our representative before using a cleaning solvent or method not given above.
- Since the device is very small, it may be damaged by excessive stress. So, pay special attention to the transport method and handling.

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 - Alarm equipment
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