

# GM1JV55200AE Series GM1BC55270AC GM1GC55200AC GM1EG55200A Series

## Chip LED

1608 size  
0.55 mm thickness

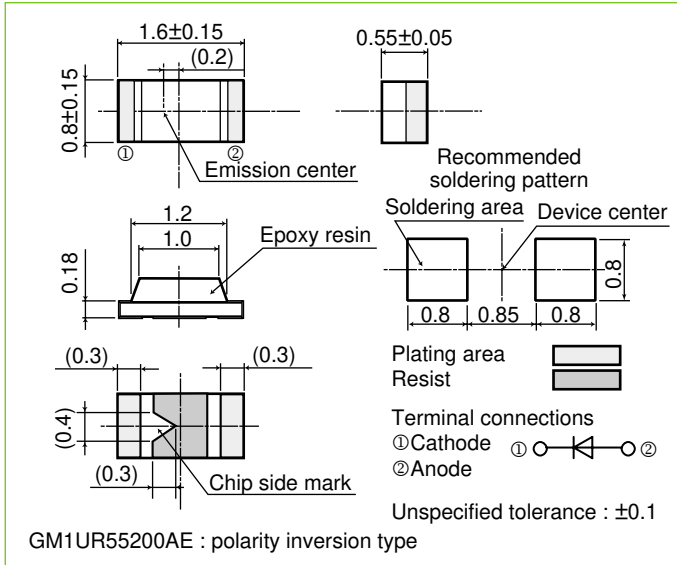


### Features

- Outline dimensions : 1.6×0.8×0.55 mm
- Taped products ( 5 000 pcs/reel )
- Lead-free ( product contains no lead )

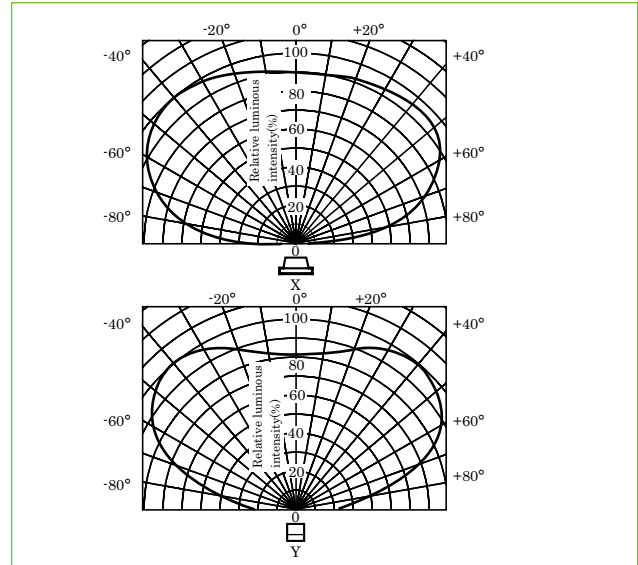
## Outline Dimensions

(Unit : mm)



## Directive Characteristics

( Ta=25 °C )



## Absolute Maximum Ratings

( Ta=25 °C )

| Model No.           | Material        | Power dissipation P (mW) | Forward current I <sub>F</sub> (mA) | Peak forward current I <sub>FM</sub> *1 (mA) | Derating factor (mA / °C) |       | Reverse voltage V <sub>R</sub> (V) | Operating temperature T <sub>opr</sub> (°C) | Storage temperature T <sub>stg</sub> (°C) | Soldering temperature T <sub>sol</sub> *2 (°C) |
|---------------------|-----------------|--------------------------|-------------------------------------|--|---------------------------|-------|------------------------------------|---|---|--|
|                     |                 |                          |                                     |  | DC                        | Pulse |                                    |   |   |  |
| GM1J□55200AE series | AlGaInP on GaAs | 52                       | 20                                  | 40   | 0.27                      | 0.53  | 5                                  | -30 to +85                                  | -40 to +100                               | 350  |
| GM1BC55270AC        | InGaN           | 63                       | 20                                  | 40   | 0.27                      | 0.53  | 5                                  | -20 to +80                                  | -40 to +100                               | 250  |
| GM1GC55200AC        | InGaN           | 78                       | 20                                  | 40   | 0.27                      | 0.53  | 5                                  | -20 to +80                                  | -40 to +100                               | 250  |
| GM1□□55200A series  | GaAsPonGaP*3    | 84*4                     | 30                                  | 50   | 0.40                      | 0.67  | 5                                  | -30 to +85                                  | -40 to +100                               | 350  |

\*1 Duty ratio=1/10, Pulse width=0.1 ms \*2 For 3 s or less, Hand soldering. \*3 GM1UR55200A : GaAlAs on GaAlAs, GM1EG55200A : GaP \*4 GM1UR55200A : 75

## Electro-optical Characteristics

( Ta=25 °C )

| Resin type               | Model No.    | Emitting color | Forward voltage V <sub>F</sub> (V) |      | Peak emission wavelength λ <sub>p</sub> (nm) TYP. | Dominant wavelength λ <sub>d</sub> (nm) TYP. | Luminous intensity I <sub>v</sub> (mcd) TYP. | Spectrum radiation bandwidth Δλ (nm) TYP. | Reverse current          |                    | Terminal capacitance     |       | Conditions I <sub>F</sub> (mA) | Page for characteristics diagrams |
|--------------------------|--------------|----------------|------------------------------------|------|---|--|--|---|--------------------------|--------------------|--------------------------|-------|--------------------------------|-----------------------------------|
|                          |              |                | TYP.                               | MAX. |   |  |  |   | I <sub>R</sub> (μA) MAX. | V <sub>R</sub> (V) | C <sub>t</sub> (pF) TYP. | (MHz) |                                |                                   |
| Colorless transparency   | GM1JJ55200AE | Orange         | 2.0                                | 2.6  | 627   | 618  | 19   | 15  | 100                      | 4                  | 60                       | 1     | 5                              | 54                                |
|                          | GM1JS55200AE | Sunset orange  | 2.0                                | 2.6  | 609   | 605  | 20.9   | 15  | 100                      | 4                  | 60                       | 1     | 5                              |                                   |
|                          | GM1JV55200AE | Amber          | 2.0                                | 2.6  | 591   | 588  | 16.8   | 15  | 100                      | 4                  | 60                       | 1     | 5                              |                                   |
|                          | GM1JE55200AE | Yellow-green   | 2.0                                | 2.6  | 575   | 573  | 13   | 15  | 100                      | 4                  | 60                       | 1     | 5                              |                                   |
| ★ Colorless transparency | GM1BC55270AC | Blue           | 2.9                                | 3.15 | 465   | 470  | 23   | 26  | 100                      | 4                  | -                        | -     | 5                              | 59                                |
| Colorless transparency   | GM1GC55200AC | Green          | 3.2                                | 3.9  | 528   | 530  | 47   | 36  | 100                      | 4                  | -                        | -     | 10                             | 59                                |
| Colorless transparency   | GM1UR55200A  | Red            | 1.85                               | 2.5  | 660   | -  | 29.7   | 20  | 100                      | 3                  | 25                       | 1     | 20                             | 66                                |
|                          | GM1HD55200A  | Red            | 2.0                                | 2.8  | 635   | -  | 12.5   | 35  | 10                       | 4                  | 20                       | 1     | 20                             | 67                                |
|                          | GM1HS55200A  | Sunset orange  | 2.0                                | 2.8  | 610   | -  | 11.4   | 35  | 10                       | 4                  | 35                       | 1     | 20                             | 68                                |
|                          | GM1HY55200A  | Yellow         | 2.1                                | 2.8  | 585   | -  | 11.5   | 30  | 10                       | 4                  | 35                       | 1     | 20                             | 68                                |
|                          | GM1EG55200A  | Yellow-green   | 2.1                                | 2.8  | 565   | -  | 19.0   | 30  | 10                       | 4                  | 35                       | 1     | 20                             | 69                                |

★ Under development

(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.
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- Specifications are subject to change without notice for improvement.

Internet address for Electric Components  
<http://sharp-world.com/products/device/index.html>