

SMLV56 Series

SRGB2

3528(1411)
3.5×2.8mm(t=0.6mm)

Features

- High Brightness Tri-Color LEDs
- Low height and improved color mixture made possible by flat frame structure.



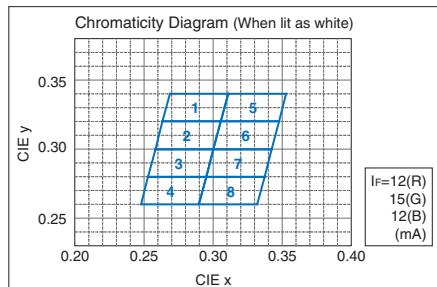
Product Specifications

| Part No. | Chip Structure | Emitting Color | Absolute Maximum Ratings (Ta=25°C) | | | | | | Electrical and Optical Characteristics (Ta=25°C) | | | | | | | | | |
|----------------------|----------------|----------------|------------------------------------|-------------------------|-------------------------------|------------------------|---------------------------------|-------------------------------|--|-----------|--------------------|-------------|-------------------------|-------------|---------|-----------------------|------------|---------|
| | | | Power Dissipation Pd (mW) | Forward Current If (mA) | Peak Forward Current IFP (mA) | Reverse Voltage VR (V) | Operating Temperature Topr (°C) | Storage Temperature Tstg (°C) | Forward Voltage VF | | Reverse Current IR | | Dominant Wavelength λ D | | | Luminous Intensity Iv | | |
| | | | | | | | | Typ. (V) | If (mA) | Max. (μA) | VR (V) | Min.*1 (nm) | Typ. (nm) | Max.*1 (nm) | If (mA) | Min. (mcd) | Typ. (mcd) | If (mA) |
| ■ | AlGaInP on Si | Red | | 50 | | | | 2.1 | | 10 | 5 | 619 | 624 | 629 | | 450 | 700 | |
| ■ SMLV56RGB1W | InGaN on SiC | Green | 400 | 40 | 100 | 5 | -40 to +85 | -40 to +100 | 3.3 | 20 | - | 520 | 527 | 535 | 20 | 710 | 1200 | 20 |
| ■ | | Blue | | | | | | | | | | | 465 | 470 | 475 | | 220 | 400 |

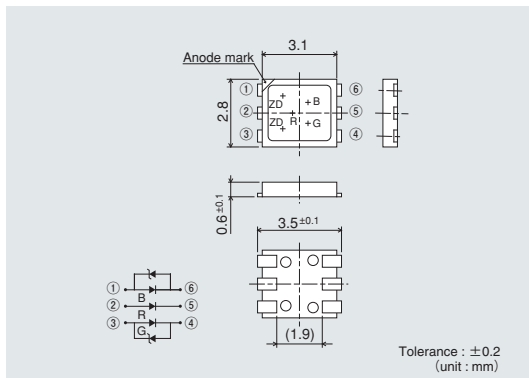
* 1=Reference

Chromaticity Coordinates

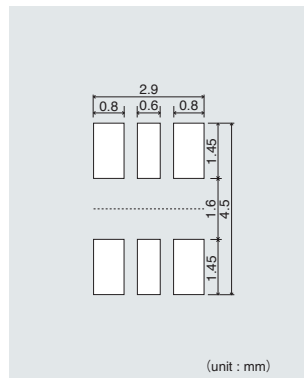
| Electrical and Optical Characteristics (Ta=25°C) | | | | | |
|--|---------|-----------------------|------------|---------|--|
| Chromaticity Coordinates (x, y) | | Luminous intensity Iv | | | |
| | If (mA) | Min. (mcd) | Typ. (mcd) | If (mA) | |
| | (R)12 | | | (R)12 | |
| (0.30, 0.30) | (G)15 | 1100 | 1700 | (G)15 | |
| | (B)12 | | | (B)12 | |



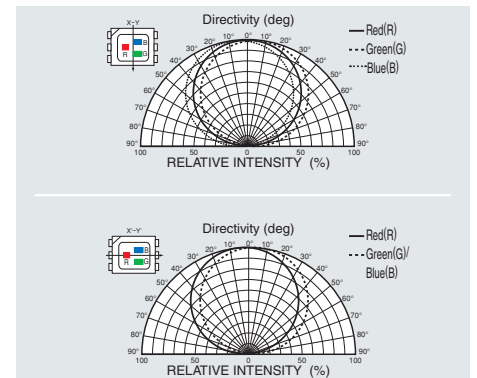
Dimensions



Recommended Solder Pattern

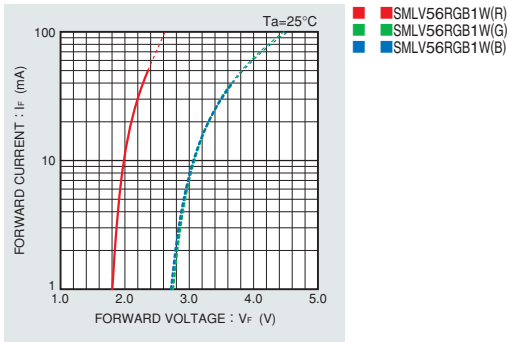


Viewing Angle

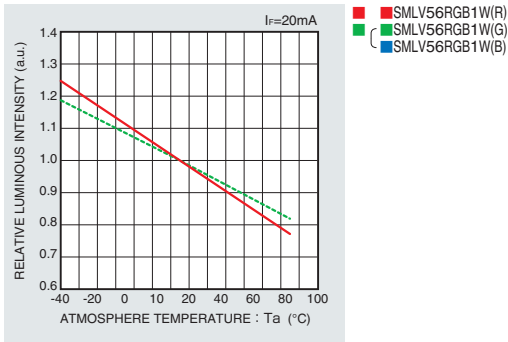


Electrical Characteristics Curves

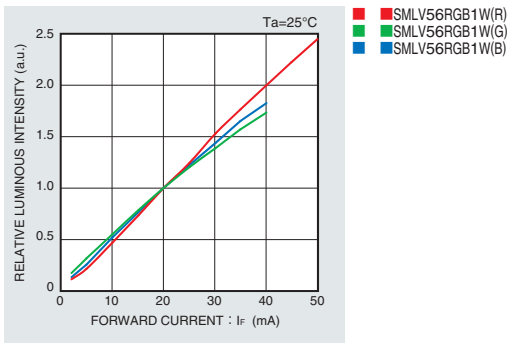
Forward Current-Forward Voltage



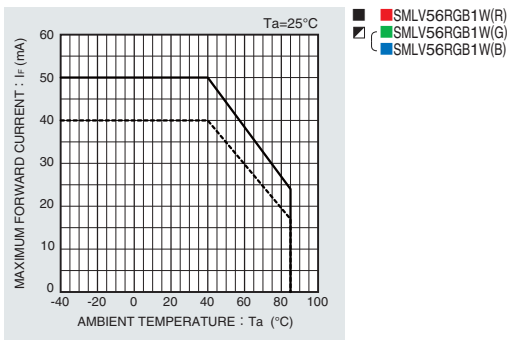
Luminous Intensity-Atmosphere Temperature



Luminous Intensity-Forward Current



Derating



Rank Reference of Brightness

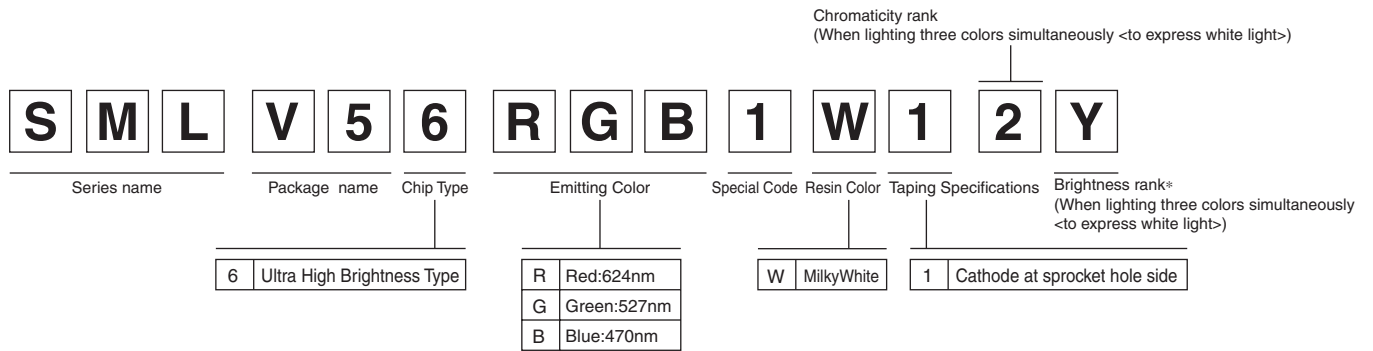
■ SMLV56RGB1W

(Ta=25°C, If=20mA)

| Chip LEDs with Reflector | Package size (mm) | Height (mm) | Luminous Intensity (mcd) | y* | | | | | | | | | | | | | | | | |
|--------------------------|-------------------|-------------|--------------------------|------------|------------|------------|------------|------------|------------|-------------|--------------|--------------|--------------|--|--|--|--|--|--|--|
| | | | | 220 to 280 | 280 to 360 | 355 to 460 | 450 to 560 | 560 to 710 | 710 to 900 | 900 to 1100 | 1100 to 1400 | 1400 to 1800 | 1800 to 2200 | | | | | | | |
| | | | Red | | | | | | | | | | | | | | | | | |
| | | | Green | | | | | | | | | | | | | | | | | |
| | | | Blue | | | | | | | | | | | | | | | | | |
| | | | White | | | | | | | | | | | | | | | | | |

* When lighting three colors simultaneously <to express white light>

Part No. Construction



* Concerning the Brightness rank

- Please refer to the rank chart above for luminous intensity classification.
 - Please refer to the Chromaticity diagram for color classification.
 - Part name is individual for each rank.
 - When shipped as sample, the part name will be a representative part name.
- General products are free of ranks. Please contact sales if rank appointment is needed.

Packing Specification

ROHM LED products are being shipped with desiccant (silica gel) concluded in moisture-proof bags.
 Pasting the moisture sensitive label on the outer surface of the moisture-proof bags or enclosing the humidity indication card inside the bag is available upon request.
 Please contact the nearest sales office or distributor if necessary.

Notes

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