

SML-02 Series

3025(1210)
3.0×2.5mm(t=1.3mm)

Features

•2-color type with reflector (standard)

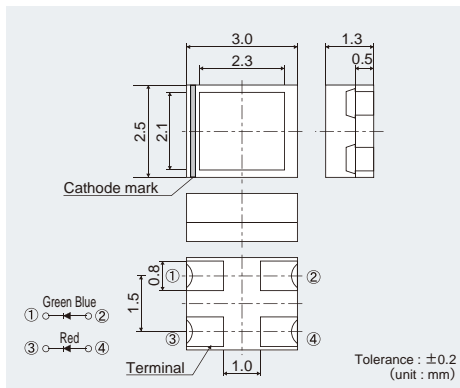


Specifications

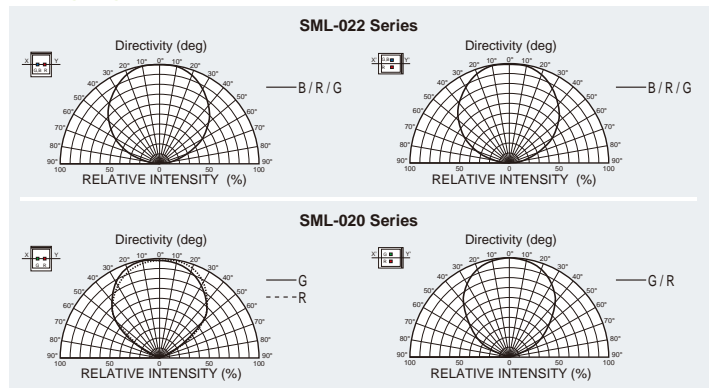
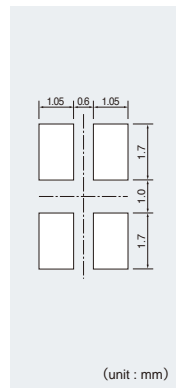
| Part No. | Chip Structure | Emitting Color | Absolute Maximum Ratings (Ta=25°C) | | | | | | Electrical and Optical Characteristics (Ta=25°C) | | | | | | | | | | |
|-------------|-----------------|----------------|------------------------------------|------------------------|---|-----------------------|--------------------------------|------------------------------|--|--------|------------------------------|-------|-----------------------------|-----|-----|-----------------------------|-----|-----|----|
| | | | Power Dissipation Pd(mW) | Forward Current IF(mA) | Peak Forward Current I _{FP} (mA) | Reverse Voltage VR(V) | Operating Temperature Topr(°C) | Storage Temperature Tstg(°C) | Forward Voltage VF Typ. (V) | IF(mA) | Reverse Current IR Max. (μA) | VR(V) | Dominant Wavelength λD (nm) | | | Luminous Intensity Iv (mcd) | | | |
| SML022BUT | InGaN | Blue | 120 | 30 | 80*2 | 5 | | -40 to +100 | 3.2 | | | 5 | 464 | 470 | 476 | | 56 | 140 | |
| | AlGaInP on GaAs | Red | 75 | | | | | | 2 | | | | 619 | 624 | 629 | | 90 | 220 | |
| SML-020MVT | GaAsP on GaAs | Green | 60 | 25 | 60*1 | | -30 to +85 | -40 to +85 | 2.2 | 20 | 100 | 4 | 569 | 572 | 575 | 20 | 9 | 20 | 20 |
| | | Red | | | | | | | 2 | | | | 625 | 630 | 635 | | 3.6 | 6.3 | |
| SML-022ML8T | AlGaInP on GaAs | Green | 52 | 20 | 60*2 | | | -40 to +100 | 2.1 | | | | 569 | 572 | 575 | | 16 | 40 | |
| | | Red | | | | | | | | | | | | 630 | 635 | | 640 | 10 | |

* 1:Duty1/5, 200Hz * 2:Duty1/10, 1kHz * 3:Reference

Dimensions

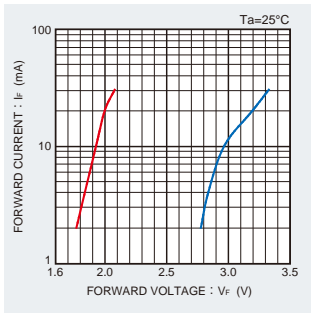


Recommended Solder Pattern Viewing Angle

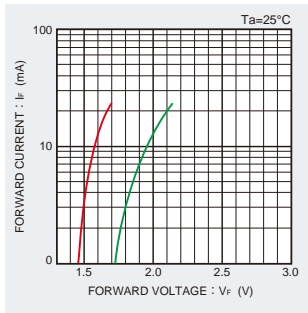


Electrical Characteristics Curves

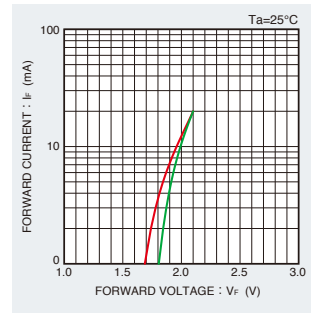
Forward Current-Forward Voltage



■ SML022BUT(U)
■ SML022BUT(B)

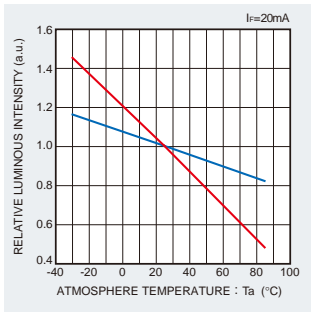


■ SML-020MVT(V)
■ SML-020MVT(M)

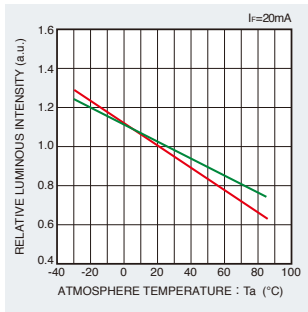


■ SML-022ML8T(L)
■ SML-022ML8T(M)

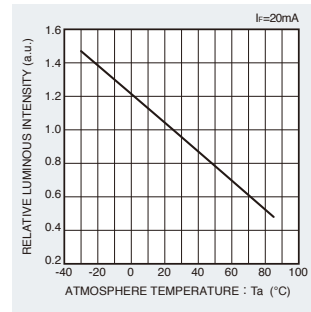
Luminous Intensity-Atmosphere Temperature



■ SML022BUT(U)
■ SML022BUT(B)

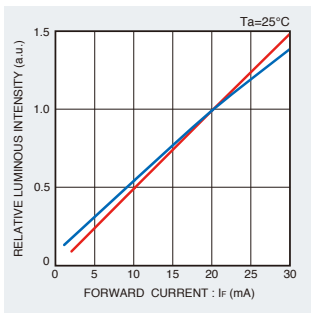


■ SML-020MVT(V)
■ SML-020MVT(M)

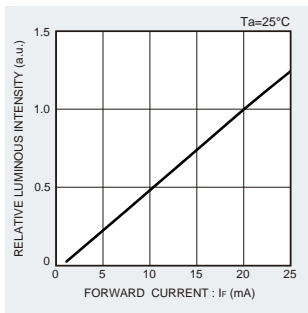


■ SML-022ML8T

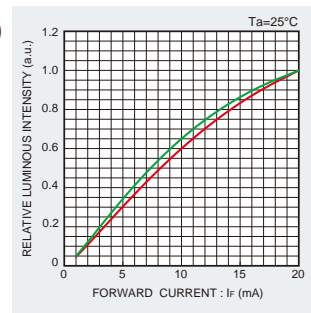
Luminous Intensity-Forward Current



■ SML022BUT(U)
■ SML022BUT(B)

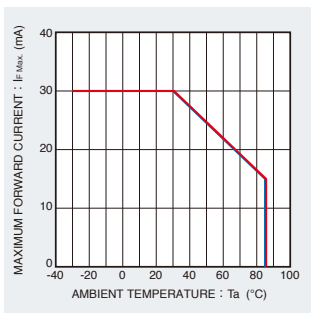


■ SML-020MVT(V)
■ SML-020MVT(M)

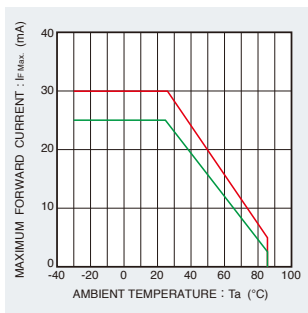


■ SML-022ML8T(L)
■ SML-022ML8T(M)

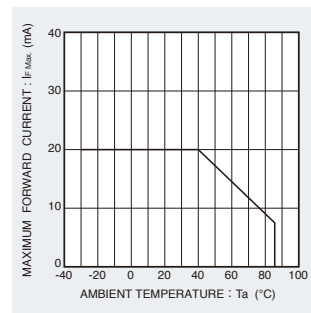
Derating



■ SML022BUT(U)
■ SML022BUT(B)



■ SML-020MVT(V)
■ SML-020MVT(M)



■ SML-022ML8T

Rank Reference of Brightness

Dual Color

(Ta=25°C, If=20mA)

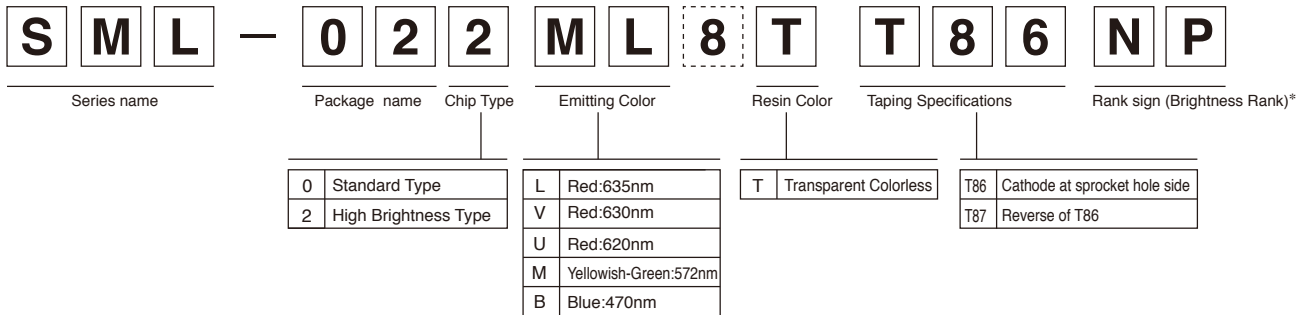
| Emitting Color | Luminous Intensity (mcd) | K | L | M | N | P | Q | R | S | T | U |
|----------------|--------------------------|------------|-----------|----------|----------|----------|----------|-----------|-----------|------------|------------|
| | | 4.0 to 6.3 | 6.3 to 10 | 10 to 16 | 16 to 25 | 25 to 40 | 40 to 63 | 63 to 100 | 90 to 140 | 140 to 220 | 220 to 360 |
| Red | | | | | | | | | | | |
| Blue | | | | | | | | | | | |
| Red | | V | | | | | | | | | |
| Green | | | | M | | | | | | | |
| Red | | | | | L | | | | | | |
| Green | | | | | | M | | | | | |

※Brightness on specification sheet include tolerance of within ± 10%.

Part No. Construction

* "-" will be taken out for emitting color B series.

Special Code



- * Concerning the Brightness rank
- Please refer to the rank chart above for luminous intensity 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.

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