


Dual-Color Type $\phi 3.1$ Circular Type LED Lamps

SPR-39 Series

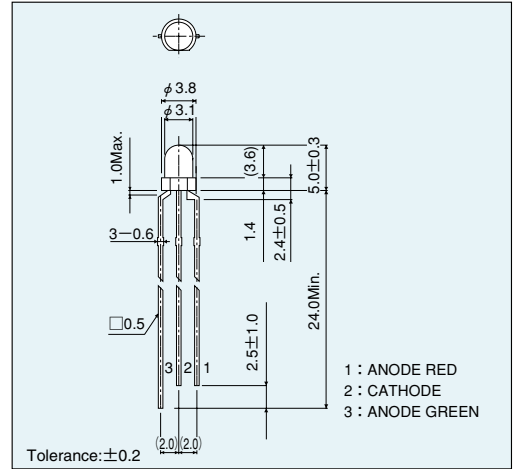
| | | | |
|---------------|---------------------------------|---|--------------|
| Shape | Emitting Surface Dimension (mm) | Green | Red |
| | | GaP | GaAsP on GaP |
| | | 563nm | 650nm |
| Circular Type | $\phi 3.1$ |  SPR-39MVW | |

Absolute Maximum Ratings (Ta=25°C)

| Part No. | Emitting color | Power dissipation Pd (mW) | Forward current IF (mA) | Peak forward current I _{FP} (mA) | Reverse voltage VR (V) | Operating temperature T _{opr} (°C) | Storage temperature T _{stg} (°C) |
|-----------|----------------|---------------------------|-------------------------|---|------------------------|---|---|
| SPR-39MVW | Green | 75 | 25 | 60 | 3 | -25 to +85 | -30 to +100 |
| | Red | 60 | 20 | | | | |

* I_{FP} measured under duty $\leq 1/5$, pulse width ≤ 1 ms.

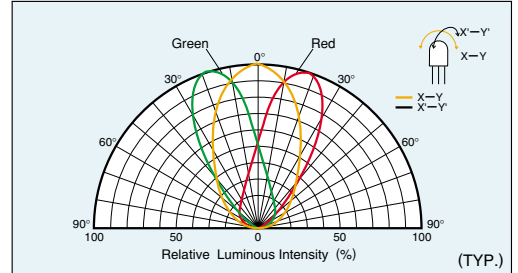
External Dimensions (Unit : mm)



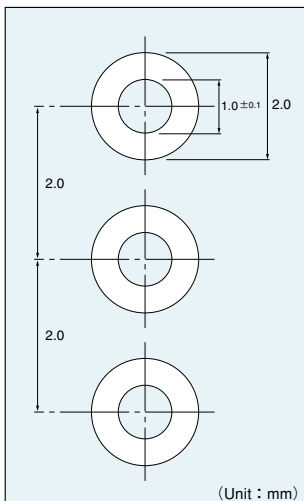
Electrical Optical Characteristics (Ta=25°C)

| Part No. | Resin Color | Forward voltage VF | | Reverse current IR | | Light wavelength | | | Brightness Iv | | |
|-----------|-------------|--------------------|---------|--------------------|--------|-----------------------|--------------------------------|---------|---------------|------------|---------|
| | | Typ. (V) | IF (mA) | Max. (μ A) | VR (V) | Peak λ_p (nm) | Half-wave $\Delta\lambda$ (nm) | IF (mA) | Min. (mcd) | Typ. (mcd) | IF (mA) |
| SPR-39MVW | Milky White | 2.1 | 10 | 10 | 3 | 563 | 40 | 10 | 3.6 | 10 | 10 |
| | | 2.0 | | | | 650 | | | 2.2 | 6.3 | |

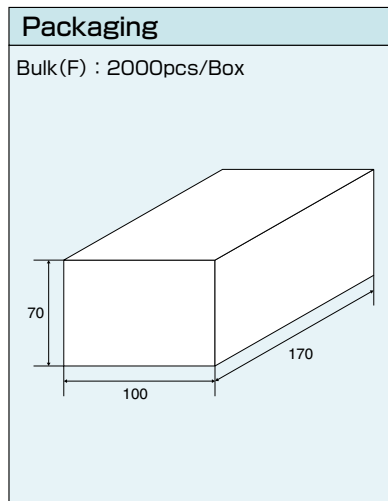
Directivity



Recommended Pad Layout

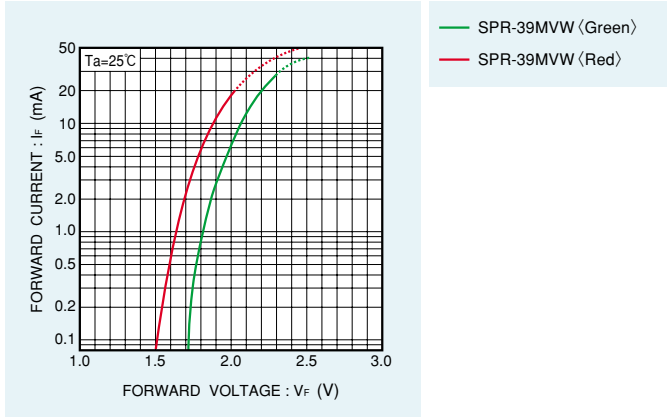


Packaging Specifications (Unit : mm)

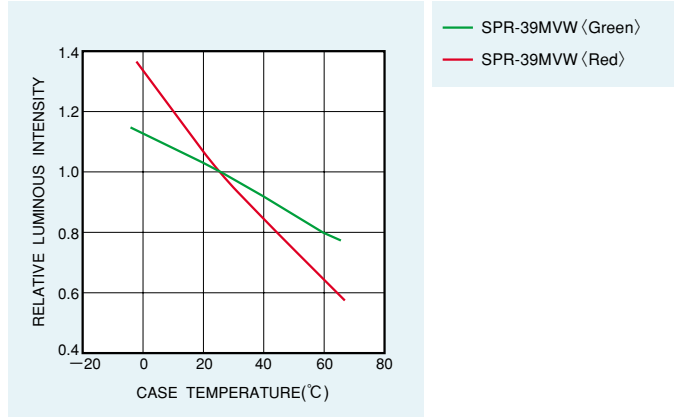


Electrical Characteristic Curves

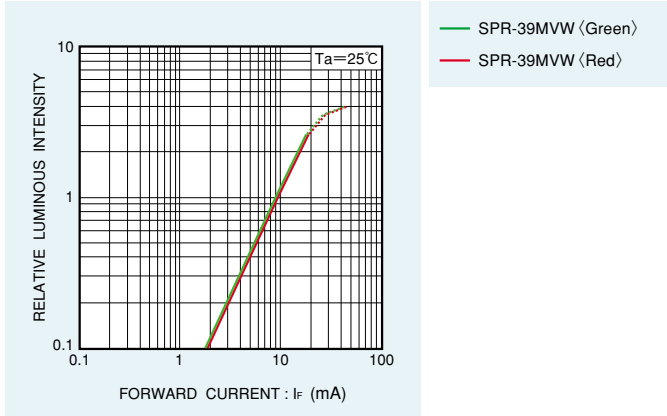
Forward Current - Forward Voltage



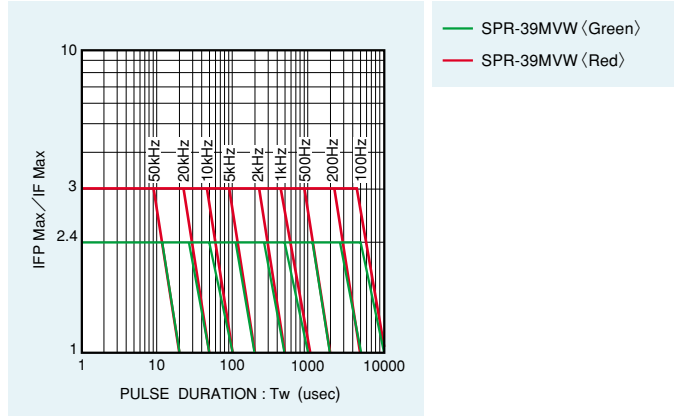
Relative Luminous Intensity - Case Temperature



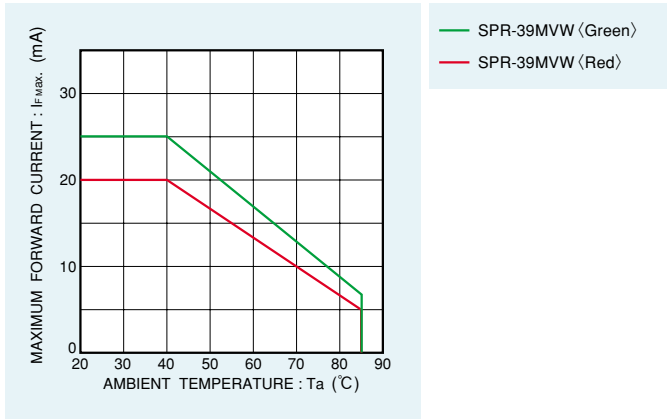
Relative Luminous Intensity - Forward Current



Ratio of Maximum Tolerable Peak Current - Pulse Duration



Derating



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