

Top View with Green LED

Features

- PLCC-2 package.
- White package
- Optical indicator and colorless clear window.
- Wide viewing angle.
- Suitable for vapor-phase reflow, Infrared reflow and wave solder processes.
- Computable with automatic placement equipment.



M3227

Descriptions

- This series is available in soft orange, green, blue and yellow.
Due to the package design, the optimized light coupling by inter reflector.
- The feature makes the ideal for light pipe application. The low current requirement makes this device ideal for portable equipment or any other application where power is at a premium.

Applications

- Automotive: backlighting in dashboard and switch.
- Telecommunication: indicator and backlighting in telephone and fax.
- Flat backlight for LCD, switches and symbols.
- Light pipe application.
- General use

Device Selection Guide

| Part No. | Chip | | Lens Color |
|-------------|----------|---------------|-------------|
| | Material | Emitted Color | |
| TSRJ-GT3227 | GaP | Green | Water Clear |

Absolute Maximum Ratings (Ta=25°C)

| Parameter | Symbol | Rating | Unit |
|--|--------|--------------------|------|
| Reverse Voltage | VR | 5 | V |
| Forward Current | IF | 30 | mA |
| Peak Forward Current (Duty 1/10@1KHz) | IFP | 160 | mA |
| Power Dissipation | Pd | 100 | mW |
| Operating Temperature | Topr | -40 ~ +85 | °C |
| Storage Temperature | Tstg | -40 ~ +90 | °C |
| Soldering Temperature | Tsol | 260 for 5 seconds. | °C |

Electro-Optical Characteristics (Ta=25°C)

| Parameter | Symbol | Min. | Typ. | Max. | Unit | Condition |
|------------------------------|-----------------|-------|-------|-------|---------|-----------|
| Luminous Intensity | Iv | 15 | 25 | ----- | mcd | IF=20mA |
| Dominant Wavelength | λ_d | ----- | 571 | ----- | nm | |
| Peak Wavelength | λ_p | ----- | 570 | ----- | nm | |
| Spectrum Radiation Bandwidth | $\Delta\lambda$ | ----- | 30 | ----- | nm | |
| Viewing Angle | $2\theta_{1/2}$ | ----- | 120 | ----- | deg | |
| Forward Voltage | VF | 1.7 | 2.1 | 2.4 | V | |
| Reverse Current | IR | ----- | ----- | 10 | μ A | VR=5V |

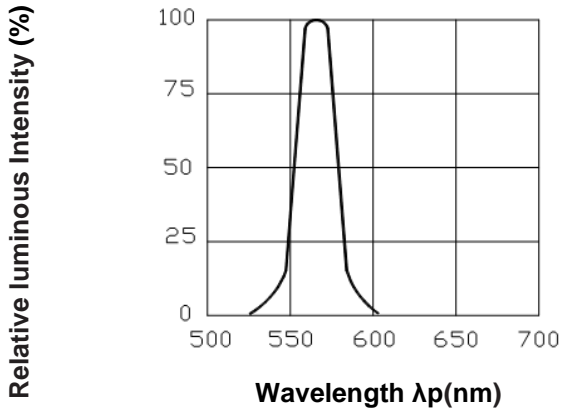
Notes: Tolerance of Luminous Intensity: $\pm 10\%$

Tolerance of Dominant wavelength: $\pm 1.0\text{nm}$

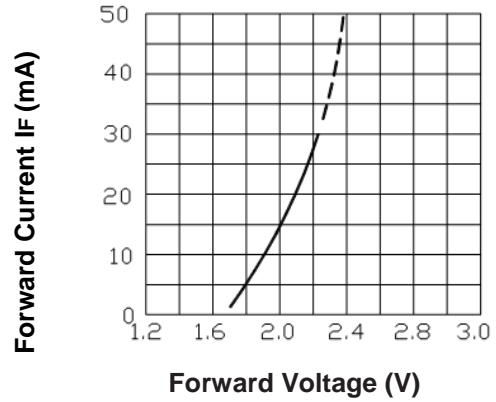
Tolerance of Forward Voltage: $\pm 0.1\text{V}$

Typical Electro-Optical Characteristics Curves (Ta=25°C)

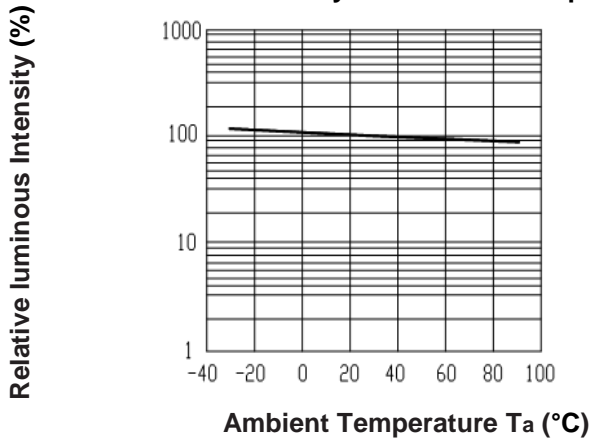
Spectrum Distribution



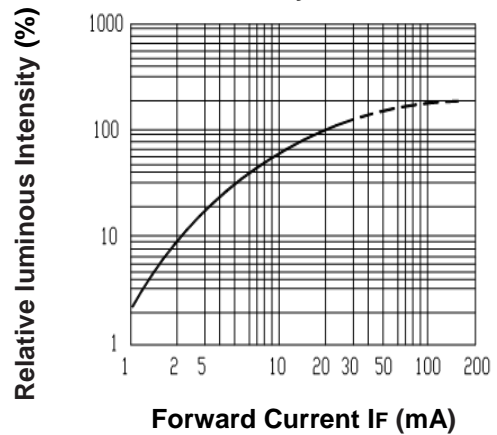
Forward Current vs. Forward Voltage



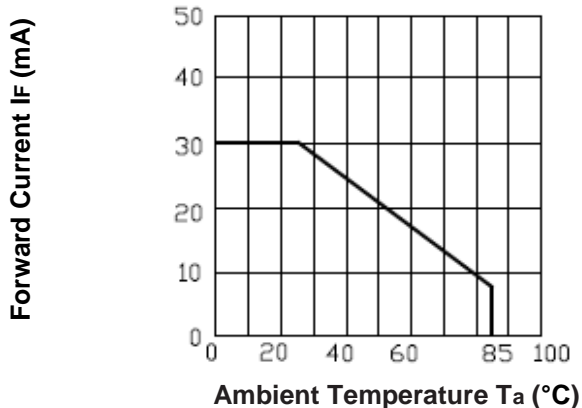
Luminous Intensity vs. Ambient Temperature



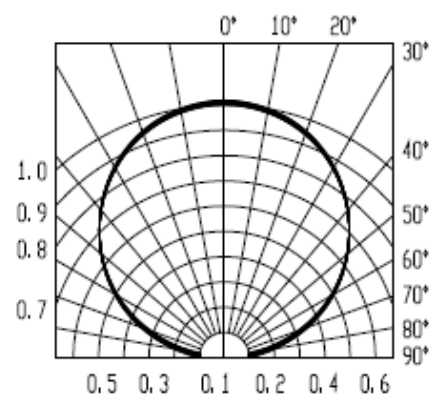
Luminous Intensity vs. Forward Current



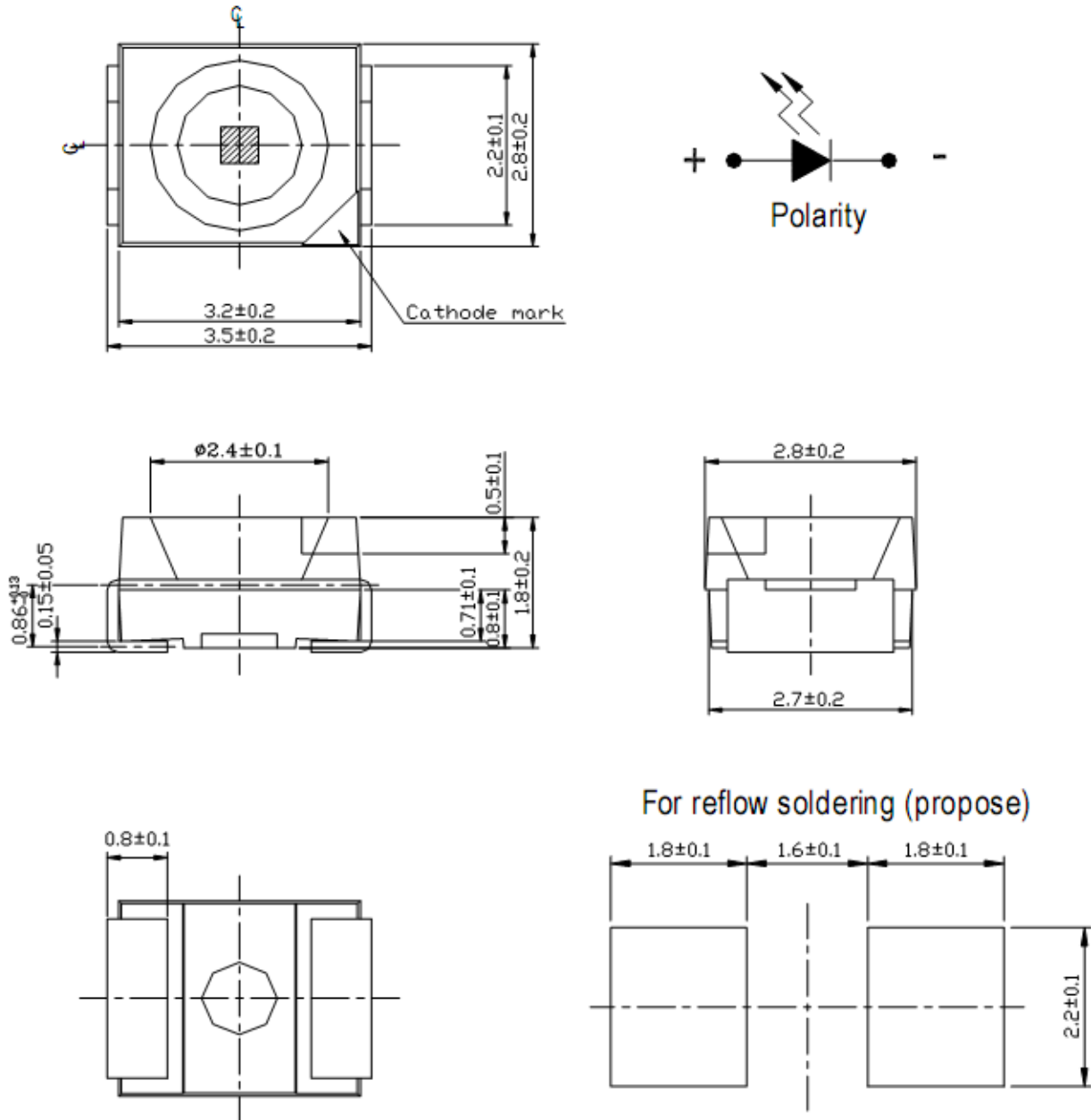
Forward Current Derating Curve



Radiation Diagram

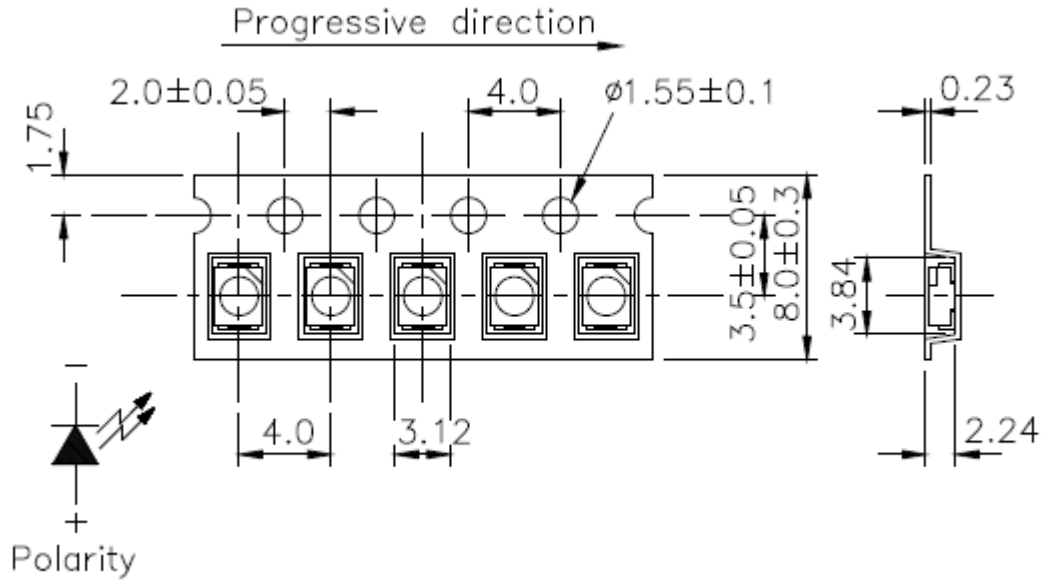


Package Outline Dimensions (Unit=mm)



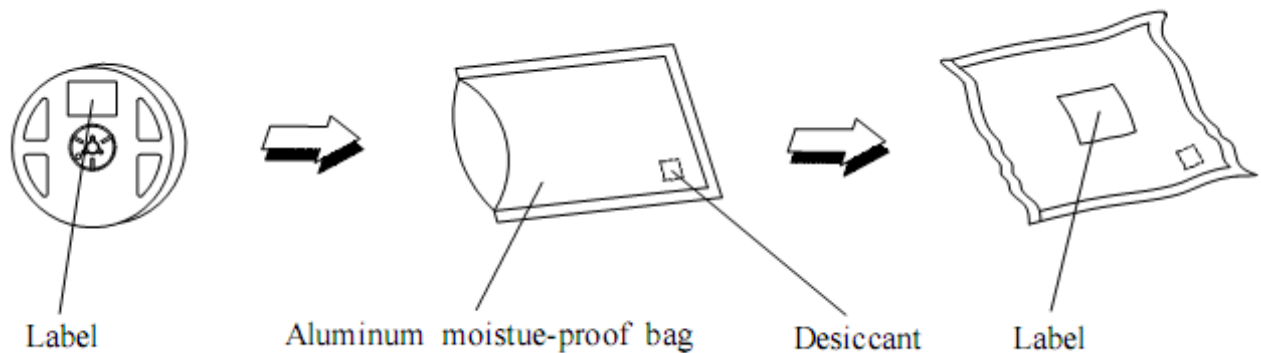
Note: The tolerances unless mentioned is ± 0.1 mm.

Carrier Tape Dimensions (Unit=mm): Loaded quantity 2000pcs per reel

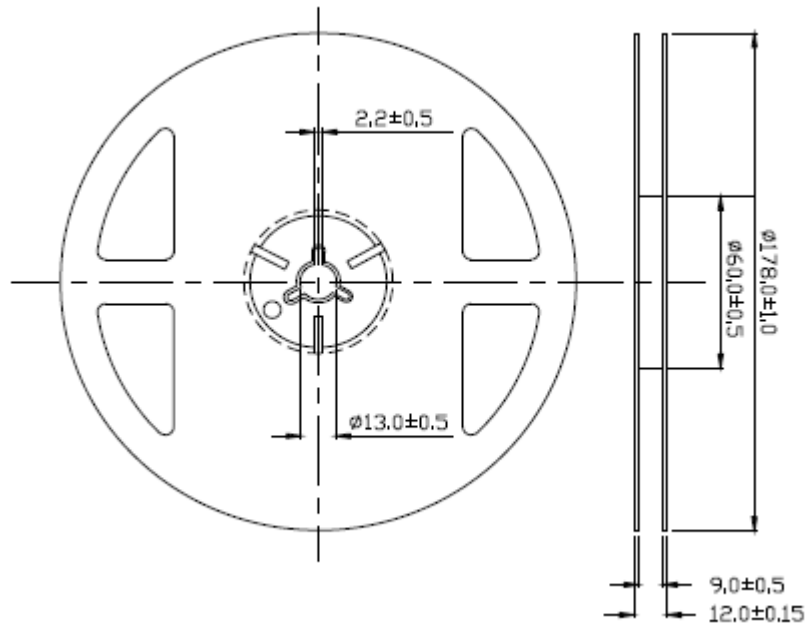


Note: The tolerances unless mentioned is ±0.1mm.

Moisture Resistant Packaging



Reel Dimensions (Unit=mm):



Note: The tolerances unless mentioned is ± 0.1 mm.

Ordering Information



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