

# SMT430

Blue color TOP LED

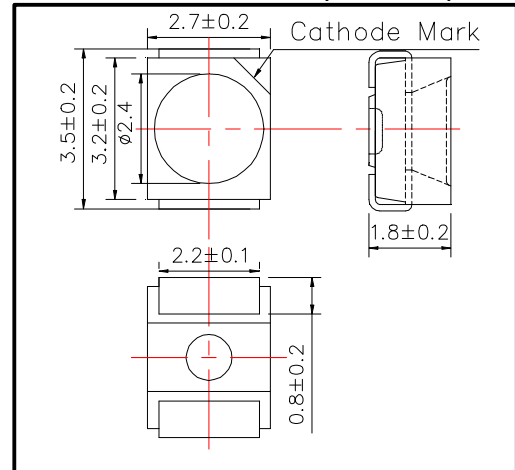
SMT430 consists of an InGaN LED mounted on the lead frame as TOP LED package and is 30mcd typical of Brightness.

It emits a spectral band of radiation at 430nm.

## Specifications

- 1) Product Name TOP LED
- 2) Type No. SMT430
- 3) Chip
  - (1) Chip Material InGaN
  - (2) Peak Wavelength 430nm typ.
- 4) Package
  - (1) Lead Frame Die Silver Plated
  - (2) Package Resin PPA Resin
  - (3) Lens Epoxy Resin

Outer dimension (Unit: mm)



## Absolute Maximum Ratings

| Item                  | Symbol           | Maximum Rated Value | Unit | Ambient Temperature  |
|-----------------------|------------------|---------------------|------|----------------------|
| Power Dissipation     | P <sub>D</sub>   | 125                 | mW   | T <sub>a</sub> =25°C |
| Forward Current       | I <sub>F</sub>   | 30                  | mA   | T <sub>a</sub> =25°C |
| Reverse Voltage       | V <sub>R</sub>   | 5                   | V    | T <sub>a</sub> =25°C |
| Operating Temperature | T <sub>OPR</sub> | -20 ~ +80           | °C   |                      |
| Storage Temperature   | T <sub>STG</sub> | -30 ~ +80           | °C   |                      |
| Soldering Temperature | T <sub>SOL</sub> | 240                 | °C   |                      |

‡Soldering condition: Soldering condition must be completed within 3 seconds at 240°C

## Electro-Optical Characteristics [T<sub>a</sub>=25°C]

| Item                 | Symbol           | Condition            | Minimum | Typical | Maximum | Unit |
|----------------------|------------------|----------------------|---------|---------|---------|------|
| Forward Voltage      | V <sub>F</sub>   | I <sub>F</sub> =20mA |         | 3.8     | 4.8     | V    |
| Reverse Current      | I <sub>R</sub>   | V <sub>R</sub> =5V   |         |         | 10      | uA   |
| Total Radiated Power | P <sub>O</sub>   | I <sub>F</sub> =20mA |         | 0.3     |         | mW   |
| Brightness           | I <sub>v</sub>   | I <sub>F</sub> =20mA |         | 30      |         | mcd  |
| Peak Wavelength      | λ <sub>P</sub>   | I <sub>F</sub> =20mA | 420     | 430     | 440     | nm   |
| Half Width           | Δλ               | I <sub>F</sub> =20mA |         | 50      |         | nm   |
| Viewing Half Angle   | θ <sub>1/2</sub> | I <sub>F</sub> =20mA |         | ±55     |         | deg. |

‡Total Radiated Power is measured by Photodyne #500

‡Brightness is measured by Tektronix J-16.

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