# SMT430

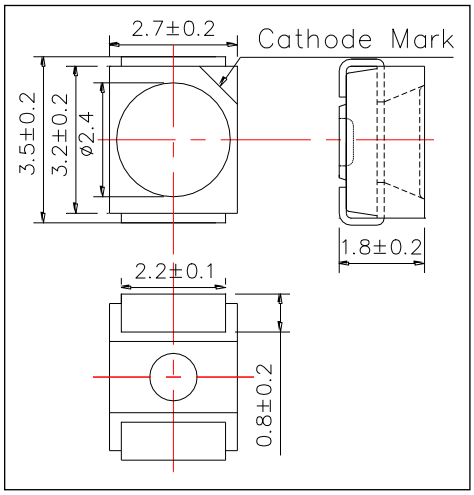
## High Performance Blue Color TOP LED

SMT430 consists of an InGaN LEDs mounted on the lead frame as TOP LED package and is 11mW typical of Total Radiated Power.
It emits a spectral band of radiation at 430nm.

<Specifications>

1. Product Name: TOP LED
2. Type Number: SMT430
3. Chip:
   - Chip Material: InGaN
   - Peak Wavelength: 430nm
4. Package
   - Lead Frame Die: Silver Plated
   - Package Resin: PPA Resin
   - Lens: Epoxy or Silicone Resin

Outer Dimension (Unit:mm)




| **Absolute Maximum Ratings** | | | | |
|---|---|---|---|---|
| Item | Symbol | Maximum Rated Value | Unit | Ambient Temperature |
| Power Dissipation | PD | 190 | mW | Ta=25℃ |
| Forward Current | IF | 50 | mA | Ta=25℃ |
| Reverse Voltage | VR | 5 | V | Ta=25℃ |
| Thermal Resistance | Rthja | 250 | K/W | |
| Junction Temperature | Tj | 100 | ℃ | |
| Operating Temperature | TOPR | -40 ~ +80 | ℃ | |
| Storage Temperature | TSTG | -40 ~ +80 | ℃ | |
| Soldering Temperature* | TSOL | 250 | ℃ | |

* Soldering condition must be completed within 5 second at 250 ℃.

| **Electro-Optical Characteristics [Ta=25℃ typ.]** | | | | | | | |
|---|---|---|---|---|---|---|---|
| Item | | Symbol | Condition | Minimum | Typical | Maximum | Unit |
| Forward Voltage | | VF | IF=20mA | | 3.3 | 4.0 | V |
| Reverse Current | | IR | VR=5V | | | 10 | uA |
| Total Radiated Power* | | PO | IF=20mA | | 11 | | mW |
| Brightness** | | IV | IF=20mA | | 35 | | mcd |
| Wavelength | Peak | λP | IF=20mA | 420 | 430 | 440 | nm |
| | Dominant | λD | | | 440 | | |
| Half Width | | Δλ | IF=20mA | | 20 | | nm |
| Viewing Half Angle | | θ1/2 | IF=20mA | | ±60 | | deg |

* Measured by S3584-08
** Measured by Tektronix J-16

RoHS Compliant

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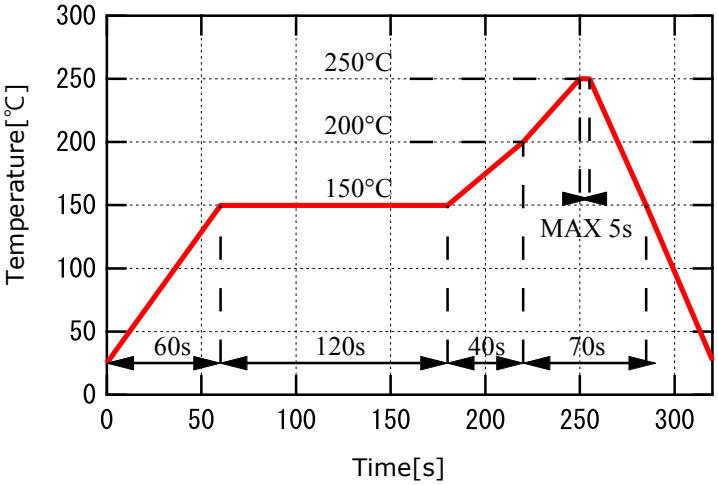
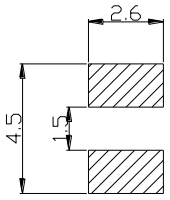
## SMD Application

IR-Reflow Soldering Profile for lead free soldering



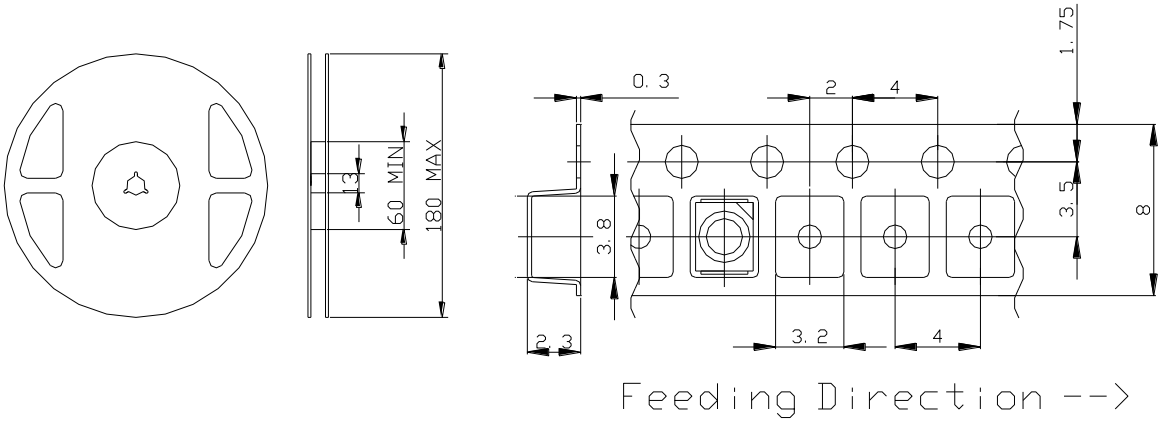

Recommended Land Layout (Unit:mm)




Don’t put stress on SMD and a circuit board after soldering

## SMD Packing

Tape and Reel Dimensions (Unit:mm)




## Wrapping

Mositure barrier bag aluminum laminated film with a desiccant to keep out the moisture absorption during the transportation and storage.