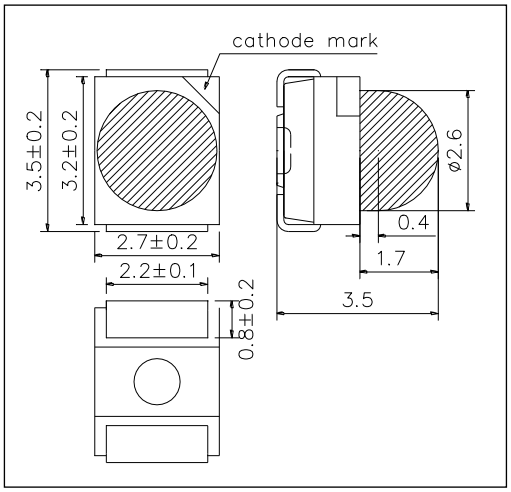
SMT470-23

High Performance Blue Color TOP LED with Lens

SMT470-23 consists of an InGaN LEDs mounted on the lead frame as TOP LED package with plastic ball lens and is 18mW typical of output power and 2800mcd of brightness. It emits a spectral band of radiation at 465nm.

Outer Dimension (Unit:mm)



<Specifications>

1. Product Name: TOP LED
2. Type Number: SMT470-23
3. Chip:
   - Chip Material: InGaN
   - Peak Wavelength: 465nm
4. Package
   - Lead Frame Die: Silver Plated
   - Package Resin: PPA Resin
   - Lens: Epoxy Resin
   - Diameter: Φ2.6mm

Absolute Maximum Ratings				
Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	PD	180	mW	Ta=25℃
Forward Current	IF	50	mA	Ta=25℃
Reverse Voltage	VR	5	V	Ta=25℃
Thermal Resistance	Rthja	200	K/W	
Junction Temperature	Tj	100	℃	
Operating Temperature	TOPR	-20 ~ +80	℃	
Storage Temperature	TSTG	-30 ~ +80	℃	
Soldering Temperature*	TSOL	255	℃	

* Soldering condition must be completed within 10 second at 255℃.

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		18.0		mW
Radiant Intensity	IE	IF=20mA		30		mW/sr
Brightness**	IV	IF=20mA		2800		mcd
Peak Wavelength	λP	IF=20mA	465	465	475	nm
Half Width	Δλ	IF=20mA		25		nm
Viewing Half Angle	θ1/2	IF=20mA		±15		deg

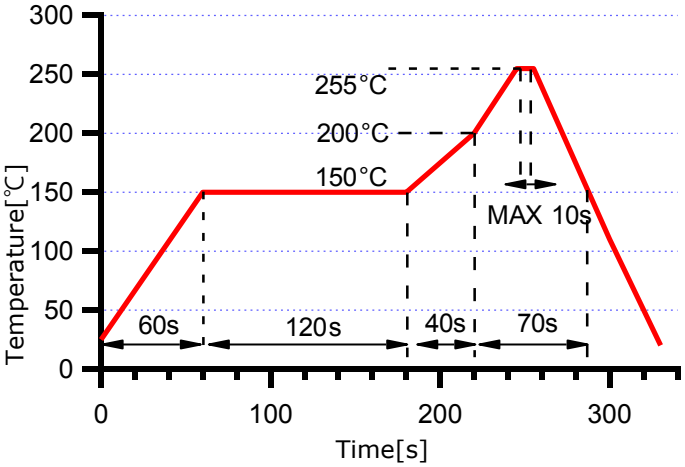
* Measured by Photodyne #500
** Measured by Tektronix J-16

RoHS Compliant

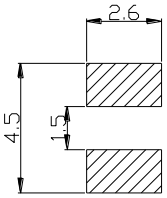
Marubeni America Corporation | 3945 Freedom Circle, Suite 1000, Santa Clara, CA95054
Tel: 408-330-0650 | Fax: 408-330-0655 | Email: sales@tech-led.com

SMD Application

IR-Reflow Soldering Profile for lead free soldering



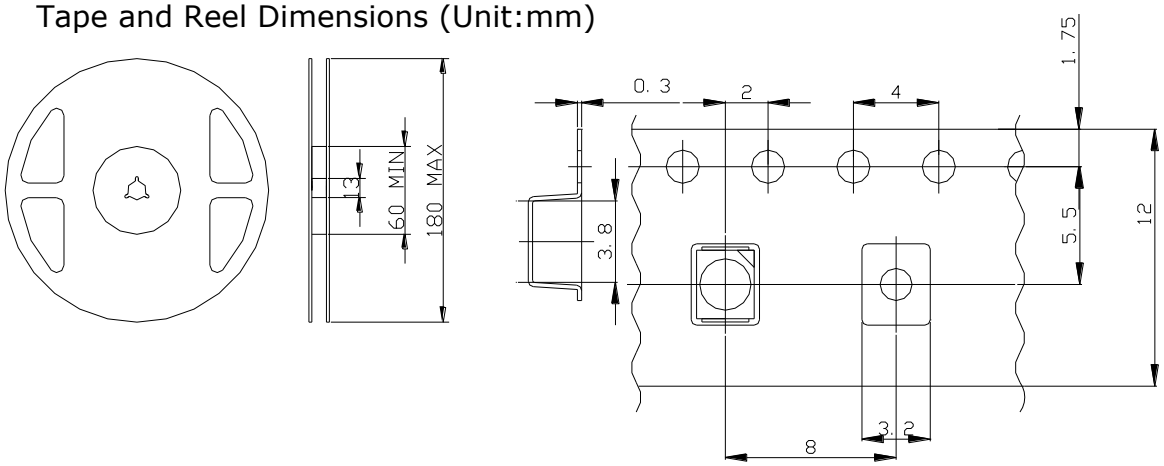
Recommended Land Layout
(Unit:mm)



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.