

Lead (Pb) Free Product RoHS compliant

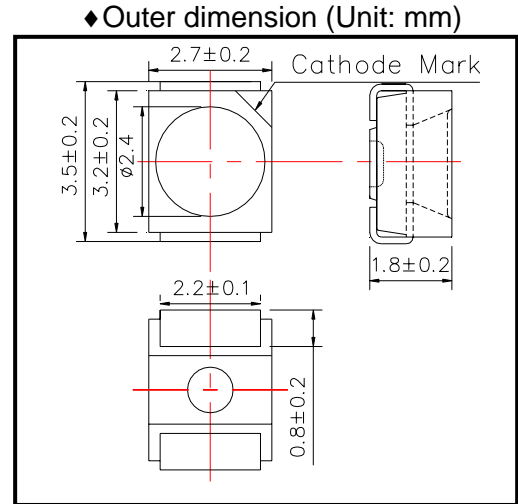
# SMT490 High Bright Greenish Blue color TOP LED

SMT490 consists of an InGaN LED mounted on the lead frame as TOP LED package and is 80mcd typical of Brightness.

It emits a spectral band of radiation at 490nm.

◆ Specifications

- 1) Product Name TOP LED
- 2) Type No. SMT490
- 3) Chip
  - (1) Chip Material InGaN
  - (2) Peak Wavelength 490nm typ.
- 4) Package
  - (1) Lead Frame Die Silver Plated
  - (2) Package Resin PPA Resin
  - (3) Lens Epoxy Resin



◆ Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P <sub>D</sub>	120	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 230°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		3.50	4.30	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		1.0		mW
Brightness	I <sub>V</sub>	I <sub>F</sub> =20mA		80		mcd
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =20mA		0.3		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	480	490	500	nm
Half Width	Δλ	I <sub>F</sub> =20mA		30		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.