

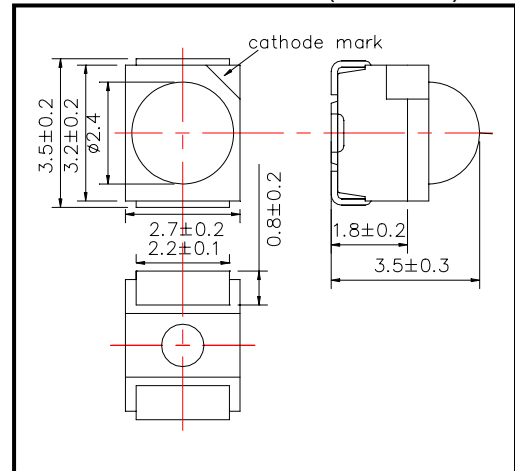
## SMT505-24 High Performance Green color TOP LED with Lens

SMT505-24 consists of an InGaN LED mounted on the lead frame as TOP LED package with plastic ball lens and is 1,600mcd typical of Brightness. It emits a spectral band of radiation at 505nm.

### ◆ Specifications

1) Product Name	TOP LED
2) Type No.	SMT505-24
3) Chip	
(1) Chip Material	InGaN
(2) Peak Wavelength	505nm typ.
4) Package	
(1) Lead Frame Die	Silver Plated
(2) Package Resin	PPA Resin
(3) Lens	Epoxy Resin

### ◆ Outer dimension (Unit: mm)



### ◆ Absolute Maximum Rating

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
Pulse Forward Current	I <sub>FP</sub>	100	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	

‡ Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

‡ 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		2.0		mW
Brightness	I <sub>v</sub>	I <sub>F</sub> =20mA	900	1,600		mcd
Radiant Intensity	I <sub>E</sub>	I <sub>F</sub> =20mA		7.0		mW/sr
Peak Wavelength	λ <sub>P</sub>	I <sub>F</sub> =20mA	500	505	510	nm
Half Width	Δλ	I <sub>F</sub> =20mA		30		nm
Viewing Half Angle	θ <sub>1/2</sub>	I <sub>F</sub> =20mA		±18		deg.

‡ Total Radiated Power is measured by Photodyne #500

‡ Brightness is measured by Tektronix J-16.

# Marubeni

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