

SMT1200

High Performance NIR TOP IR LED

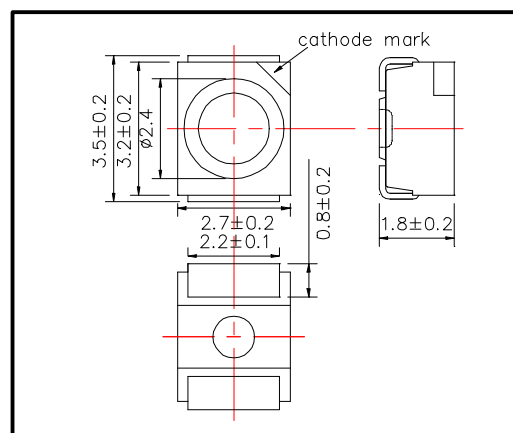
SMT1200 consists of an InGaAsP LED mounted on the lead frame as TOP LED package, and is sealed with epoxy resin.

It emits a spectral band of radiation at 1200nm.

Other dimension(Unit:mm)

Specifications

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|---------------------|---------------|
| 1) Product Name | TOP NIR LED |
| 2) Type No. | SMT1200 |
| 3) Chip | |
| (1) Chip Material | InGaAsP |
| (2) Peak Wavelength | 1200nm typ. |
| 4) Package | |
| (1) Lead Frame Die | Silver Plated |
| (2) Package Resin | PPA Resin |
| (3) Lens | Epoxy resin |



Absolute Maximum Rating

Item	Symbol	Maximum Rated Value	Unit	Ambient Temperature
Power Dissipation	P _D	120	mW	T _a =25°C
Forward Current	I _F	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	mA	T _a =25°C
Reverse Voltage	V _R	5	V	T _a =25°C
Operating Temperature	T _{OPR}	-20 ~ +85	°C	
Storage Temperature	T _{STG}	-30 ~ +100	°C	
Soldering Temperature	T _{SOL}	230	°C	

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

‡Soldering condition: Soldering condition must be completed within 3 seconds at 230°C

Electro-Optical Characteristics

Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	V _F	I _F =50mA		1.2	1.5	V
Reverse Current	I _R	V _R =5V			10	uA
Total Radiated Power	P _O	I _F =50mA		1.0		mW
Peak Wavelength	λ _P	I _F =50mA	1150	1200	1250	nm
Half Width	Δλ	I _F =50mA		100		nm
Viewing Half Angle	Q _{1/2}	I _F =50mA		±55		deg.
Rise Time	t _r	I _F =50mA		10		ns
Fall Time	t _f	I _F =50mA		10		ns

‡Total Radiated Power is measured by Ando AQ2140/2742