

SMT1300-27

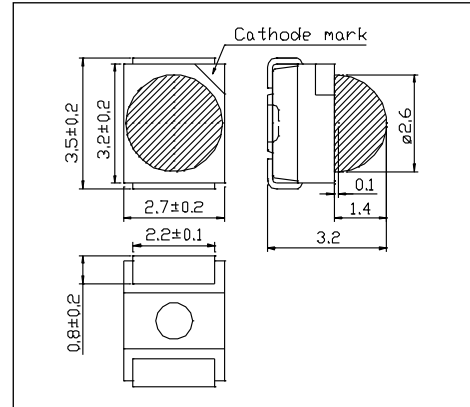
High Performance TOP NIR LED with Lens

SMT1300-27 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 1300nm.

<Specifications>

1. Product Name: TOP NIR LED
2. Type Number: SMT1300-27
3. Chip:
 - Chip Material: InGaAsP
 - Peak Wavelength: 1300nm
4. Package:
 - Lead Frame Die: Silver Plated
 - Package Resin: PA6T
 - Lens: Epoxy or Solicone Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	130	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Thermal Resistance	Rthja	80	K/W
Junction Temperature	Tj	120	°C
Operating Temperature	TOPR	-40 ~ +100	°C
Storage Temperature	TSTG	-40 ~ +100	°C
Soldering Temperature**	TSOL	250	°C

* Duty=1% and Pulse Width=10us.

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

Electro-Optical Characteristics [Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.0	1.3	V
	VFP	IFP=1A		1.6		
Radiated Power*	PO	IF=50mA		5		mW
		IFP=1A		24		
Peak wavelength	λP	IF=50mA	1250	1300	1350	nm
Half Width	Δλ	IF=50mA		86		nm
Viewing Half Angle	θ1/2	IF=50mA		±28		deg

* Measured by G8370-85



Disclaimer

Product specifications and data shown in this product catalog are subject to change without notice for the purposes of improving product performance, reliability, design, or otherwise.

Product data and parameters in this catalog are typical values based on reasonably up-to-date measurements. Product data and parameters may vary by user application and over time.

Products shown in this catalog are intended to be used for general electronic equipment. Products are not guaranteed for applications where product malfunction or failure may cause personal injury or death, including but not limited to life-supporting / saving devices, medical devices, safety devices, airplanes, aerospace equipment, automobiles, traffic control systems, and nuclear reactor control systems.

2015.04