

SMT750-27

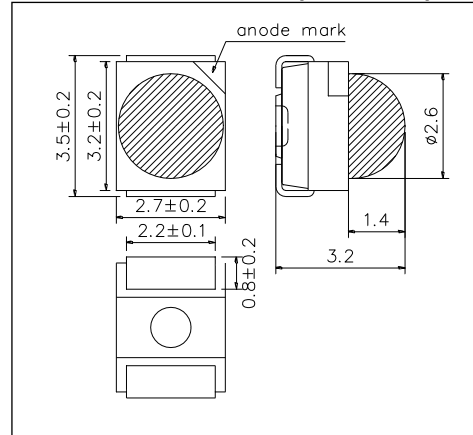
Infrared TOP IR LED with Lens

SMT750-27 consists of an AlGaAs LED mounted on the lead frame as TOP LED package with epoxy resin lens. It is 15mW/sr typical. It emits a spectral band of radiation at 750nm.

<Specifications>

1. Product Name: TOP IR LED
2. Type Number: SMT750-27
3. Chip:
 - Chip Material: AlGaAs
 - Peak Wavelength: 750nm
4. Package
 - Lead Frame Die: Silver Plated
 - Package Resin: PPA Resin
 - Lens: Epoxy Resin
 - Diameter: $\Phi 2.6$ mm

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	190	mW
Forward Current	IF	100	mA
Pulse Forward Current*	IFP	500	mA
Reverse Voltage	VR	5	V
Operating Temperature	TOPR	-20 ~ +80	°C
Storage Temperature	TSTG	-30 ~ +80	°C
Soldering Temperature**	TSOL	255	°C

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

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

Electro-Optical Characteristics[Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=50mA		1.85	2.00	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=50mA	12	20		mW
Radiant Intensity**	IE	IF=50mA	10	15		mW/sr
Peak Wavelength	λP	IF=50mA	735	750	765	nm
Half Width	$\Delta\lambda$	IF=50mA		25		nm
Viewing Half Angle	$\theta 1/2$	IF=50mA		± 28		deg
Rise Time	tr	IF=50mA		80		ns
Fall Time	tf	IF=50mA		80		ns

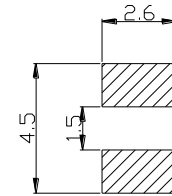
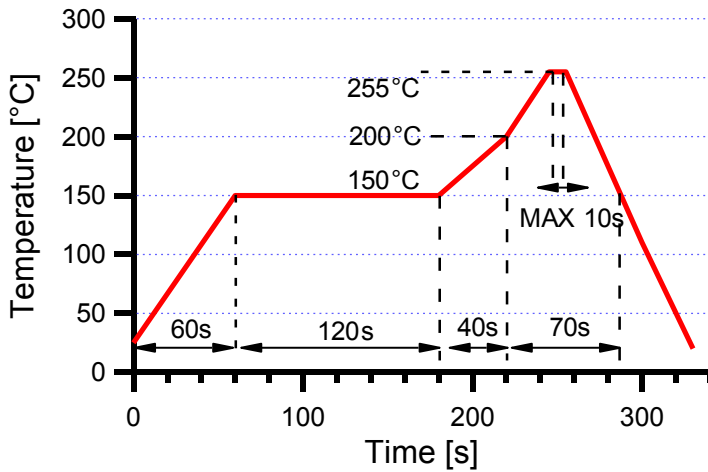
* Measured by Photodyne #500

** Measured by Tektronix J-6512



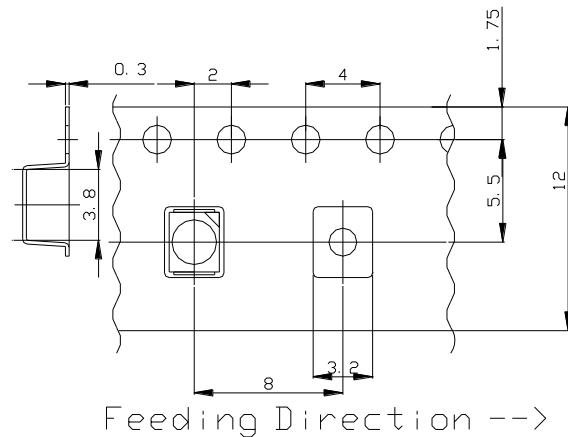
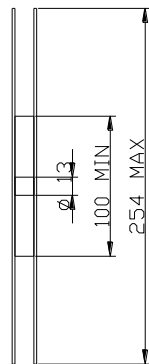
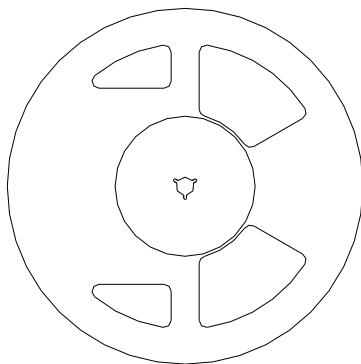
◆ SMD Application
Recommended reflow soldering profile

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

Moisture barrier bag aluminum laminated film with a desiccant to keep out the moisture absorption during the transportation and storage.