

**SMT670-23**

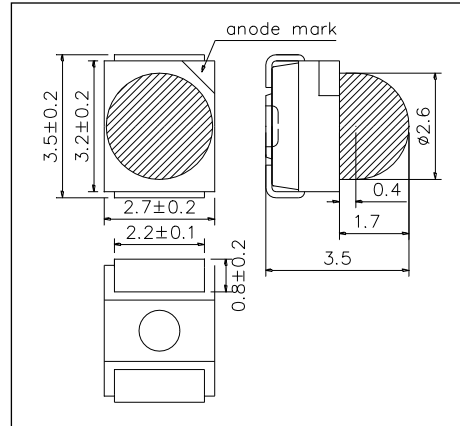
High Performance Red Color TOP LED

SMT670-23 consists of an AlGaAs LED mounted on the lead frame as TOP LED package with plastic ball lens. It is 6mW typical of output power and 13mW/sr of radiant intensity. It emits a spectral band of radiation at 670nm.

<Specifications>

1. Product Name: TOP LED
2. Type Number: SMT670-23
3. Chip:
  - Chip Material: AlGaAs
  - Peak Wavelength: 670nm
4. Package
  - Lead Frame Die: Silver Plated
  - Package Resin: PPA Resin
  - Lens: Epoxy Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings[Ta=25°C]			
Item	Symbol	Maximum Rated Value	Unit
Power Dissipation	PD	100	mW
Pulse Forward Current*	IF	50	mA
Reverse Voltage	VR	5	V
Operating Temperature	TOPR	-30 ~ +80	°C
Storage Temperature	TSTG	-40 ~ +80	°C
Soldering Temperature**	TSOL	250	°C

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

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

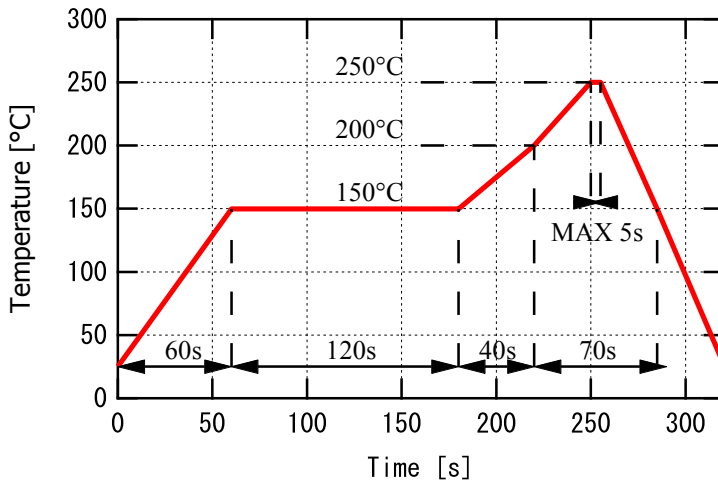
Electro-Optical Characteristics[Ta=25°C]						
Item	Symbol	Condition	Minimum	Typical	Maximum	Unit
Forward Voltage	VF	IF=20mA		1.8	2.3	V
Reverse Current	IR	VR=5V			10	uA
Total Radiated Power*	PO	IF=20mA		6		mW
Radiant Intensity	IE	IF=20mA		13		mW/sr
Peak Wavelength	λP	IF=20mA	660	670	680	nm
Half Width	Δλ	IF=20mA		20		nm
Viewing Half Angle	θ1/2	IF=20mA		±15		deg

\* Measured by Photodyne #500

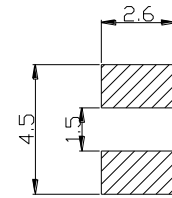


◆ SMD Application

Recommended reflow soldering profile



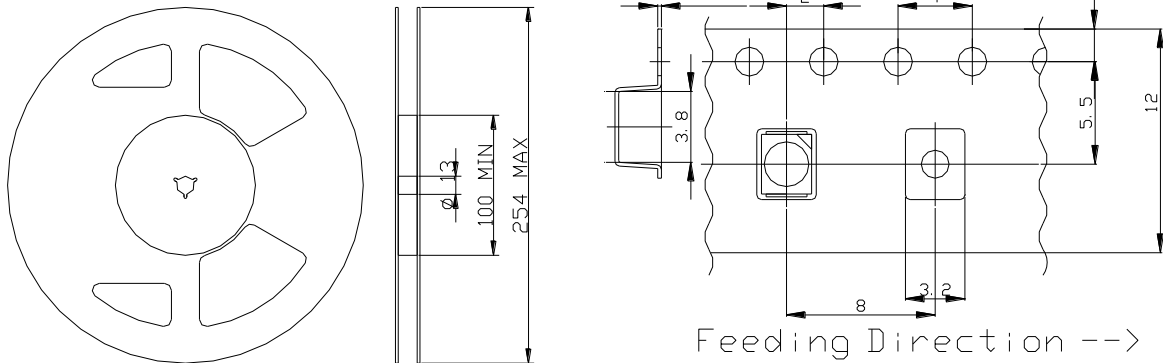
Recommended Land Layout (Unit: mm)



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.