

SMT760/850

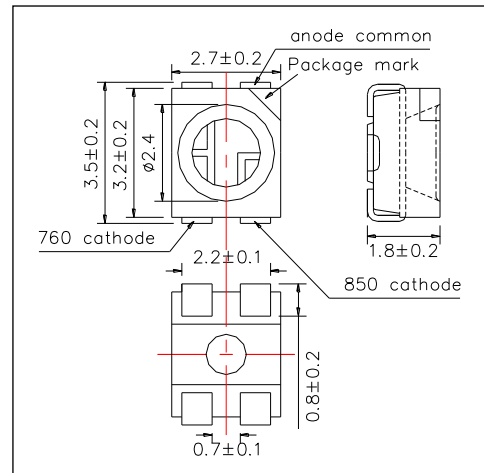
High Performance Bi-color TOP LED

Bi-color LED of SMT760/850 consists of DDH AlGaAs LEDs mounted on the lead frame as TOP LED package and is sealed with epoxy resin.
It emits a spectral band of radiation at 760nm and 850nm at anode common.

Outer Dimension (Unit:mm)

<Specifications>

1. Product Name: Bi-color TOP LED
2. Type Number: SMT760/850
3. Chip:
 - Chip Material: AlGaAs
 - Peak Wavelength: 760nm/850nm
4. Package
 - Lead Frame Die: Silver Plated
 - Package Resin: PPA or PA9T Resin
 - Lens: Epoxy or Silicone Resin



Absolute Maximum Ratings					
Item	Symbol	Maximum Rated Value		Unit	Ambient Temperature
		760nm	850nm		
Power Dissipation	PD	165	150	mW	Ta=25°C
Forward Current	IF	75		mA	Ta=25°C
Pulse Forward Current*	IFP	500		mA	Ta=25°C
Reverse Voltage	VR	5		V	Ta=25°C
Operating Temperature	TOPR	-20 ~ +80		°C	
Storage Temperature	TSTG	-30 ~ +80		°C	
Soldering Temperature**	TSOL	250		°C	

* Duty=1% and Pulse Width=10μs.

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

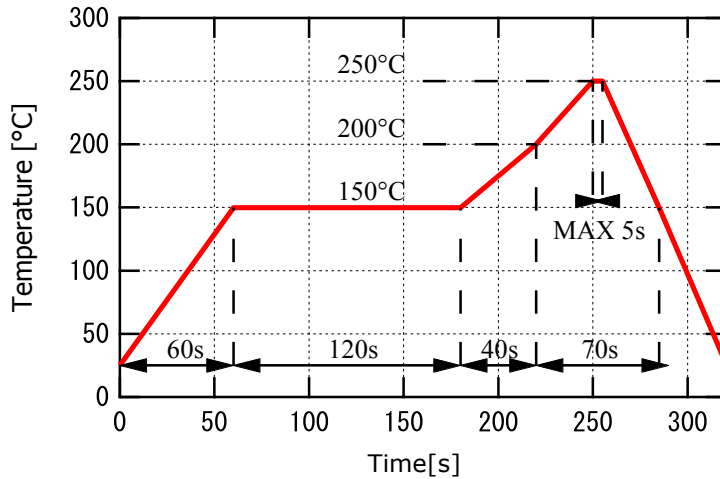
Electro-Optical Characteristics [Ta=25°C typ.]									
Item	Symbol	Condition	Minimum		Typical		Maximum		Unit
			760	850	760	850	760	850	
Forward Voltage	VF	IF=50mA			1.85	1.60	2.00	1.80	V
Reverse Current	IR	VR=5V					10		uA
Total Radiated Power*	PO	IF=50mA	7.0	10.0	14.0	18.0			mW
Peak Wavelength	λP	IF=50mA	750	840	760	850	770	860	nm
Half Width	Δλ	IF=50mA			35	40			nm
Viewing Half Angle	θ1/2	IF=50mA			±55				Deg.

* Measured by S3584-08

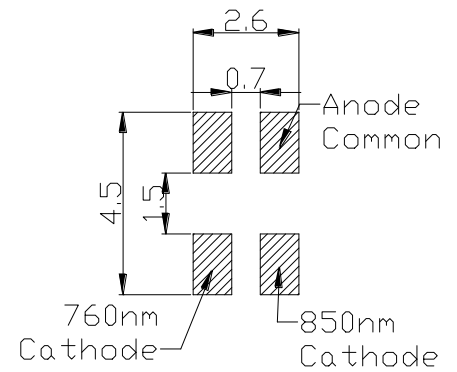


SMD Application

Recommended reflow soldering profile



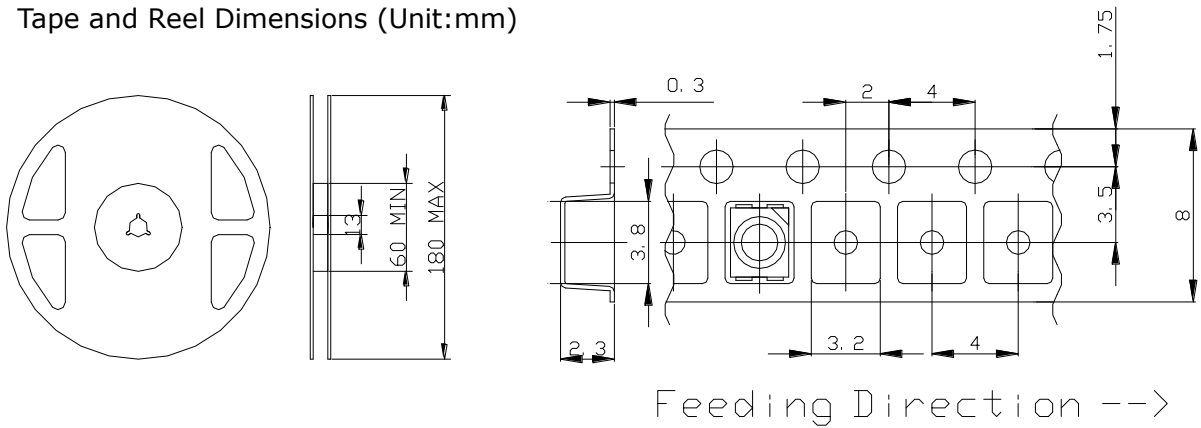
Recommended land layout (unit:mm)



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.