

PRELIMINARY

SMT700/940

High Performance Bi-color TOP LED

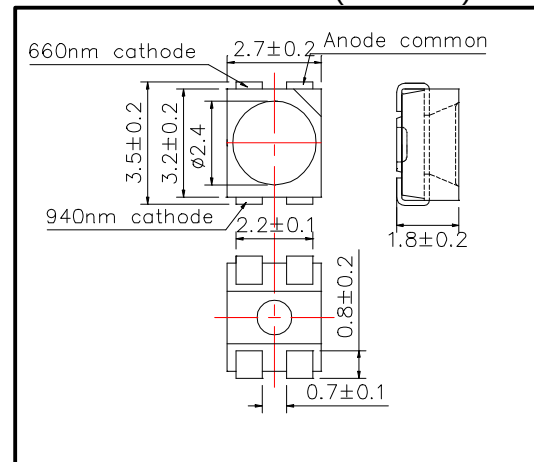
Bi-color LED of SMT700/940 consists of DDH AlGaAs and GaAs LEDs mounted on the lead frame as TOP LED package and is sealed with epoxy resin.

It emits a spectral band of radiation at 700nm and 940nm at anode common.

Specifications

- 1) Product Name Bi-color TOP LED
- 2) Type No. SMT700/940
- 3) Chip
 - (1) Chip Material AlGaAs/GaAs
 - (2) Peak Wavelength 700nm/940nm
- 4) Package
 - (1) Lead Frame Die Silver Plated
 - (2) Package Resin PPA Resin
 - (3) Lens Epoxy Resin

Outer dimension (Unit: mm)



Absolute Maximum Ratings

Item	Symbol	Maximum Rated Value		Unit	Ambient Temperature
		700nm	940nm		
Power Dissipation	P _D	110	80	mW	T _a =25°C
Forward Current	I _F	50	50	mA	T _a =25°C
Pulse Forward Current	I _{FP}	200	500	mA	T _a =25°C
Reverse Voltage	V _R	5		V	T _a =25°C
Operating Temperature	T _{OPR}	-20 ~ +80		°C	
Storage Temperature	T _{STG}	-30 ~ +80		°C	
Soldering Temperature	T _{SOL}	240		°C	

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

Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum		Typical		Maximum		Unit
			700nm	940nm	700nm	940nm	700nm	940nm	
Forward Voltage	V _F	I _F =50mA			1.90	1.30	2.30	1.40	V
Reverse Current	I _R	V _R =5V					10		uA
Total Radiated Power	P _O	I _F =50mA	4.0	5.0	6.0	7.5			mW
Peak Wavelength	λ _P	I _F =50mA	680	930	700	940	720	960	nm
Half Width	Δλ	I _F =50mA			20	50			nm
Viewing Half Angle	Q _{1/2}	I _F =50mA			±55				deg.

‡Total Radiated Power is measured by Photodyne #500

‡Brightness is measured by Tektronix J-16.

EPITEX INC. : 4, Nishiaketa-Cho, Higashi-Kujyou, Minami-Ku, Kyoto, Japan

Tel.: ++81-75-682-2338 Fax: ++81-75-682-2267

e-mail: sales-dep@epitex.com

<http://www.epitex.com>