

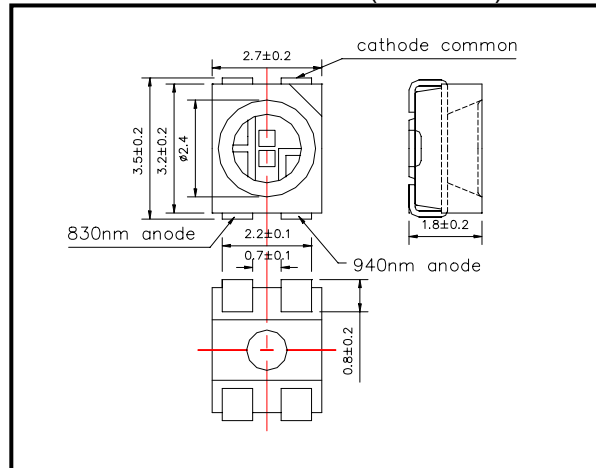
SMT830/940-C High Performance Bi-color TOP LED

Bi-color LED of SMT830/940 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 830nm and 940nm at cathode common.

◆ Specifications

- 1) Product Name Bi-color TOP LED
- 2) Type No. SMT830/940-C
- 3) Chip
- (1) Chip Material AlGaAs/GaAs
- (2) Peak Wavelength 830nm/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
		830nm	940nm		
Power Dissipation	P _D	170	140	mW	T _a =25°C
Forward Current	I _F	100	100	mA	T _a =25°C
Pulse Forward Current	I _{FP}	500	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}	255		°C	

‡Soldering condition: Soldering condition must be completed within 10 seconds at 255°C

◆ Electro-Optical Characteristics [T_a=25°C]

Item	Symbol	Condition	Minimum		Typical		Maximum		Unit
			830nm	940nm	830nm	940nm	830nm	940nm	
Forward Voltage	V _F	I _F =50mA			1.50	1.30	1.80	1.40	V
Reverse Current	I _R	V _R =5V					10		uA
Total Radiated Power	P _O	I _F =50mA	10.0	8.0	20.0	15.0			mW
Radiant Intensity	I _E	I _F =50mA			10.0	7.0			mW/sr
Peak Wavelength	λ _P	I _F =50mA	820	925	830	940	840	955	nm
Half Width	Δλ	I _F =50mA			40	50			nm
Viewing Half Angle	θ _{1/2}	I _F =50mA			±55				deg.

‡Total Radiated Power is measured by Photodyne #500

‡Brightness is measured by Tektronix J-16.