

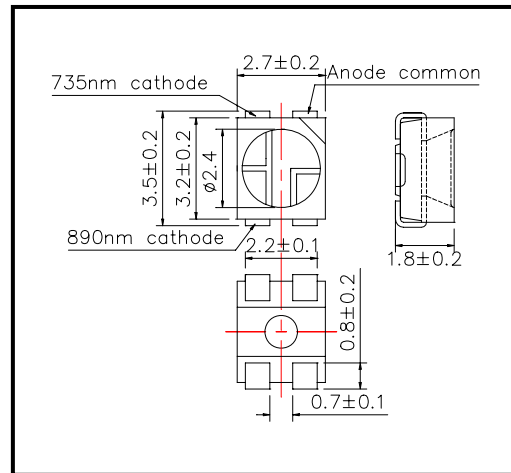
SMT735/890 High Performance Bi-color TOP LED

Bi-color LED of SMT735/890 consists of 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 735nm and 890nm at anode common.

◆ Specifications

- | | |
|---------------------|------------------|
| 1) Product Name | Bi-color TOP LED |
| 2) Type No. | SMT735/890 |
| 3) Chip | |
| (1) Chip Material | AlGaAs |
| (2) Peak Wavelength | 735nm/890nm |
| 4) Package | |
| (1) Lead Frame Die | Silver Plated |
| (2) Package Resin | PPA Resin |
| (3) Lens | Epoxy Resin |

◆ Outer dimension (Unit:mm)



◆ Absolute Maximum Rating

Item	Symbol	Maximum Rated Value		Unit	Ambient Temperature
		735nm	890nm		
Power Dissipation	PD	100	150	mW	Ta=25°C
Forward Current	IF	50	100	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	240		°C	

‡Pulse Forward Current condition: Duty=1% and Pulse Width=10us.

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

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

Item	Symbol	Condition	Minimum		Typical		Maximum		Unit
			735nm	890nm	735nm	890nm	735nm	890nm	
Forward Voltage	VF	IF=50mA			1.90	1.45	2.30	1.70	V
Reverse Current	IR	VR=5V					10		uA
Total Radiated Power	PO	IF=50mA	5.0	4.0	10.0	8.0			mW
Radiant Intensity	IE	IF=50mA	2.0	2.0	5.0	4.0			mW/sr
Peak Wavelength	λP	IF=50mA	615	865	735	880	755	895	nm
Half Width	Δλ	IF=50mA			20	75			nm
Viewing Half Angle	θ 1/2	IF=50mA			±55				deg.

‡Total Radiated Power is measured by Photodyne #500

‡Radiant Intensity is measured by Tektronix J-6512.