

SMT640/700/910

Tri-Color TOP LED

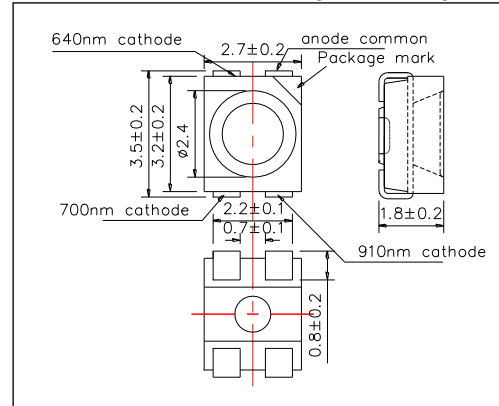
SMT640/700/910 consists of an AlGaAs LEDs mounted on the lead frame as TOP LED package and is sealed with epoxy or silicone resin.

It emits a spectral band of radiation at 640, 700 and 910nm. This device is operated as anode common.

<Specifications>

1. Product Name: Tri-Color TOP LED
2. Type Number: SMT640/700/910
3. Chip:
 - Chip Material: AlGaAs
 - Peak Wavelength: 640,700,910nm
4. Package
 - Lead Frame Die: Silver Plated
 - Package Resin: PPA Resin
 - Lens: Epoxy or Silicone Resin

Outer Dimension (Unit:mm)



Absolute Maximum Ratings [Ta=25°C]					
Item	Symbol	Maximum Rated Value			Unit
		640nm	700nm	910nm	
Power Dissipation	PD	110	120	150	mW
Forward Current	IF	50	50	100	mA
Reverse Voltage	VR	5			V
Junction Temperature	Tj	100			°C
Thermal Resistance	Rthja	190	160	290	K/W
Operating Temperature	TOPR	-30 ~ +80			°C
Storage Temperature	TSTG	-40 ~ +80			°C
Soldering Temperature*	TSOL	255			°C

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

Electro-Optical Characteristics [Ta=25°C]												
Item	Symbol	Condition	Minimum			Typical			Maximum			Unit
			640	700	910	640	700	910	640	700	910	
Forward Voltage	VF	IF=20mA				2.0	1.8	1.3	2.2	2.1	1.4	V
Reverse Current	IR	VR=5V							-			uA
Total Radiated Power*	PO	IF=20mA	0.3	1.2	2.5	0.6	2.5	4.5				mW
Radiant Intensity**	IE	IF=20mA				3	10	18				mcd
Peak wavelength	λP	IF=20mA				640	700	910				nm
Half Width	Δλ	IF=20mA				20	24	42				nm
Viewing Half Angle	θ1/2	IF=20mA				±55						deg

* Measured by Photodyne #500

** Measured by Tektronix J-6512

