

Description

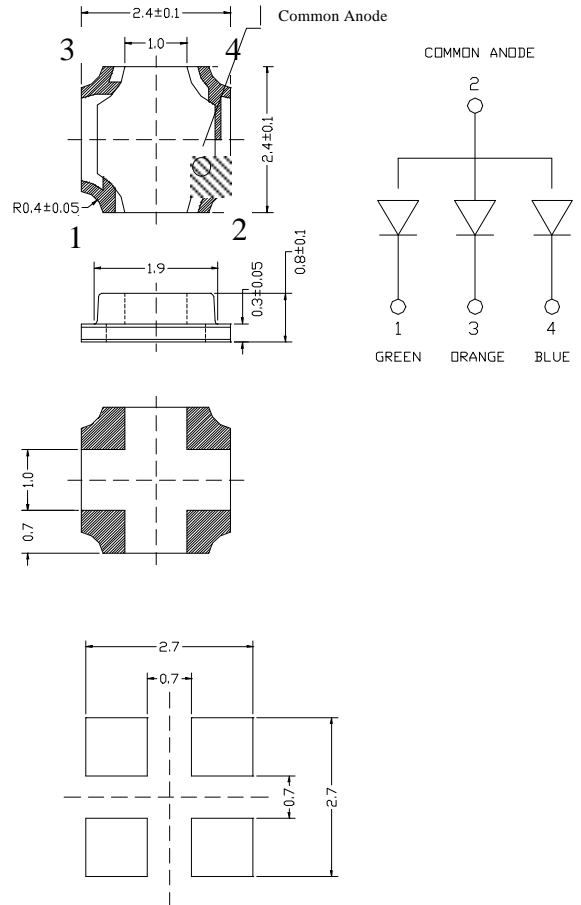
The MSL-157RGB, a full colors device, is made with InGaN (on Sapphire substrate) BLUE, TRUE GREEN and AlInGaP SOFT RED LED dice. It is PCB type package, suitable for all SMT assembly methods.

Features

- Key pad backlighting
- Symbol backlighting
- Front panel indicator

Package Dimensions

Unit: mm



- Notes :
1. All dimensions are in millimeters.
 2. Tolerance is ± 0.10 mm unless otherwise noted.

Absolute Maximum Ratings

@ $T_A = 25^\circ\text{C}$

Parameter	Symbol	Maximum Rating	Unit
Peak Forward Current(1/10 Duty Cycle@1KHz)	I_{FP}	100	mA
Continuous Forward Current	I_F	30	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{opr}	-20°C to +80°C	
Storage Temperature Range	T_{stg}	-30°C to +100°C	

Optical-Electrical Characteristics

Blue

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	15	40	-	mcd
Forward Voltage	I _F =20mA	V _F	-	3.7	4.2	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Peak/Dominant Wavelength	I _F =20mA	λ _d	-	470	-	nm
Spectral Linewidth	I _F =20mA	Δλ	-	26	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	120	-	deg.

Green

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	70	150	-	mcd
Forward Voltage	I _F =20mA	V _F	-	3.7	4.2	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Peak/Dominant Wavelength	I _F =20mA	λ _d	-	525	-	nm
Spectral Linewidth	I _F =20mA	Δλ	-	35	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	120	-	deg.

Orange

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	25	50	-	mcd
Forward Voltage	I _F =20mA	V _F	-	2.0	2.6	V
Reverse Current	V _R =5V	I _R	-	-	100	μA
Peak/Dominant Wavelength	I _F =20mA	λ _d	-	625	-	nm
Spectral Linewidth	I _F =20mA	Δλ	-	20	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	120	-	deg.

Typical Optical-Electrical Characteristic Curves

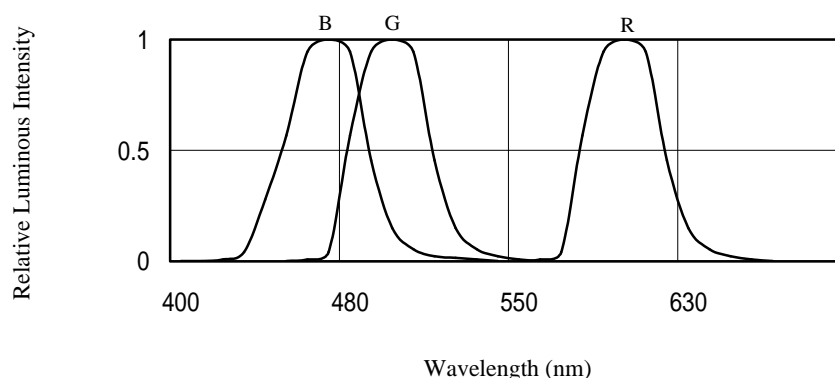


FIG.1 RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

Typical Optical-Electrical Characteristic Curves

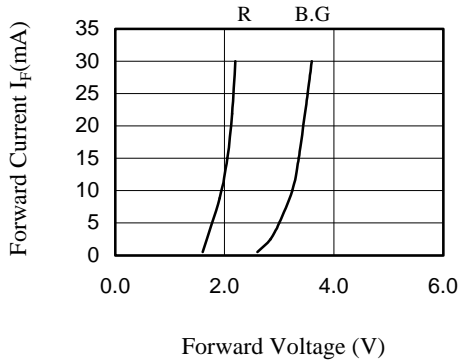


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE

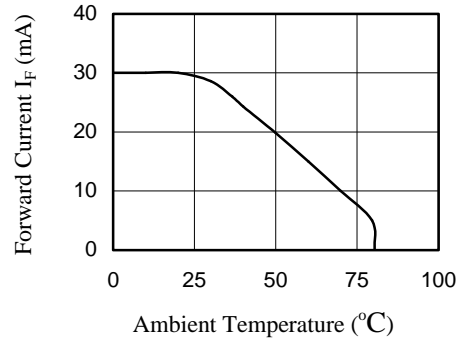


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE

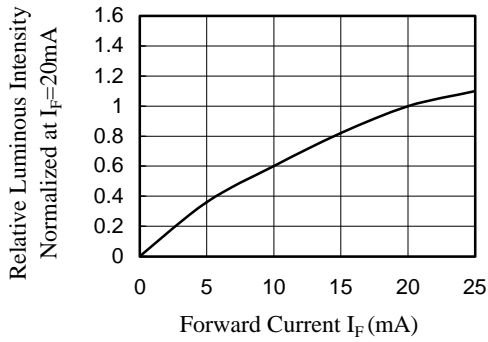


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT

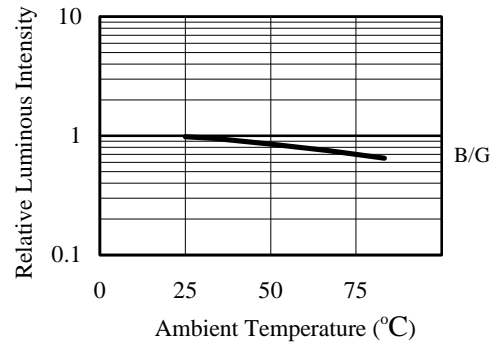


FIG.5-2 RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

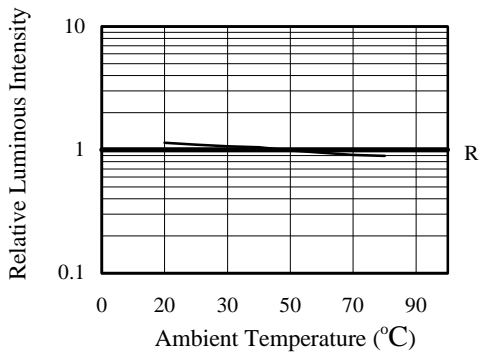


FIG.5-3 RELATIVE LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

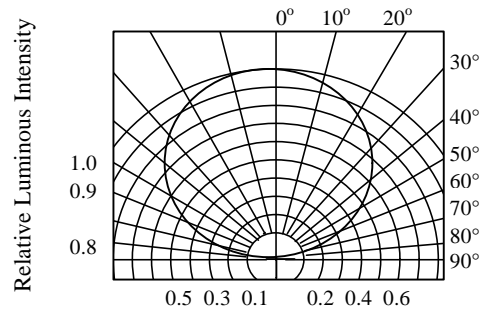


FIG.6 RADIATION DIAGRAM