

Description

The MSL-194UR, a RED source Chip LED device, is designed in an indnstry standard package suitable for SMT assembly method. It utilizes AlGaAs on AlGaAs LED chip technology and water clear epoxy package.

Applications

- Small Size
- Industry Standard Footprint(0603)
- Compatible with IR Solder process
- Availalble in 8 mm Tape on 7"(178mm)

Diameteer Reels

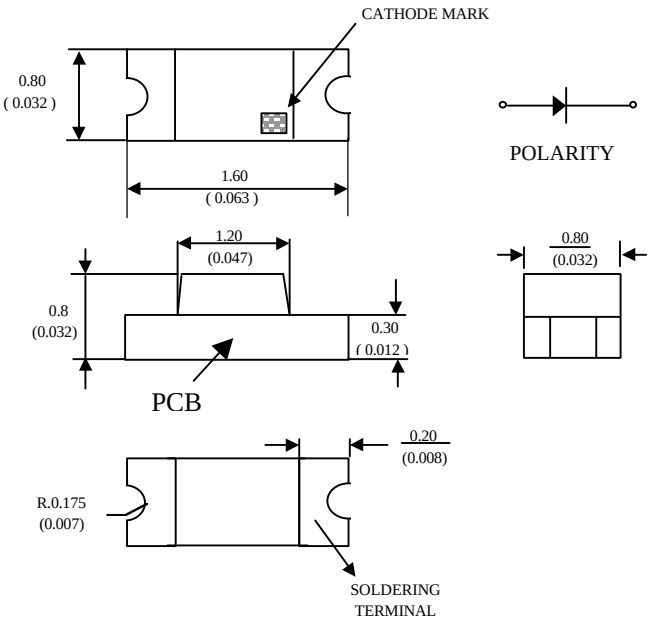
Features

- Push-Button Backlighting
- LCD Backlighting
- Symbol Backlighting
- Front Panel Indicator

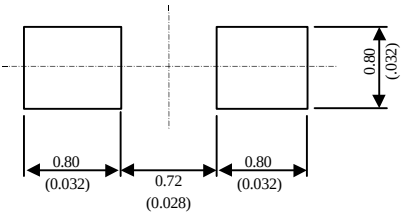
Absolute Maximum Ratings

- NOTE:
1. All dimensions are in millimeter (inches)
 2. Tolerance is ± 0.1mm (.004") unless otherwise specified.

Package Dimensions



Recommended Solder Patterns



@ T_A=25°C

Parameter	Symbol	Maximum Rating	Unit
Peak Forward Current(1/10 Duty Cycle@1KHz)	I _{FP}	200	mA
DC Forward Current	I _F	25	mA
Power Dissipation	P _D	68	mW
Reverse Voltage	V _R	5	V
Operating Temperature Range	T _{OPR}	-25°C to +80°C	
Storage Temperature Range	T _{STG}	-30°C to +85°C	

Optical-Electrical Characteristics

@ T_A=25°C

Parameter	Test Conditions	Symbol	Min .	Typ .	Max .	Unit .
Luminous Intensity	I _F =20mA	I _V	15	31.5	-	mcd
Forward Voltage	I _F =20mA	V _F	-	2.1	2.5	V
Reverse Current	V _R =5V	I _R	-	-	10	μA
Peak/Dominant Wavelength	I _F =20mA	λ _p /λ _d	-	660/640	-	nm
Spectral Linewidth	I _F =20mA	Δλ	-	20	-	nm
Viewing Angle	I _F =20mA	2θ _{1/2}	-	130	-	deg.

Typical Optical-Electrical Characteristic Curves

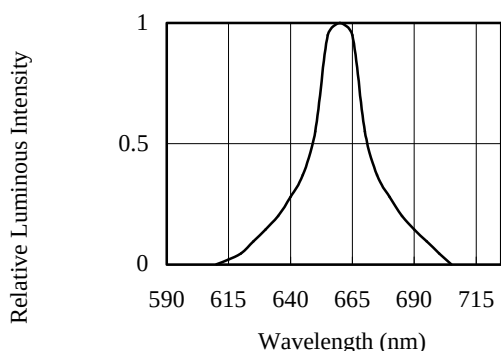


FIG.1 RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

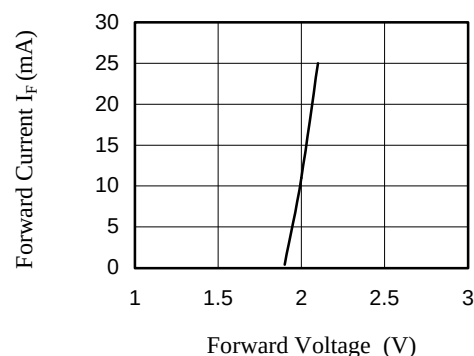


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE.

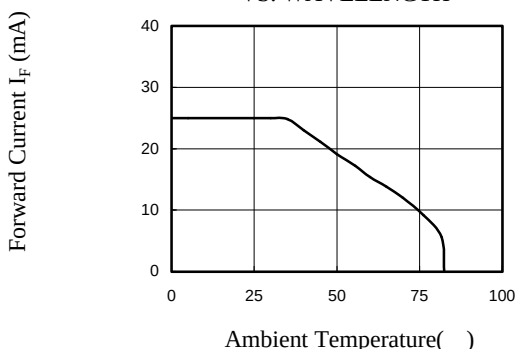


FIG.3 FORWARD CURRENT VS. AMBIENT TEMPERATURE.

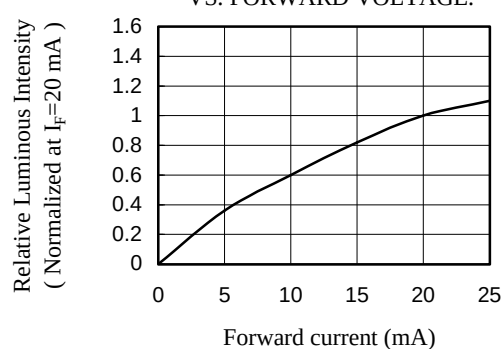


FIG.4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

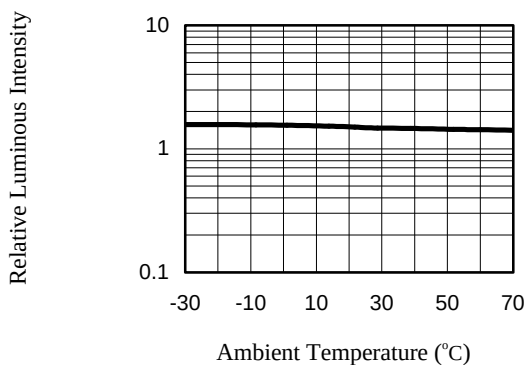


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

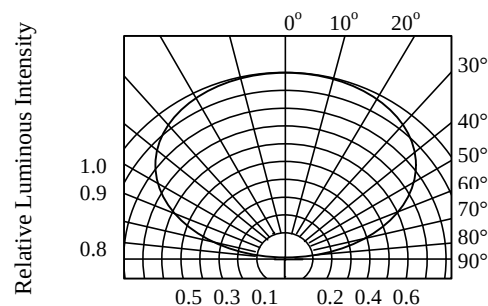


FIG.6 RADIATION DIAGRAM