Surface Mount Chip LEDs MSL-194UOL

Description

The MSL-194UOL, a SUPER ORANGE source Chip LED device, is designed in an indnstry Standard package suitable for SMT assembly method. It utilizes AlGaInP on GaAs LED chip technology and water clear epoxy package.

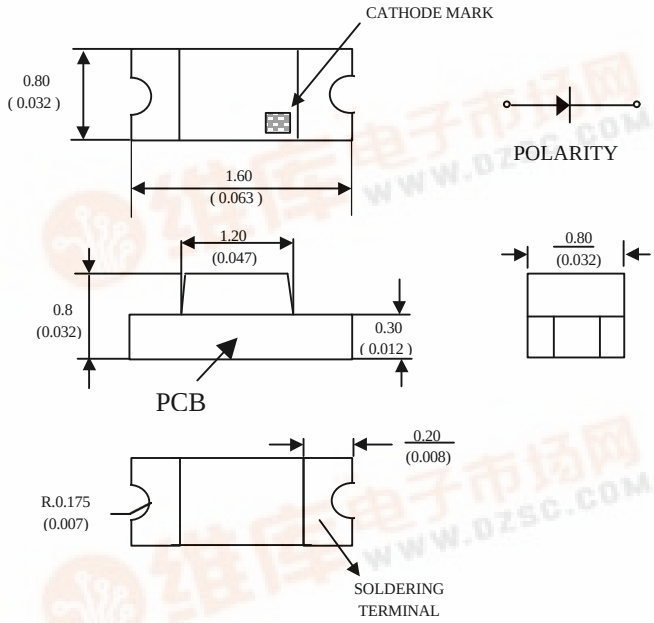
Applications

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

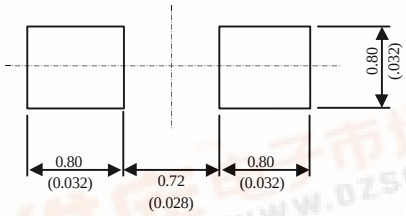
Features

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

Package Dimensions



Recommended Solder Patterns



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

Absolute Maximum Ratings

@ T_A=25°C

Parameter	Symbol	Maximum Rating	Unit
Peak Forward Current(1/10 Duty Cycle@1KHz)	I_{FP}	100	mA
DC Forward Current	I_F	25	mA
Power Dissipation	P_D	65	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	40	80	-	mcd
Forward Voltage	I_F=20mA	V_F	-	2.1	2.4	V
Reverse Current	V_R=5V	I_R	-	-	10	μA
Peak/Dominant Wavelength	I_F=20mA	λ_p/λ_d	-	630/625	-	nm
Spectral Linewidth	IF=20mA	$\Delta\lambda$	-	20	-	nm
Viewing Angle	I_F=20mA	$2\theta_{1/2}$	-	130	-	deg.

Typical Optical-Electrical Characteristic Curves

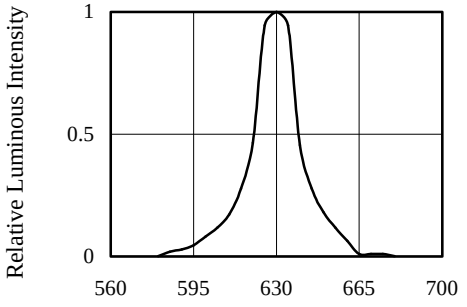


FIG.1 RELATIVE INTENSITY LUMINOUS VS. WAVELENGTH

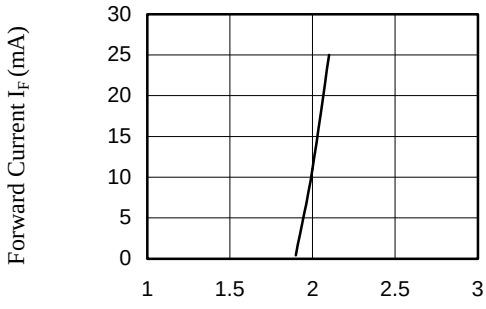


FIG.2 FORWARD CURRENT VS. FORWARD VOLTAGE.

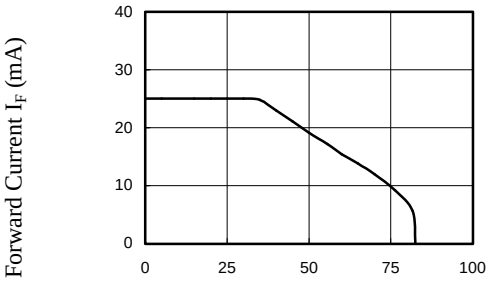


FIG. 3 FORWARD CURRENT VS. AMBIENT TEMPERATURE.

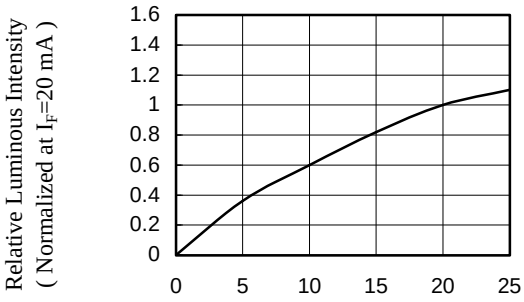


FIG. 4 RELATIVE LUMINOUS INTENSITY VS. FORWARD CURRENT.

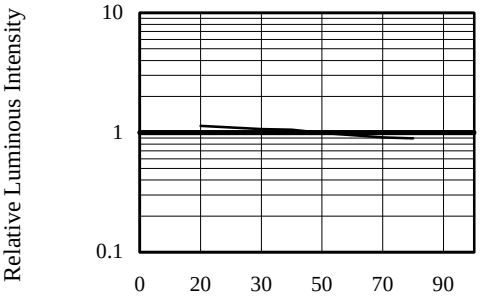


FIG.5 LUMINOUS INTENSITY VS. AMBIENT TEMPERATURE

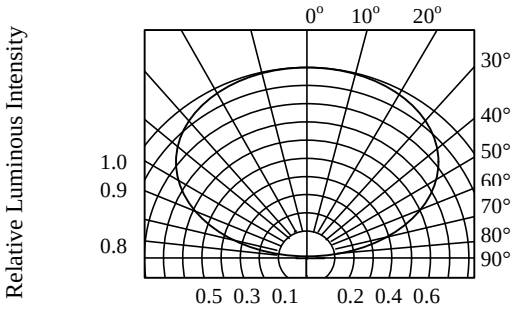


FIG.6 RADIATION DIAGRAM