



Opto Plus LED Corp

OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● EDIT HISTORY

Version A: Sep. 30, 2011

New color data sheet.

Manufacture	Examination	Approving



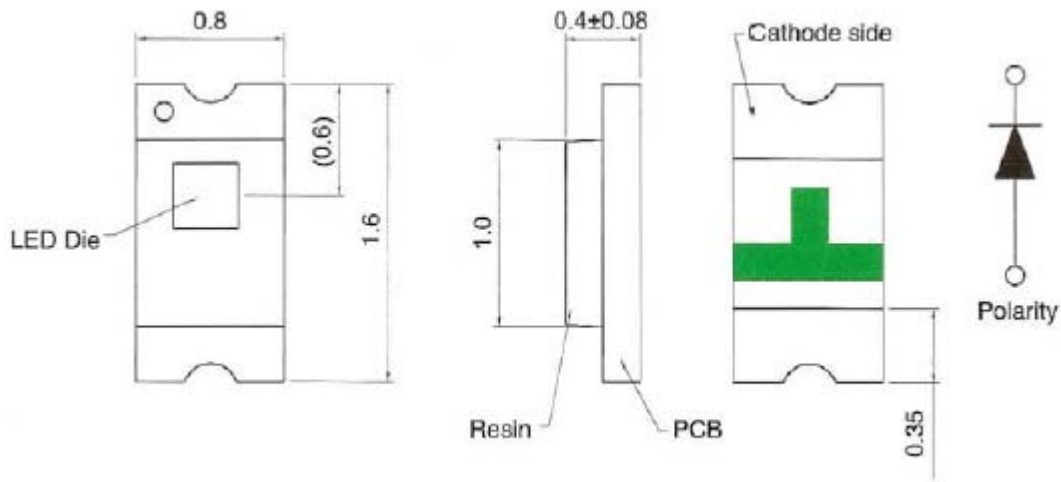
Opto Plus LED Corp OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● FEATURES

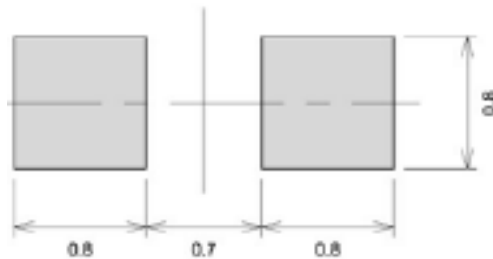
- ◆ 1.6 x 0.8 x 0.4 mm SMD Lamp.
- ◆ Wide viewing angle.
- ◆ Low power consumption.
- ◆ RoHS compliant.

● PACKAGE DIMENSIONS



Polarity reference for cathode mark is reversed for UR.

● RECOMMENDED SOLDERING PAD DIMENSIONS



LENS COLOR	DICE MATERIAL	LIGHT COLOR
Water Clear	AlInGaP	Ultra Bright Yellow Green

RoHS Compliance



Pb free.





Opto Plus LED Corp

OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● **ABSOLUTE MAXIMUM RATINGS AT TA=25°C**

Parameter	Symbol	Ultra Bright Red	Unit
Power Dissipation	P_{AD}	72	mW
Continuous Forward Current	I_{FMAX}	30	mA
Peak Forward Current (duty cycle 1/10, 0.1ms Pulse Width)	I_{FP}	100	mA
Reverse Voltage	V_R	5	V
Operating Temperature Range	T_{OPR}	-30 to +80	°C
Storage Temperature Range	T_{STG}	-40 to +85	°C

● **ELECTRICAL OPTICAL CHARACTERISTICS AT TA=25°C**

Characteristic	Symbol	Condition	Min.	Type	Max.	Unit
Forward Voltage	V_F	$I_F = 5mA$	-	2.0	2.4	V
Reverse Current	I_R	$V_R = 5V$	-	-	100	μA
Peak Wavelength	λ_P	$I_F = 5mA$	-	574	-	nm
Dominant Wavelength	λ_d	$I_F = 5mA$	-	573	-	nm
Luminous Intensity	I_V	$I_F = 5mA$	7.15	18	28.5	mcd



Opto Plus LED Corp

OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● **LUMINOUS INTENSITY BIN LIMITS**

Test condition : @5mA		
BIN Code	I _v min. (mcd)	I _v max. (mcd)
K	7.15	11.25
L	11.25	18
M	18	28.5

* @5mA / Ta=25°C, Tolerance: ±10%

● **HUE GRADE**

BIN	min	max
C	567.5	570.5
D	570.5	573.5
E	573.5	576.5

● **FORWARD VOLTAGE BIN LIMITS**

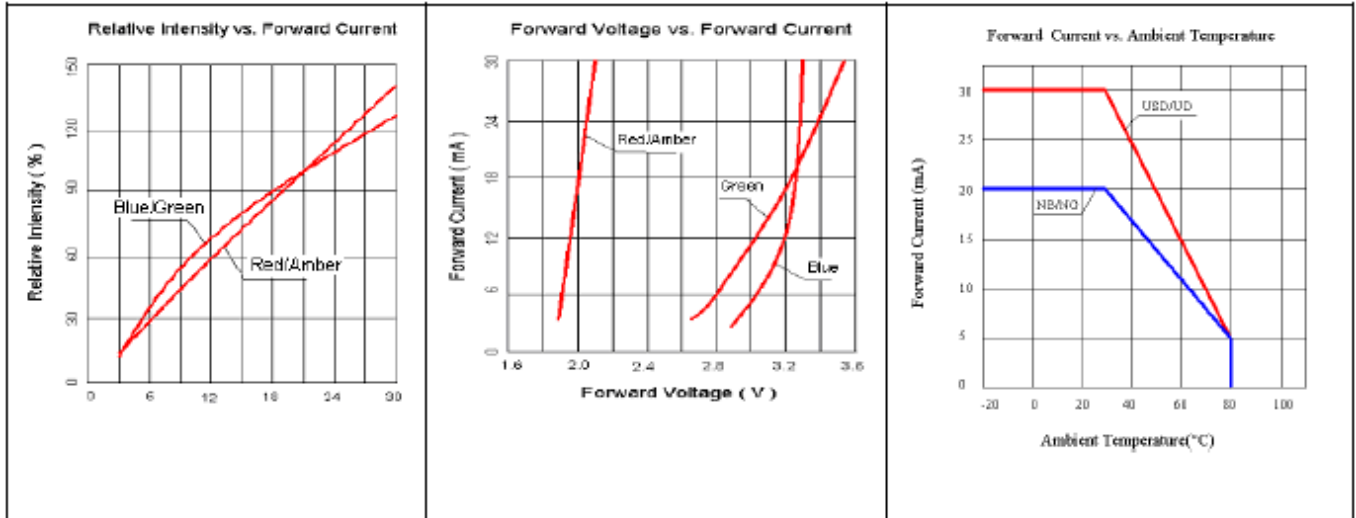
Test condition : @5mA		
Color	Bin Code	Spec. Range (V)
Ultra Bright Red	-	1.6 – 2.4



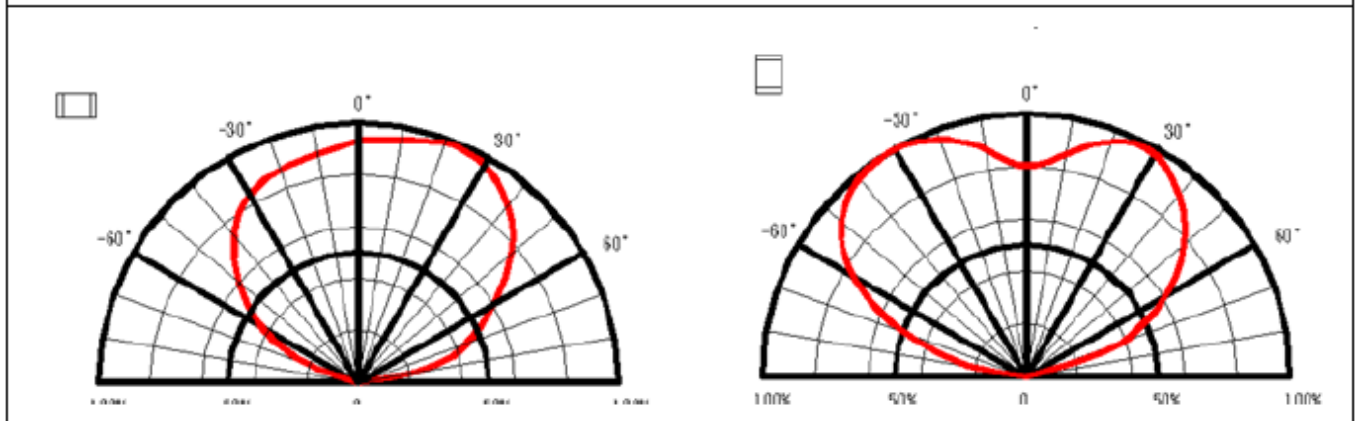
Opto Plus LED Corp OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● TYPICAL ELECTRO-OPTICAL CHARACTERISTIC CURVES



Directive Characteristics





Opto Plus LED Corp OPS-L193UYG5-C0270

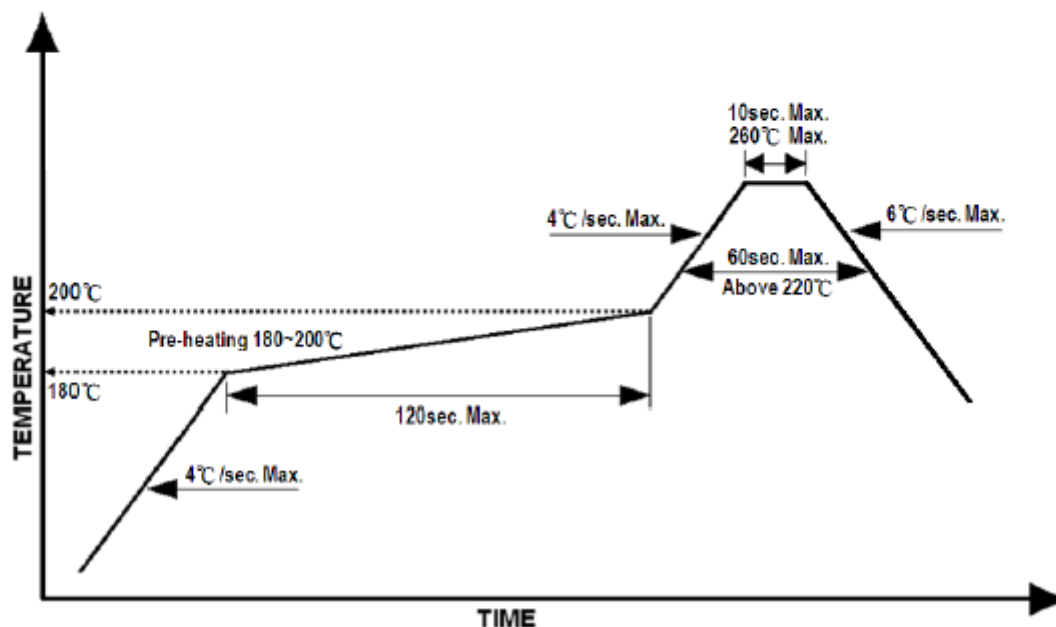
1.6 x 0.8 x 0.4 mm SMD LAMP

Reflow Soldering

Recommend soldering paste specifications:

1. Operating temp.: Above 220 °C ,60 sec.
2. Peak temp.:260 °CMax.,10sec Max.
3. Never attempt next process until the component is cooled down to room temperature after reflow.
4. The recommended reflow soldering profile (measured on the surface of the LED terminal) is as following:

Lead-free Solder Profile



Reworking

- Rework should be completed within 5 seconds under 260 °C.
- The iron tip must not come in contact with the copper foil.
- Twin-head type is preferred.

Cleaning

Following are cleaning procedures after soldering:

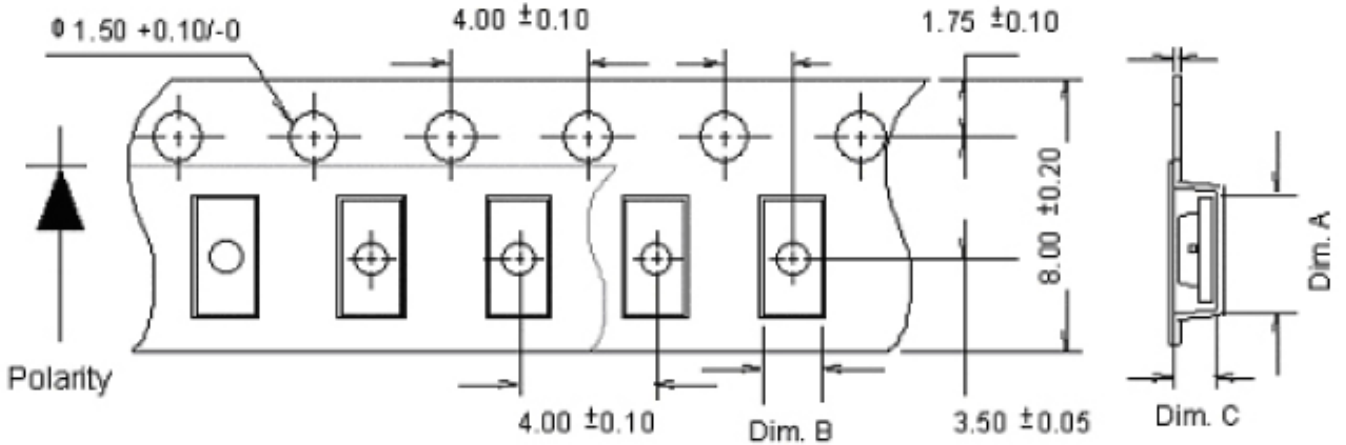
- An alcohol-based solvent such as isopropyl alcohol (IPA) is recommended.
- Temperature x Time should be 50°C x 30sec. or <30°C x 3min
- Ultrasonic cleaning: < 15W/ bath; bath volume ≤ 1liter
- Curing: 100 °C max, <3min



Opto Plus LED Corp OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

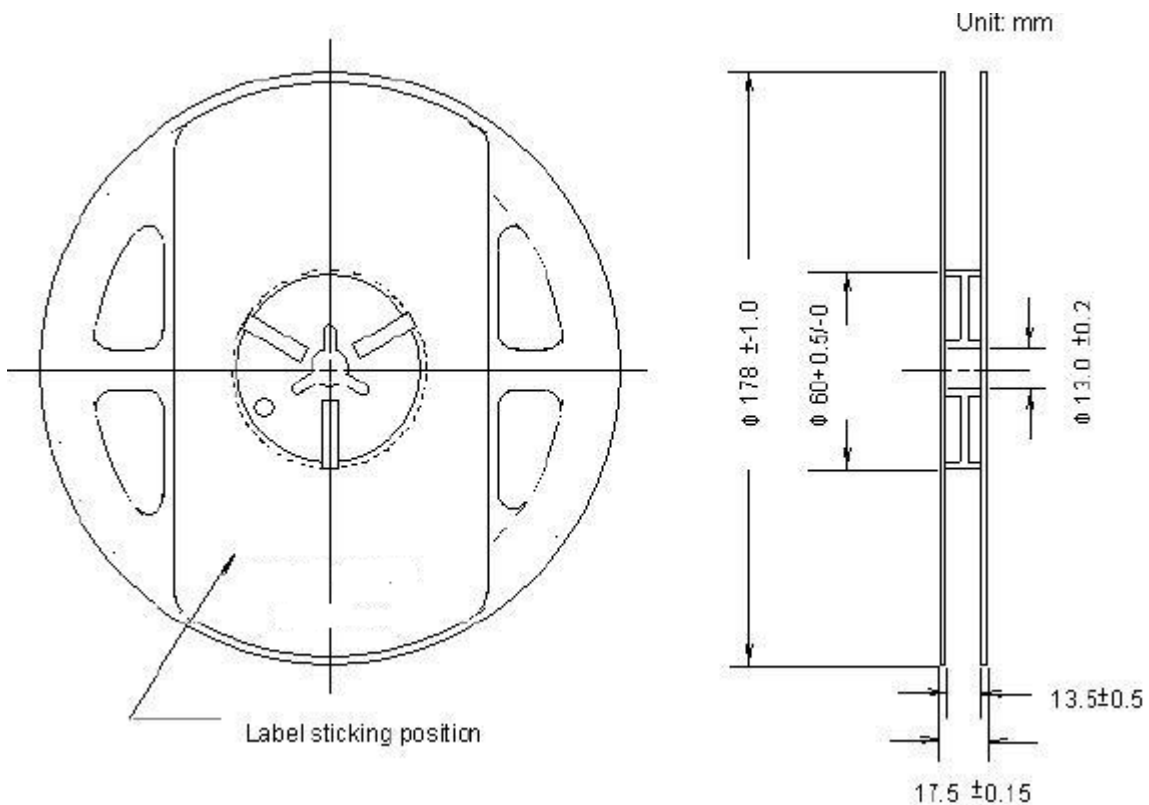
● TAPE SPECIFICATION : 4000 PCS PER REEL



Unit: mm

Dim. A	Dim. B	Dim. C
1.8 ± 0.10	0.95 ± 0.10	0.6 ± 0.10

● PACKAGE DIMENSIONS OF REEL





Opto Plus LED Corp OPS-L193UYG5-C0270

1.6 x 0.8 x 0.4 mm SMD LAMP

● PACKING AND SHIPPING INSTRUCTION

