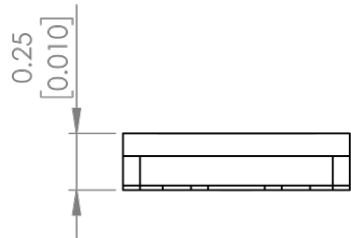
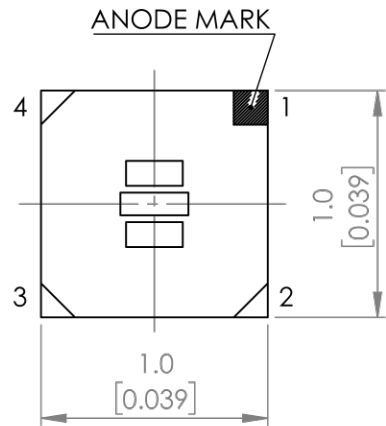
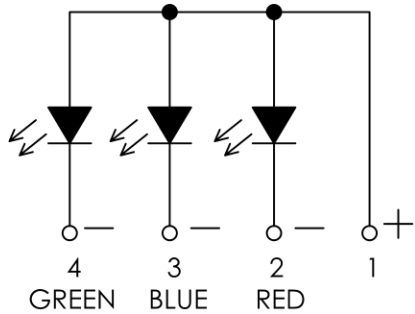


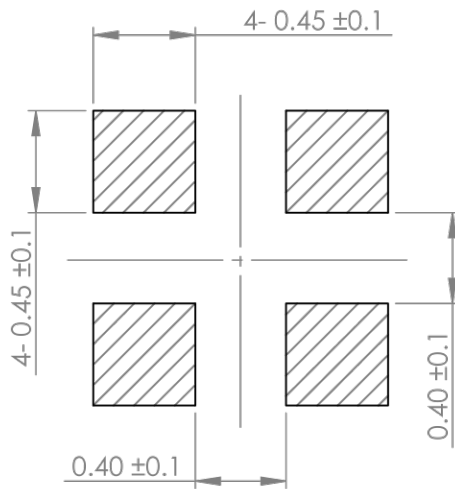
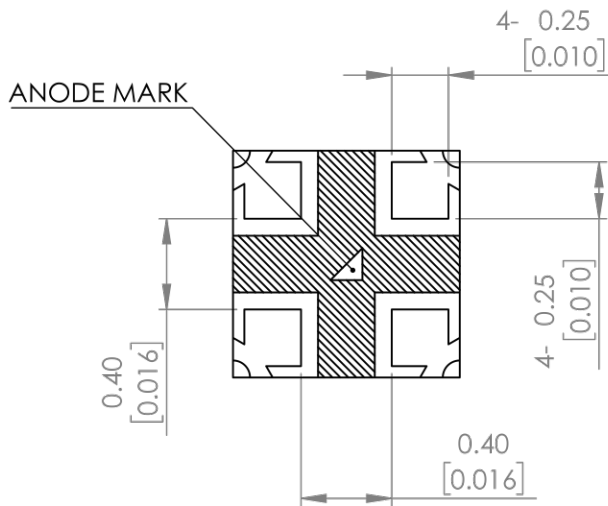
PART NUMBER		SML-LX0404SIUPGUSB	REV	C
REV	E.C.N. NUMBER AND REVISION COMMENTS		DATE	
A	E.C.N. #11941		05.11.15	
B	E.C.N. #11956		06.03.15	
C	ECN-Lumex201700046		08.10.17	



POLARITY



RECOMMENDED SOLDER PAD LAYOUT



ELECTRO-OPTICAL CHARACTERISTIC TA=25°C

PARAMETER		MIN	TYP	MAX	UNITS	TEST COND
PEAK WAVELENGTH	R	-	632	-	nm	If=2mA
	G	-	518	-		
	B	-	468	-		
DOMINANT WAVELENGTH	R	-	627	-	nm	If=2mA
	G	-	531	-		
	B	-	470	-		
FORWARD VOLTAGE	R	-	1.95	2.15	Vf	If=2mA
	G	-	2.75	2.95		
	B	-	2.70	2.85		
REVERSE VOLTAGE	R	-	-	5	Vr	Ir=10uA
	G	-	-	5		Ir=50uA
	B	-	-	5		Ir=50uA
LUMINOUS INTENSITY	R	-	35	-	mcd	If=2mA
	G	-	50	-		
	B	-	20	-		
VIEWING ANGLE		-	120	-	2x theta1/2	-
EMITTED COLOR	RED / GREEN / BLUE					
EPOXY LENS FINISH	WATER CLEAR					

ABSOLUTE MAXIMUM RATINGS TA=25°C

PARAMETER	MAX	UNITS
PEAK FORWARD CURRENT(R/G/B)*	60 / 100 / 20	mA
FORWARD CURRENT(R/G/B)	25 / 25 / 10	mA
POWER DISIPATION(R/G/B)	60 / 95 / 30	mW
STORAGE TEMPERATURE	-40 TO +90	°C
OPERATING TEMPERATURE	-40 TO +85	°C

*t<10us

MOISTURE SENSITIVE DEVICE
PER JEDEC LEVEL 2 STANDARDS

NOTE:

1.THE PRODUCT ITSELF WILL REMAIN WITHIN RoHS COMPLIANT VERSION.

*UNLESS OTHERWISE SPECIFIED TOLERANCES PER DECIMAL PRECISION ARE: X=±1 (±0.039), X.X=±0.5 (±0.020), X.XX=±0.25 (±0.010), X.XXX=±0.127 (±0.005). LEAD SIZE=±0.05 (±0.002), LEAD LENGTH=±0.75 (±0.030). MIN= ^{+DECIMAL PRECISION}_{-0.00} MAX= ^{+0.00}_{-DECIMAL PRECISION}



425 N. GARY AVE.
CAROL STREAM, IL 60188
PHONE : 800-278-5666
FAX : 630-315-2150
WEB : WWW.LUMEX.COM

1(L)*1(W)*0.25(H)mm, SURFACE MOUNT TOP VIEW LED,AlGaInP RED / InGaN GREEN / InGaN BLUE, WATER CLEAR LENS, TAPE & REEL.

THE SPECIFICATIONS MAY CHANGE AT ANY TIME WITHOUT NOTICE DUE TO NEW MATERIALS OR PRODUCT IMPROVEMENT.

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KEEP ALL INFORMATION CONTAINED HEREIN CONFIDENTIAL AND SHALL PROTECT SAME IN WHOLE OR IN PART FROM DISCLOSURE AND DISSEMINATION TO ALL THIRD PARTIES.

DATE : 2017.08.11

DRAWN BY : C.C.

PAGE : 1 OF 7

CHKD BY : G.Y.

SCALE : NTF

APRVD BY : E.C.

UNIT : mm [INCH]

Ⓢ

RED BIN RANGE OF LUMINOUS INSTENSITY

Bin Code	Min.	Max.	Unit	Condition
A	25	34	mcd	IF=2mA
B	34	45		

RED BIN RANGE OF FORWARD VOLTAGE

Bin Code	Min.	Max.	Unit	Condition
1	1.75	1.95	V	IF=2mA
2	1.95	2.15		

BLUE BIN RANGE OF FORWARD VOLTAGE

Bin Code	Min.	Max.	Unit	Condition
1	2.60	2.70	V	IF=2mA
2	2.70	2.80		
3	2.80	2.85		

GREEN BIN RANGE OF LUMINOUS INSTENSITY

Bin Code	Min.	Max.	Unit	Condition
A	35	48	mcd	IF=2mA
B	48	65		

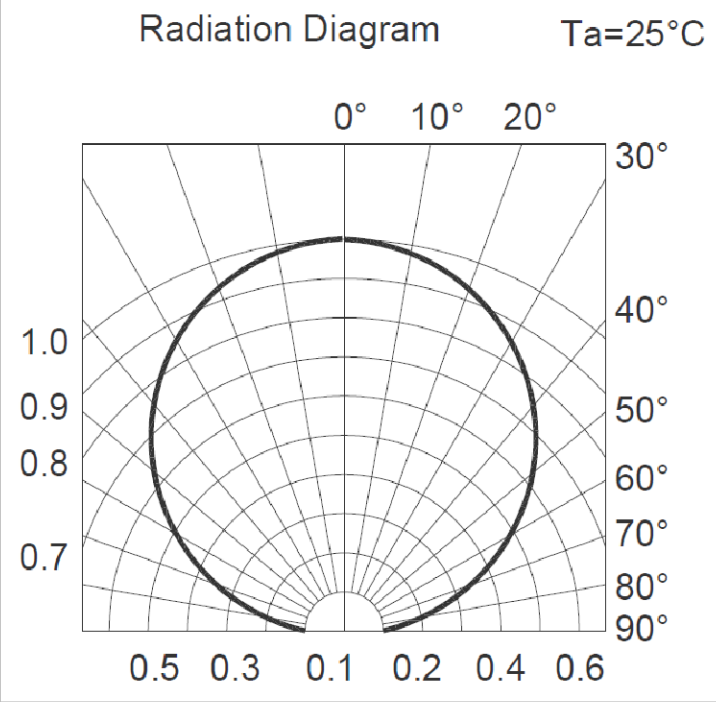
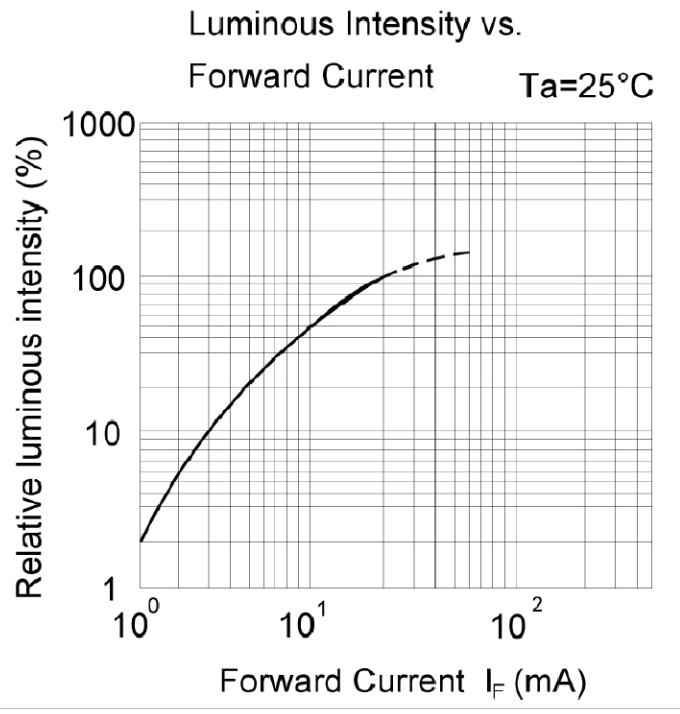
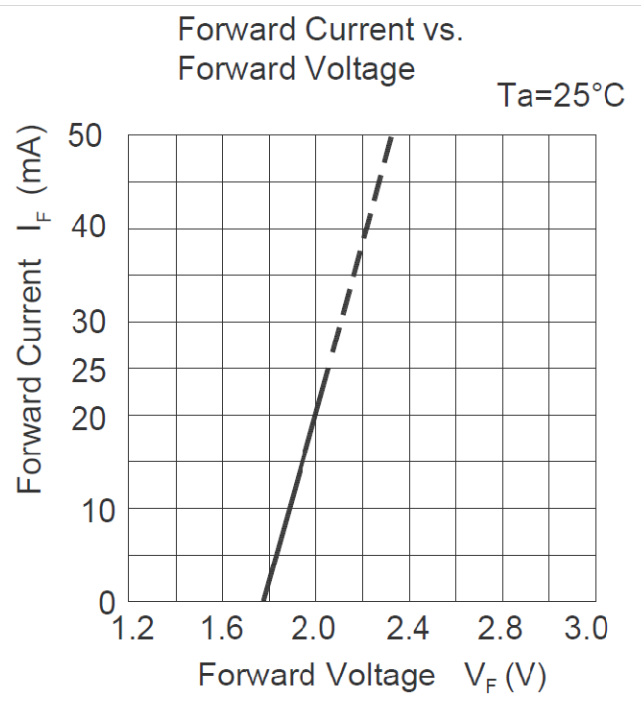
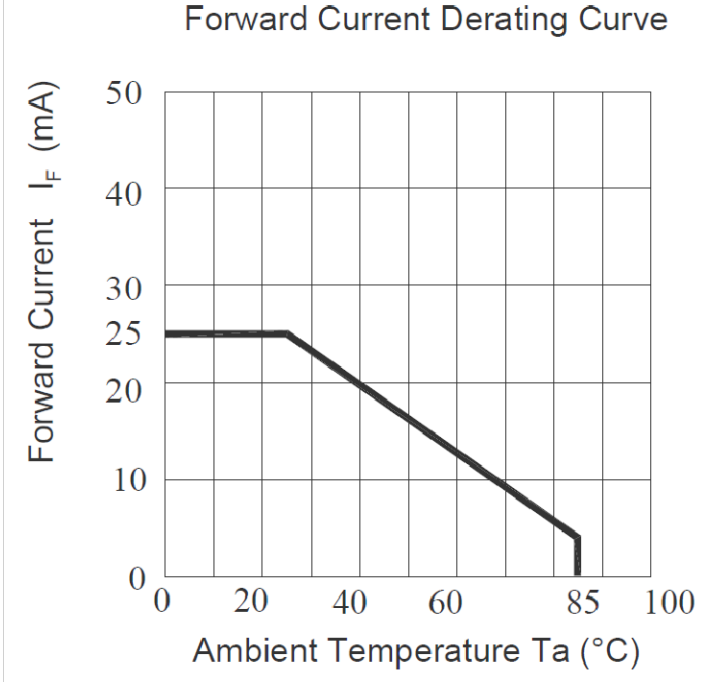
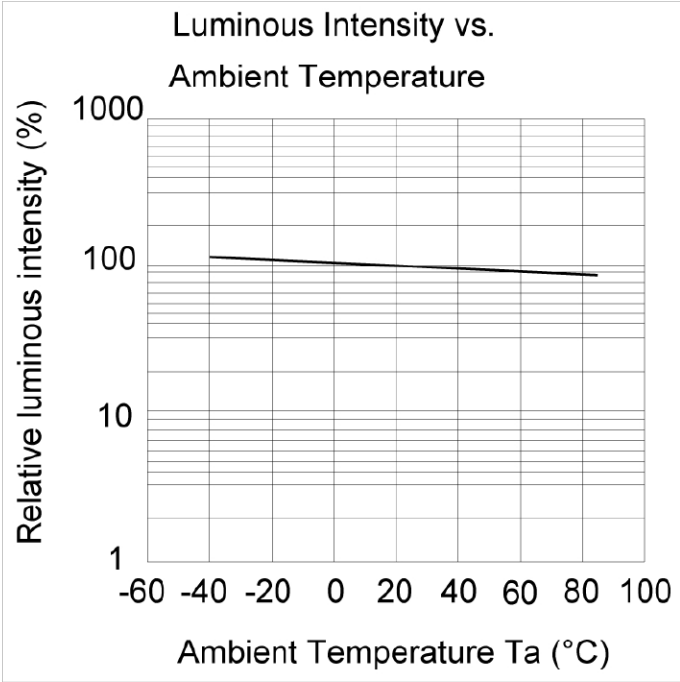
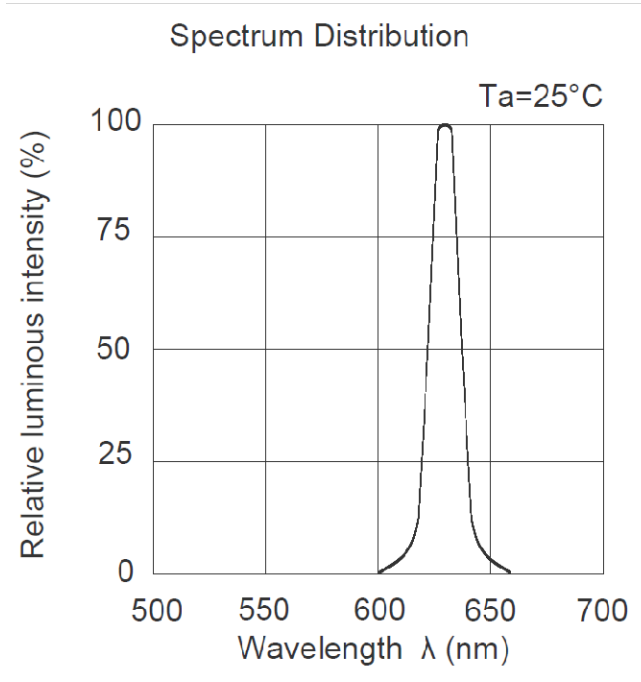
GREEN BIN RANGE OF DOMINANT WAVELENGTH

Bin Code	Min.	Max.	Unit	Condition
A	524	531	nm	IF=2mA
B	531	538		

GREEN BIN RANGE OF FORWARD VOLTAGE

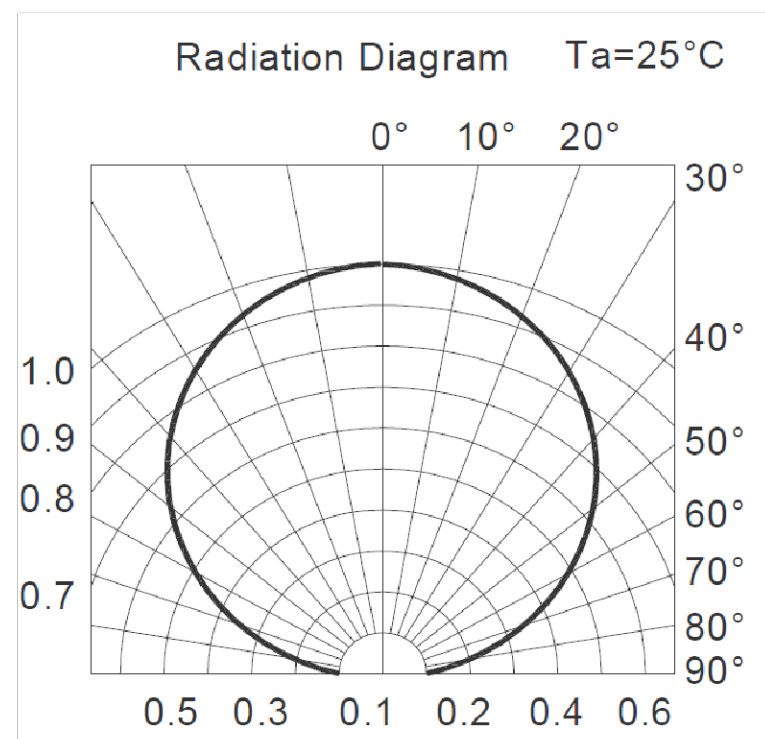
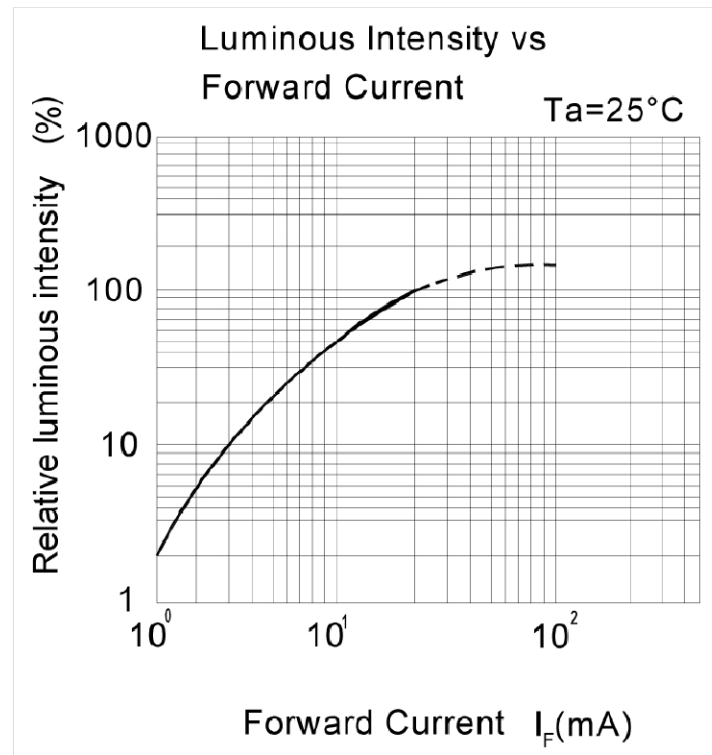
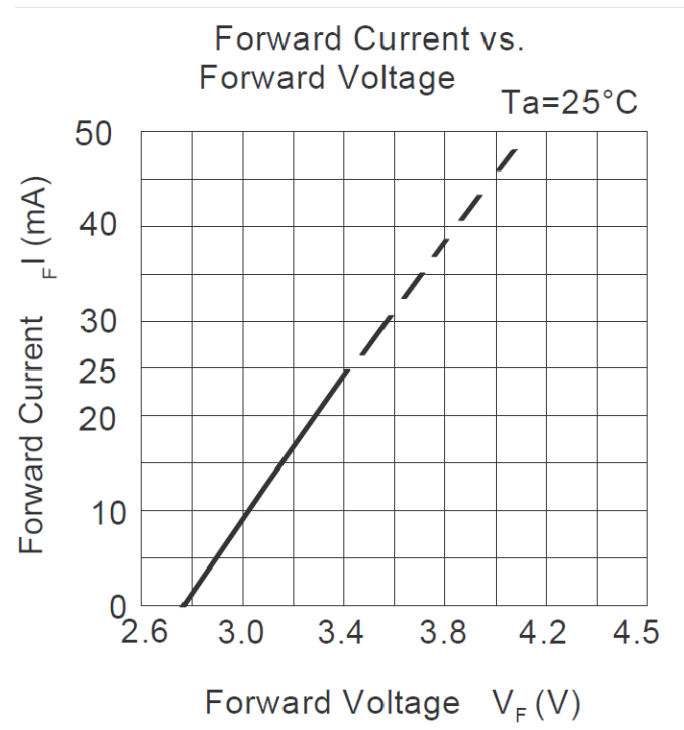
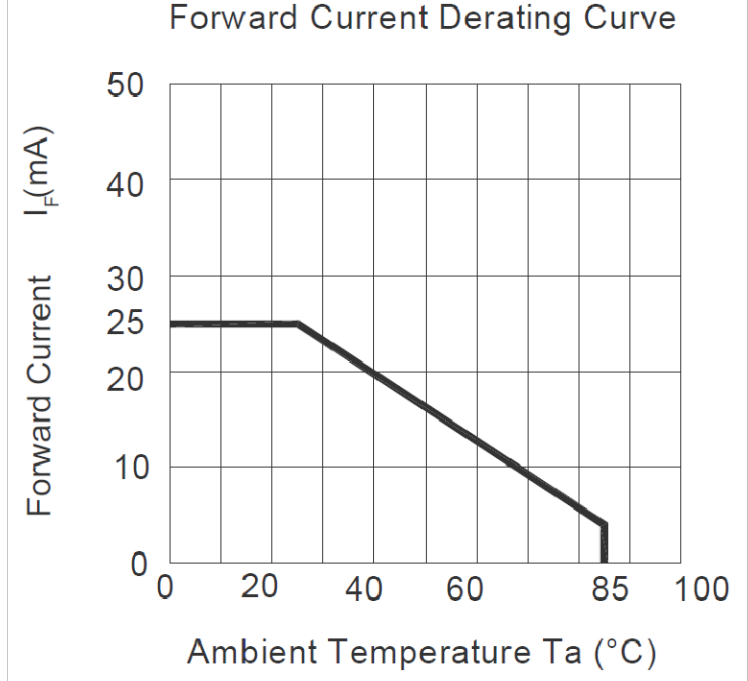
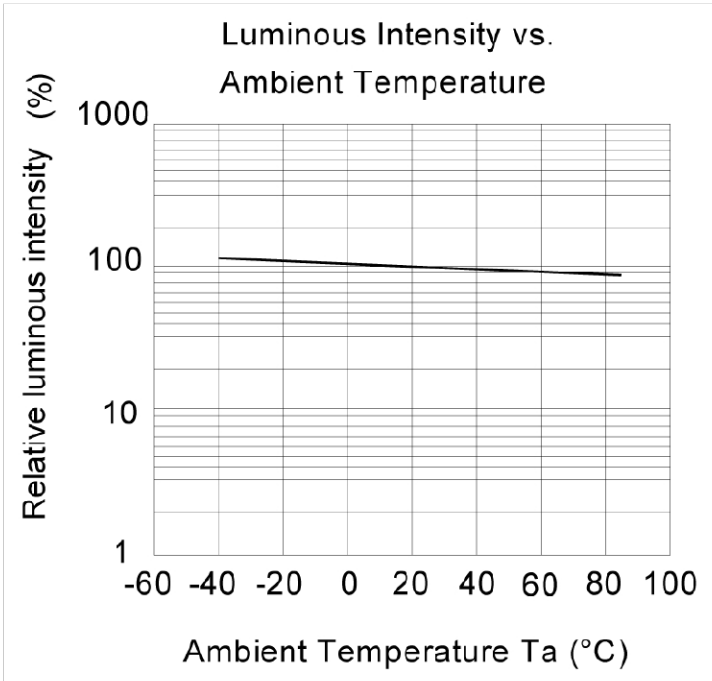
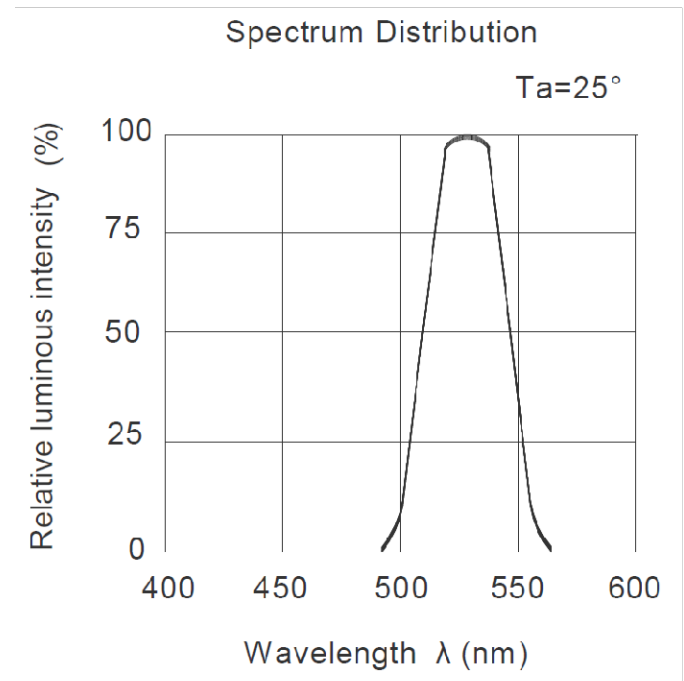
Bin Code	Min.	Max.	Unit	Condition
A	2.60	2.65	V	IF=2mA
B	2.65	2.70		
C	2.70	2.75		
1	2.75	2.80		
2	2.80	2.85		
3	2.85	2.90		
4	2.90	2.95		

RED TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

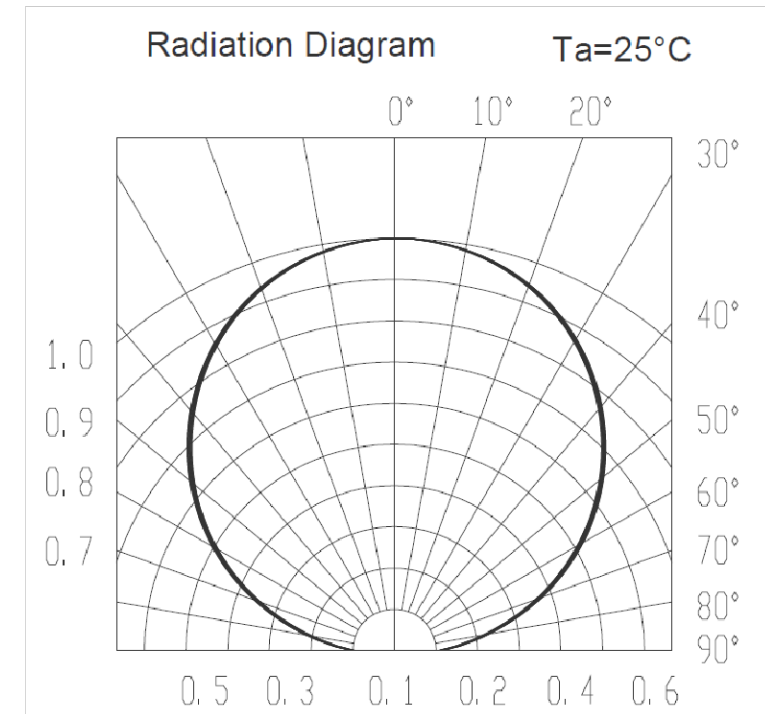
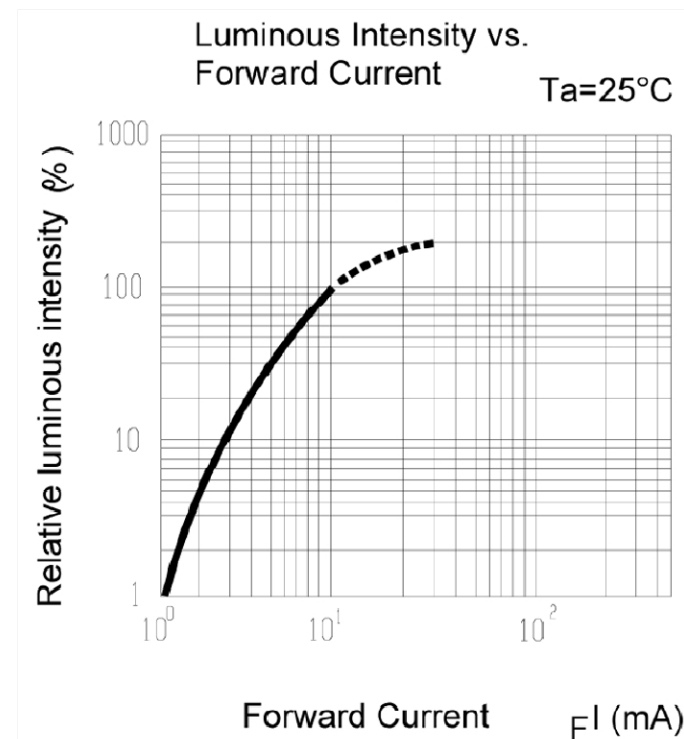
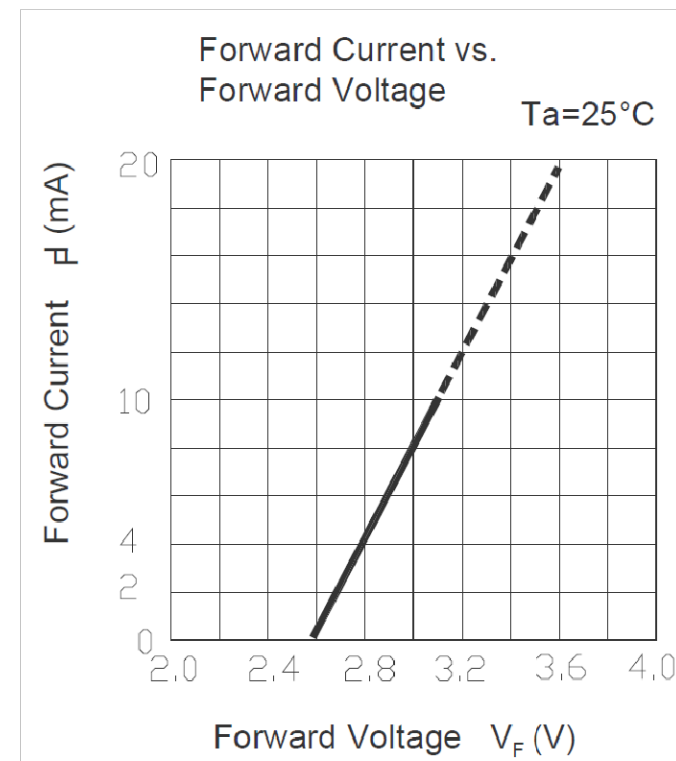
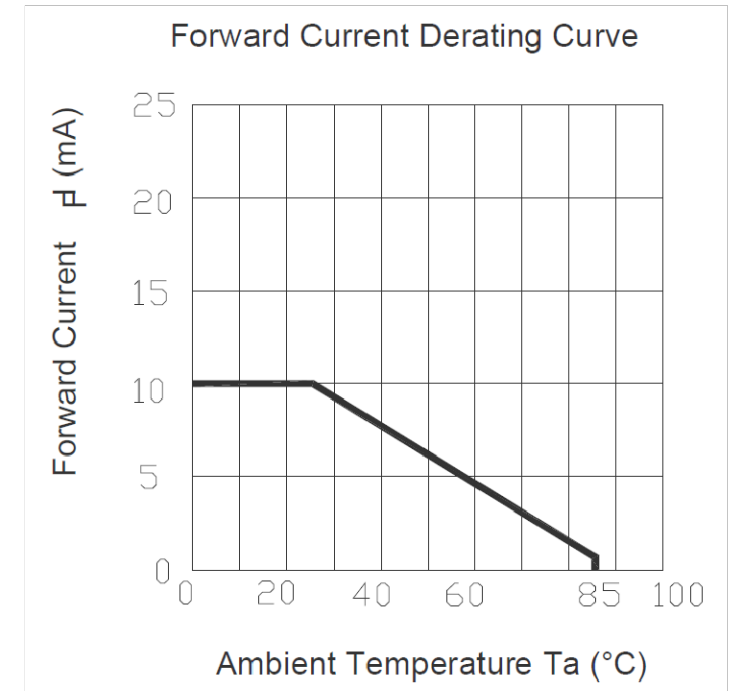
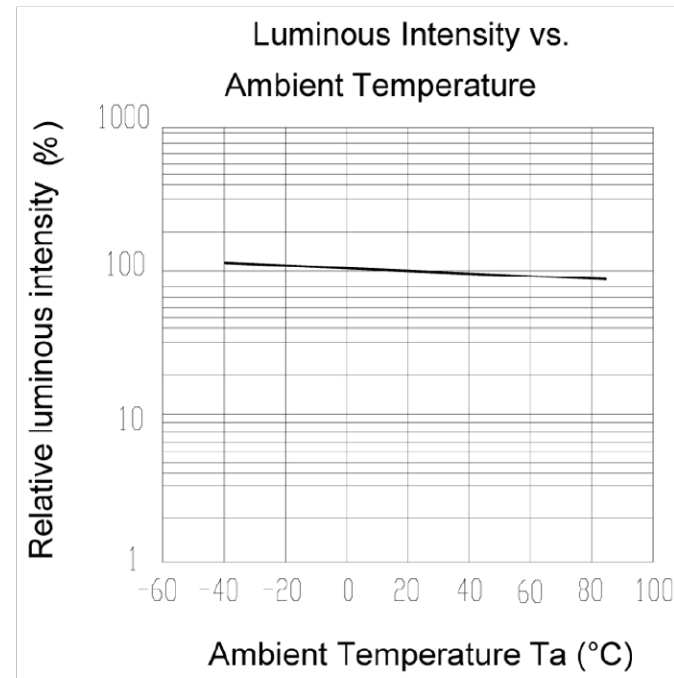
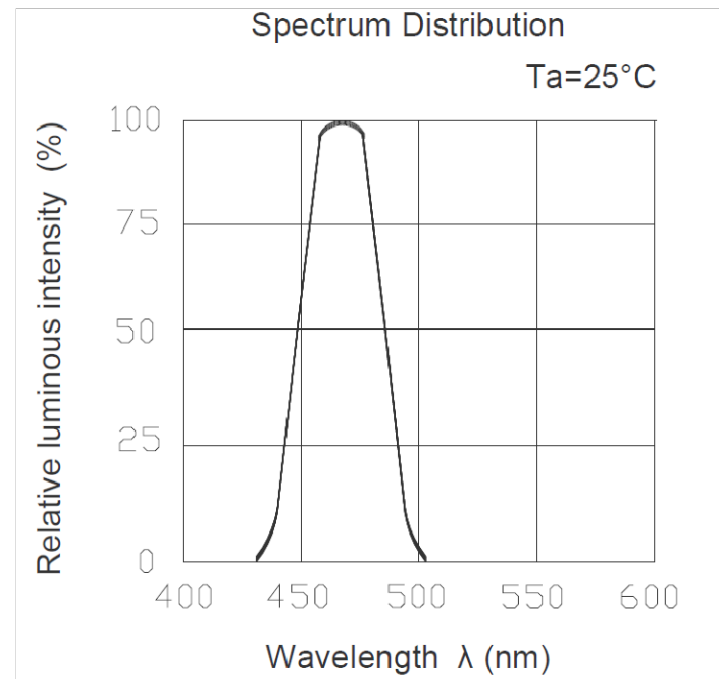


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GREEN TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

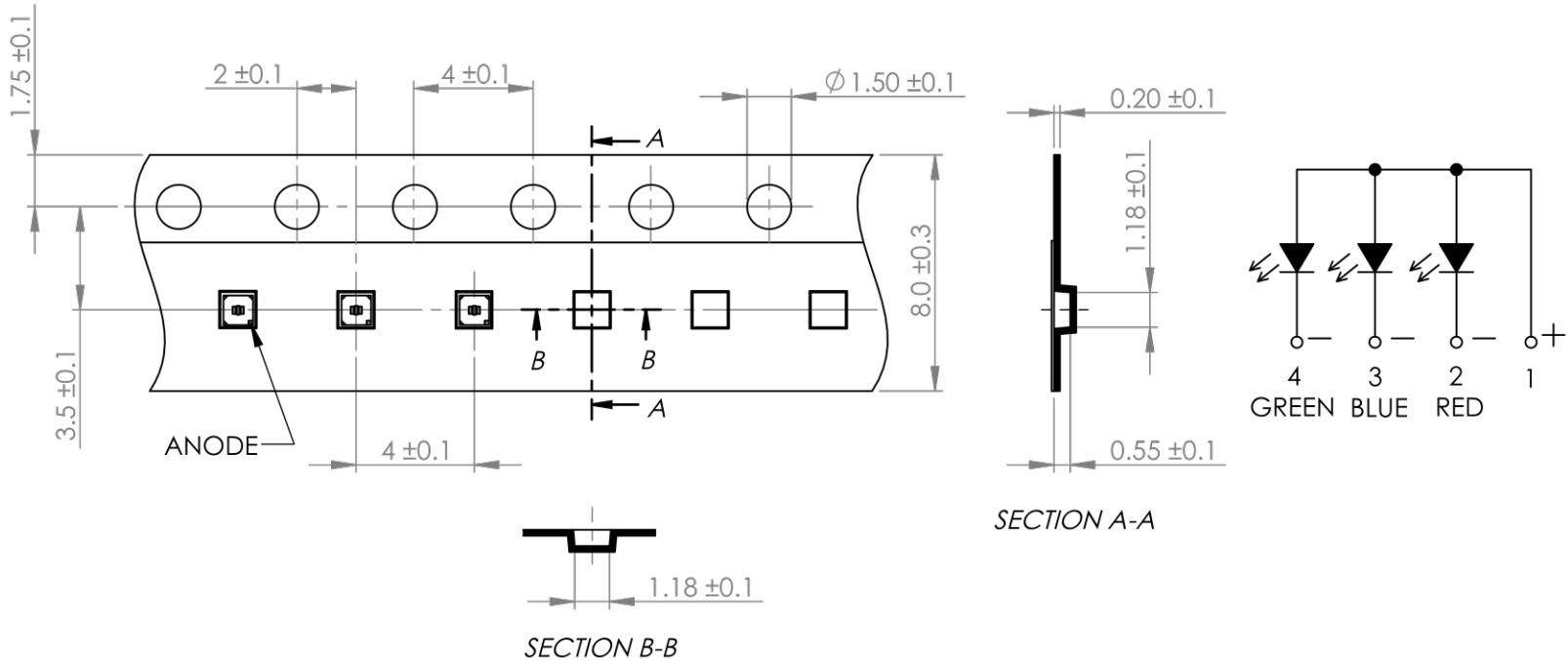


BLUE TYPICAL ELECTRO-OPTICAL CHARACTERISTICS CURVES

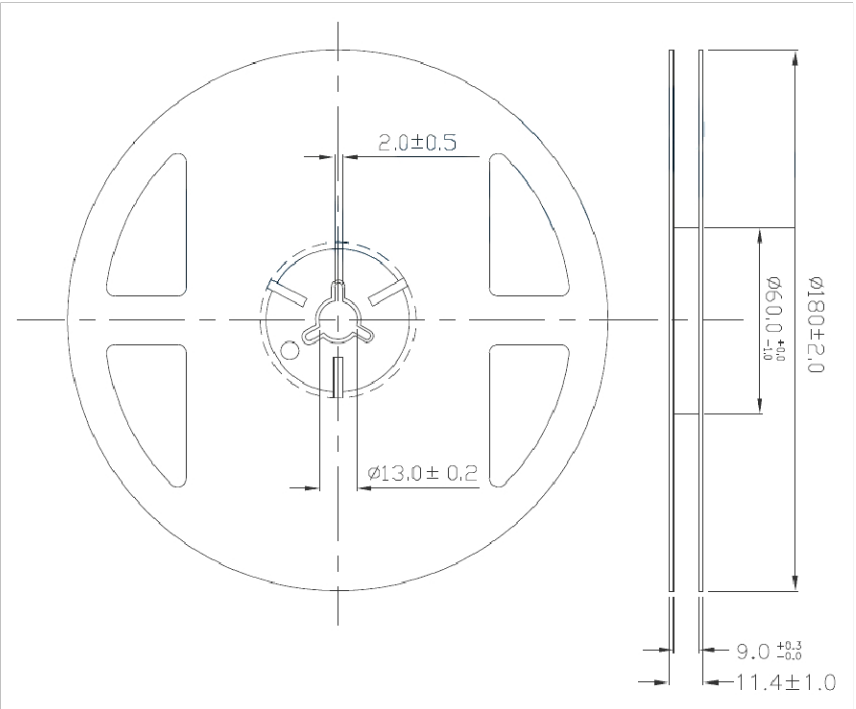


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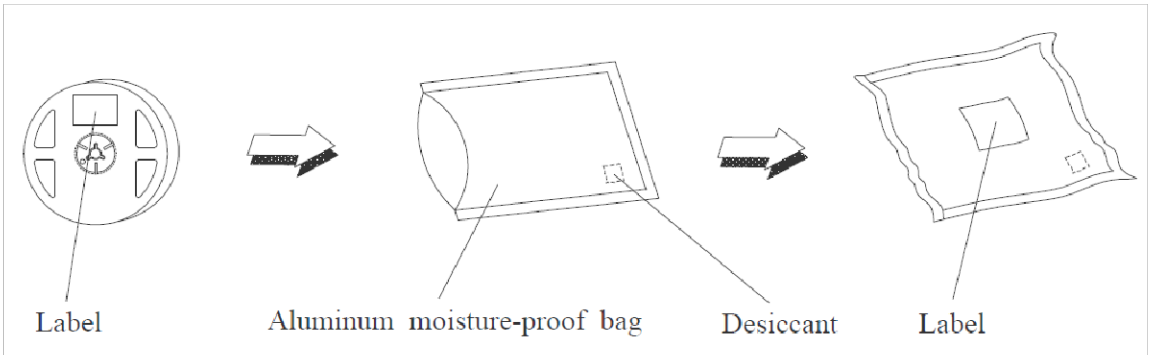
CARRIER TAPE DIMENSION



REEL DIMENSIONS



MOISTURE RESISTANT PACKAGING



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PRECAUTIONS FOR USE

1. Over-current-proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change (Burn out will happen).
2. Storage

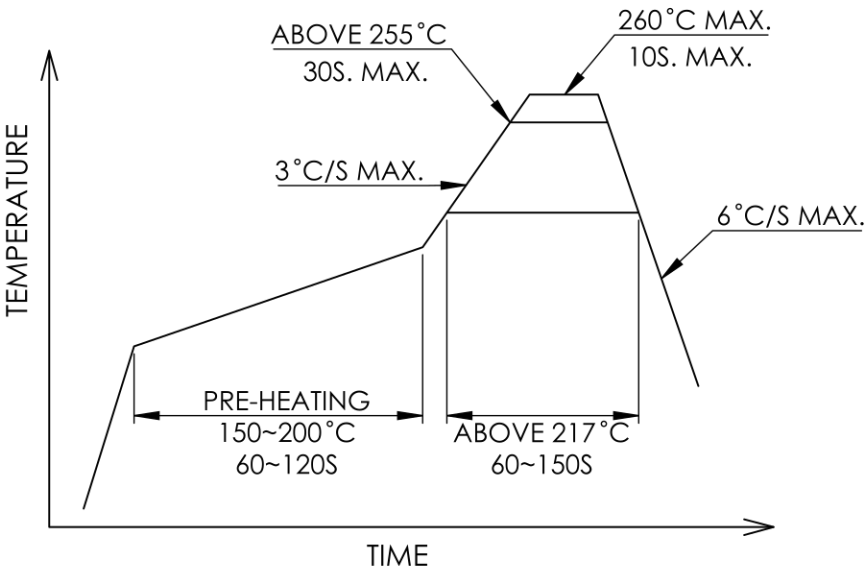
2.1 Do not open moisture proof bag before the products are ready to use.

2.2 Before opening the package: The LEDs should be kept at 30°C or less and 90%RH or less.

2.3 After opening the package: The LED's floor life is 1 year under 30°C or less and 60% RH or less.
If unused LEDs remain, it should be stored in moisture proof packages.

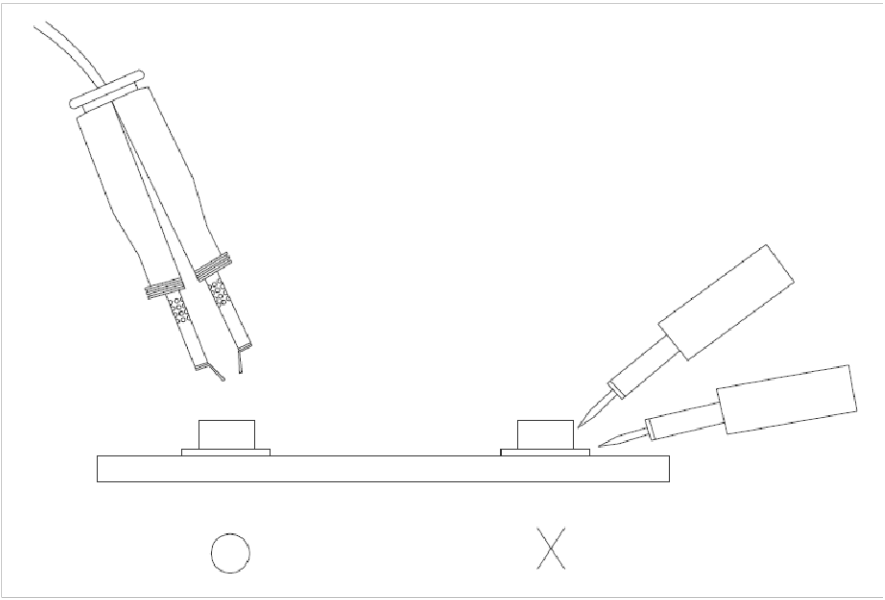
2.4 If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage time, baking treatment should be performed using the following conditions.
Baking treatment : 60±5°C for 24 hours.
3. Soldering Condition

3.1 Pb-free solder temperature profile



- 3.2 Reflow soldering should not be done more than two times.
- 3.3 When soldering, do not put stress on the LEDs during heating.
- 3.4 After soldering, do not warp the circuit board.
- 4.Soldering Iron
Each terminal is to go to the tip of soldering iron temperature less than 350°C for 3 seconds within once in less than the soldering iron capacity 25W. Leave two seconds and more intervals, and do soldering of each terminal. Be careful because the damage of the product is often started at the time of the hand solder.
- 5.Repairing

Repair should not be done after the LEDs have been soldered. When repairing is unavoidable, a double-head soldering iron should be used (as below figure). It should be confirmed beforehand whether the characteristics of the LEDs will or will not be damaged by repairing.



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