

SMD LED LAMP
BL-LS1311xx
Features:

- 3.5mmx2.8mm SMD, 1.9mm THICKNESS PLCC2 package
- Mono-color type, Ultra brightness
- Compatible with automatic placement equipment
- WIDE VIEWING ANGLE.
- IDEAL FOR BACKLIGHT AND INDICATOR.
- PACKAGE: 2KPCS/REEL
- RoHs Compliance


Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=20mA)

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (Iv) Unit:mcd		Viewing Angle 2θ1/2 (deg)
	Emitted Color	Material	λ _p (nm)		Typ	Max	Min.	Typ.	
					BL-LS1311UEC	Ultra Orange	AlGaAs	630	
BL-LS1311UYO	Ultra Amber	AlGaInP	610	2.10	2.60	50	160		
BL-LS1311UYC	Ultra Yellow	AlGaInP	593	2.10	2.60	200	400		
BL-LS1311UGC	Ultra Green	AlGaInP	575	2.20	2.70	28	50		
BL-LS1311PGC	Ultra Pure Green	InGaN	525	3.10	3.80	200	500		
BL-LS1311UBC	Ultra Blue	InGaN	470	3.10	3.80	100	200		
BL-LS1311UWC-A120P	Ultra White	InGaN	/	3.10	3.80	1200	1700		

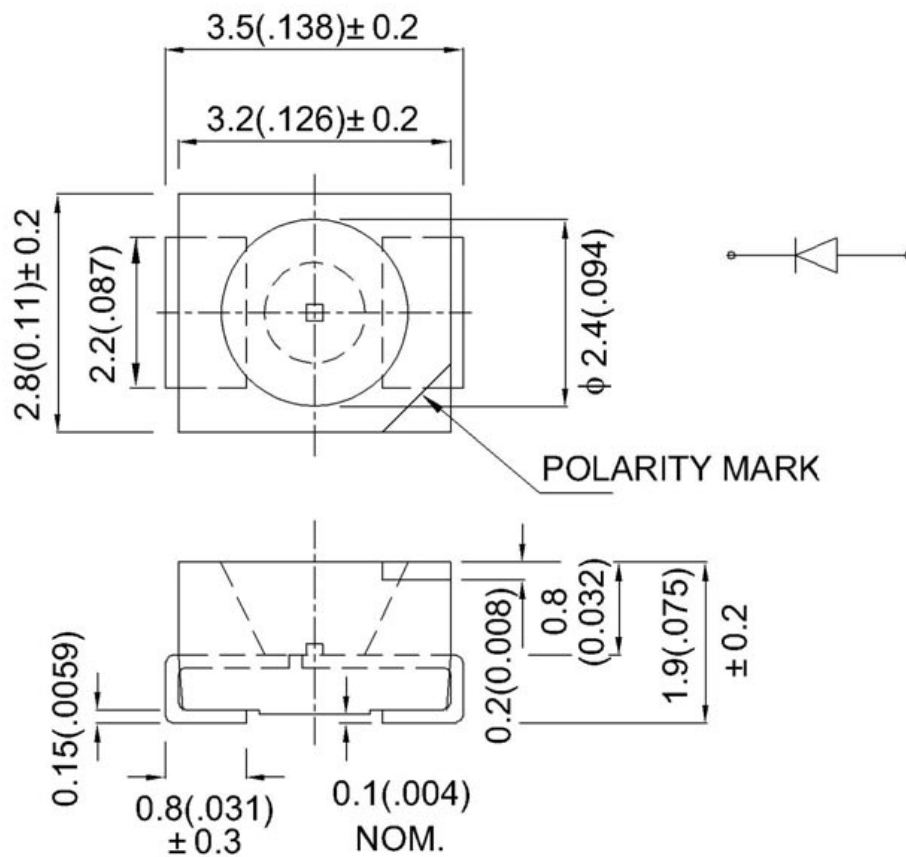
Absolute maximum ratings (Ta=25°C)

Parameter	UE	UYO	UY	UG	PG	UB	UW	Unit
Forward Current I _F	30	30	30	30	30	30	30	mA
Power Dissipation P _d	78	78	78	78	78	78	78	mW
Reverse Voltage V _R	5	5	5	5	5	5	5	V
Peak Forward Current I _{PF} (Duty 1/10 @1KHZ)	100	100	100	100	100	100	100	mA
Operation Temperature T _{OPR}	-30 to +80							°C
Storage Temperature T _{STG}	-40 to +85							°C
Lead Soldering Temperature T _{SOL}	Max.260±5°C for 3 sec Max. (1.6mm from the base of the epoxy bulb)							°C

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■ Package configuration & Internal circuit diagram



Notes:

1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

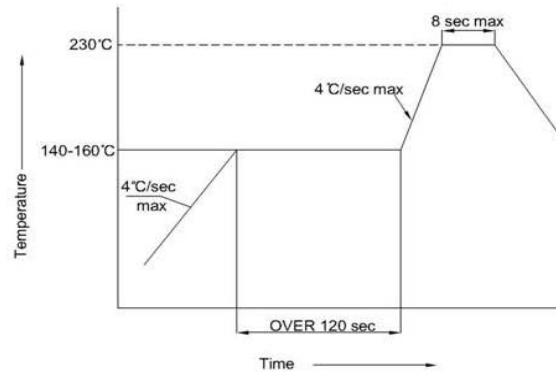
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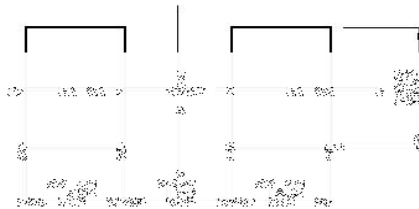
■ Tape Specifications

SMT Reflow Soldering Instructions

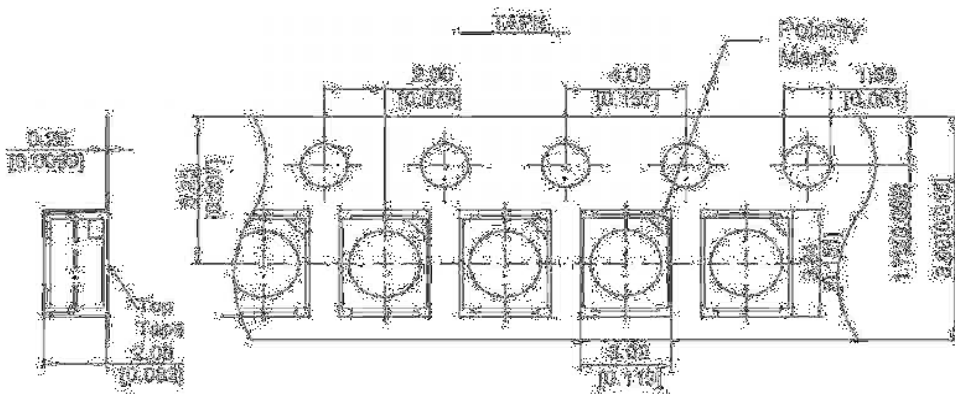
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process.



Recommended Soldering Pattern
(Units : mm)



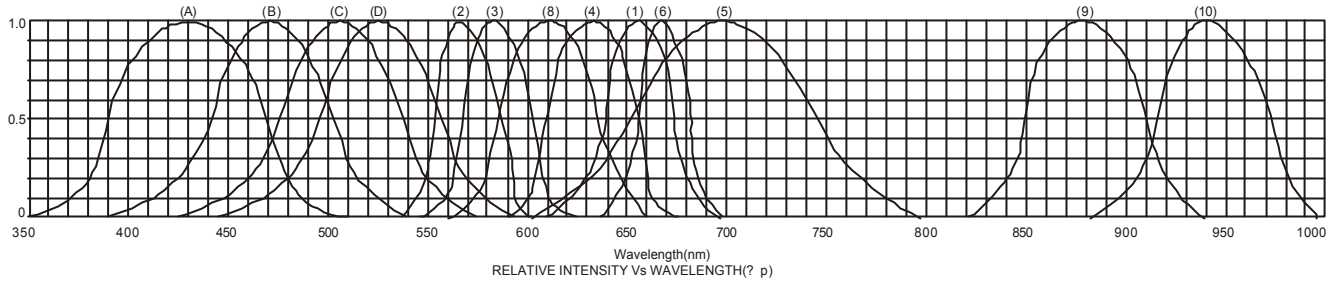
1.5
1.5
1.5



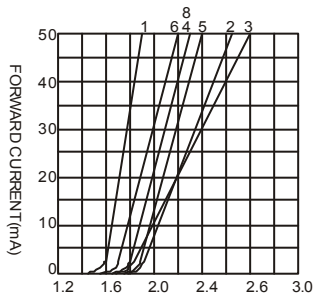
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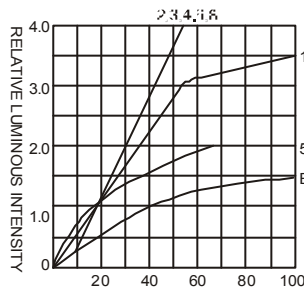
Typical electrical-optical characteristics curves:



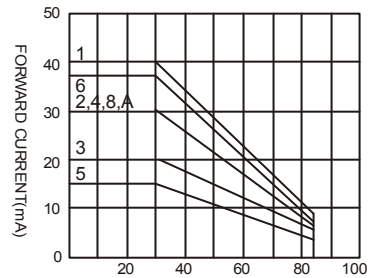
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) - GaN/SiC 430nm/Blue
- (B) - InGaN/SiC 470nm/Blue
- (C) - InGaN/SiC 505nm/Ultra Green
- (D) - InGaAl/SiC 525nm/Ultra Green



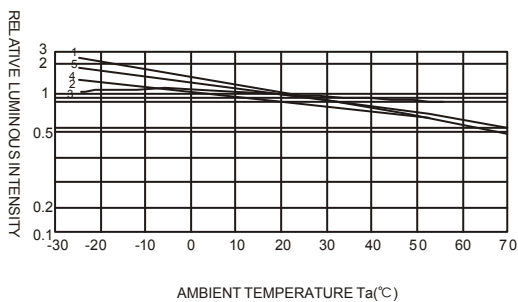
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



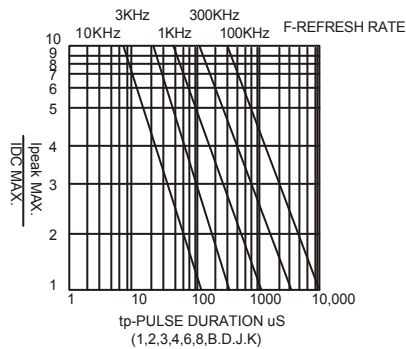
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



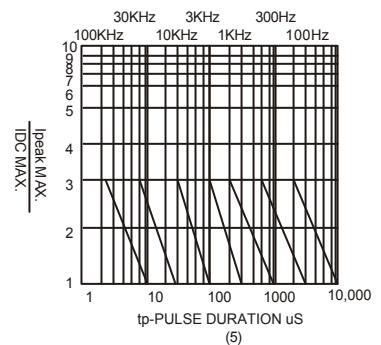
AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



tp-PULSE DURATION µS
(1,2,3,4,6,8,B,D,J,K)



(5)

NOTE:25°C free air temperature unless otherwise specified