

SMD LED LAMP

BL-LS1311xx

Features:

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



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

Part Number	Chip			Lens Type	Forward Voltage(VF) Unit:V		Luminous Intensity (lv) Unit:mcd		Viewing Angle 2θ/2 (deg)
	Emitted Color	Material	λp (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	Ultra White	InGaN	/	3.10	3.80	280	500		
BL-LS1311UWC-A120P	Ultra White	InGaN	/	3.10	3.80	1200	1700		

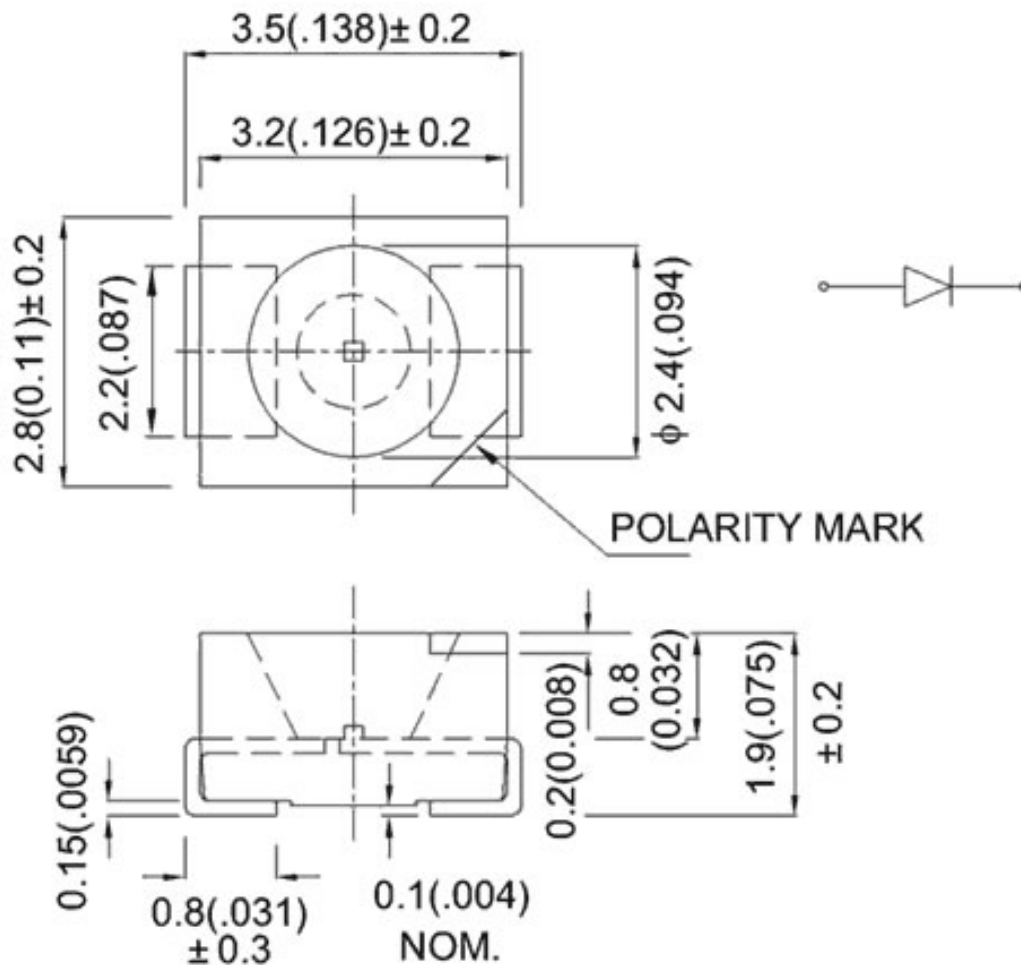
Absolute maximum ratings (Ta=25°C)

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.

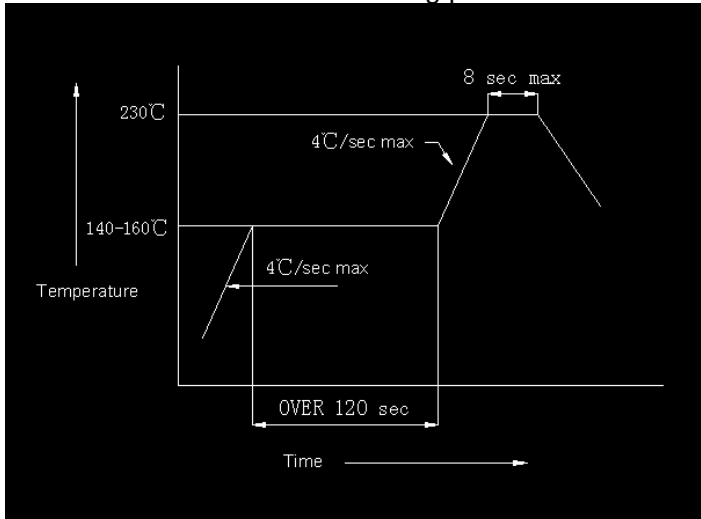
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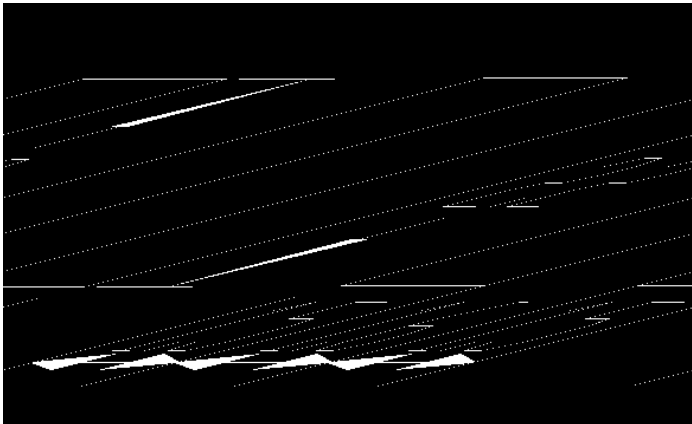
Tape Specifications

Smt Reflow Soldering Instructions

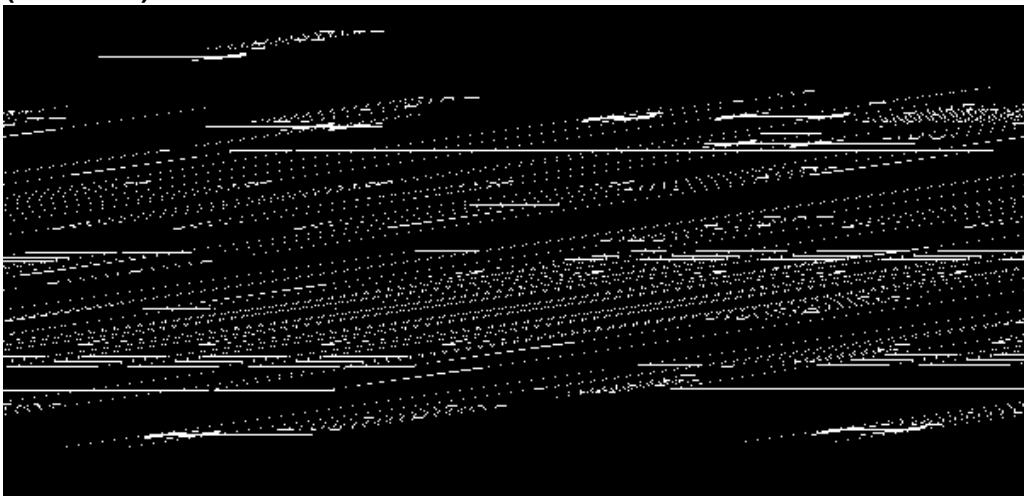
Number of reflow process shall be less than 2 times and cooling process to normal temperature is required between first and second soldering process



**Recommended Soldering Pattern
(Units:mm)**



**Tape Specifications
(Units:mm)**



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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) - InGaAlSiC 525nm/Ultra Green



FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



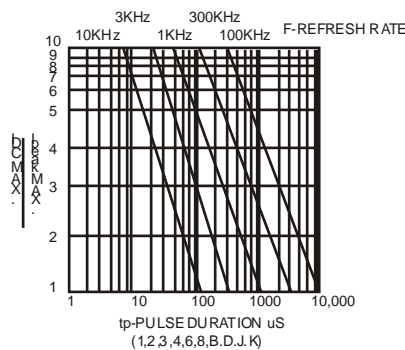
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



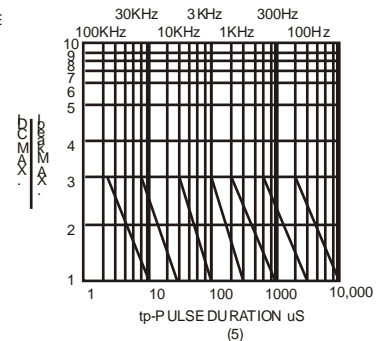
AMBIENT TEMPERATURE Ta ()
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta ()



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



(5)

NOTE: 25 free air temperature unless otherwise specified

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Packing and weighting

