

**SMD LED LAMP, Side View Type**
**BL-LS3010A0E1**
**Features:**

- 3.0mmx1.0mm SMD, Side view
- 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:mcad		Viewing Angle 2θ1/2 (deg)
	Emitted Color	Material	λP (nm)		Typ	Max	Min.	Typ.	
BL-LS3010A0E1UHR	Ultra Red	AlGaAs	645	Water Clear	2.10	2.50	55	100	120
BL-LS3010A0E1UEC	Ultra Red	AlGaAs	630		2.10	2.50	50	100	
BL-LS3010A0E1UYO	Ultra Amber	AlGaInP	610		2.10	2.60	35	80	
BL-LS3010A0E1UYC	Ultra Yellow	AlGaInP	593		2.10	2.60	30	75	
BL-LS3010A0E1UGC	Ultra Green	AlGaInP	575		2.20	2.70	20	40	
BL-LS3010A0E1PGC	Ultra Pure Green	InGaN	525		3.10	3.80	110	250	
BL-LS3010A0E1UBC	Ultra Blue	InGaN	470		3.10	3.80	90	180	
BL-LS3010A0E1UWC	Ultra White	InGaN	/		3.10	3.80	100	200	

**Absolute maximum ratings (Ta=25°C)**

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

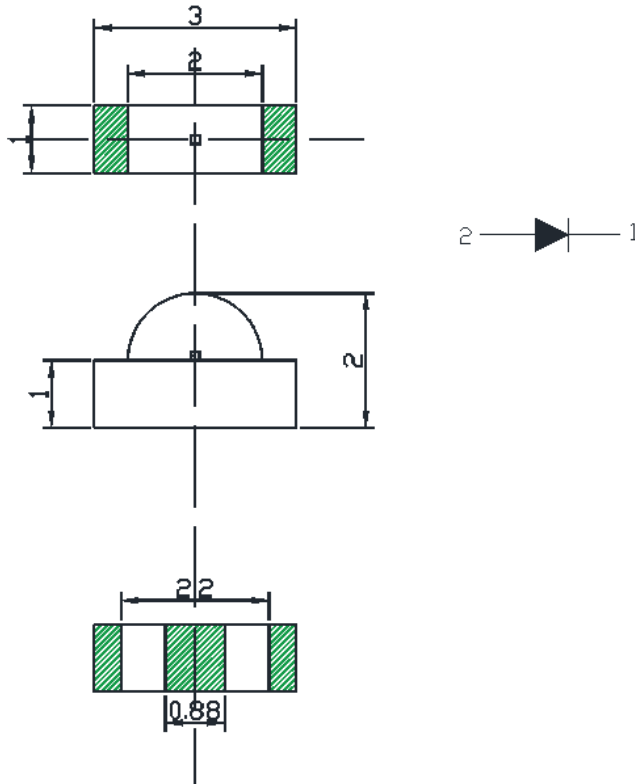
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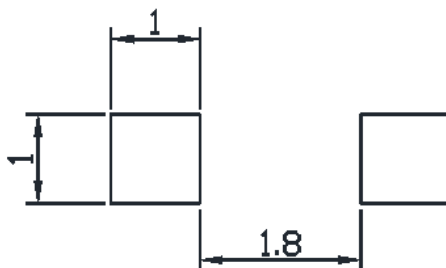
■ **Package configuration & Internal circuit diagram**

**BL-LS3010A0E1 Series**

**Package Outline Drawing**



**Recommended Soldering Pad Dimensions**



**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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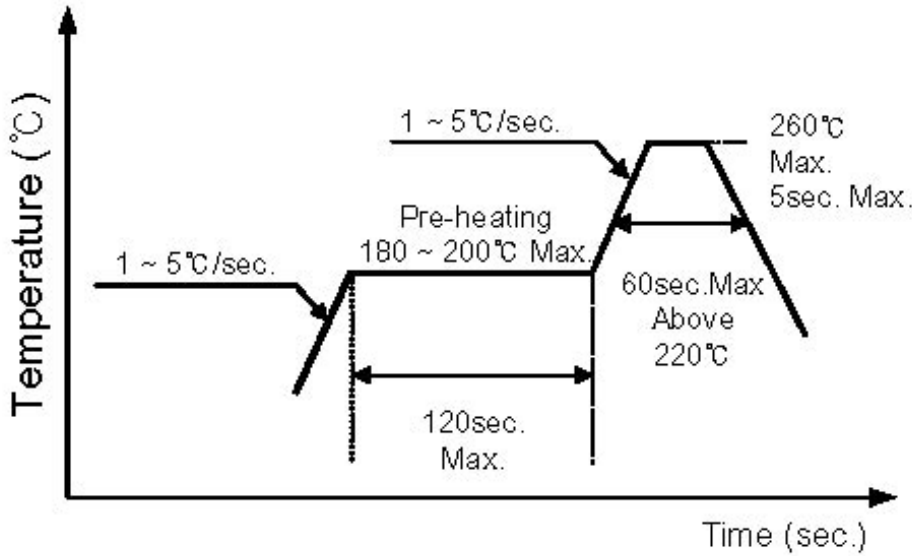
**BL-LS3010A0E1**

■ **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

■ **Lead-free Solder**

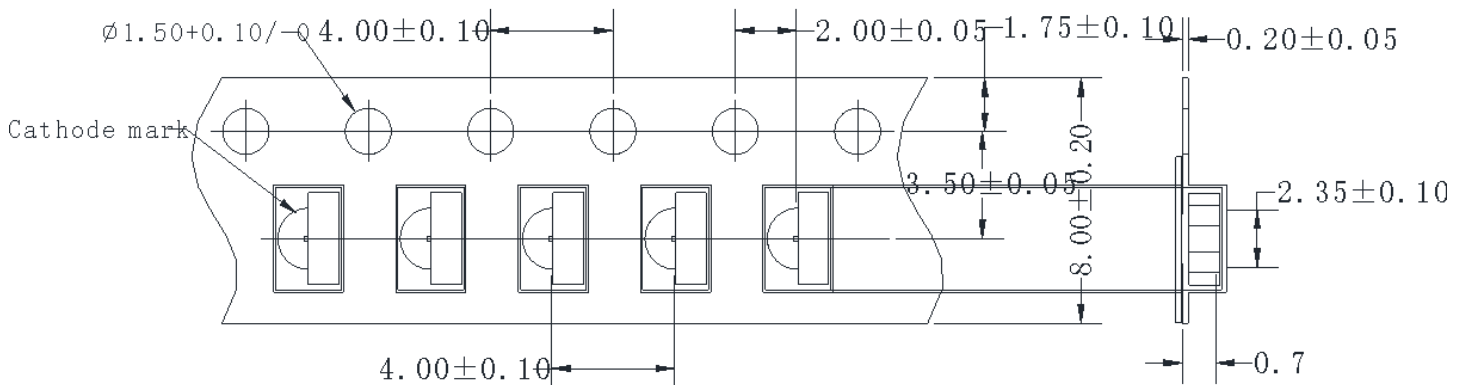


**Tape Specifications**

(Units:mm)

Unit: mm

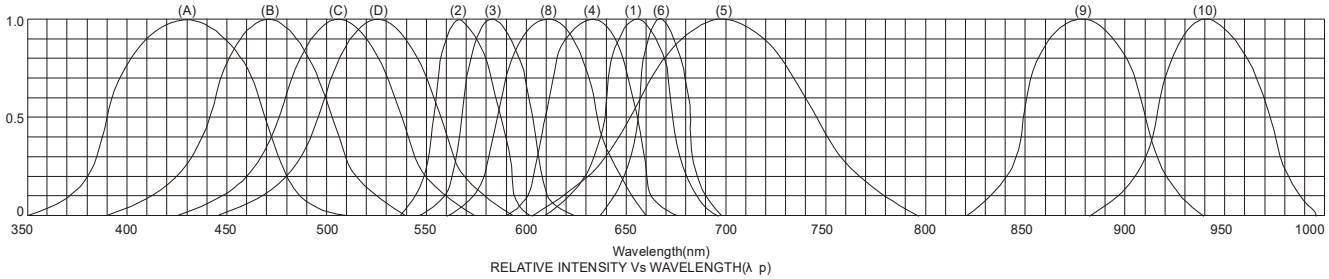
Tolerance: ±0.1



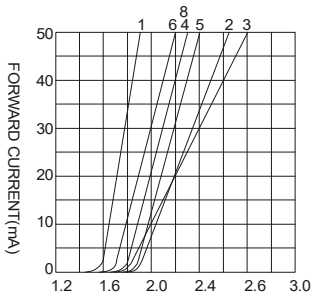
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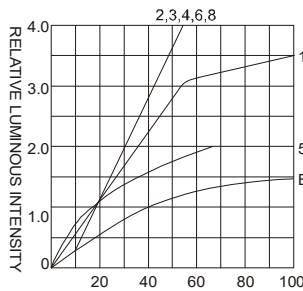
■ **Typical electrical-optical characteristics curves:**



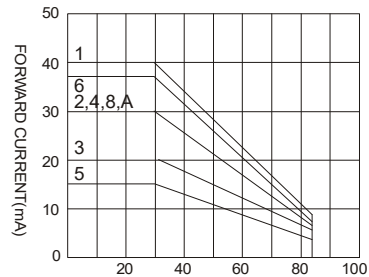
- (1) - GaAsP/GaAs 655nm/Red
- (2) - GaP 570nm/Yellow Green
- (3) - GaAsP/GaP 585nm/Yellow
- (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red
- (5) - GaP 700nm/Bright Red
- (6) - GaAlAs/GaAs 660nm/Super Red
- (8) - GaAsP/GaP 610nm/Super Red
- (9) - GaAlAs 880nm
- (10) - GaAs/GaAs & GaAlAs/GaAs 940nm
- (A) -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



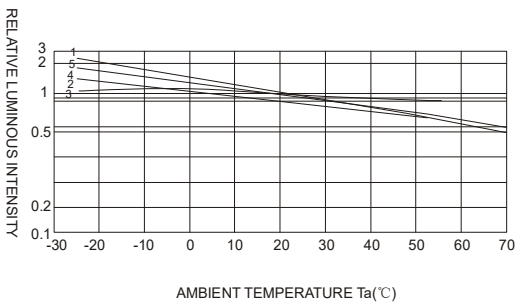
FORWARD VOLTAGE (Vf)  
FORWARD CURRENT VS.  
FORWARD VOLTAGE



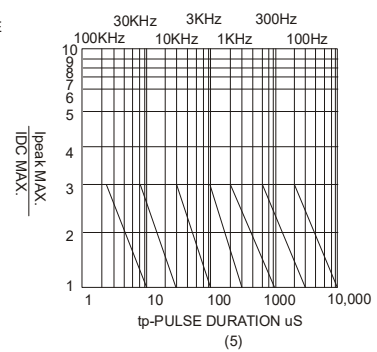
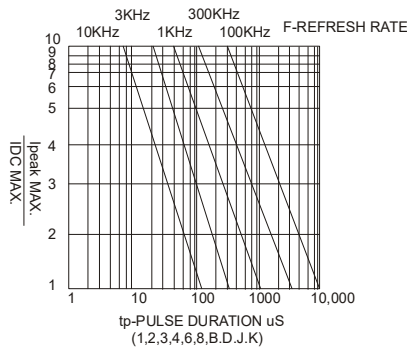
FORWARD CURRENT (mA)  
RELATIVE LUMINOUS  
INTENSITY VS. FORWARD  
CURRENT



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



AMBIENT TEMPERATURE Ta(°C)



NOTE: 25°C free air temperature unless otherwise specified

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■ **Packing and weighting**

