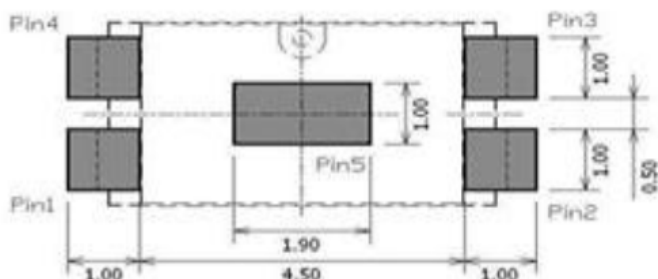
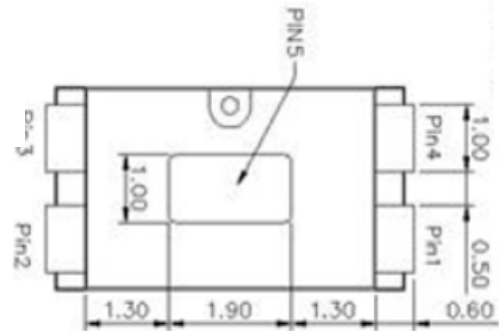
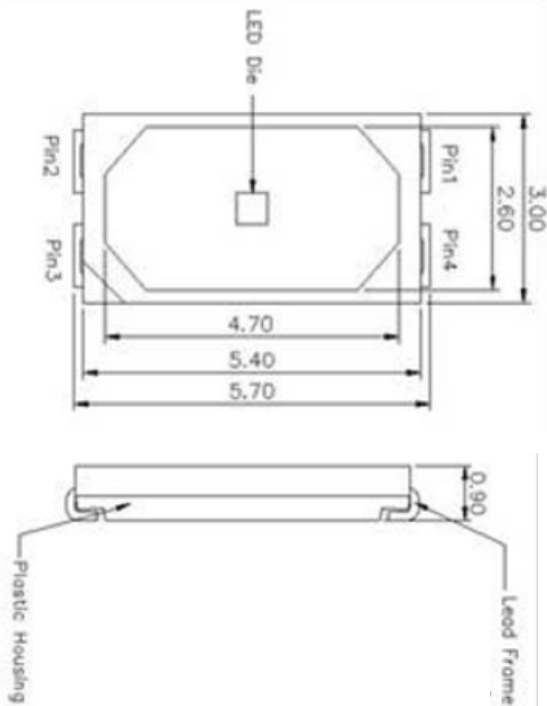


## SURFACE MOUNT LED LAMPS

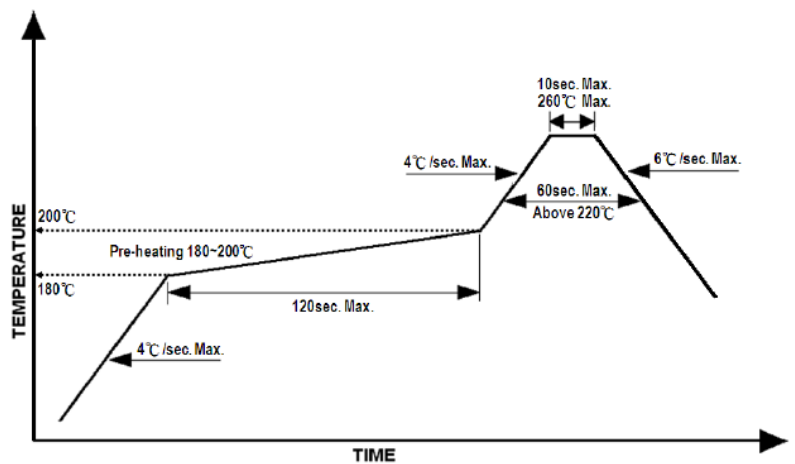
5630 Package Power White Surface Mount Device

Part Number: 62-217BUW1C1

### Package outlines & Re-flow Profile



#### Reflow Temp/Time



#### Soldering iron

Basic spec is  $\leq 5\text{sec}$  when  $260^\circ\text{C}$ . If temperature is higher, time should be shorter ( $+10^\circ\text{C} \rightarrow -1\text{sec}$ ). Power dissipation of iron should be smaller than  $15\text{W}$ , and temperatures should be controllable. Surface temperature of the device should be under  $230^\circ\text{C}$ .

ITEM	MATERIALS
Resin (mold)	Epoxy
Lens color	Yellow Diffused
Printed circuit board	BT
Emitted color	White
Material	InGaN

#### NOTES:

1. All dimensions are in millimeters (inches);
2. Tolerances are  $\pm 0.1\text{mm}$  (0.004inch) unless otherwise noted.
3. Polarity referring onto the cathode mark is reversed on the red.



**A-BRIGHT INDUSTRIAL CO., LTD.**

**SURFACE MOUNT LED LAMPS**

Part Number: 62-217BUW1C1

**ELECTRO-OPTICAL CHARACTERISTICS**

(T<sub>A</sub>=25°C)

Parameter	Test Condition	Symbol	Value			Unit
			MIN.	TYP.	MAX.	
Viewing angle at 50% I <sub>v</sub>	I <sub>F</sub> =60mA	2θ 1/2	120			Deg
Forward voltage	I <sub>F</sub> =60mA	V <sub>F</sub>	2.8	---	3.5	V
Color Temperature	I <sub>F</sub> =60mA	CCT	5250	5750	6250	K
			3750	4000	4250	
Luminous Flux	I <sub>F</sub> =60mA	Flux	---	20	---	lm
			---	21	---	
Pulse Forward Current (Pulse Width ≤ 10msec, and duty ≤ 1/10)		I <sub>FP</sub>	150			mA

**Absolute maximum ratings**

(T<sub>A</sub>=25°C)

Parameter	Symbol	Value	Unit
Forward current	I <sub>F</sub>	100	mA
Reverse voltage	V <sub>R</sub>	5	V
Reverse current	I <sub>R</sub>	1	μA
Power dissipation	P <sub>D</sub>	235	mW
Operating temperature range	Top	-30 ~+80	°C
Storage temperature range	Tstg	-40 ~+85	°C



**A-BRIGHT INDUSTRIAL CO., LTD.**

# SURFACE MOUNT LED LAMPS

Part Number: 62-217BUW1C1

## Bin Code

■ Iv Bin:

Color	Bin Code	Spec. Range
White	MC2	15.8~18.1lm
	MD2	16.9 ~18.1lm
	NA1	18.1~19.3lm
	NB1	19.3~20.6lm
	NC2	20.6~22.0lm
	ND2	22.0~23.5lm
	AP1	23.4~25.1lm
	BP1	25.1~26.8m
	CP2	26.8~28.6m
	DP2	28.6~30.4m
	QA1	30.4~32.6m
	QB1	32.6~34.9m
	QC2	34.9~37.2m
	QD2	37.2~39.8m
	RA1	39.8~42.5m
	RB1	42.5~45.3m
	RC2	45.3~48.4m
	RD2	48.4~51.7m
	SA3	51.7~55.2m
	SB3	55.2~58.9m
SC4	58.9~62.4m	
SD4	62.4~67.2m	

■ Vf Bin

Bin Code	Spec. Range
H1	2.8-2.9V
H2	2.9-3.0V
H3	3.0-3.1V
H4	3.1-3.2V
J1	3.2-3.3V
J2	3.3-3.4V
J3	3.4-3.5V

Forward Voltage Measurement Allowance is  $\pm 0.005V$

Luminous Intensity Measurement Allowance is  $\pm 7\%$

Color Temperature		Iv Bin		
Min.	Max.	Min.	Typ.	Max.
2750K	3250K	MD2	NA1	NB1
3750K	4250K	NB1	NC2	ND2
5250K	6250K	NA1	NB1	NC2



A-BRIGHT INDUSTRIAL CO., LTD.

SURFACE MOUNT LED LAMPS

Part Number: 62-217BUW1C1

Color Rank

BOA	8000-8500K	B1A	8000-8500K	B0E	7500-8000K	B1E	7500-8000K	B0C	8000-8500K	B1C	8000-8500K	B0D	7500-8000K	B1D	7500-8000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.298	0.282	0.2915	0.298	0.302	0.297	0.29825	0.3045	0.2943	0.29	0.28125	0.30893	0.295125	0.29675	0.292625	0.315585
0.2948	0.29	0.28725	0.30883	0.298125	0.29575	0.292625	0.315585	0.2918	0.298	0.283	0.31925	0.29675	0.3015	0.295	0.33893
0.299125	0.29575	0.292625	0.315585	0.3035	0.3015	0.298	0.3225	0.29625	0.3045	0.299	0.30893	0.2931	0.311	0.295	0.334
0.302	0.287	0.29625	0.3045	0.308	0.292	0.301	0.311	0.295125	0.29575	0.292625	0.315585	0.3035	0.3015	0.298	0.3225
0.298	0.282	0.2915	0.298	0.302	0.297	0.29825	0.3045	0.2943	0.29	0.28125	0.30893	0.295125	0.29675	0.292625	0.315585

COA	1000-1500K	C1A	7000-7500K	C0E	8750-7000K	C1E	8750-7000K	C0C	7000-7500K	C1C	7000-7500K	C0D	8750-7000K	C1D	8750-7000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.305	0.292	0.301	0.311	0.30975	0.2985	0.3055	0.3165	0.3035	0.3015	0.298	0.3225	0.30725	0.3055	0.301	0.3235
0.3034	0.3014	0.298	0.3225	0.307625	0.3005	0.303	0.3285	0.301	0.311	0.298	0.334	0.3055	0.3105	0.3005	0.3405
0.307625	0.3024	0.303	0.3285	0.3115	0.308	0.3145	0.3225	0.3105	0.3005	0.3005	0.3405	0.31	0.322	0.308	0.347
0.30975	0.2994	0.3004	0.3195	0.3135	0.301	0.31	0.322	0.307625	0.3005	0.303	0.3285	0.31175	0.3115	0.308	0.344
0.302	0.292	0.301	0.311	0.30975	0.2985	0.3055	0.3165	0.3035	0.3015	0.298	0.3225	0.30725	0.3055	0.301	0.3235

DOA	8500-9100K	D1A	8500-9100K	D0E	8250-8500K	D1E	8250-8500K	D0C	8500-9100K	D1C	8500-9100K	D0D	8250-8500K	D1D	8250-8500K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.3132	0.301	0.31	0.322	0.3107	0.304	0.3132	0.3255	0.31175	0.3115	0.305	0.3345	0.3101	0.31475	0.31175	0.33775
0.31175	0.3114	0.308	0.3345	0.3181	0.31475	0.31175	0.33775	0.31	0.322	0.308	0.347	0.3135	0.3205	0.31	0.35
0.3181	0.31475	0.31175	0.33775	0.3181	0.318	0.3145	0.341	0.3132	0.3225	0.31	0.35	0.317	0.329	0.314	0.362
0.3107	0.304	0.3132	0.3255	0.307	0.317	0.309	0.329	0.3101	0.31475	0.31175	0.33775	0.3185	0.318	0.3105	0.341
0.3132	0.301	0.31	0.322	0.3107	0.304	0.3132	0.3255	0.31175	0.3115	0.305	0.3345	0.3101	0.31475	0.31175	0.33775

EOA	8000K-8250K	E1A	8000K-8250K	E0E	8750-8000K	E1E	8750-8000K	E0C	8000K-8250K	E1C	8000K-8250K	E0D	8750-8000K	E1D	8750-8000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.32	0.307	0.317	0.329	0.3235	0.31	0.3215	0.333	0.3182	0.318	0.3102	0.341	0.3222	0.3215	0.3202	0.34025
0.3182	0.318	0.3155	0.341	0.3225	0.3215	0.3202	0.34025	0.317	0.329	0.314	0.353	0.3212	0.323	0.3185	0.3575
0.3225	0.3215	0.3202	0.34025	0.3202	0.3202	0.3455	0.3215	0.329	0.329	0.3182	0.3455	0.3212	0.323	0.323	0.352
0.3235	0.31	0.3215	0.333	0.327	0.313	0.326	0.337	0.3225	0.3215	0.3202	0.34525	0.3225	0.325	0.3225	0.3495
0.32	0.307	0.317	0.329	0.3235	0.31	0.3215	0.333	0.3182	0.318	0.3102	0.341	0.3222	0.3215	0.3202	0.34025

FOA	8500-9100K	F1A	8500-9100K	F0E	8250-8500K	F1E	8250-8500K	F0C	8500-9100K	F1C	8500-9100K	F0D	8250-8500K	F1D	8250-8500K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.327	0.313	0.328	0.337	0.332	0.317	0.3325	0.342	0.3285	0.328	0.3255	0.3495	0.33225	0.3295	0.33275	0.35475
0.3265	0.325	0.3255	0.3495	0.33225	0.3295	0.33275	0.35475	0.328	0.328	0.3255	0.3495	0.33225	0.3295	0.33275	0.35475
0.33225	0.3295	0.33275	0.35475	0.332	0.324	0.33	0.35	0.3285	0.328	0.3255	0.3495	0.33225	0.3295	0.33275	0.35475
0.325	0.317	0.3255	0.342	0.327	0.321	0.328	0.337	0.3225	0.3215	0.3202	0.34525	0.3225	0.325	0.3225	0.3495
0.327	0.313	0.328	0.337	0.332	0.317	0.3325	0.342	0.3285	0.328	0.3255	0.3495	0.33225	0.3295	0.33275	0.35475

G0A	8000K-8250K	G1A	8000K-8250K	G0E	8750-8000K	G1E	8750-8000K	G0C	8000K-8250K	G1C	8000K-8250K	G0D	8750-8000K	G1D	8750-8000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.327	0.321	0.329	0.347	0.343	0.3255	0.348	0.351	0.338	0.324	0.34	0.36	0.3445	0.33225	0.3475	0.364
0.328	0.334	0.34	0.36	0.3445	0.33225	0.3475	0.354	0.338	0.347	0.341	0.373	0.346	0.351	0.349	0.377
0.3445	0.33225	0.3475	0.364	0.351	0.348	0.355	0.363	0.346	0.351	0.345	0.377	0.353	0.355	0.357	0.381
0.343	0.3255	0.348	0.351	0.349	0.33	0.352	0.355	0.3445	0.33225	0.3475	0.364	0.351	0.3425	0.353	0.369
0.327	0.321	0.329	0.347	0.343	0.3255	0.348	0.351	0.338	0.324	0.34	0.36	0.3445	0.33225	0.3475	0.364

H0A	4500-4750K	H1A	4500-4750K	H0E	4250-4500K	H1E	4250-4500K	H0C	4500-4750K	H1C	4500-4750K	H0D	4250-4500K	H1D	4250-4500K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.349	0.33	0.353	0.355	0.3555	0.3335	0.35	0.359	0.351	0.3425	0.355	0.368	0.35775	0.34625	0.3525	0.37225
0.351	0.3425	0.355	0.358	0.35775	0.34625	0.3525	0.37225	0.353	0.355	0.357	0.361	0.358	0.355	0.355	0.3855
0.35775	0.3425	0.3525	0.37225	0.3545	0.35	0.357	0.3755	0.35	0.355	0.355	0.365	0.365	0.367	0.373	0.38
0.3555	0.3335	0.35	0.359	0.3555	0.3335	0.35	0.359	0.351	0.3425	0.355	0.368	0.35775	0.34625	0.3525	0.37225
0.349	0.33	0.353	0.355	0.3555	0.3335	0.35	0.359	0.351	0.3425	0.355	0.368	0.35775	0.34625	0.3525	0.37225

J0A	4000-4250K	J1A	4000-4250K	J0E	3750-4000K	J1E	3750-4000K	J0C	4000-4250K	J1C	4000-4250K	J0D	3750-4000K	J1D	3750-4000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.3645	0.35	0.3685	0.37	0.37425	0.355	0.37925	0.375	0.3655	0.36	0.37175	0.385	0.37675	0.365	0.383375	0.39
0.3685	0.36	0.37175	0.385	0.37675	0.365	0.383375	0.39	0.3685	0.37	0.37675	0.4	0.37925	0.375	0.3875	0.405
0.37675	0.365	0.383375	0.39	0.387	0.37	0.395	0.395	0.37925	0.375	0.3875	0.405	0.38	0.39	0.4	0.41
0.37425	0.355	0.37925	0.375	0.384	0.35	0.39	0.39	0.37175	0.365	0.383375	0.39	0.387	0.37	0.385	0.395
0.3645	0.35	0.3685	0.37	0.37425	0.355	0.37925	0.375	0.3655	0.36	0.37175	0.385	0.37675	0.365	0.383375	0.39

K0A	3500-3750K	K1A	3500-3750K	K0E	3250-3500K	K1E	3250-3500K	K0C	3500-3750K	K1C	3500-3750K	K0D	3250-3500K	K1D	3250-3500K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.384	0.38	0.39	0.39	0.395	0.364	0.403	0.395	0.387	0.37	0.395	0.395	0.399	0.3745	0.409	0.4
0.387	0.37	0.385	0.395	0.389	0.3745	0.409	0.4	0.38	0.38	0.4	0.41	0.403	0.385	0.415	0.415
0.395	0.3745	0.409	0.4	0.411	0.379	0.4228	0.404	0.403	0.395	0.415	0.415	0.418	0.39	0.43	0.42
0.395	0.384	0.403	0.395	0.408	0.368	0.418	0.39	0.399	0.3745	0.409	0.4	0.411	0.379	0.423	0.405
0.384	0.38	0.39	0.39	0.395	0.364	0.403	0.395	0.387	0.37	0.395	0.395	0.399	0.3745	0.409	0.4

L0A	3000-3250K	L0E	2750-3000K	L0D	3000-3250K	L0D	2750-3000K	L1A	3000-3250K	L1B	2750-3000K	L1C	3000-3250K	L1D	2750-3000K
x	y	x	y	x	y	x	y	x	y	x	y	x	y	x	y
0.4050	0.368	0.4200	0.37050	0.41250	0.38250	0.42725	0.38475	0.415	0.397	0.4345	0.395	0.42750	0.41500	0.44375	0.417
0.41250	0.38250	0.4													

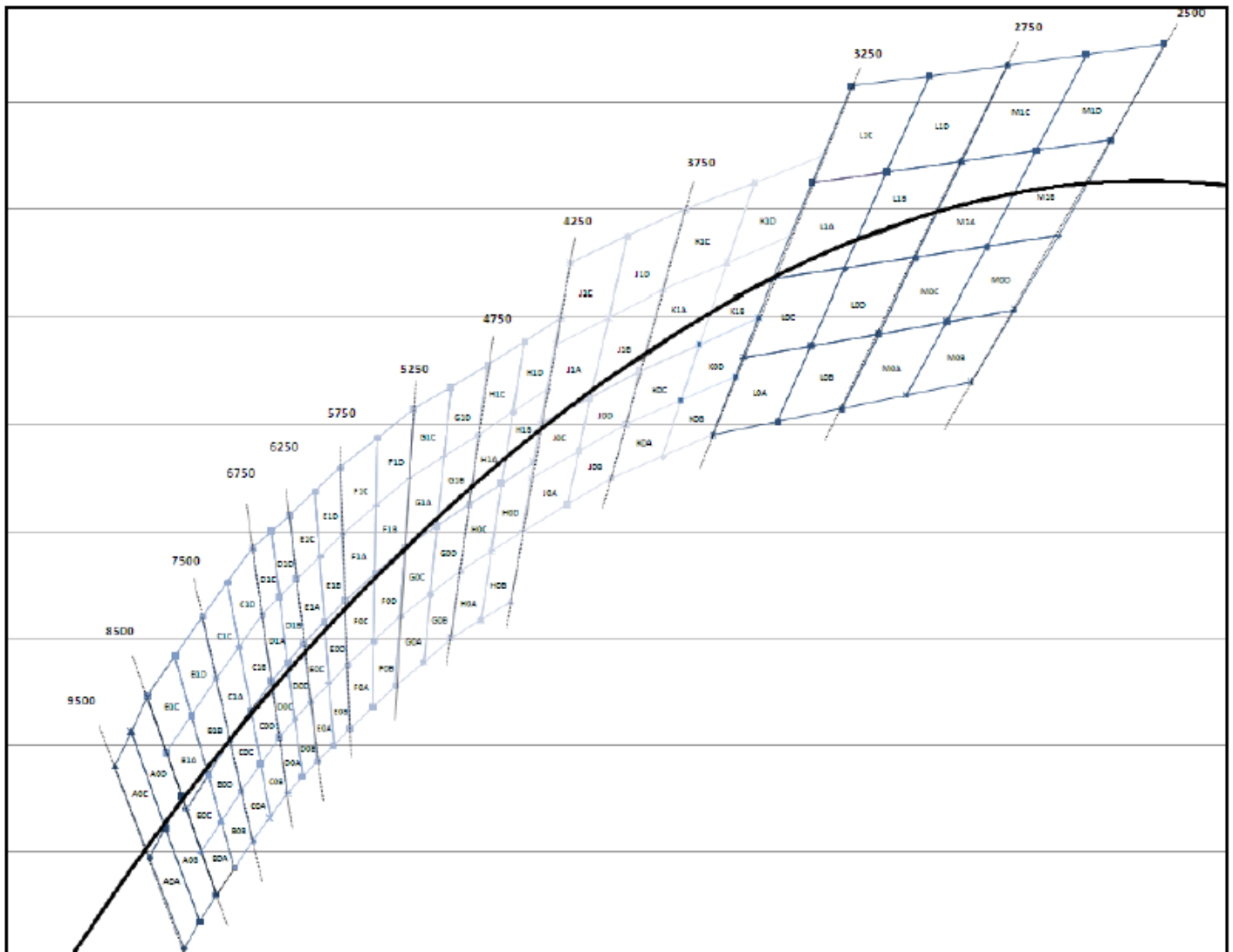
**A-BRIGHT**

**A-BRIGHT INDUSTRIAL CO., LTD.**

# SURFACE MOUNT LED LAMPS

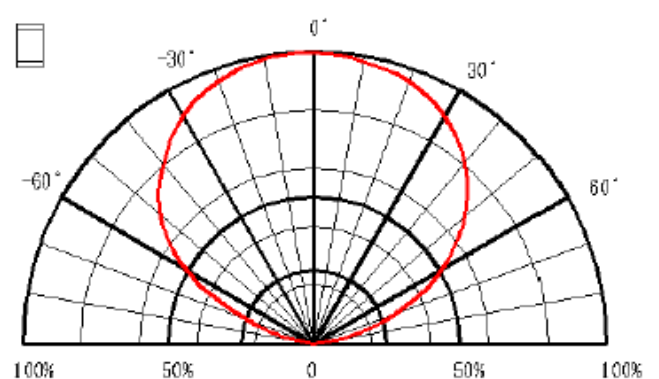
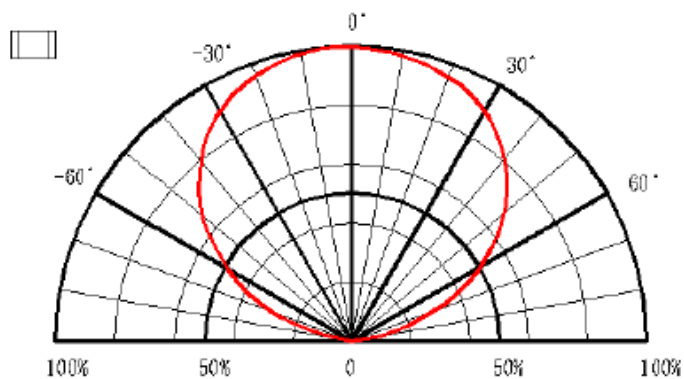
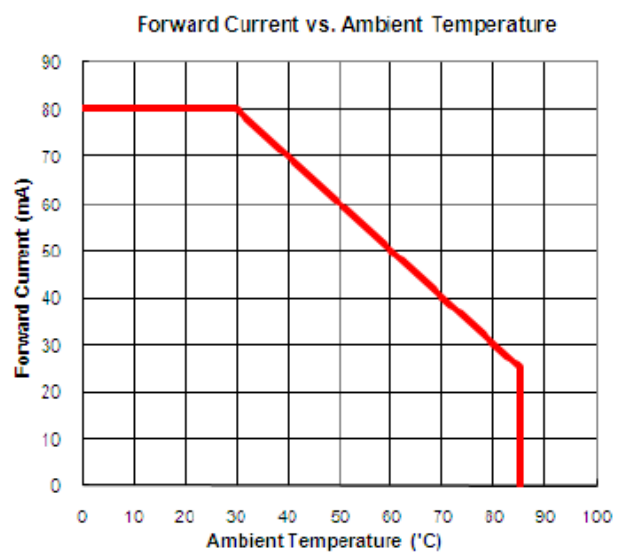
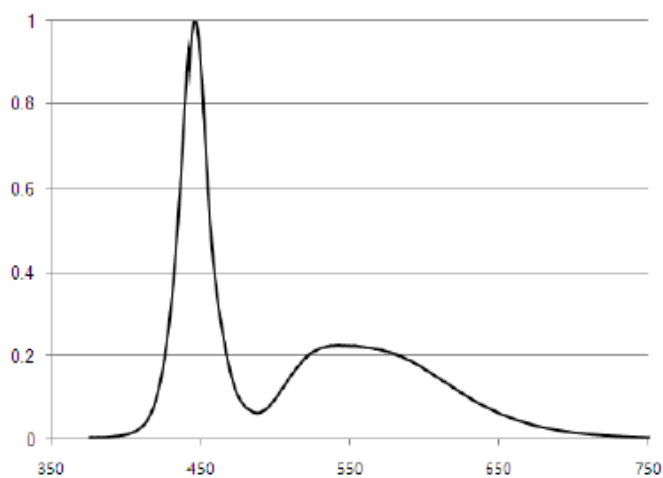
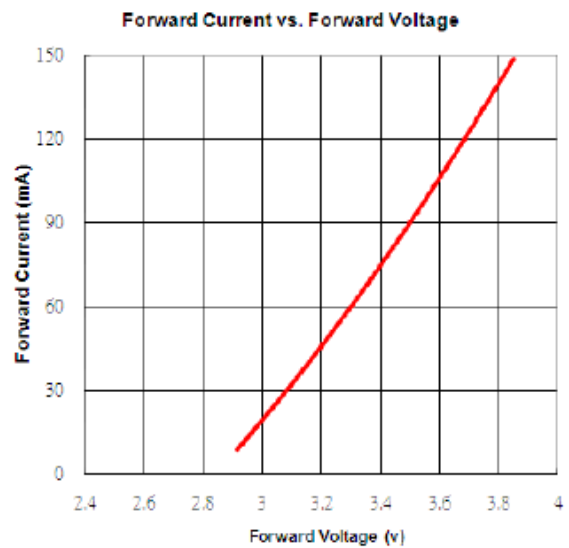
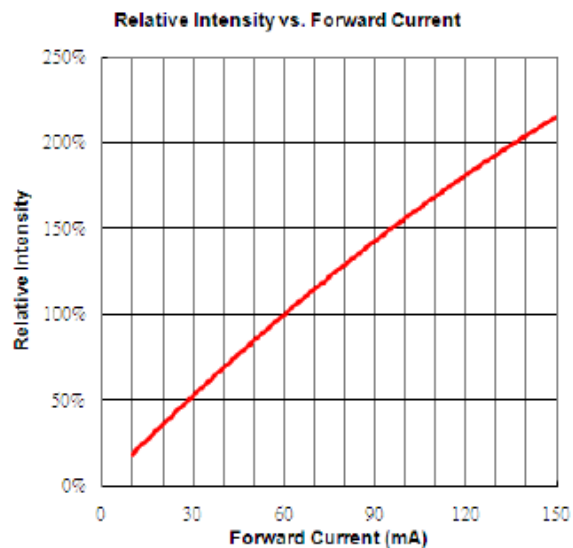
Part Number: 62-217BUW1C1

## CIE Chromaticity Diagram



**SURFACE MOUNT LED LAMPS**

Part Number: 62-217BUW1C1

**Typical Electro-Optical Characteristic Curves**

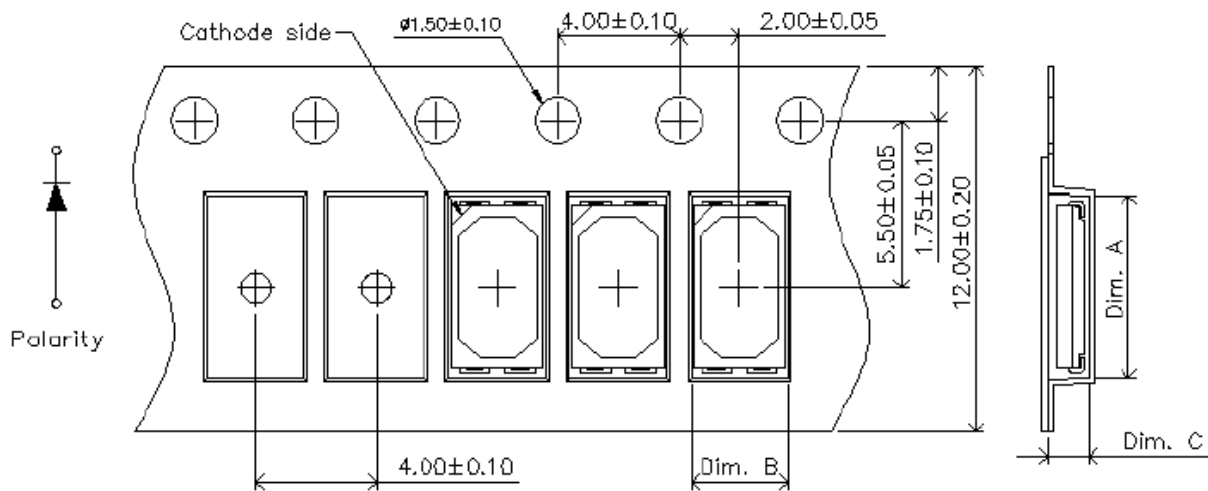


# **A-BRIGHT** A-BRIGHT INDUSTRIAL CO., LTD. SURFACE MOUNT LED LAMPS

Part Number: 62-217BUW1C1

## Packaging Tape, Reel, and Packing Model

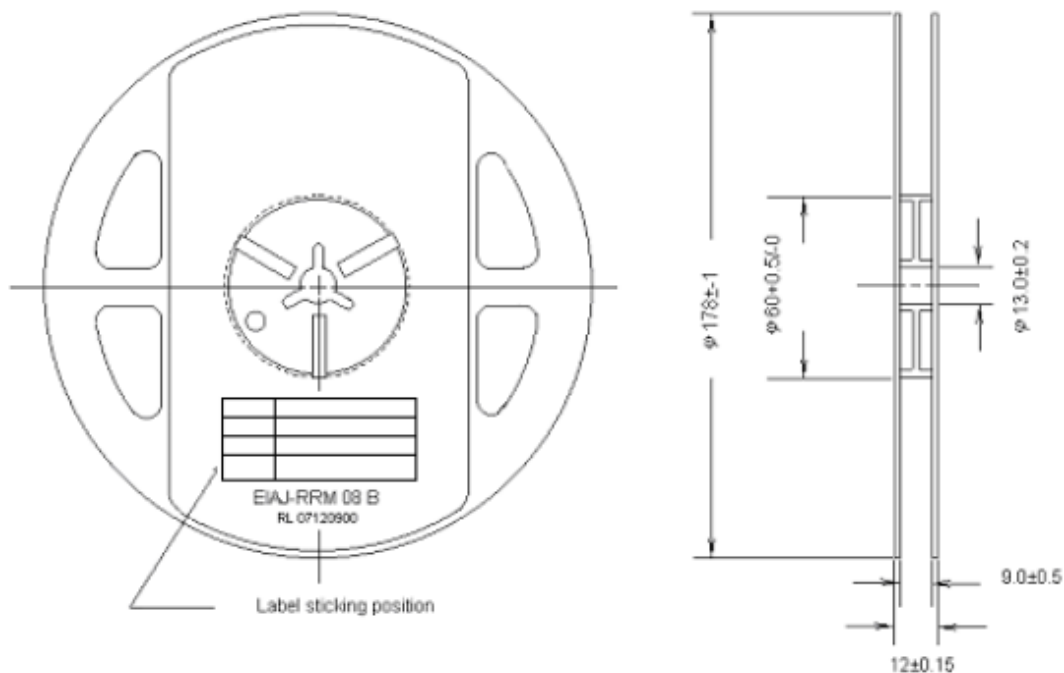
### Tape Dimension



Part No.	Dim. A	Dim. B	Dim. C	Q'ty/Reel
HT-T5301	$6.0 \pm 0.1$	$3.2 \pm 0.1$	$1.1 \pm 0.1$	2K

Unit: mm

### Reel Dimension



**SURFACE MOUNT LED LAMPS**

Part Number: 62-217BUW1C1

**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 The LEDs should be used within a year.

2.4 After opening the package, the LEDs should be kept at 30°C or less and 70%RH or less.

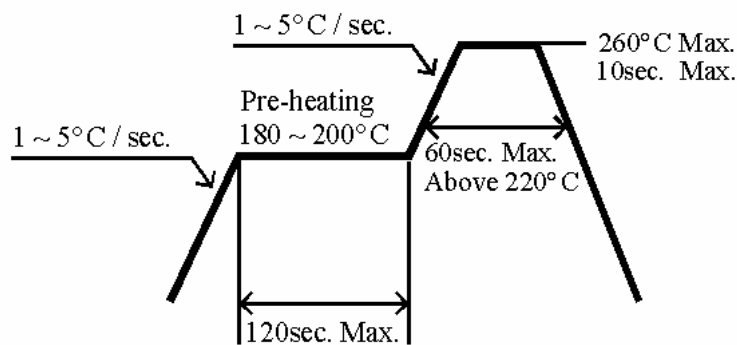
2.5 The LEDs should be used within 168 hours (7 days) after opening the package.

2.6 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 280°C for 3 seconds within once in less than 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.