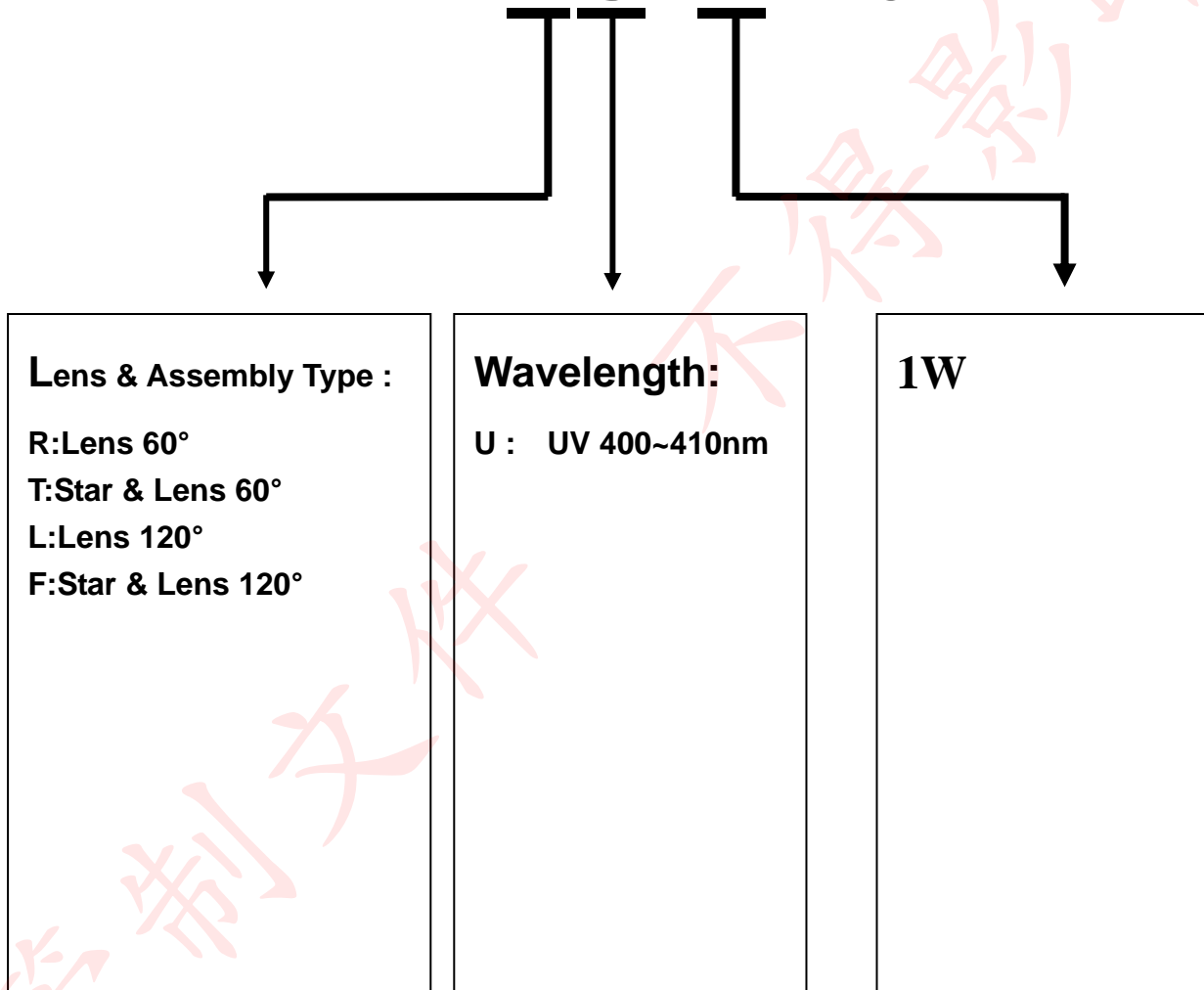


SPECIFICATION FOR UV SERIES

HPL-H44XU1BA-0N1



Caution:

Depends on different chips structures, the thermal pad could has a polarity as

3. Absolute Maximum Ratings

 (T_j=25°C)

Parameters		Symbol	Rating	Unit
Power Dissipation	U 400~410nm	P	1.4	W

Parameters	Symbol	Rating	Unit
Forward Current	I _F	350	mA
Forward Pulse Current (1/10 Duty Cycle, 400msec Pulse Width)	I _{FP}	500	mA
Thermal Resistance, Junction-Case	R _{th, J-C} ¹	10	°C/W
Reverse Voltage	V _R	5	V
LED Junction Temperature	T _j	125	°C
Operating Temperature Range	T _{opr}	-40°C to + 80°C	
Storage Temperature Range	T _{stg}	-40°C to + 120°C	
Soldering Condition	T _{sol}	260°C For 5 Seconds	

Note: 1. The thermal resistance value is measured with MCPCB (Star).

4. Initial Electrical/Optical Characteristics

● Forward Voltage

 (T_j=25°C)

Wavelength	Forward Voltage					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
U 400~410nm	V _F	3.03	3.90	4.47	I _F = 350mA	V

Caution: The real output is decided by chip capability

● Reverse Current

 (T_j=25°C)

Wavelength	Reverse Current					
	Symbol	MIN.	TYP.	MAX.	Test Condition	Unit
U 400~410nm	I _R	-	-	100	V _R = 5V	μA

● Radiant Intensity

 (T_j=25°C)

Radiant Intensity Bins

Item	Bin Code	Symbol	Condition	Min.	Max.	Unit
Radiant Flux ²	0	Φ_e	$I_F = 350$ [mA]	0	10	mW
	1			10	20	
	2			20	30	
	3			30	40	
	4			40	50	
	5			50	75	
	6			75	100	
	7			100	125	
	8			125	150	
	9			150	175	
	A			175	225	
	B			225	275	
	C			275	350	

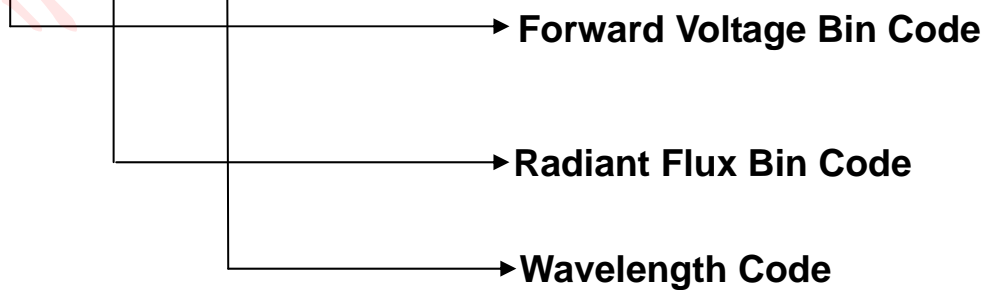
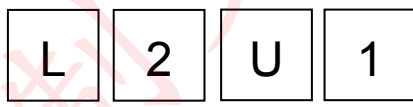
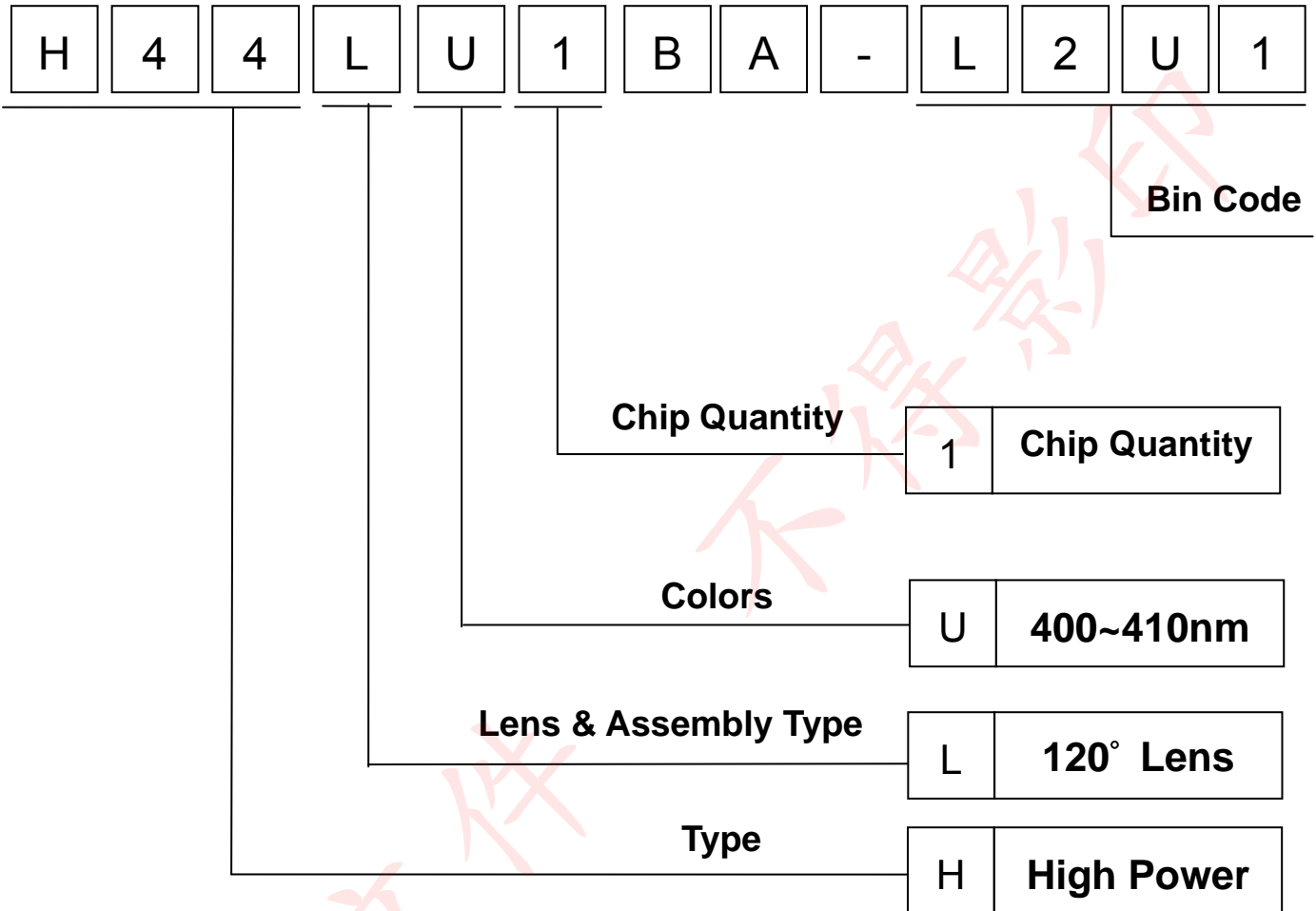
Wavelength Bins

Wavelength ³	Bin Code	Symbol	Condition	Min.	Max.	Unit
U 400~410nm	U1	λ_p	$I_F = 350$ [mA]	400	410	nm

Note

1. Forward voltage measurement allowance is $\pm 0.1V$.
2. Radiant flux measurement allowance is $\pm 10\%$.
3. Wavelength measurement allowance is $\pm 5nm$.
4. If you have any inquiry or request other than the specified wavelength, please kindly contact with our sales department.

5. Part Number Formation



7. Outline Dimension

Unit : mm

HPL-H44RU1BA

HPL-H44LU1BA

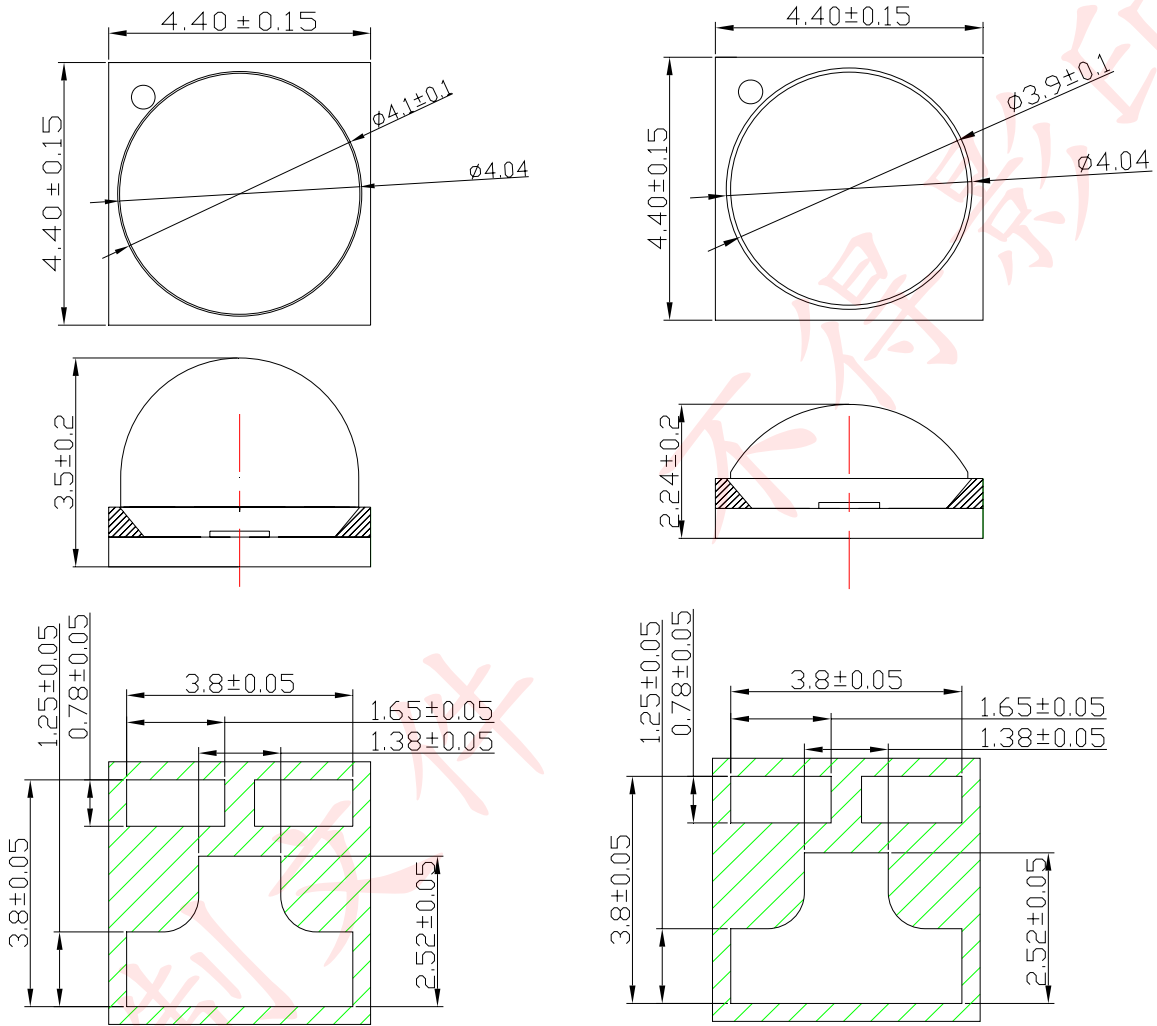
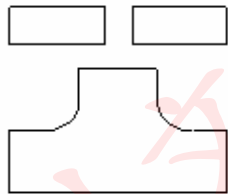
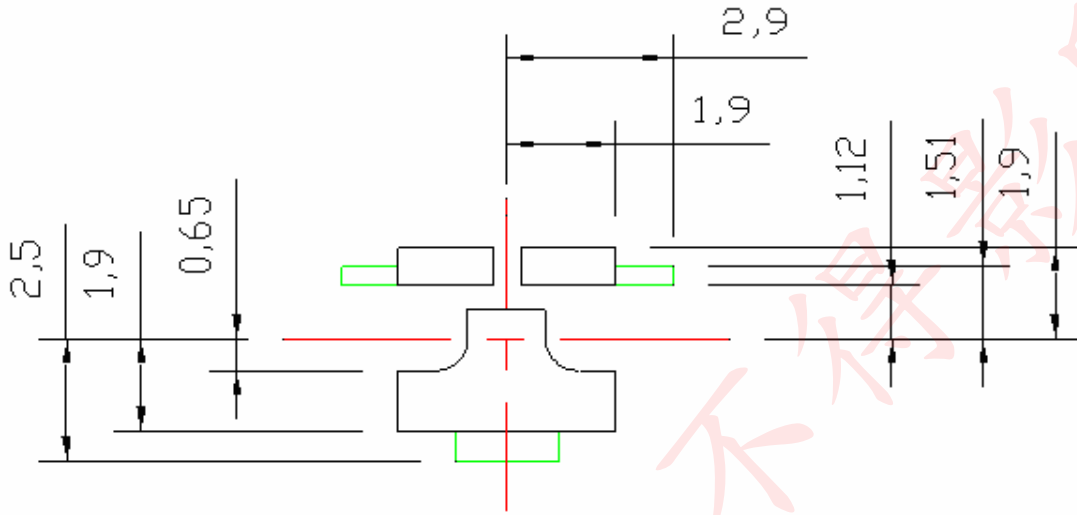
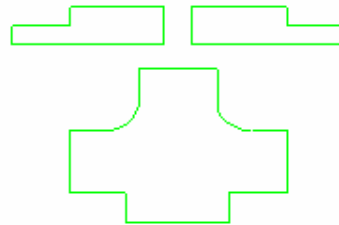


Fig. 7.1 Package Outline Drawing.

8. Recommended Solder Pattern



**SOLDER
MASK**

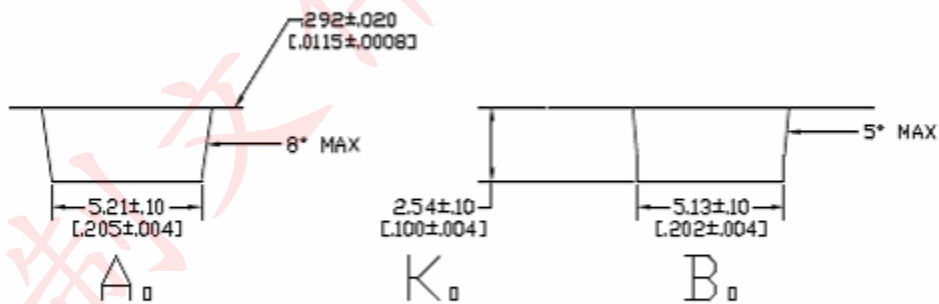
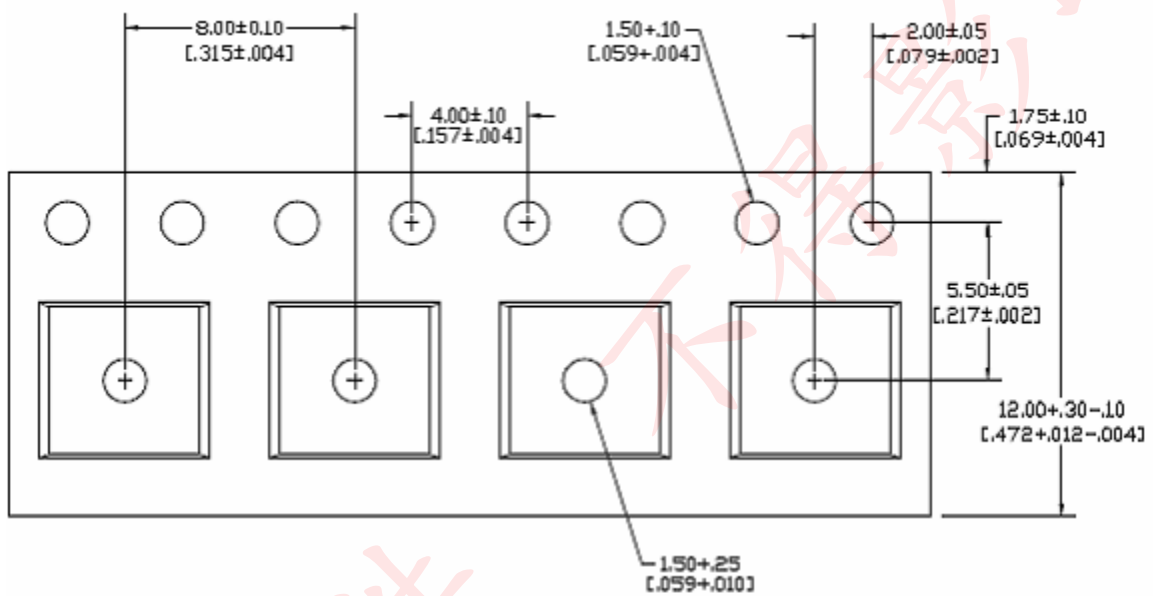


**COPPER
LAYER**

● **120 degree Lens Type :**

- Moisture proof bag.
- 1 Reel/bag.
- Q'ty: 800(MAX)/Reel.

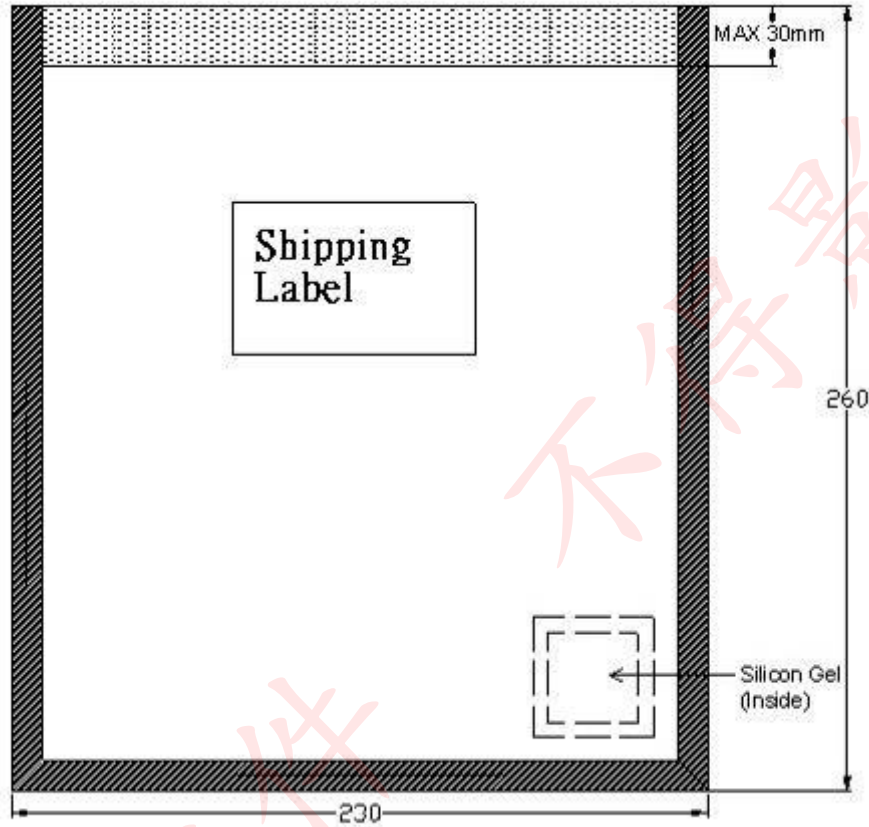
Unit : mm



MM
[INCH]

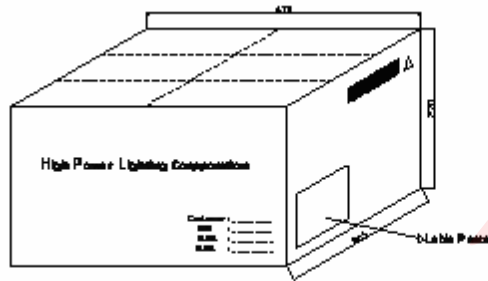
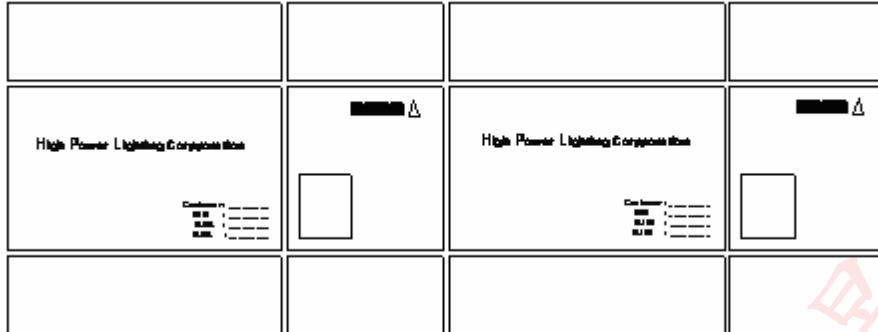
Anti Static Bag :

Unit : mm



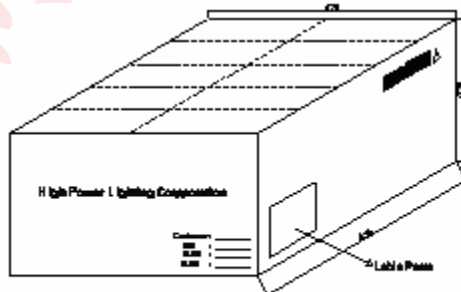
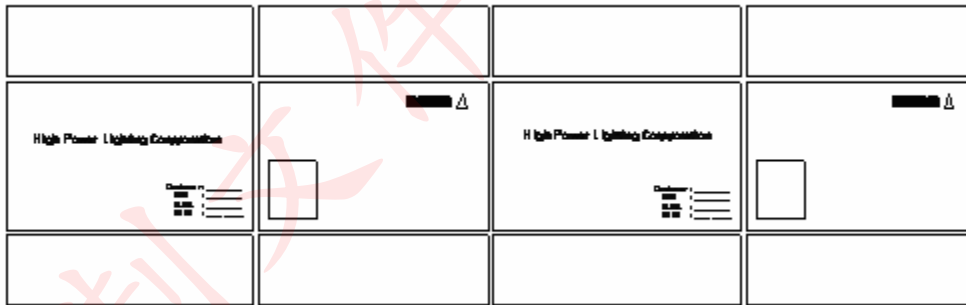
Middle Box

Unit : mm



Large Box

Unit : mm



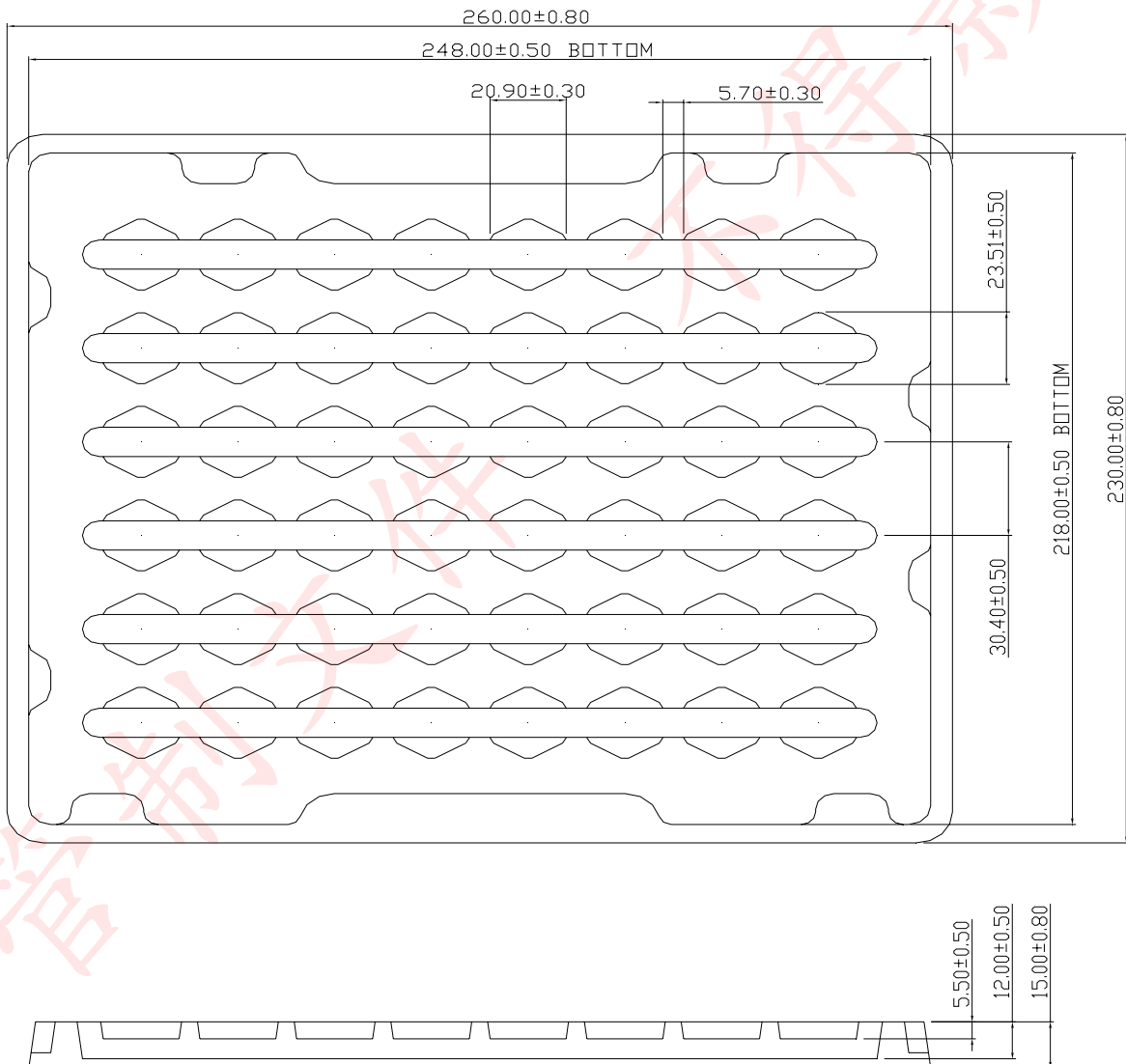
B. Assembly Type

(1) Tapping Dimension Packaging Specification

● **60 degree Assembly Type :**

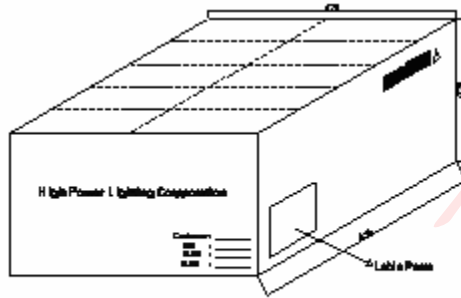
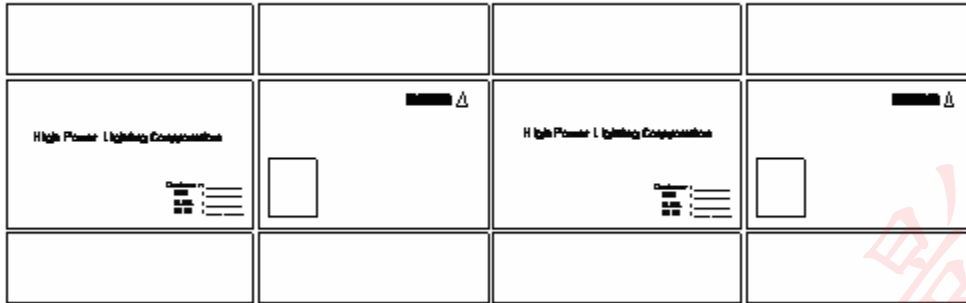
- Moisture proof bag.
- 21 Tray (MAX) /bag.
- Q'ty:48pcs(MAX)/Tray

Unit : mm



(2) Package Large Box

Unit : mm



(3) Label Formation

70mm

Unit : mm

HPLighting	
P/N: XXXXXXXXXXXXXXXXX	BIN Rank: XXXXXXX
	
LOT: XXXXXXXXXXXXXXXXX	Q'ty: XXXXX pcs
	
High Power Lighting Corporation (Taiwan)	XXX

40mm,

HPLighting	
Customer :XXXXXXXXXXXXXXXXXXXXXX	
P/N: XXXXXXXXXXXXXXXXX	
OQC Stamp:	Q'ty: XXXXX pcs
High Power Lighting Corporation (Taiwan)	