



无锡烁华电子科技有限公司

ASIATECH INCORPORATION LTD

规格(承认)书

Specification for approval

※ P/N (ATI LED P/N): ATI-0805PWHB

※ P/N (CUSTOMER P/N): _____

※ (DESCRIPTION):

1、

2、

3、

※ 日期 (DATE): 2011 年 5 月 18 日

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Technical Data Sheet

Model NO: 0805PWHB

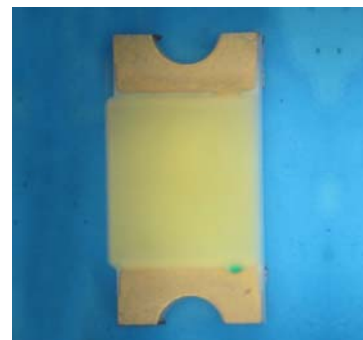
Package(2.0*1.25mm)LED

Feature:

- Low power consumption
- Hight performance
- P/b free

Applications:

- Indicators
- Backlighting for electronic devices
- General use



Dice material	Emitted color	Lens Color
InGaN	White	Water Clear

Electrical/Optical Characteristics(Ta=25°C)

Parameter	Symbol	Condition	Min	Typ.	Max	Unit
Luminous Intensity	I _v	IF=20mA	150	500		mcd
Dominant Wavelength	λ _D	IF=20mA		X:0.25 Y:0.22		nm
Peak Emission Wavelength	λ _p	IF=20mA		-		nm
Viewing Angle	2θ1/2	IF=20mA		120		Deg
Forward Voltage	V _F	IF=20mA	2.8	3.1	3.4	V
Reverse Current	I _R	VR=5V			10	μA

Note: Luminous intensity tolerance ±15%

Forward voltage tolerance ± 0.1v

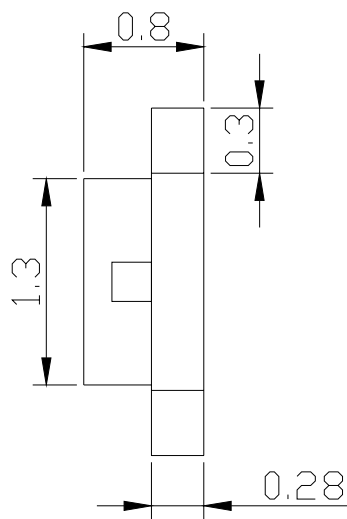
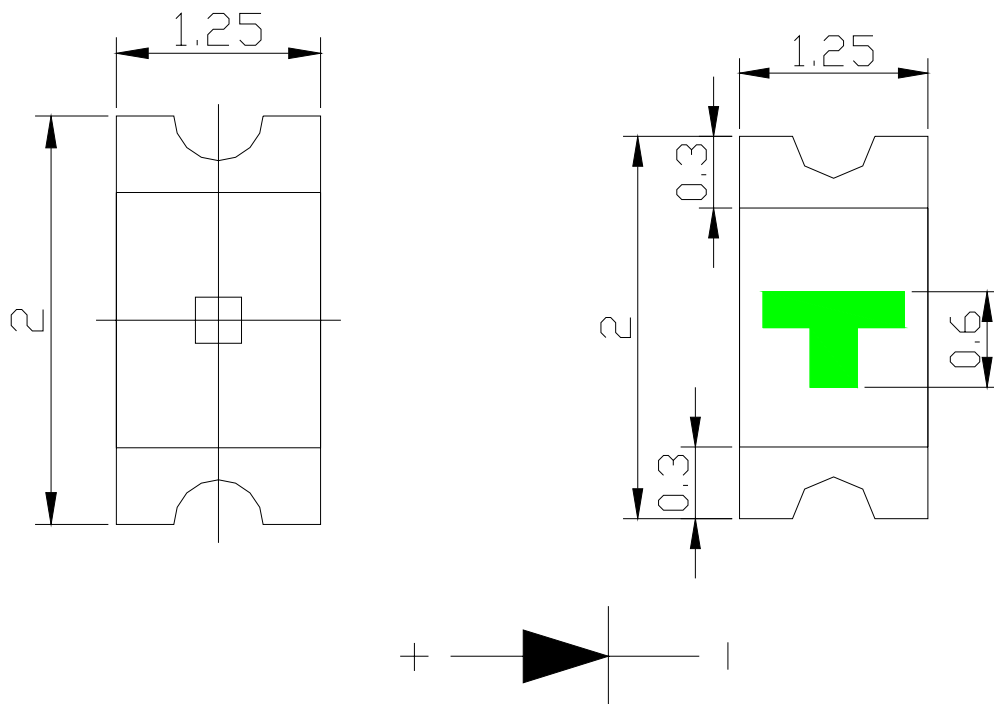
Wavelength tolerance ± 1nm (WD)

CIE (X.Y) tolerance ± 0.01 (CIE)

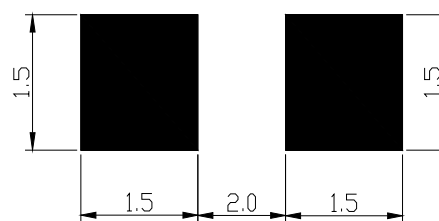
Absolute Maximum Ratings(Ta=25°C)

Parameter	Symbol	Maximum	Unit
Power Dissipation	P _d	80	mW
Peak Forward Current(1/10 Duty Cycle 0.1ms Pulse Width)	IF(Peak)	60	mA
Continuous Forward Current	IF	20	mA
Reverse Voltage	VR	5	V
Derivation Linear From 25°C		0.3	mA/°C
Operating Temperature Range	Topr	-30 to +80	°C
Storage Temperature Range	Tstg	-40 to +90	°C

Package Outline Dimensions:



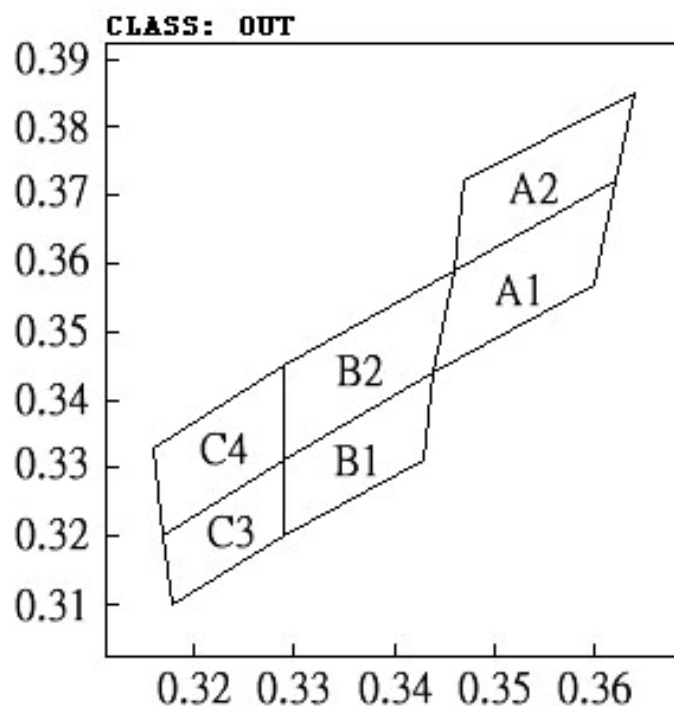
● Paecomended Soldering Pattern



Note

1. All dimensions are in millimeters.
2. Tolerances unspecified are $\pm 0.1\text{mm}$.

Typical Electro-Optical Characteristics Curves



Bin Range of Chromaticity Coordinate

X1	Y1	X2	Y2	X3	Y3	X4	Y4	BIN
0.362	0.372	0.36	0.357	0.344	0.344	0.346	0.359	A1
0.364	0.385	0.362	0.372	0.346	0.359	0.347	0.372	A2
0.329	0.331	0.344	0.344	0.343	0.331	0.329	0.32	B1
0.329	0.331	0.329	0.345	0.346	0.359	0.344	0.344	B2
0.329	0.331	0.329	0.32	0.318	0.31	0.317	0.32	C3
0.329	0.345	0.329	0.331	0.317	0.32	0.316	0.333	C4

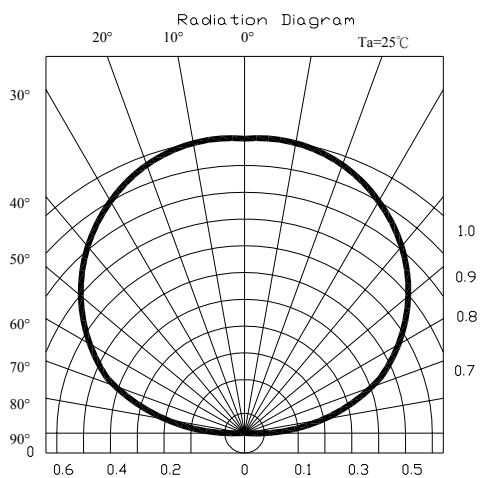
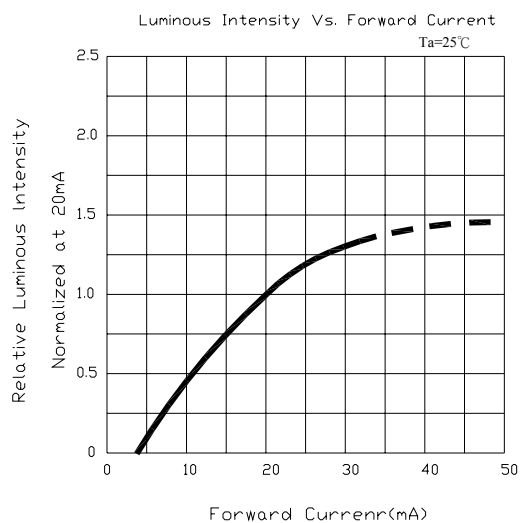
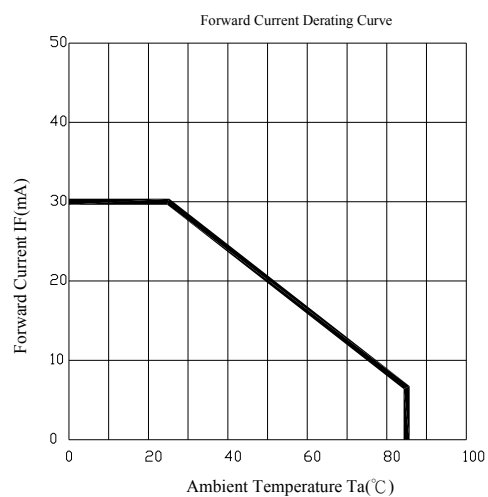
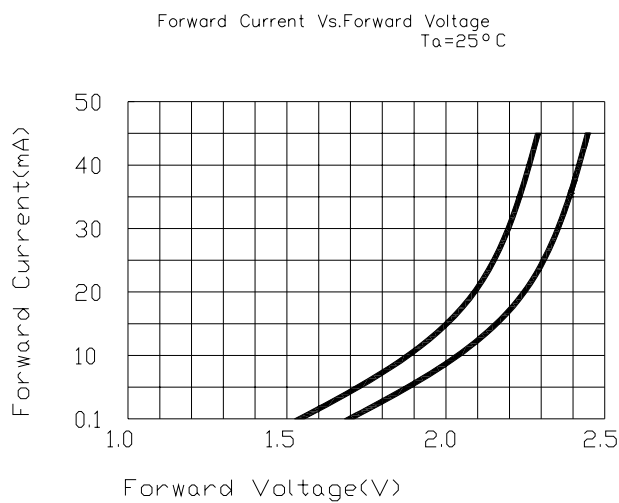
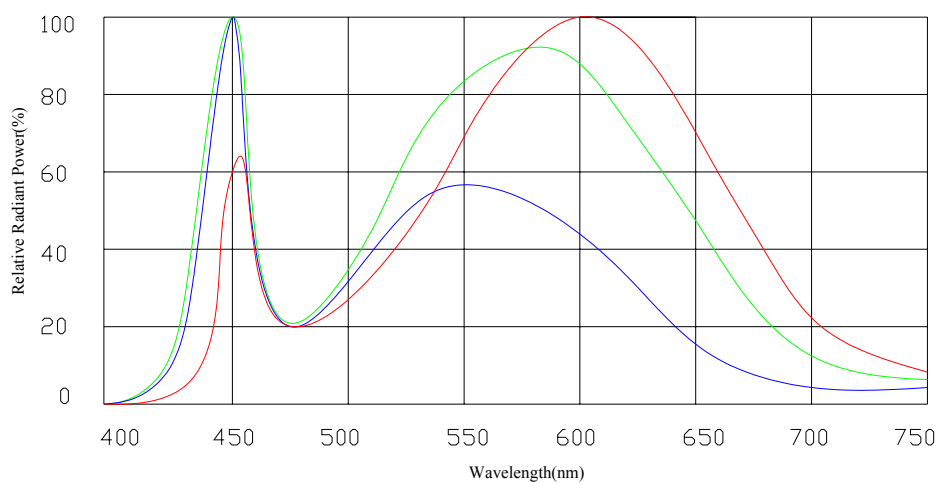
Bin Range of Luminous Intensity

Min	Max	Unit	BIN
400	500	mcd	4
500	600		5
600	700		6
700	800		7

Bin Range of Forward Voltage

Min	Max	Unit	BIN
2.9	3.0	V	Q
3.0	3.1		R
3.1	3.2		S
3.2	3.3		T

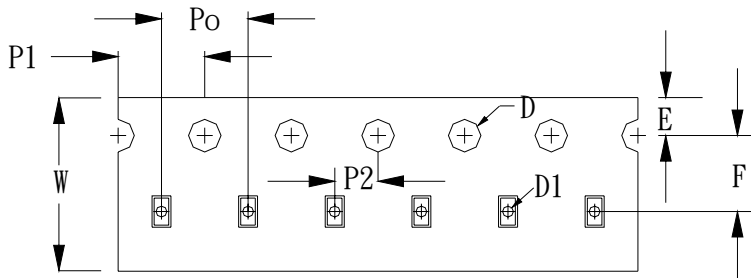
Typical Electro-Optical Characteristics Curves



Carrier Tape Dimensions: Loaded quantity 3000PCS per reel

Packing Size													
Item	W	P1	E	F	D	D1	Po	10Po	P2	Ao	Bo	Ko	t
Spec.	8.00	4.00	1.75	3.50	1.55	1.0	4.00	40.00	2.00	1.78	3.40	1.04	0.229
Tolerance	±0.20	±0.10	±0.10	±0.05	±0.05	±0.25	±0.1	±0.20	±0.05	±0.10	±0.10	±0.10	±0.013

● Tape Specifications



Precautions For Use

- Over-Current-Proof
Customer must apply resistors for protection, otherwise slight voltage shift will cause big current change. (Burn out will happen)
- Storage
 1. Do not open moisture proof bag before the products are ready to use.
 2. The LEDs should be used within a year. Before opening the package, the LEDs should be kept at 25°C or less and 30%RH or less.
 3. After opening the package, the LEDs should be kept at 30%RH or less.
 4. The LEDs should be used within 24 hours (1 day) after opening the package.
 5. If the moisture absorbent material (silica gel) has faded away or the LEDs have exceeded the storage conditions, baking treatment should be performed using the following conditions. Baking treatment : 70±5°C for 72 hours.

Reliability Test Items And Conditions

No.	Items	Test Condition	Test Hours/Cycles	Sample Size
1	Solder Heat	TEMP : 240°C±5°C	5 sec/3cycles	48 pcs
2	Temperature Cycle	90°C ~ 25°C ~ -30°C ~ 25°C 30m 5m 30m 5m	300Cycles	48 pcs
3	Thermal Shock	100°C ~ -55°C 10m 10m	100Cycles	48 pcs
4	Operation Life	If=20mA	1000 Hrs	48 pcs
5	High Temperature Storage	Temp:90°C	1000Hrs	48 pcs
6	Low Temperature Storage	Temp:-30°C	1000Hrs	48 pcs
7	High Temperature/High Humidity	80°C / R.H80%	1000Hrs	48 pcs