



**PWH01NBT-C0**

**LIGHT EMITTING DIODE**

**WHITE HIGH POWER LED**

■ **FEATURES**

- \* Very long operating life
- \* Energy efficient

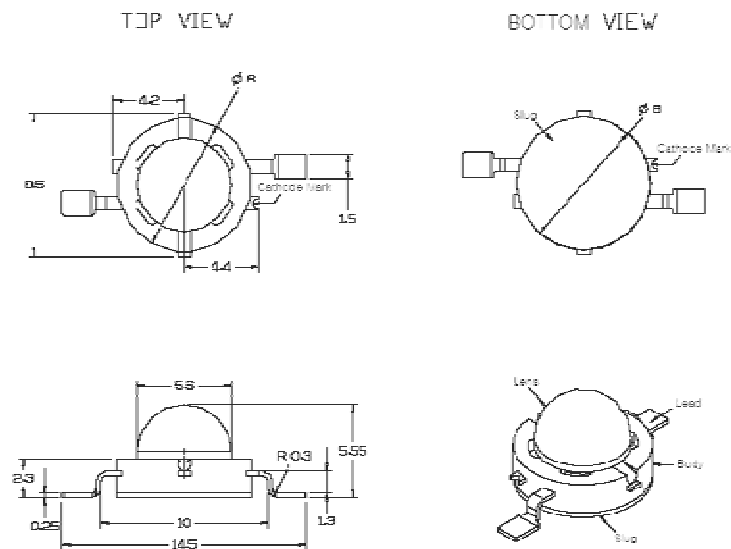
■ **APPLICATIONS**

- \* Automotive exterior and interior lighting
- \* Architectural lighting
- \* Electronic signs and signals

■ **MECHANICAL DIMENSIONS**

Note:Dimensions shown in mm

**Dome Type**



### ORDERING INFORMATION

Ordering Number
PWH01NBT-C0

<p>P W H 0 1 N B T - C 0</p> <ul style="list-style-type: none"><li>(1)View Angle</li><li>(2)Lead Frame</li><li>(3)Lens Type</li><li>(4)Base Type</li><li>(5)Watts</li><li>(6)Color Type</li><li>(7)Product Type</li></ul>	<ul style="list-style-type: none"><li>(1) C0: 120°</li><li>(2) T: Round</li><li>(3) B: Helmet</li><li>(4) N: No Al Base</li><li>(5) 01: 1w</li><li>(6) WH: White</li><li>(7) P: Power LED</li></ul>
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### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

PARAMETER	SYMBOL	RATINGS	UNIT
DC Forward Current	I <sub>F</sub>	350	mA
Forward Pulse Current (Note1)	I <sub>FP</sub>	500	mA
Reverse Voltage	V <sub>R</sub>	5	V
Viewing Angle	2θ <sub>1/2</sub>	120	°
Operation Temperature	T <sub>OPR</sub>	-40 ~ +80	
Storage Temperature	T <sub>STG</sub>	-40 ~ +80	

Note: 1. Pulse width 0.1msec max. Duty cycle1/10

2. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

### ■ ELECTRICAL CHARACTERISTICS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Forward Voltage	V <sub>F</sub> (Note1)	I <sub>F</sub> =350mA	3.1	3.4	3.8	V
Reverse Current	I <sub>R</sub>	V <sub>R</sub> =5V			10	uA
Color Temperature	CCT (Note2)	I <sub>F</sub> =350mA	4000	6000	10000	K
Viewing Angle	2θ <sub>1/2</sub>	I <sub>F</sub> =350mA		120		°

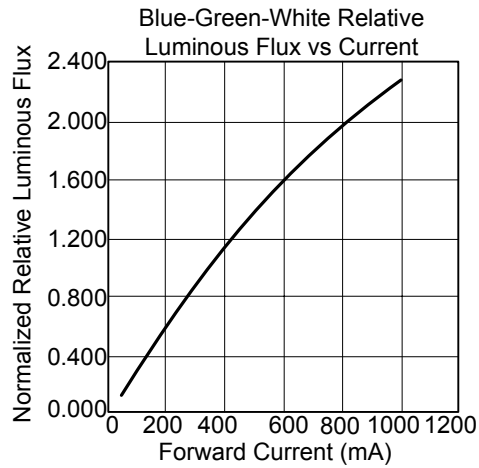
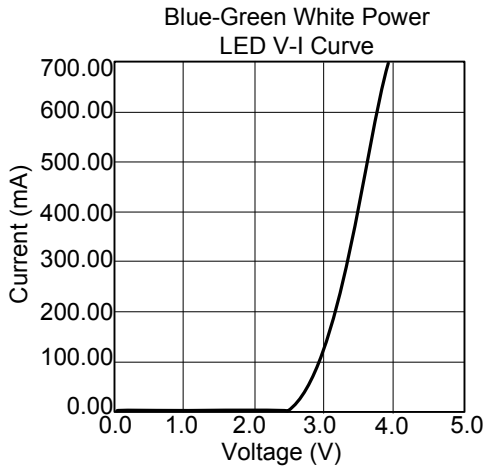
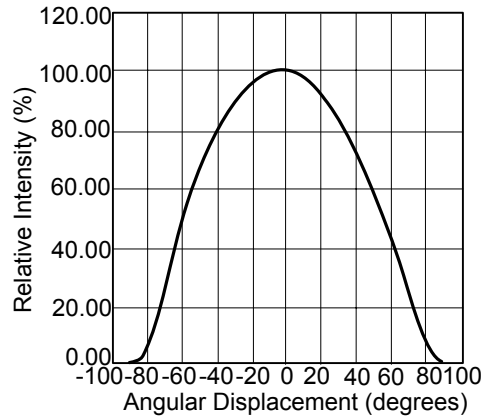
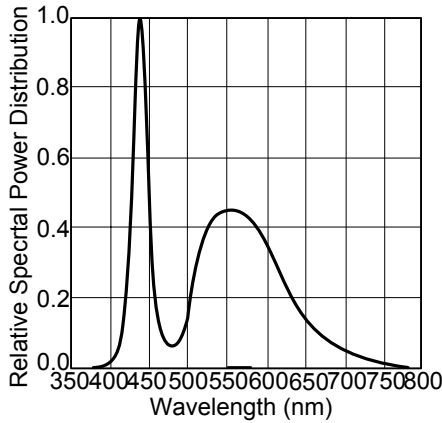
Note1. V<sub>F</sub> is classified 0.2V per grade.

2. CCT is classified 1000K. per grade.

### ■ RELIABILITY ITEMS AND CONDITIONS

NO.	ITEMS	TEST CONDITIONS	NOTE	RESULT
1	Resistance to Soldering Heat	260 ±5	10Sec.	Pass
2	Thermal Shock	-20 ~ 100 10Min. 5Sec. 10Min.	50Cycles	Pass
3	Temperature Cycle	-40 25 100 30Min. 5Min. 30Min.	100Cycles	Pass
4	Hi-Temp. Storage	100	1000Hrs	Pass
5	Low-Temp. Storage	-40	1000Hrs	Pass
6	Hi-Temperature/ Hi-Humidity Test	60 /90%RH	1000Hrs	Pass
7	Operating Life	I <sub>F</sub> =350mA	1000Hrs	Pass
8	Life Time 1	500mA@ROOM TEMP	1000Hrs	Pass
9	Life Time 2	350mA@-40	1000Hrs	Pass
10	ON/OFF Test	I <sub>F</sub> =700mA Pulse width 0.1msec max. Duty cycle1/10	100,000 Cycles	Pass

■ TYPICAL CHARACTERISTICS



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