PBL01NBT-C0

LIGHT EMITTING DIODE

BLUE HIGH POWER LED

■ FEATURES

* Very long operating life
* Energy efficient

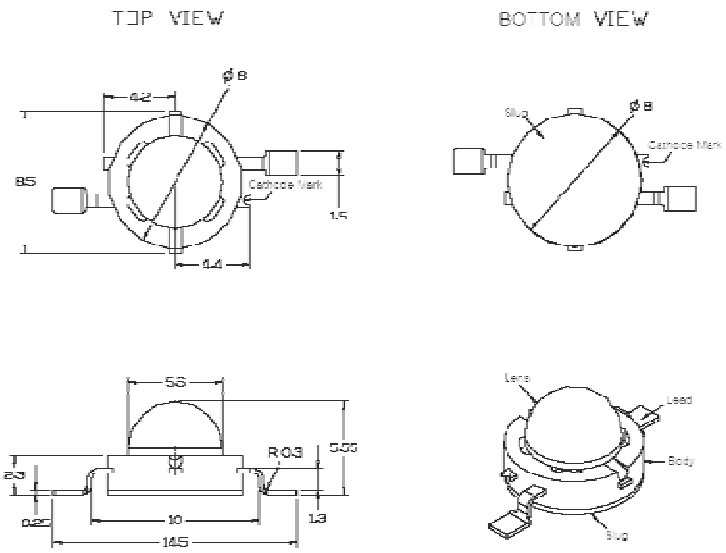
■ APPLICATIONS

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

■ MECHANICAL DIMENSIONS

Note:Dimensions shown in mm

Dome Type



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■ ORDERING INFORMATION

Ordering Number
PBL01NBT-C0

P B L 0 1 N B T - C 0 (1)View Angle (2)Lead Frame (3)Lens Type (4)Base Type (5)Watts (6)Color Type (7)Product Type	(1) C0: 120° (2) T: Round (3) B: Helmet (4) N: No Al Base (5) 01: 1w (6) BL: Blue (7) P: Power LED

■ ABSOLUTE MAXIMUM RATINGS (Ta=25℃)

PARAMETER	SYMBOL	RATINGS	UNIT
DC Forward Current	I_F	350	mA
Forward Pulse Current (Note1)	I_{FP}	500	mA
Reverse Voltage	V_R	5	V
Viewing Angle	2θ1/2	120	°
Operation Temperature	T_{OPR}	-40°C ~ +80°C	°C
Storage Temperature	T_{STG}	-40°C ~ +80°C	°C

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.

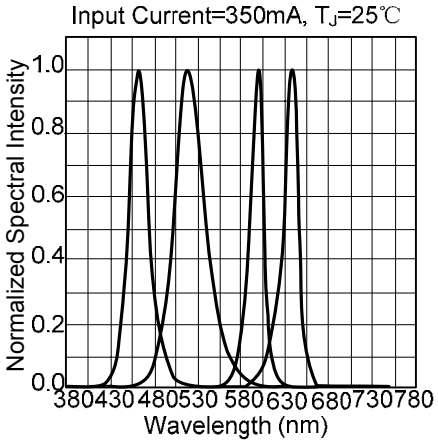
■ ELECTRICAL CHARACTERISTICS

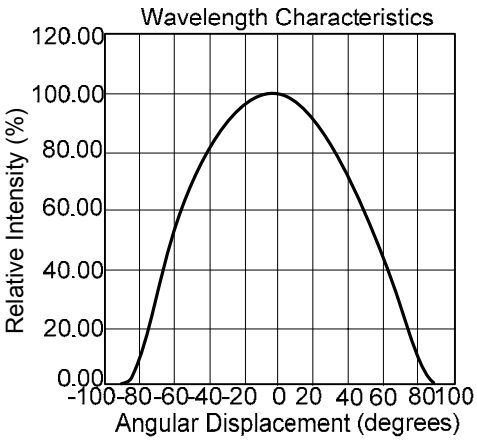
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Luminous Flux	L_X	I_F=350mA	6	8		lm
Forward Voltage	V_F	I_F=350mA	3.1	3.4	3.8	V
Reverse Current	I_R	V_R=5V			10	uA
Dominant Wavelength	λD	I_F=350mA	460	465	470	nm
Viewing Angle	2θ1/2	I_F=350mA		120		°

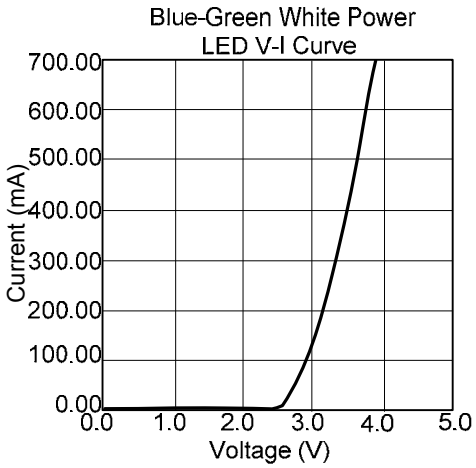
■ RELIABILITY ITEMS AND CONDITIONS

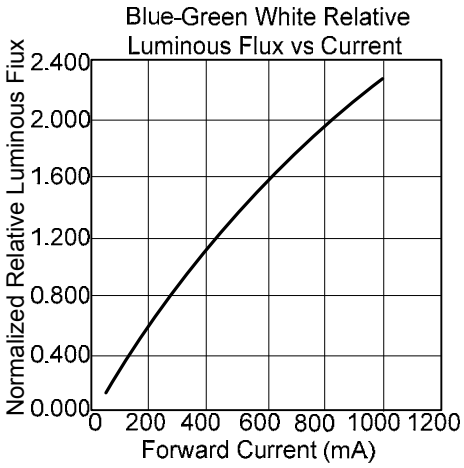
NO.	ITEMS	TEST CONDITIONS	NOTE	RESULT
1	Resistance to Soldering Heat	260℃±5℃	10Sec.	Pass
2	Thermal Shock	-20℃ ~ 100℃ 10Min. 5Sec. 10Min.	50Cycles	Pass
3	Temperature Cycle	-40℃ 25℃ 100℃ 30Min. 5Min. 30Min.	100Cycles	Pass
4	Hi-Temp. Storage	100℃	1000Hrs	Pass
5	Low-Temp. Storage	-40℃	1000Hrs	Pass
6	Hi-Temperature/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

■ TYPICAL CHARACTERISTICS









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