

ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
DISCHARGE
SENSITIVE
DEVICES

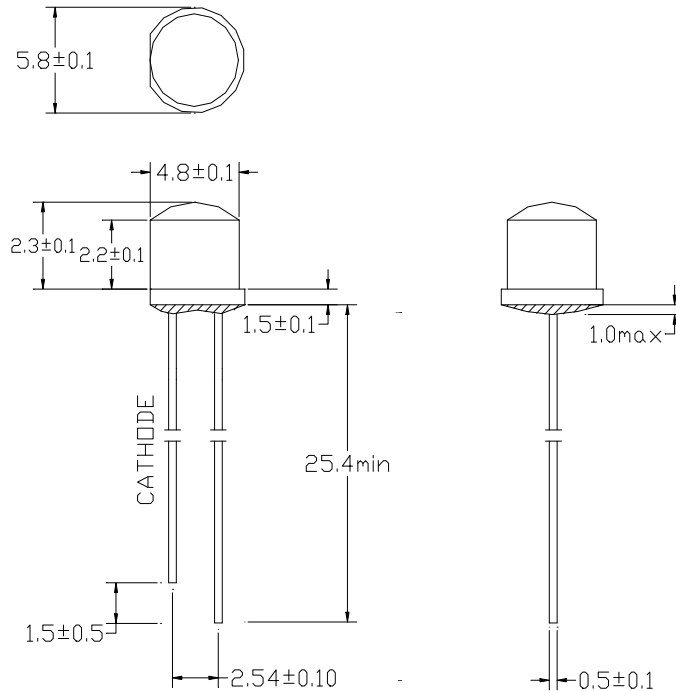
Part No./型号: 412LB7C

➤ **Features/特征:**

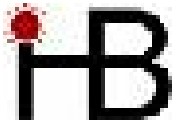
- Single color/单色
- High bright output/高亮度输出
- Large view angle/大视角
- Low power consumption/低功耗
- High reliability and long life/
可靠性高、寿命长

➤ **Descriptions/描述:**

- Dice material/芯片材质: GaN
- Emitting Color/发光颜色:
Super Bright Blue/ 高亮度蓝色
- Device Outline/产品外形:
φ5mm Round Type/ 5mm 圆形
- Lens Type 胶体颜色:
Water Clear/ 无色透明



1. All dimensions are millimeters/单位: mm.
2. Tolerance is +/-0.25mm unless otherwise noted/没有标注的公差均为±0.25mm.



Part No./型号: 412LB7C

➤ Absolute maximum ratings/极限参数 (Ta = 25°C)

Parameter 参数	Symbol 符号	Test Condition 测试条件	Values 数值		Unit 单位
			Min.	Max.	
Reverse Voltage 反向电压	V _R	I _R = 30 μ A	5	--	V
Forward Current 正向工作电流	I _F	----	----	25	mA
Power Dissipation 损耗功率	P _d	----	----	90	mW
Pulse Current 正向峰值电流	I _{peak}	Duty=0.1mS, 1kHz	----	100	mA
Operating Temperature 工作温度范围	T _{opr}	----	-40	+85	°C
Storage Temperature 储存温度范围	T _{str}	----	-40	+100	°C

➤ Electrical and optical characteristics/光电参数 (Ta = 25°C)

Parameter 参数	Symbol 符号	Test Condition 测试条件	Values 数值			Unit 单位
			Min.	Typ.	Max.	
Forward Voltage 正向电压	V _F	I _F =20mA	----	V _{8~V} 10	-----	V
Reverse Current 反向电流	I _R	V _R =5V	----	----	30	μ A
Dominate Wavelength 主波长	λ _d	I _F =20mA	----	470	----	nm
Peak Wavelength 峰值波长	λ _p	I _F =20mA	----	468	----	nm
Spectral Line half-width 半波长宽度	Δ λ	I _F =20mA	----	20	----	nm
Luminous Intensity 发光强度	I _v	I _F =20mA		J.K.L		mcd



Part No./型号: 412LB7C

➤ Typical electrical/optical characteristic curves/光电特性曲线:

Fig.1 正向电流 Vs. 正向电压

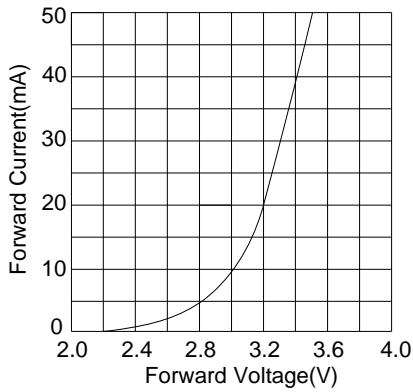


Fig.2 相对亮度 Vs. 正向电流

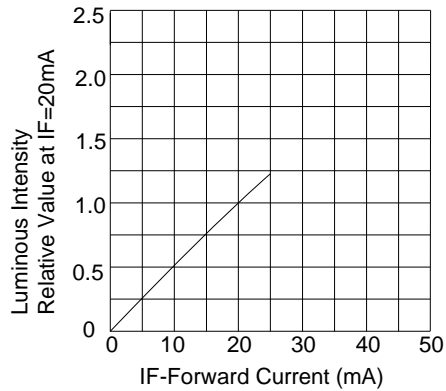


Fig.3 正向电流 Vs. 环境温度

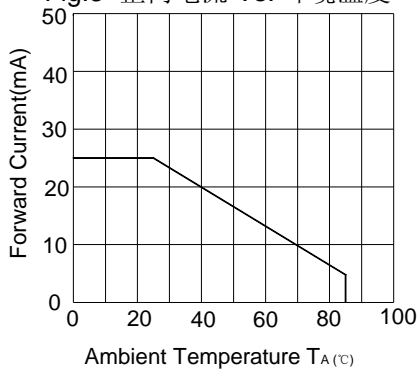


Fig.4 相对亮度 Vs. 环境温度

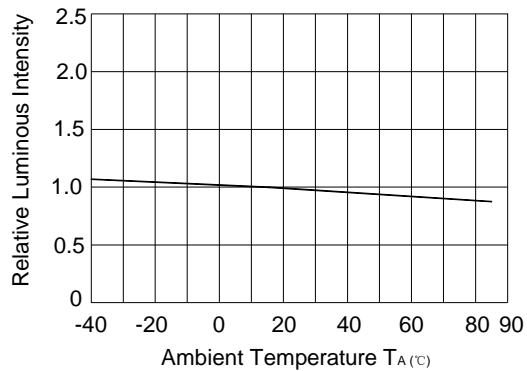
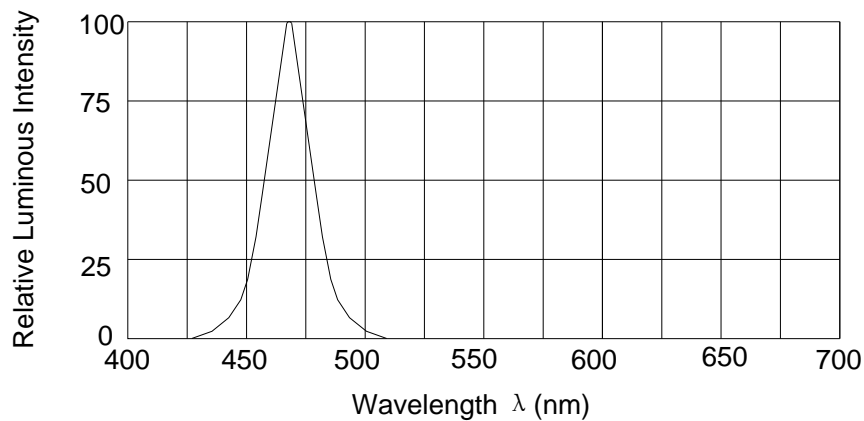


Fig.5 相对亮度 Vs. 波长





BIN ranking for LEDs

BRIGHTNESS BIN

Bin Code	IV(mcd)	Bin Code	IV(mcd)	Bin Code	IV(mcd)	Bin Code	IV(mcd)
A	0-5.0	H	37.2-52.0	Q	390-550	X	4180--5860
B	5.0-7.0	J	52.0-72.8	R	550-770	Y	5860-8200
C	7.0-9.8	K	72.8-102	S	770-1100	Z1	8-10cd
D	9.8-13.7	L	102-145	T	1100-1520	Z2	10-12cd
E	13.7-19.0	M	145-200	U	1520-2130	Z3	12-14cd
F	19.0-26.6	N	200-280	V	2130-3000	Z4	14-16cd
G	26.6-37.2	P	280-390	W	3000-4180	Z5	16-18cd

WAVELENGTH BIN

Ligth Col.	Bin Code	Wavel. (nm)	Ligth Col.	Bin Code	Wavel. (nm)	
BLUE	B1	450-455	YELLOW GREEN	YG1	555-558	
	B2	455-460		YG2	558-561	
	B3	460-465		YG3	561-564	
	B4	465-470		YG4	564-567	
	B5	470-475		YG5	567-570	
	B6	475-480		YG6	570-573	
BLUE GREEN	G1	491-494		YG7	573-576	
	G2	494-497	YELLOW	Y1	582-585	
	G3	497-500		Y2	585-588	
	G4	500-503		Y3	588-591	
	G5	503-506		Y4	591-594	
	G6	506-509		Y5	594-597	
	PURE GREEN	G7	509-512	YELLOW ORANGE	YO1	597-600
		G8	512-515		YO2	600-603
G9		515-518	YO3	603-606		
G10		518-521	YO4	606-609		
G11		521-524	PURE ORANGE	O1	609-612	
G12		524-527		O2	612-615	
G13		527-530	RED	O3	615-618	
G14		530-533		R1	618-621	
G15		533-536		R2	621-624	
G16		536-539		R3	624-627	
G17		539-542		R4	627-630	
G18	542-545	R5		630-633		
G19	545-548	R6	633-636			

FORWARD VOLTAGE (VF) BIN

Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)	Bin Code	VF (V)
V1	1.6-1.8	V5	2.4-2.6	V9	3.2-3.4	V13	4.0-4.2
V2	1.8-2.0	V6	2.6-2.8	V10	3.4-3.6	V14	4.2-4.4
V3	2.0-2.2	V7	2.8-3.0	V11	3.6-3.8	V15	4.4-4.6
V4	2.2-2.4	V8	3.0-3.2	V12	3.8-4.0	V16	4.6-4.8