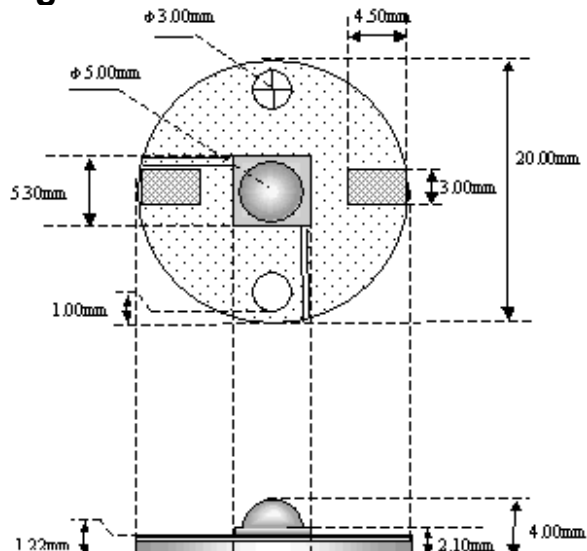




Package Dimension



GaN LEDs are class 1 ESD sensitive. Please observe appropriate precautions during handling and processing. For further information please see MIL-STD-1686A.

Tolerance: $\pm \frac{\text{inch}}{\text{mm}}$ Unit: $\pm \frac{0.01}{0.25}$

Features

- Highest Lumen Per Watt
- Long Operational Life
- More Energy Efficient
- IC Compatible
- Low DC Voltage
- Superior ESD Protection
- Smallest Footprint

Applications

- Accent Lighting
- Automotive Exterior/Interior Light
- High Power Back Light
- Reading Light
- Marine/Miner's Lighting
- Portable Lighting

Optical Characteristics at $T_a=25^\circ\text{C}$

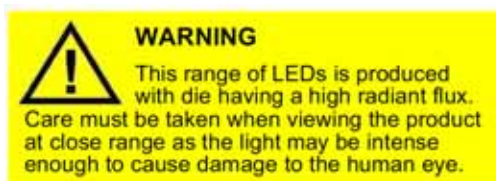
PART NUMBER	LED CHIP	Lens Color	Wavelength/CCT	Drive Voltage	Luminous Flux	VIEW ANGLE $2\theta_{1/2}$ (deg)
	MATERIAL		Min/Max	Typ.	@350mA(1m) Typ.	
BTP-53NRCR-XX-15	AlInGaP	Water Clear	620~635	2.85V	15 lm	60
BTP-53AMCR-XX-15	AlInGaP	Water Clear	600~620	2.85V	15 lm	60
BTP-53YECR-XX-15	AlInGaP	Water Clear	585~595	2.85V	15 lm	60
BTP-53DBCR-XX-05	AlInGaN	Water Clear	450~460	3.50V	5 lm	60
BTP-53BLCR-XX-06	AlInGaN	Water Clear	460~475	3.50V	6 lm	60
BTP-53GBCR-XX-08	AlInGaN	Water Clear	475~485	3.50V	8 lm	60
BTP-53BGCR-XX-15	AlInGaN	Water Clear	495~510	3.50V	15 lm	60
BTP-53GMCR-XX-20	AlInGaN	Water Clear	510~520	3.50V	20 lm	60
BTP-53PGCR-XX-25	AlInGaN	Water Clear	520~525	3.50V	25 lm	60
BTP-53WHCR-XX-20	AlInGaN	Water Clear	5000K~8000K	3.60V	20 lm	60

Absolute Maximum Ratings at $T_a=25^{\circ}\text{C}$

Parameter	White/Green/Cyan/Blue	Red/Amber/Yellow
DC Forward Current (mA) ^[1]	350	350
Peak Pulsed Forward Current (mA)	500	500
Average Forward Current (mA)	350	350
Reverse Voltage (V)	5	5
Reverse Current (uA)	10	10
LED Junction Temperature ($^{\circ}\text{C}$)	120	120
AI-PCB Temperature ($^{\circ}\text{C}$) ^[3]	100	100
Storage Temperature ($^{\circ}\text{C}$)	-40 to +100	-40 to +100
Soldering Temperature ($^{\circ}\text{C}$) ^[4]	260 for 5 seconds max	260 for 5 seconds max

Application Notes:

1. Proper forward current must be observed to maintain the junction temperature below maximum rating
2. Although all products listed are class one ESD protection (+/- 1KV by HBM mode), care must be fully taken when handling products
3. Measured at back of aluminium PCB without additional heat sink. We recommend mounting BriLux light source directly to heat sink with fasteners for best performance.
4. Measured at contact terminals.
5. Specification is subjected to change without notice.



Note: Industry standard procedures regarding static must be observed when handling this product.

Typical Electro-Optical Characteristics Curves at $T_a=25^\circ\text{C}$
(Red/Yellow/Blue/Green)

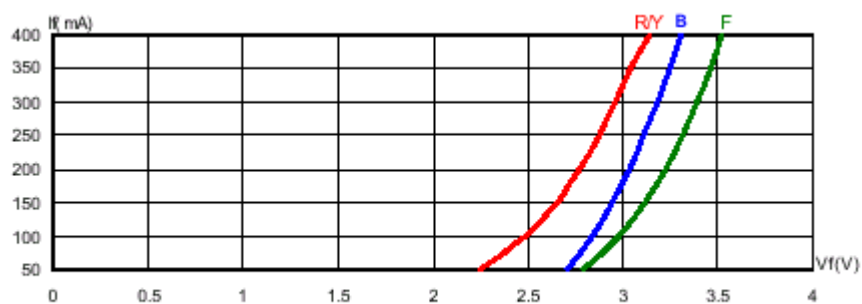


Fig.1 Forward Current vs. Forward Voltage

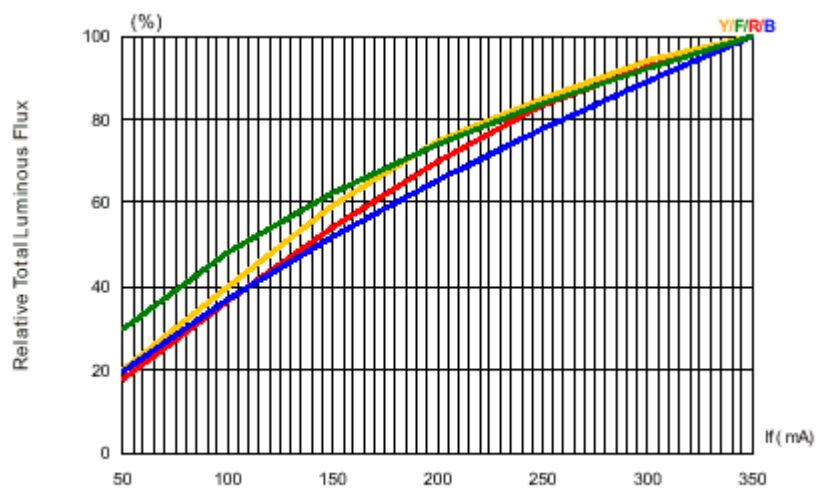
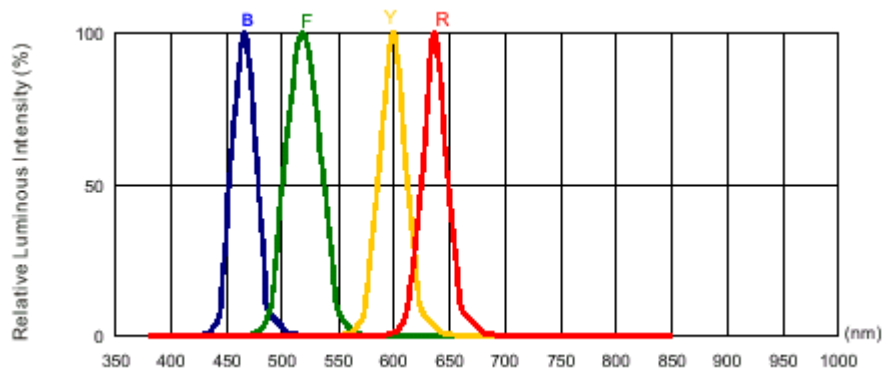


Fig.2 Luminous Flux vs. Forward Current



Typical Electro-Optical Characteristics Curves at $T_a=25^\circ\text{C}$ (White)

White BriLux

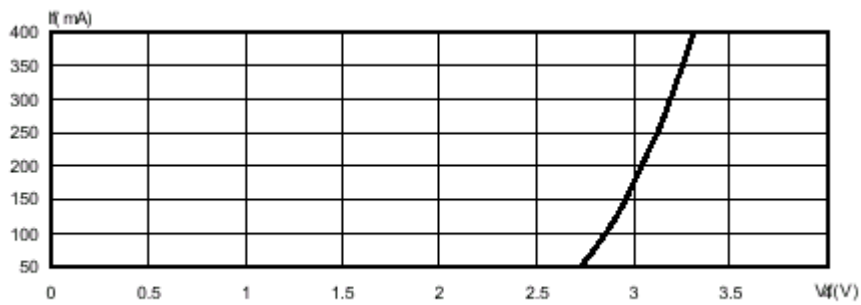


Fig.1 Forward Current vs. Forward Voltage

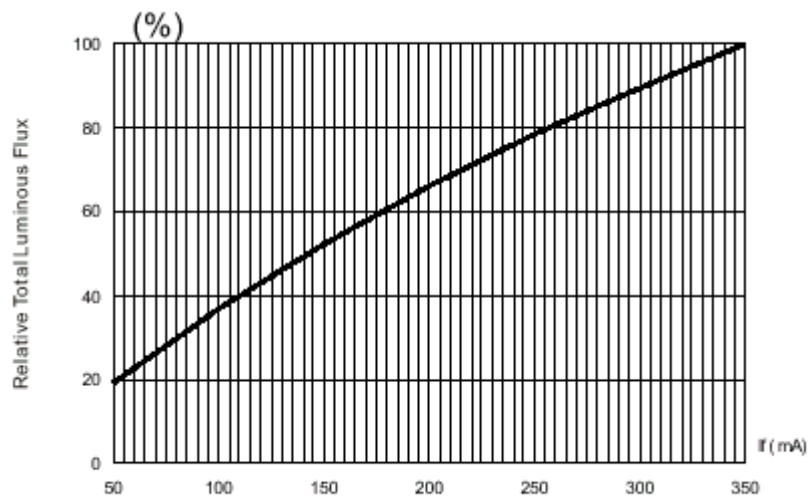


Fig.2 Luminous Flux vs. Forward Current

