

High Power LED

BL-LS5050B1S1XX-1W

■ Features:

- 1W LEDs , 5.0mmx5.0mm SMD, 1.8mm THICKNESS SOP6 package
- Longer service and less luminosity loss, 50,000hours
- Different emitting colors are available Working current: 200-350mA
- With or without heat sink are both available
- PACKAGE: 500PCS/REEL

■ Applications:

Commercial lighting
Residential lighting
Decorative lighting



■ Electrical-optical characteristics: (Ta=25°C) (Test Condition: IF=350mA)

Part Number	Chip		Lens Type	Forward Voltage(VF) Unit:V		Flux Unit:lm		View ing Angl e 201/2 (deg)
	Emitted Color	λ_P (nm) or CTT		Typ	Max	Min.	Typ.	
BL-LS5050B1S1UEC-1W	Ultra Red	630	Water Clear	2.2	2.75	35	45	120
BL-LS5050B1S1UYC-1W	Ultra Yellow	590		2.2	2.75	35	45	
BL-LS5050B1S1PGC-1W	Ultra Pure Green	525		3.2	3.8	50	60	
BL-LS5050B1S1BGC-1W	Ultra Bluish Green	505		3.2	3.8	40	50	
BL-LS5050B1S1UBC-1W	Ultra Blue	470		3.2	3.8	10	15	
BL-LS5050B1S1UWC-1W	Ultra White	-		3.2	3.8	90	100	

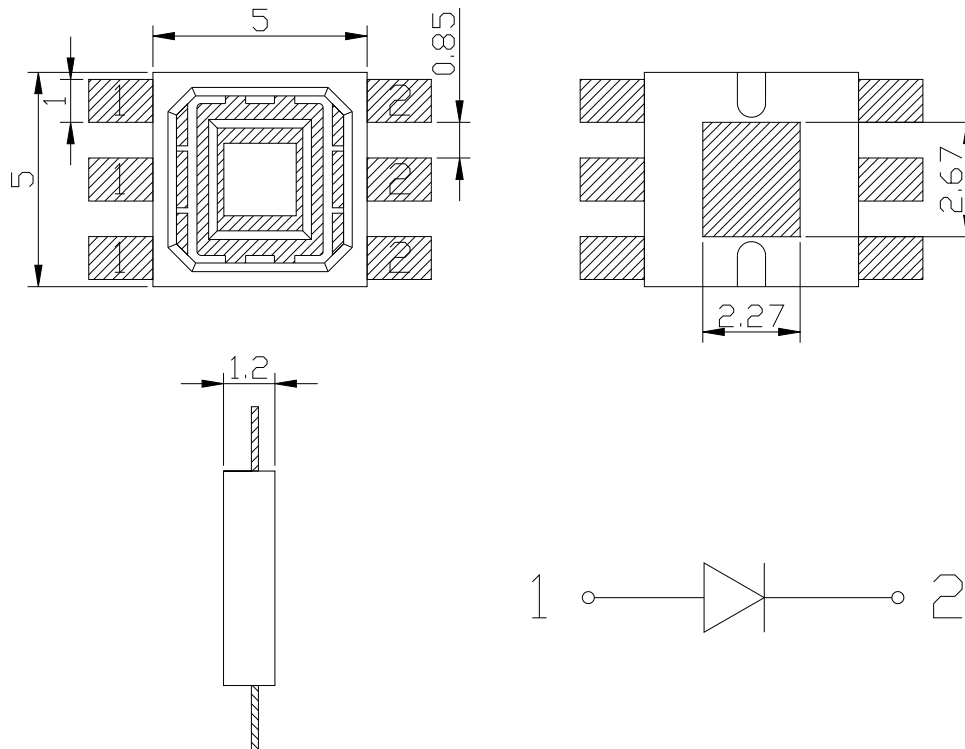
■ Absolute maximum ratings (Ta=25°C)

Parameter	UE	UY	BG	PG	UB	UW	Unit
Forward Current I_F	350	350	350	350	350	350	mA
LED Junction Temperature	120	120	120	120	120	120	°C
Peak Forward Current I_{PF} (Duty 1/10 @1KHZ)	500	500	500	500	500	500	mA
Operation Temperature T_{OPR}	-40 to +80						°C
Storage Temperature T_{STG}	-40 to +100						°C
Aluminum-Core Pcb Temperature	105						°C

High Power LED

BL-LS5050B1S1XX-1W

■ Package configuration & Internal circuit diagram



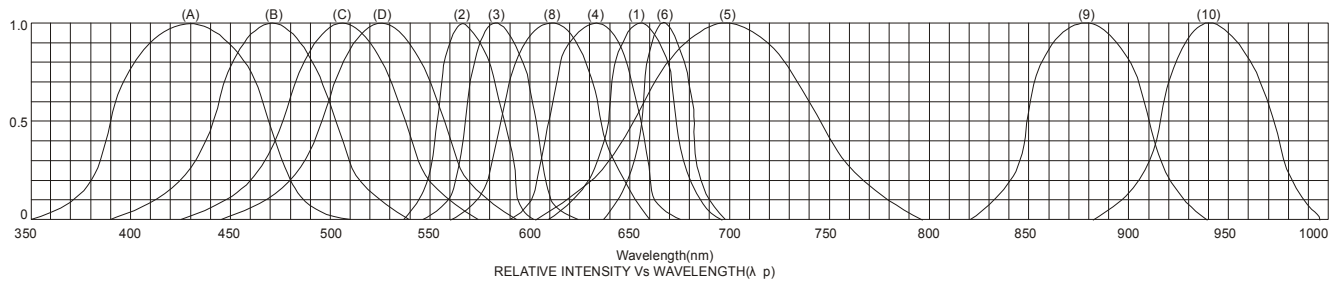
Notes:

1. All dimensions are in millimeters (inches)
2. Tolerance is $\pm 0.25(0.01)$ unless otherwise noted.
3. Specifications are subject to change without notice.

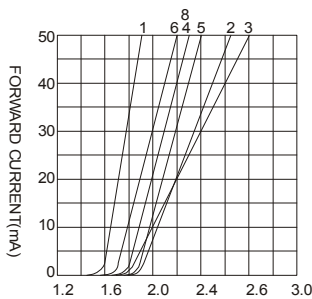
High Power LED

BL-LS5050B1S1XX-1W

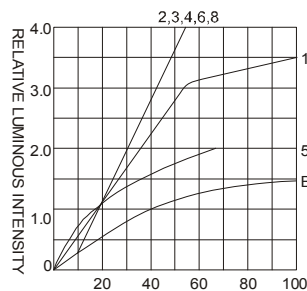
Typical electrical-optical characteristics curves:



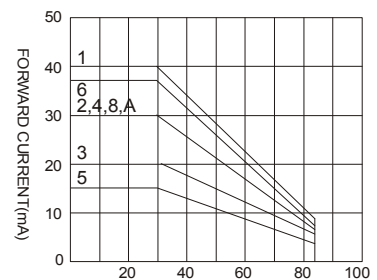
- | | |
|---|--------------------------------------|
| (1) - GaAsP/GaAs 655nm/Red | (9) - GaAlAs 880nm |
| (2) - GaP 570nm/Yellow Green | (10) - GaAs/GaAs & GaAlAs/GaAs 940nm |
| (3) - GaAsP/GaP 585nm/Yellow | (A) - GaN/SiC 430nm/Blue |
| (4) - GaAsP/GaP 635nm/Orange & Hi-Eff Red | (B) - InGaN/SiC 470nm/Blue |
| (5) - GaP 700nm/Bright Red | (C) - InGaN/SiC 505nm/Ultra Green |
| (6) - GaAlAs/GaAs 660nm/Super Red | (D) - InGaAl/SiC 525nm/Ultra Green |
| (8) - GaAsP/GaP 610nm/Super Red | |



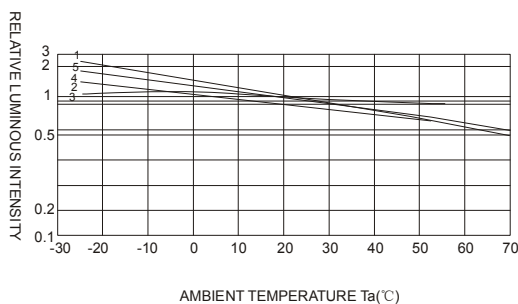
FORWARD VOLTAGE (Vf)
FORWARD CURRENT VS.
FORWARD VOLTAGE



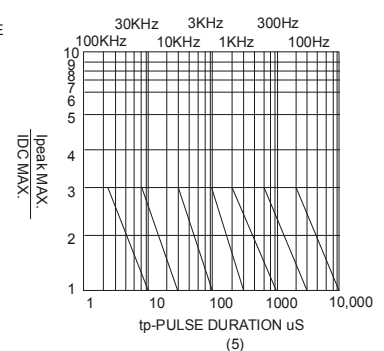
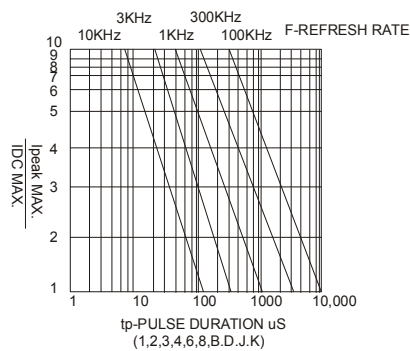
FORWARD CURRENT (mA)
RELATIVE LUMINOUS
INTENSITY VS. FORWARD
CURRENT



AMBIENT TEMPERATURE Ta(°C)
FORWARD CURRENT VS. AMBIENT
TEMPERATURE



AMBIENT TEMPERATURE Ta(°C)



NOTE:25°C free air temperature unless otherwise specified

High Power LED

BL-LS5050B1S1XX-1W

■ Packing and weighting

