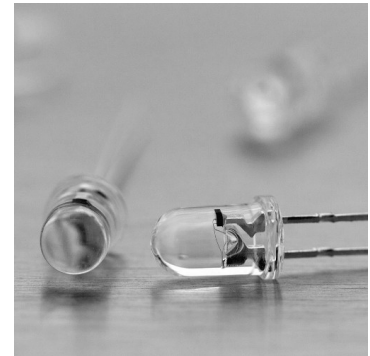


Winger Electronics WESBL02-CS 5mm blue 12V DIP LED



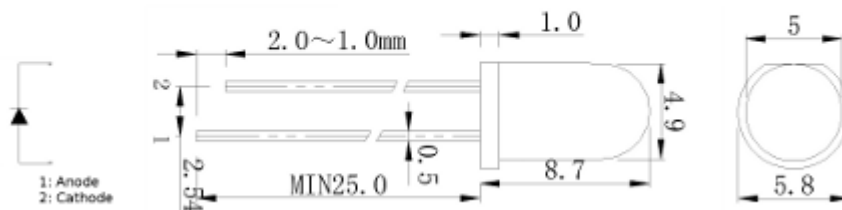
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES



Description

- 5mm 12V DIP LED
- Emitting Color: Blue
- Internal resistor: LED may be connected directly to 3...23V DC

Dimension figure



Unit: mm
Tolerances: ± 0.25 mm

Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	I_F	20	mA
Peak Forward Current *	I_{FP}	120	mA
Reverse Voltage	V_R	5	V
Power Dissipation	P_O	100	mW
Operating Temperature	T_{OPR}	-30 ~ +70	°C
Storage Temperature	T_{stg}	-30 ~ +80	°C
Lead Soldering Temperature	T_{SOL}	Max. 5 sec @ 260	°C

* I_{FP} Conditions: 1/10 Duty Cycle, 10ms Puls Width

* T_{SOL} Conditions: 3mm space from epoxy base

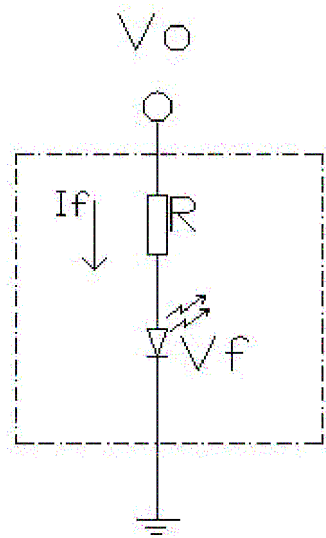
Typical Optical/Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	V_F		3	12	23	V
50% Power Angle			-	30	-	deg
Luminous Intensity	I_V		1000	-	3000	mcd
Dominant Wavelength	λ_D		460	-	470	nm
Color Temperature	T_C		-	-	-	K
Forward Current	$I_{F(rec)}$		-	10	20	mA
Reverse Current	I_R	$V_R=5V$	-	-	5	μA

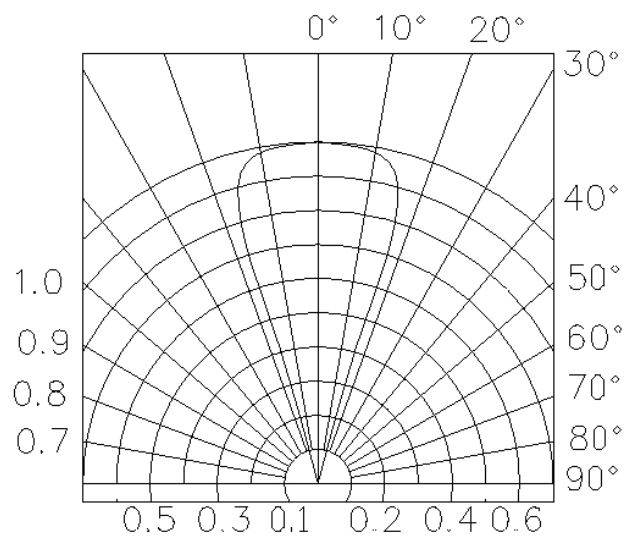
Notes:

1. It's strongly recommended to limit die temperature to 55°C
2. Absolute maximum ratings $T_a=25^\circ C$
3. Measurement Tolerances of Forward Voltage $\pm 0.1V$
4. Measurement Tolerances of peak wavelength $\pm 2.0nm$
5. Measurement Tolerances of luminous intensity $\pm 15\%$
6. Measurement Tolerances of angle intensity $\pm 15\%$

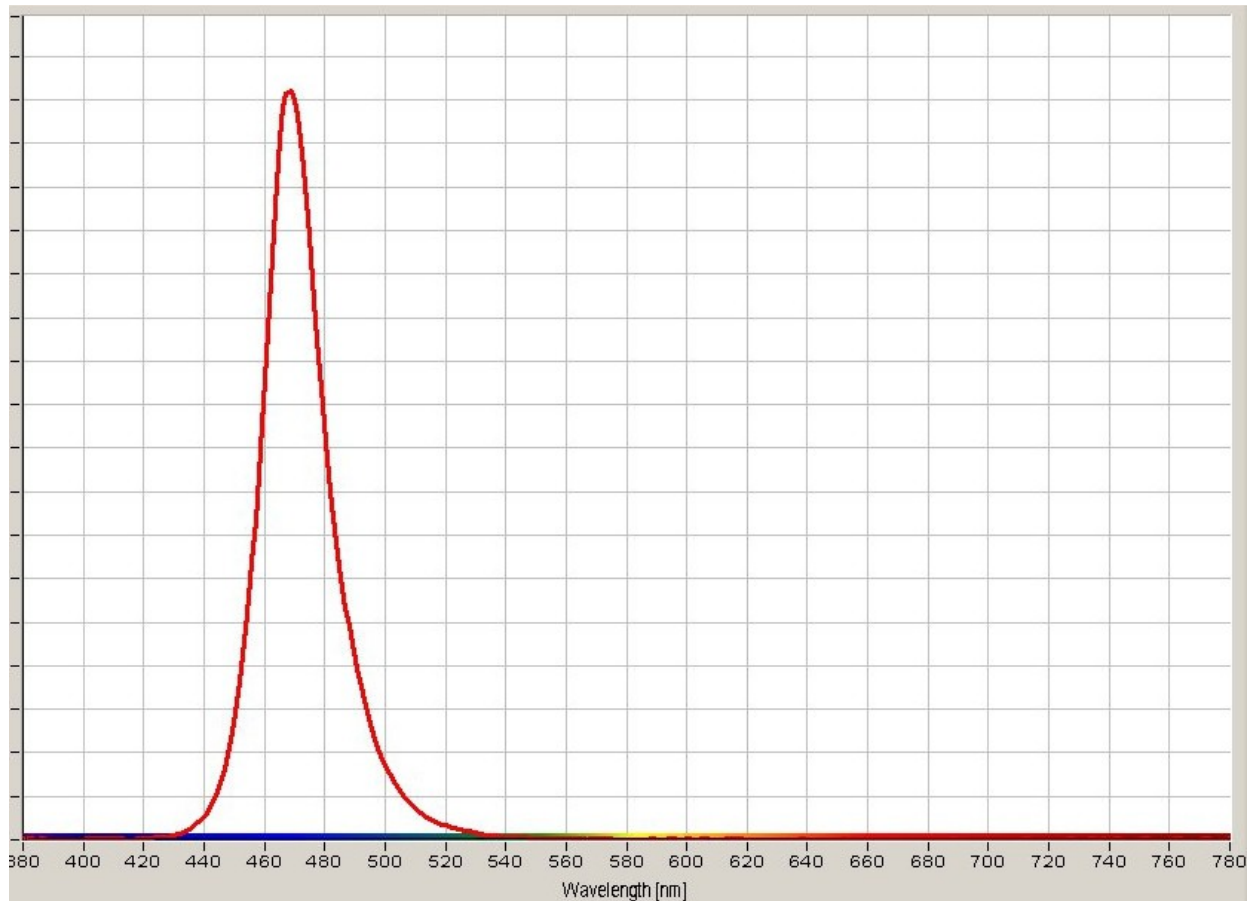
Typical electrical and optical characteristics



Spatial Distribution



Spectrum



7. Warranty

Perform an acceptance inspection on arrival of the goods. Return the defectives if any stipulating the disqualification and quantity.

Embedding the LEDs into the application and the verification of life and other qualities in practical use shall be executed by user.

Seller shall not bear responsibility for any damages or defects caused by improper operation at the current in excess of the absolute maximum ratings that are not covered by warranty.