

# Winger Electronics WESWW10-CS 5mm Warm-white 12V DIP LED



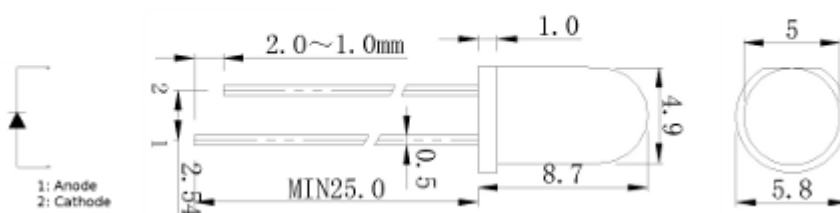
**ATTENTION**  
OBSERVE PRECAUTIONS  
FOR HANDLING  
ELECTROSTATIC  
SENSITIVE DEVICES



## Description

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

## Dimension figure



Unit: mm  
Tolerances:  $\pm 0.25$ 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

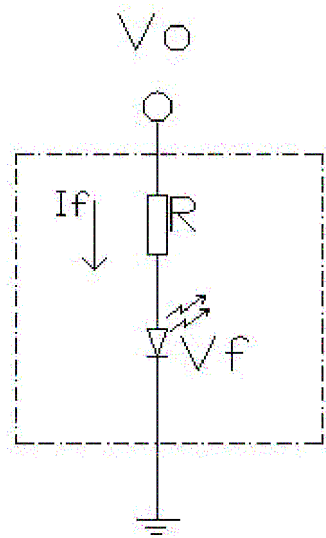
## Typical Optical/Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Supply Voltage	$V_F$		3	12	23	V
50% Power Angle			-	30	-	deg
Luminous Intensity	$I_V$		6000	-	10000	mcd
Dominant Wavelength	$\lambda_D$		-	-	-	nm
Color Temperature	$T_C$		-	3200	-	K
Forward Current	$I_{F(rec)}$		-	10	20	mA
Reverse Current	$I_R$	$V_R=5V$	-	-	5	$\mu A$

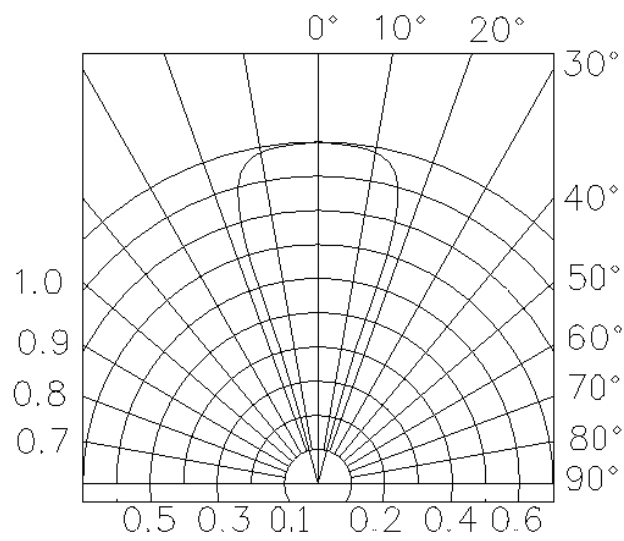
### Notes:

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  $\pm 15\%$

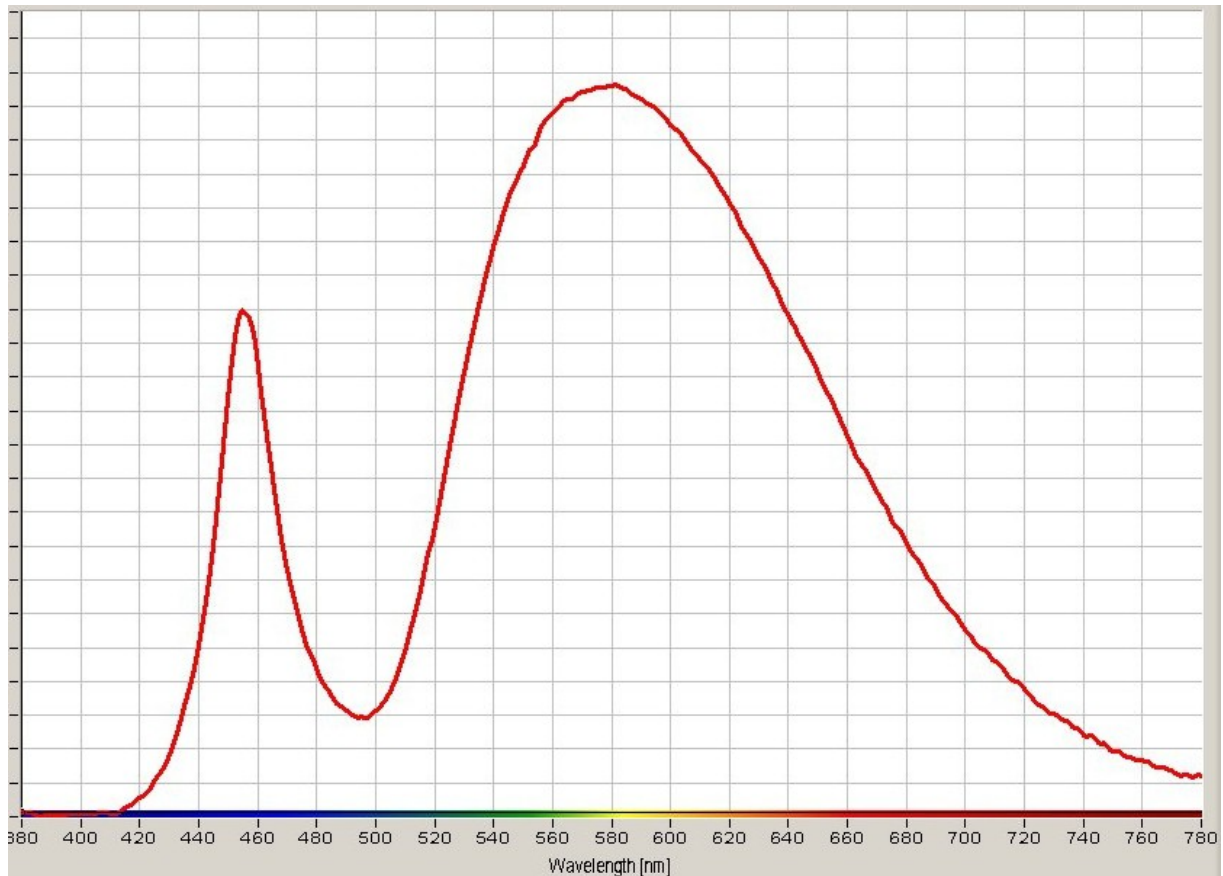
## Typical electrical and optical characteristics



## 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.