

# Winger Electronics WEBCW10-CS 3mm white DIP LED



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

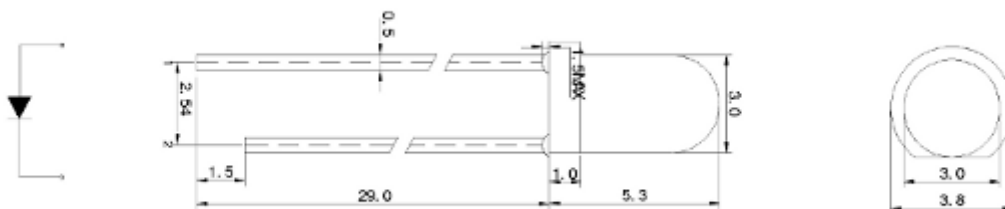


## Description

- 3mm DIP LED
- Emitting Color: White

Material InGaN

## Dimension figure



Unit: mm

Tolerances:  $\pm 0.25\text{mm}$

## Absolute Maximum Ratings

Item	Symbol	Absolute Maximum Rating	Unit
Forward Current	$I_F$	30	mA
Peak Forward Current *	$I_{FP}$	100	mA
Reverse Voltage	$V_R$	5	V
Power Dissipation	$P_O$	100	mW
Operating Temperature	$T_{OPR}$	-30 ~ +80	°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

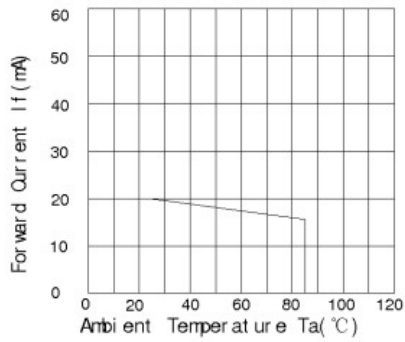
Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_F$	$I_F=20mA$	3	3,2	3,6	V
50% Power Angle			-	20	-	deg
Luminous Intensity	$I_V$		8200	-	10000	mcd
Dominant Wavelength	$\lambda_D$		-	-	-	nm
Color Temperature	$T_C$		-	10000	-	K
Recommended Forward Current	$I_{F(rec)}$		-	-	20	mA
Reverse Current	$I_R$	$V_R=5V$	-	-	5	$\mu A$

### Notes:

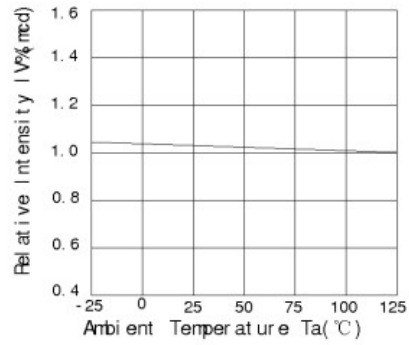
1. It's strongly recommended to limit die temperature to 55°C
2. Absolute maximum ratings  $T_a=25^\circ C$
3. Measurement Tolerances of Forward Voltage  $\pm 0.1V$
4. Measurement Tolerances of peak wavelength  $\pm 2.0nm$
5. Measurement Tolerances of luminous intensity  $\pm 15\%$
6. Measurement Tolerances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

# Typical electrical and optical characteristics

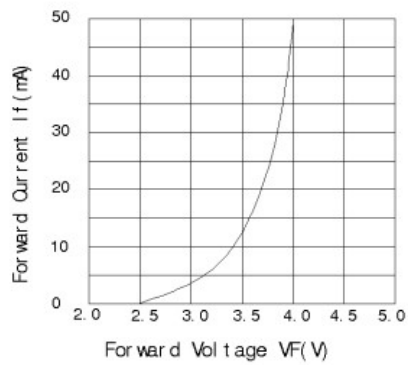
Forward Current vs. Ambient Temperature



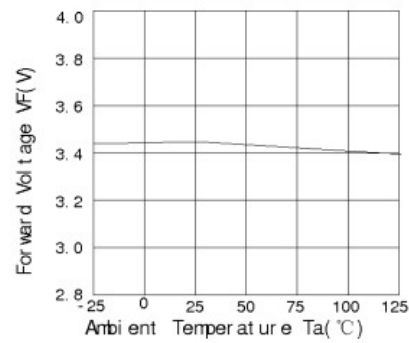
Relative Intensity vs. Ambient Temperature



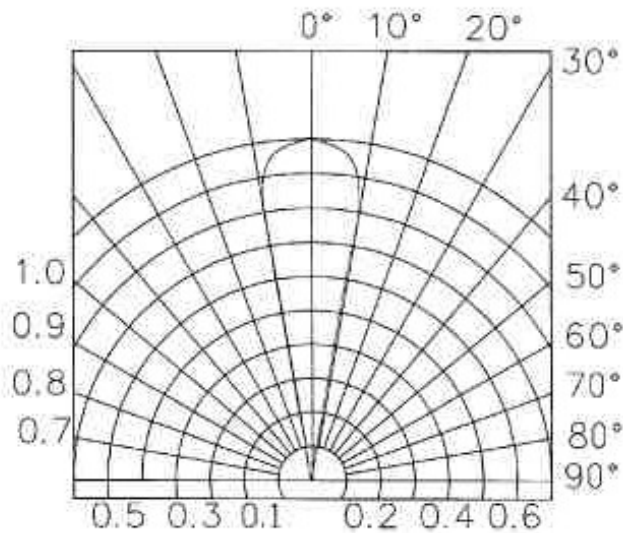
Forward Current vs. Forward Voltage



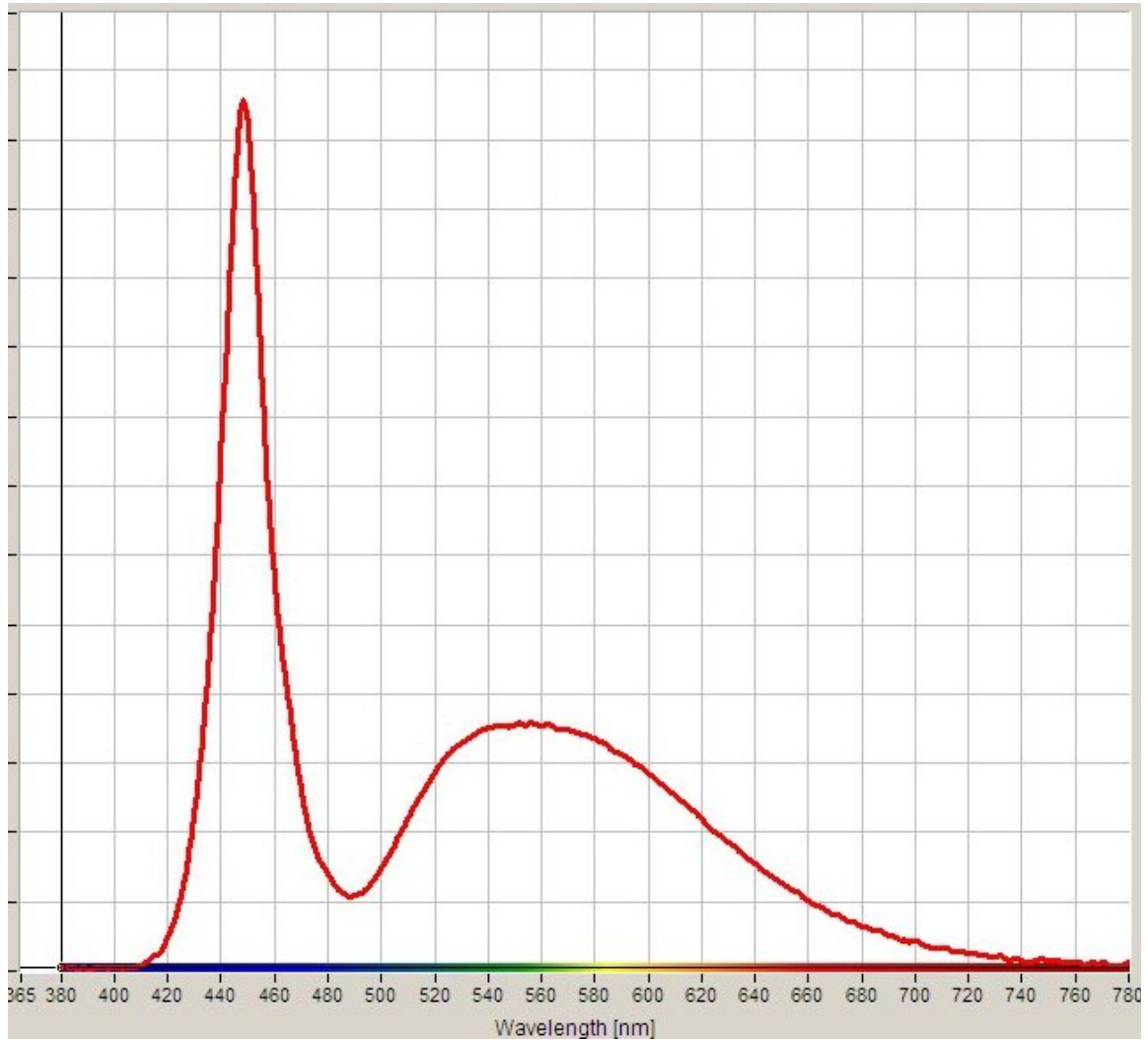
Forward Voltage vs. Ambient Temperature



## 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.