Winger Electronics
WEAOR03-CS
1.8mm orange DIP LED

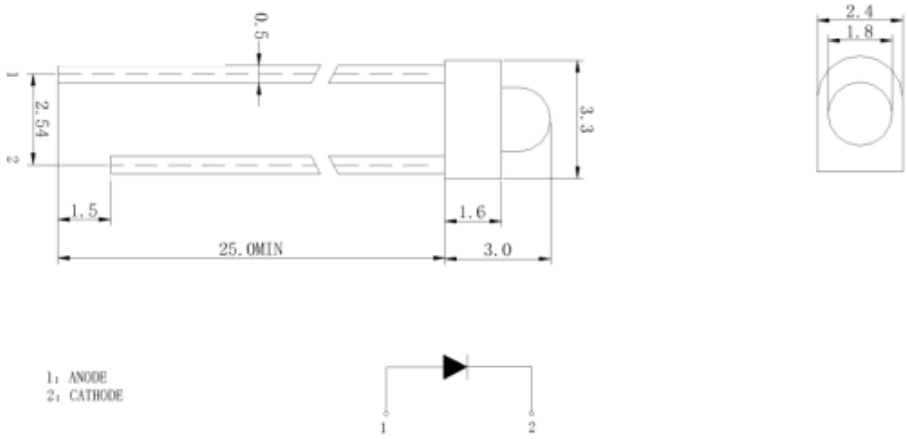
ATTENTION
OBSERVE PRECAUTIONS
FOR HANDLING
ELECTROSTATIC
SENSITIVE DEVICES

RoHS COMPLIANT

Description

- 1.8mm DIP LED
- Emitting Color: Orange

Dimension figure



Unit: mm
Tolerances: ±0.25mm

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	80	mW
Operating Temperature	T_{OPR}	-20 ~ +50	°C
Storage Temperature	T_{stg}	-40 ~ +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

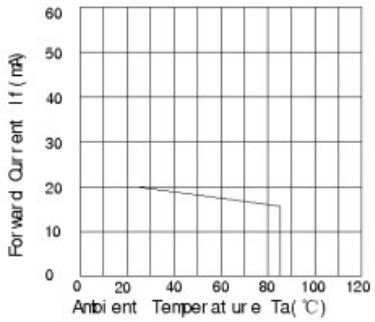
Typical Optical/Electrical Characteristics

Item	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F		1,8	2,2	2,6	V
50% Power Angle			-	20	-	deg
Liminous Intensity	I_V		1260	-	2200	mcd
Dominant Wavelength	λ_D		600	-	610	nm
Color Temperature	Tc		-	-	-	K
Recommended Forward Current	$I_{F(rec)}$		-	-	20	mA
Reverse Current	I_R	V_R=5V	-	-	5	µA

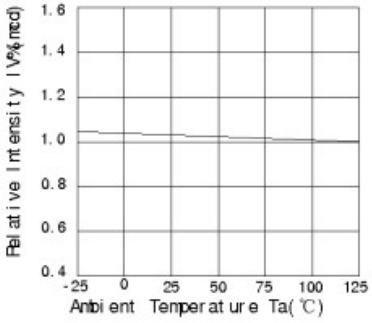
Notes:
1. It's strongly recommended to limit die temperature to 55°C
2. Absolute maximum ratings Ta=25°C
3. Measurement Tolerances of Forward Voltage ±0.1V
4. Measurement Tolerances of peak wavelength ±2.0nm
5. Measurement Tolerances of luminous intensity ±15%
6. Measurement Tolerances of angle intensity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

Typical electrical and optical characteristics

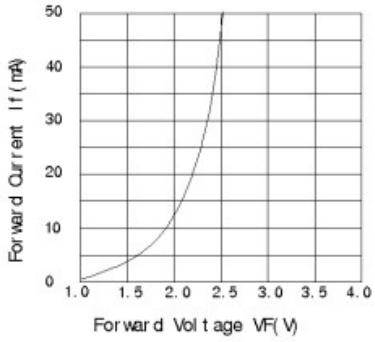
Forward Current vs. Ambient Temperature



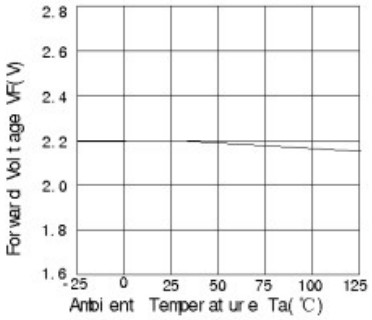
Relative Intensity vs. Ambient Temperature



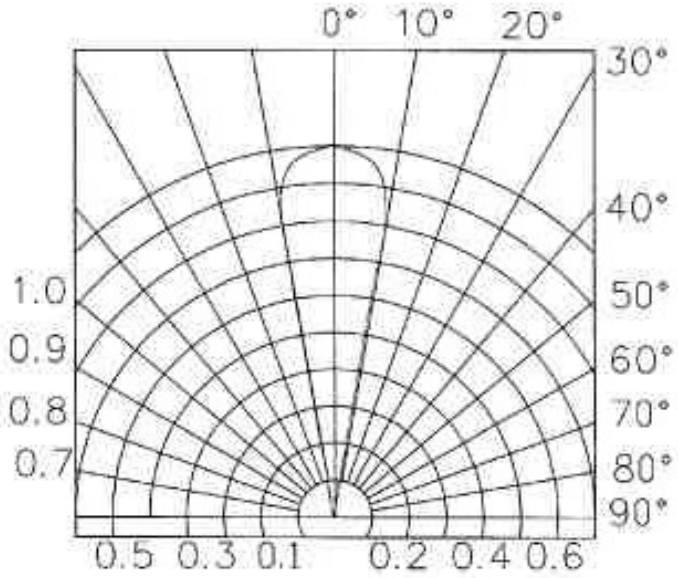
Forward Current vs. Forward Voltage



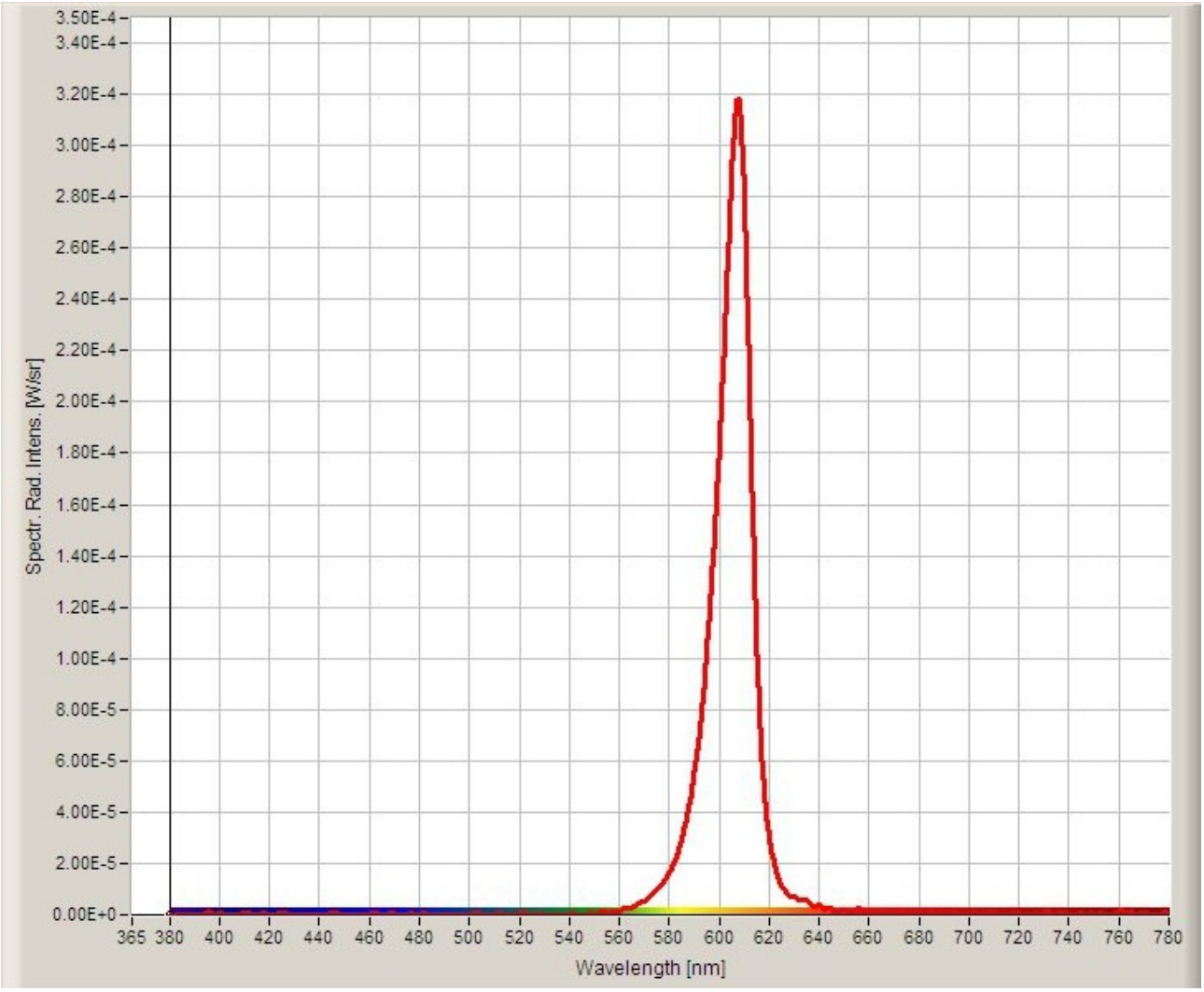
Forward Voltage vs. Ambient Temperature



Spatial Distribution



Spectrum



7. Warranty

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

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

(3) Do not use the LEDs for the applications that require the higher reliability and security and that may endanger life and health by the breakdown and the malfunction. Seller shall not bear any responsibility or liability with respect to any claims and damages caused by user’s usage of the LEDs without following our intended purpose or any written consent.

(4) 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.