

MED7P5 is an AlInGaP red point source LED with a small emitting window. This chip is ideally suited for use in applications where high and parallel output power is required such as optical switches and sensors.

Features

- Small emitting window (φ150um)
- High output power
- High reliability

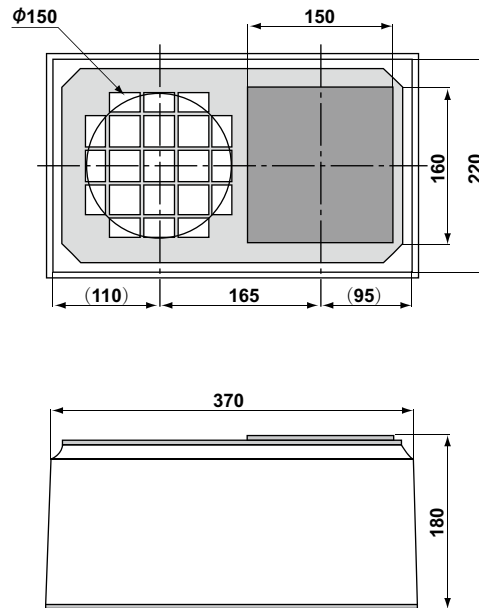
Structure

- Material : AlInGaP
- Electrode : Au alloy (p,n)
- Emitting surface : p-side

Applications

- Optical sensors
- Optical switches
- Optical encoders etc

Dimensional outline drawing(μm)



Absolute Maximum Ratings* (Ta=25°C)

Parameter	Symbol	Rating	Unit
Power Dissipation	P _D	120	mW
Forward Current	I _F	50	mA
Reverse Voltage	V _R	3	V
Operating Temperature	T _{opr}	-40 ~ +85	°C
Storage Temperature	T _{stg}	-40 ~ +100	°C

Electro-Optical Characteristics* (Ta=25°C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V _F	I _F =20mA	-	2.0	2.4	V
Reverse Current	I _R	V _R =3V	-	-	10	μA
Output Power	P _o	I _F =20mA	0.6	0.9	-	mW
Peak Wavelength	λ _P	I _F =20mA	630	650	675	nm

*As mounted on T018 header and hermetically sealed

Fig1. I_f / T_a

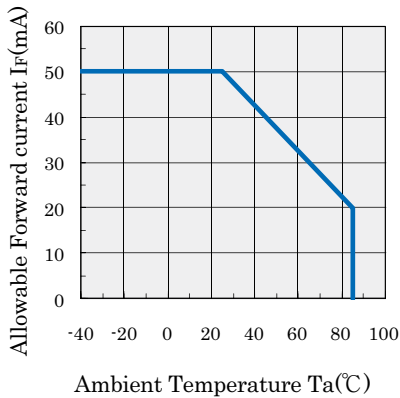


Fig2. I_f / V_f

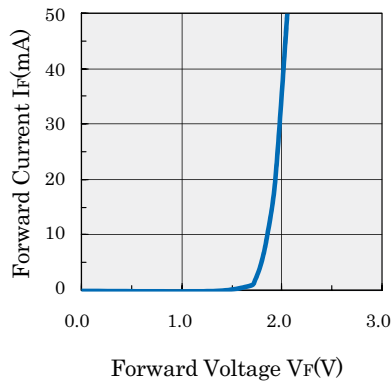


Fig3. V_f / T_a

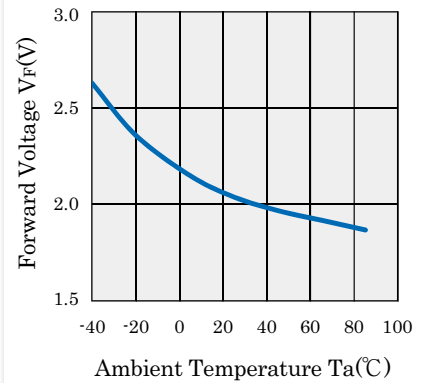


Fig4. P_o / I_f

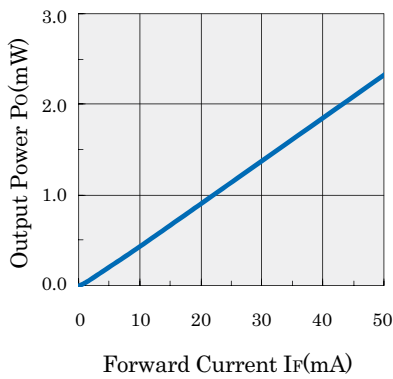


Fig5. Relative P_o / T_a

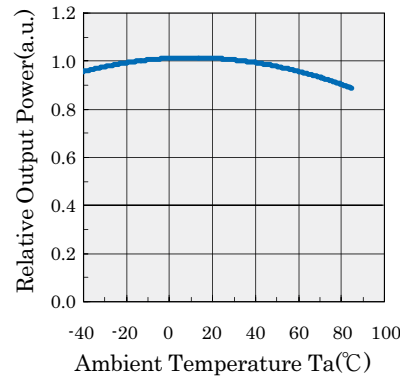


Fig6. Spatial Distribution

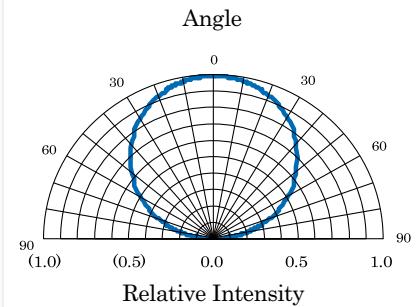


Fig7. Spectral Characteristics

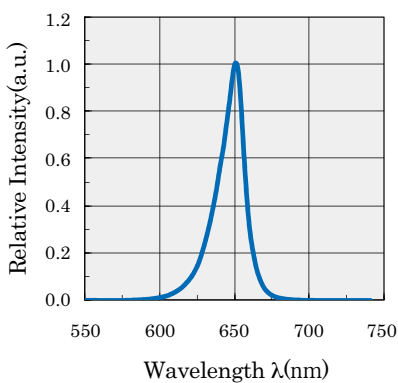


Fig8. Peak Wavelength λ_p / T_a

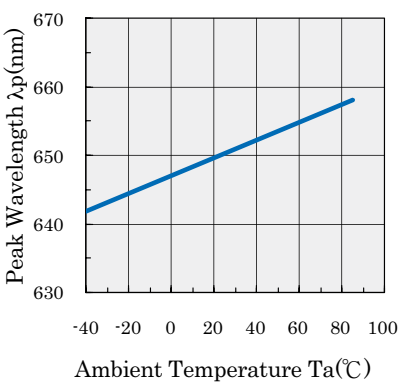
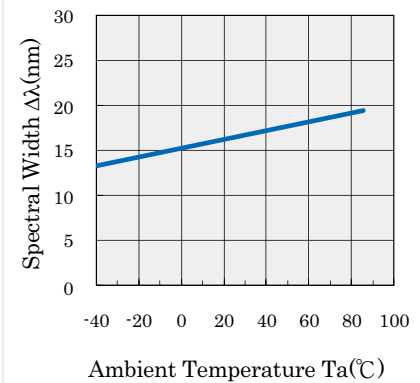


Fig9. Spectral Width $\Delta\lambda / T_a$



This catalogue was compiled in October 2012. All items listed in the catalogue are subject to change without any prior notice.

Products listed in this catalogue are manufactured for use in standard applications (eg: household appliances, OA/AV, telecommunications, measurement instruments). Please do not use the products in critical reliability and security applications (eg: space and aviation, critical-safety transport applications, nuclear power control, life-supporting units and equipment).