StarLED

Red Point-Source LED Die

MED7P25

MED7P25 is an AlInGaP red point source LED with a small emitting window. This die 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 (ϕ170μm)
- High output power
- High reliability

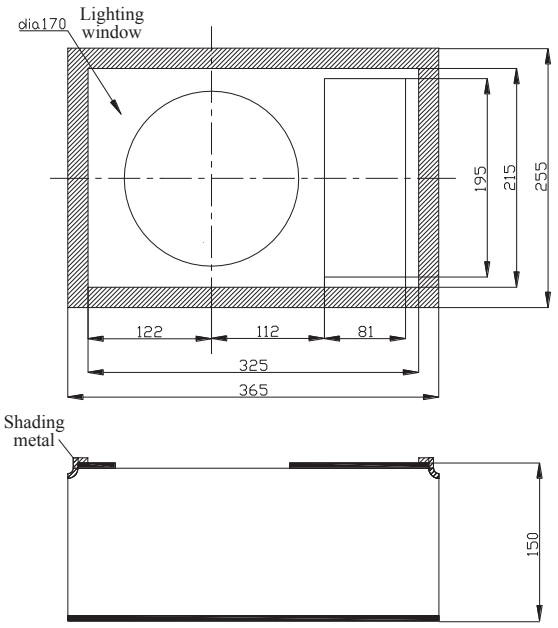
Structure

- Material: AlInGaP/Si
- Electrode: Au alloys (n,p)
- Emitting surface: n-side

Applications

- Optical sensors
- Optical switches

Dimensional outline drawing(μm)



Absolute Maximum Ratings* (Ta=25℃)

Parameter	Symbol	Rating	Unit
Forward Current	I_F	80	mA
Reverse Voltage	V_R	3	V
Operating Temperature	T_{opr}	-40~85	℃
Storage Temperature	T_{stg}	-40~100	℃

Electro-Optical Characteristics* (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=60mA	-	2.2	3.0	V
Reverse Current	I_R	V_R=3V	-	-	10	μA
Output Power	P_o	I_F=60mA	6.0	9.0	-	mW
Peak Wavelength	λ_p	I_F=60mA	630	650	670	nm

*As mounted on TO18 header and hermetically sealed.
*The values are measured by our equipment.

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MED7P25

Fig.1 IF / Ta

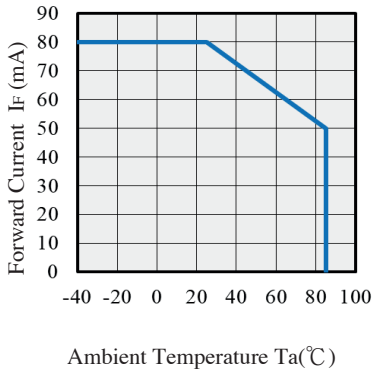


Fig.2 IF / VF

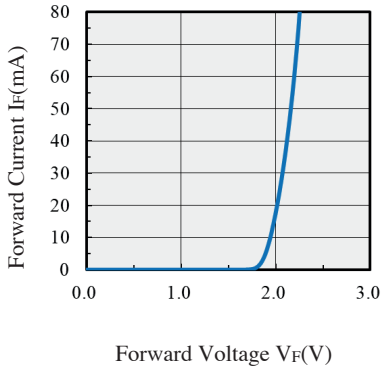


Fig.3 VF / Ta

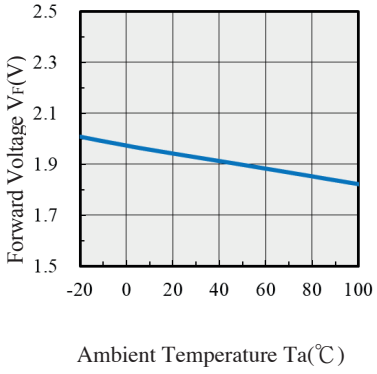


Fig.4 Po / IF

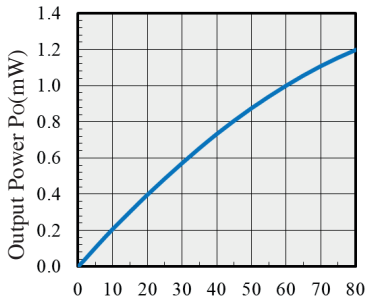


Fig.5 Relative Po / Ta

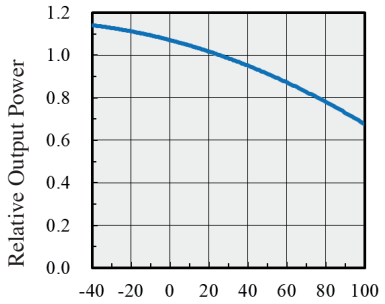


Fig.6 Spatial Response

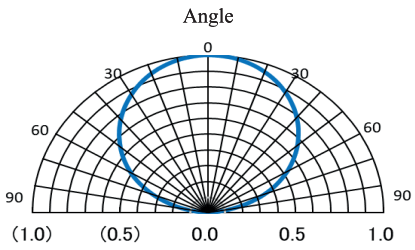


Fig.7 Spectral Characteristics

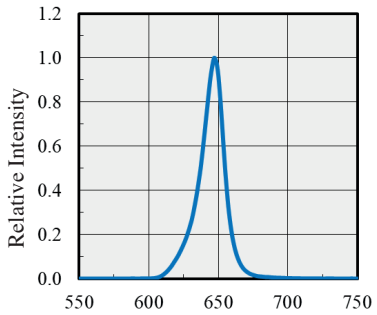


Fig.8 Central Wavelength / Ta

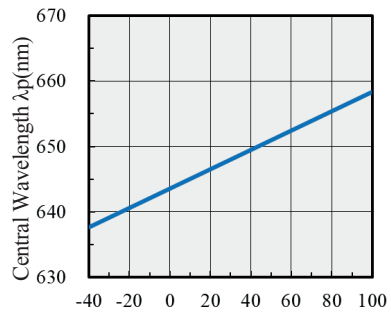
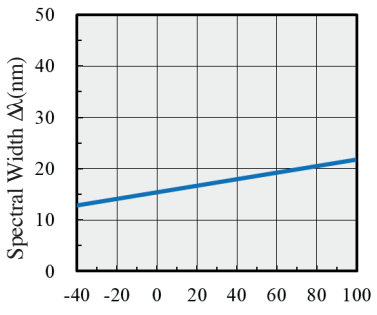


Fig.9 Spectral Width / Ta



This catalogue was compiled in June 2025. All items listed in the catalogue are subject to change without any prior notice.

Products listed in this catalogue are designed and manufactured for use in standard applications (eg: household appliances, OA/AV, telecommunications, measurement instruments). The customers should take security measures, when used the products in critical reliability and security applications (eg: space and aviation, critical-safety transport applications, nuclear power control, medical, life-supporting units and equipment). We assume no liability for damages incurred by use of the products without taking measures described above.

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