StarLED

Infrared Point Source LED Die

MED8P59

MED8P59 is a Low failure infrared point soutce LED die. It is optimaized for optical switches and encoder applications due to its small-size emitting aperture.

Features

- Small emitting window (ϕ60μm)
- High output power
- High reliability

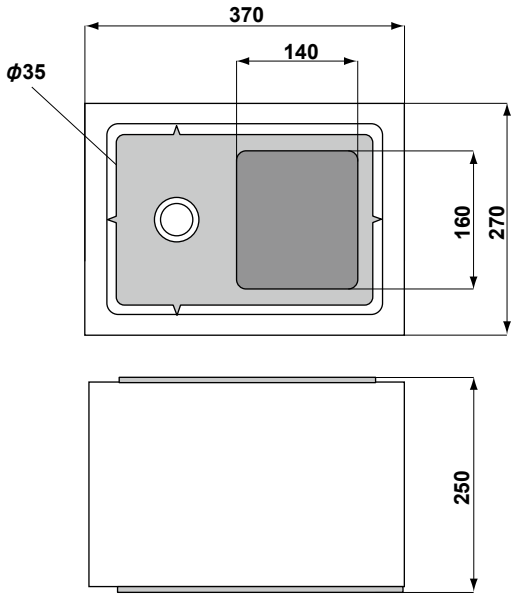
Structure

- Material: AlGaAs/GaAs sub
- Electrode: Au alloys (p,n)
- Emitting surface: p-side

Applications

- Optical ecoders
- Optical switches
- Optical sensors etc

Dimensional outline drawing(μm)



Absolute Maximum Ratings* (Ta=25℃)

Parameter	Symbol	Rating	Unit
Forward Current	I_F	30	mA
Reverse Voltage	V_R	3	V
Operating Temperature	T_{opr}	-20~80	℃
Storage Temperature	T_{stg}	-30~100	℃

Electro-Optical Characteristics* (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=20mA	-	2.1	2.8	V
Reverse Current	I_R	V_R=3V	-	-	10	μA
Output Power	P_o	I_F=20mA	0.4	0.7	-	mW
Peak Wavelength	λc	I_F=20mA	-	855	-	nm

*As mounted on TO18 header and hermetically sealed.

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MED8P59

Fig.1 IF / Ta

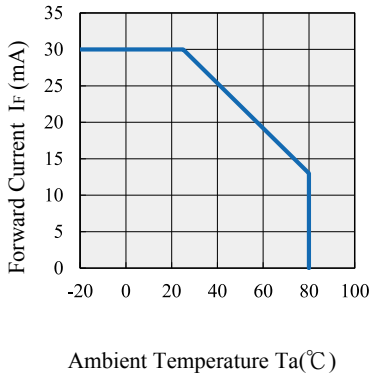


Fig.2 IF / VF

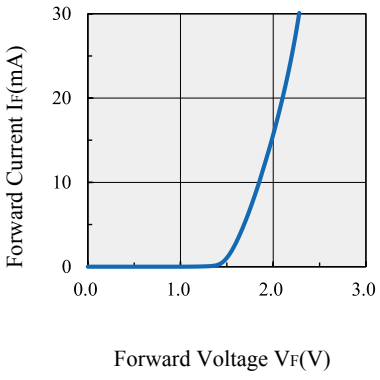


Fig.3 VF / Ta

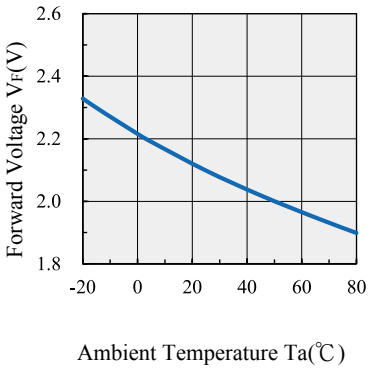


Fig.4 Po / IF

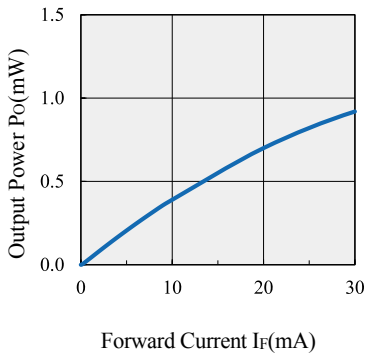


Fig.5 Relative Po / Ta

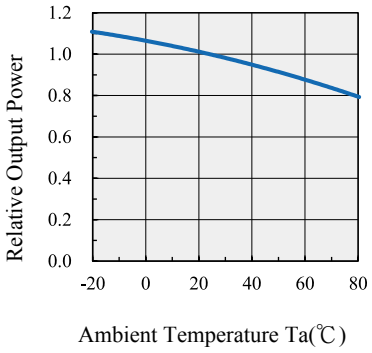


Fig.6 Frequency Response

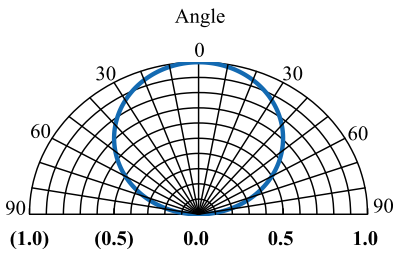


Fig.7 Spectral Characteristics

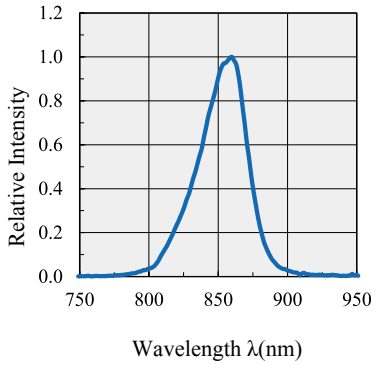


Fig.8 Central Wavelength / Ta

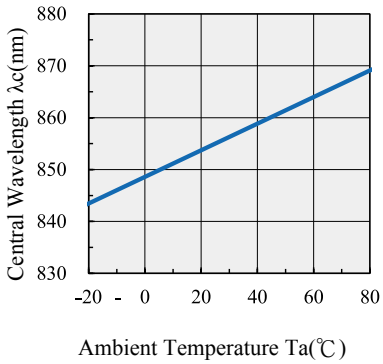
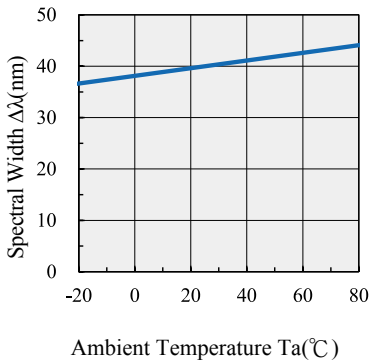


Fig.9 Spectral Width / Ta



This catalogue was compiled in September 2024. 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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