StarLED

Infrared Point Source LED Die

MED8P73

MED8P73 is a low failure rate point source LED die designed for high temperature operation(105℃) with high output power. Lambertian distribution of light output can provide parallel beam line. It is well suited for optical encoders, positioning and sensing applications.

Features

- Small-size emitting aperture (ϕ60μm)
- High temperature operation
- High reliability

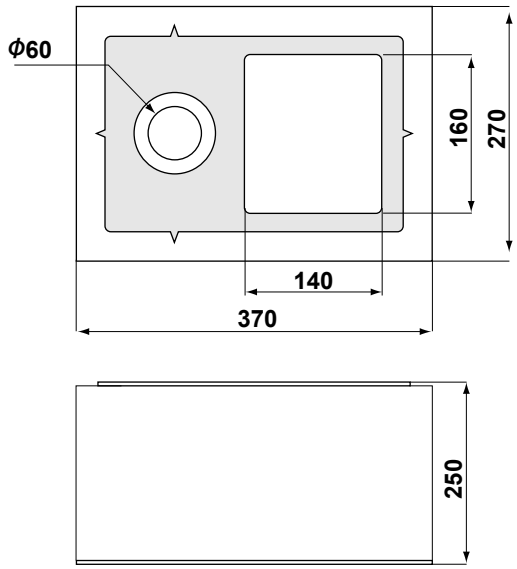
Structure

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

Applications

- Optical encoders
- Optical switches
- Optical sensors

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}	-40~105	℃
Storage Temperature	T_{stg}	-40~105	℃

Electro-Optical Characteristics* (Ta=25℃)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	I_F=50mA	-	2.0	2.4	V
Reverse Current	I_R	V_R=3V	-	-	10	μA
Output Power	P_o	I_F=50mA	1.2	2.0	-	mW
Central Wavelength	λ_C	I_F=50mA	-	855	-	nm
Cutoff Frequency	fc	I_F=50mA+20mAp-p	-	45	-	MHz

*As mounted on TO18 header and hermetically sealed

DAIDO STEEL

MED8P73

Fig.1 IF / Ta

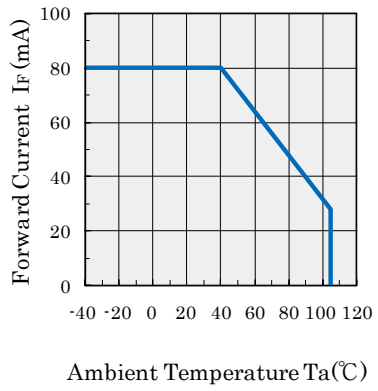


Fig.2 IF / VF

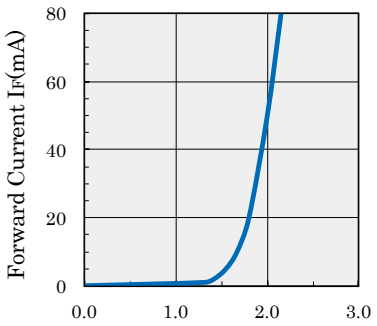


Fig.3 VF / Ta

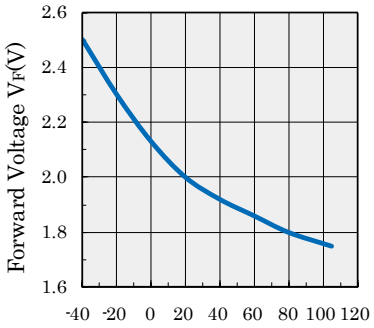


Fig.4 Po / IF

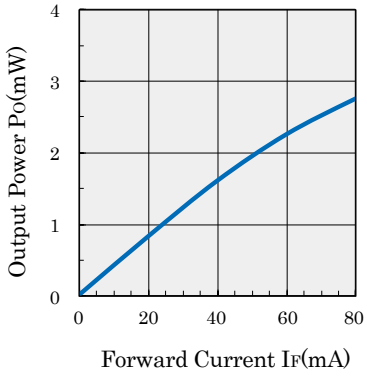


Fig.5 Relative Po / Ta

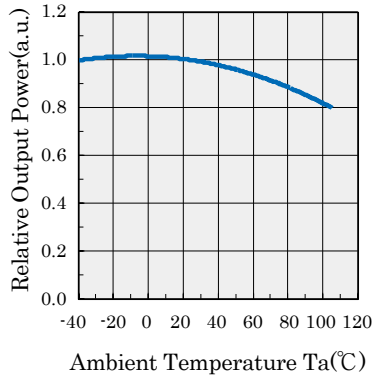


Fig.6 Frequency Response

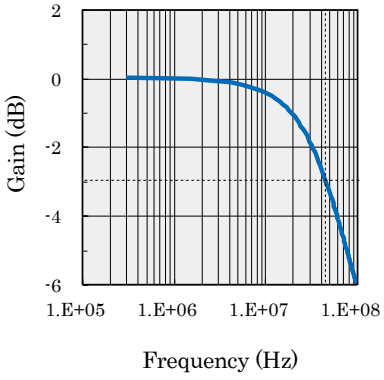


Fig.7 Spectral Characteristics

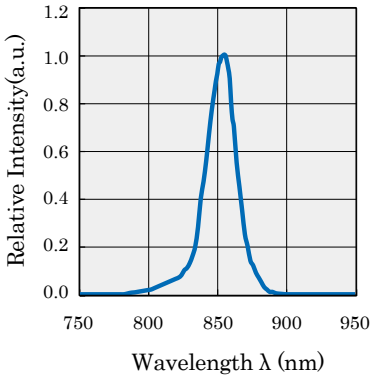


Fig.8 Central Wavelength / Ta

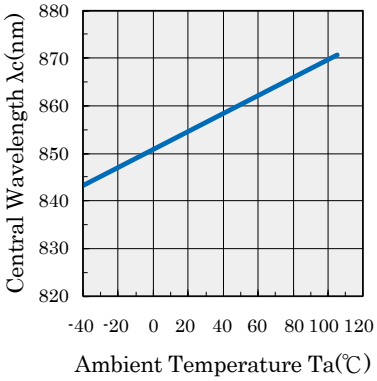
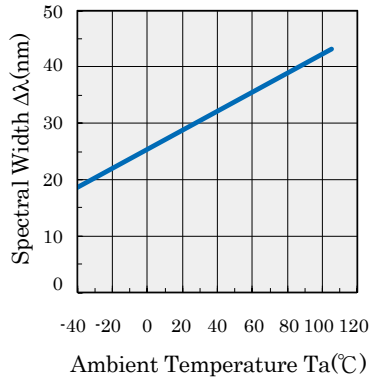


Fig.9 Spectral Width / Ta



This catalogue was compiled in March 2023. 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.

DAIDO STEEL
www.daido.co.jp

Electronic Materials Division
9 Takiharu-cho, Minami-ku, Nagoya, 457-8712 Japan
Tel:+81 52 308 4991 Fax:+81 52 613 6914