

MED8P67A is a low failure infrared point source LED die. It is well suited for optical switches, positioning and sensing applications due to its small-size emitting aperture.

Features

- Small-size emitting aperture ($\phi 60\mu\text{m}$)
- Small side-face emission
- High output power
- High reliability

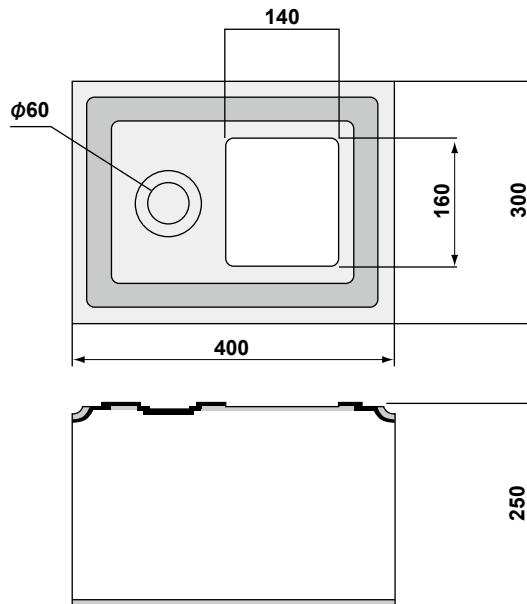
Structure

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

Applications

- Optical encoders
- Optical switches
- Optical sensors etc

Dimensional outline drawing (μm)



Absolute Maximum Ratings* ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Forward Current	I_F	80	mA
Reverse Voltage	V_R	3	V
Operating Temperature	T_{opr}	-20 ~ 80	$^\circ\text{C}$
Storage Temperature	T_{stg}	-30 ~ 100	$^\circ\text{C}$

Electro-Optical Characteristics* ($T_a=25^\circ\text{C}$)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=50\text{mA}$	-	2.0	2.4	V
Reverse Current	I_R	$V_R=3\text{V}$	-	-	10	μA
Output Power	P_o	$I_F=50\text{mA}$	1.2	2.0	-	mW
Central Wavelength	λ_c	$I_F=50\text{mA}$	-	855	-	nm
Side-face Emission	P_s	$I_F=50\text{mA}$	-	-	1	%

*As mounted on T018 header and hermetically sealed

Fig1. I_F / T_a

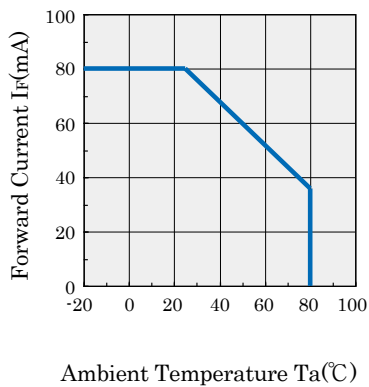


Fig2. I_F / V_F

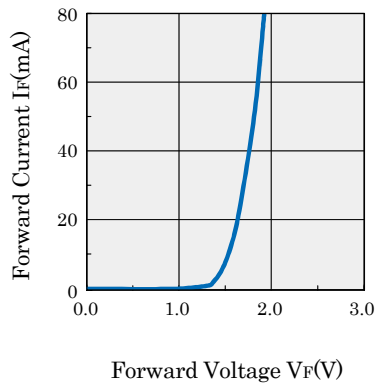


Fig3. V_F / T_a

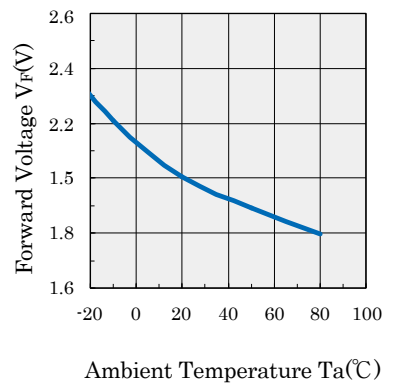


Fig4. P_o / I_F

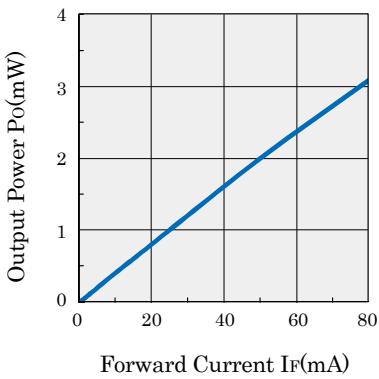


Fig5. Relative P_o / T_a

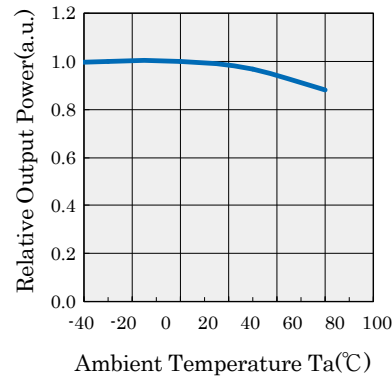


Fig6. Spatial Distribution

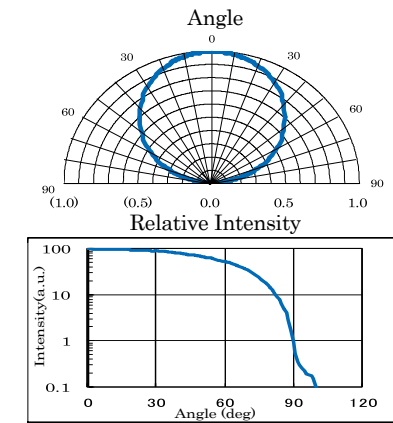


Fig7. Spectral Characteristics

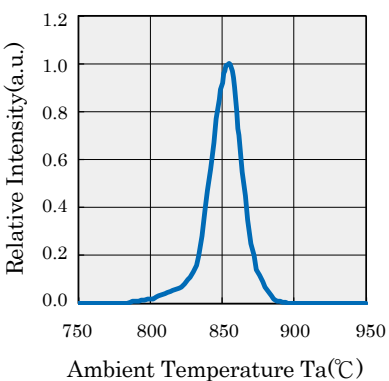


Fig8. Central Wavelength λ_c / T_a

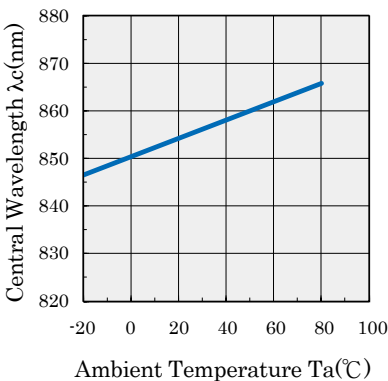
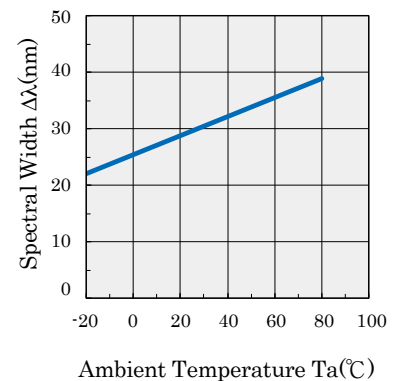


Fig9. Spectral Width $\Delta\lambda / T_a$



This catalogue was compiled in March 2023. All items listed in the catalogue are subject to change without any prior notice.

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