

Red Point Source LED Chip MED7P2

MED7P2 is a red point source LED chip with high output power and high reliability. Due to its small-size emitting aperture and uniform optical power distribution it is well suited for optical switches and other light source applications.

• Features

- Small-size emitting aperture ($\phi 160\mu\text{m}$)
- High output power (0.8mW)
- High reliability

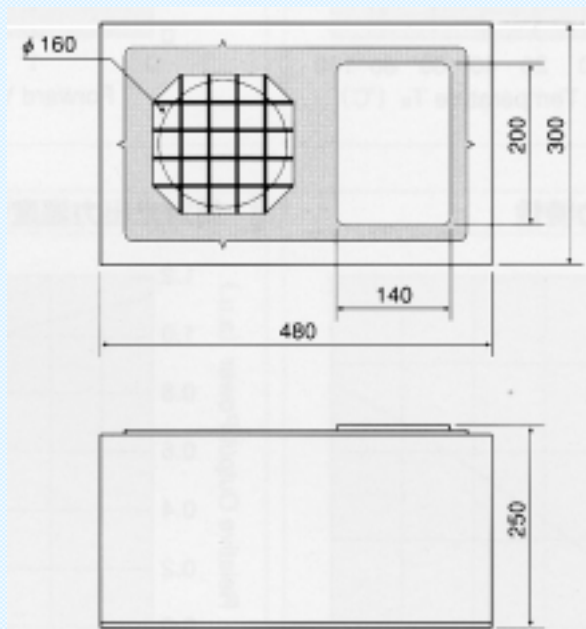
• Structure

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

• Applications

- Optical switches
- Optical sensors
- POF communications

• Dimensional outline drawing (μm)



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

Parameter	Symbol	Rating	Unit
Power Dissipation	P_D	100	mW
Forward Current	I_F	50	mA
Reverse Voltage	V_R	3	V
Operating Temperature	T_{opr}	-40 ~ 85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40 ~ 100	$^\circ\text{C}$

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

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F=20\text{mA}$	-	2.2	2.5	V
Reverse Current	I_R	$V_R=3\text{V}$	-	-	10	μA
Output Power	P_o	$I_F=20\text{mA}$	0.5	0.8	-	mW
Peak Wavelength	λ_p	$I_F=20\text{mA}$	630	650	670	nm

* as mounted on TO18 header and hermetically sealed

Star LED



Daido Steel Co., Ltd

MED7P2 data sheet

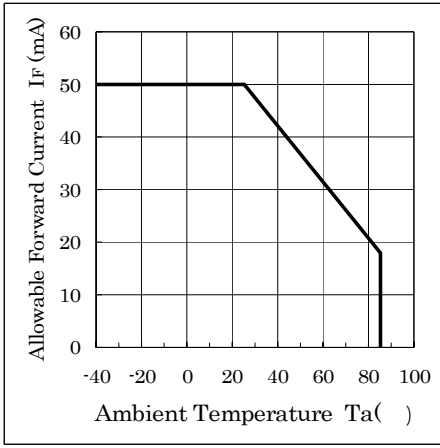


Fig1. I_f / T_a

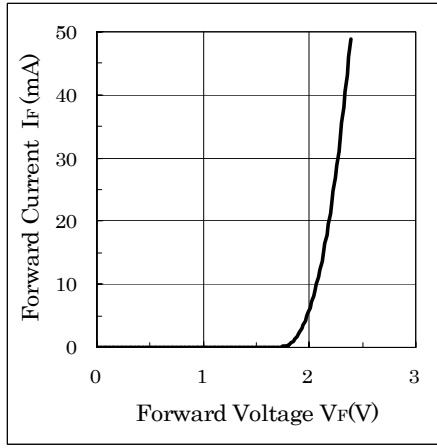


Fig2. I_f / V_f

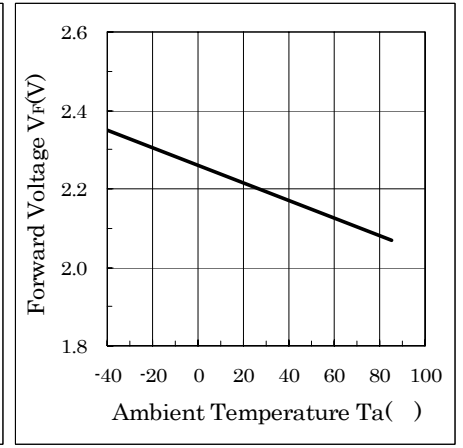


Fig3. V_f / T_a

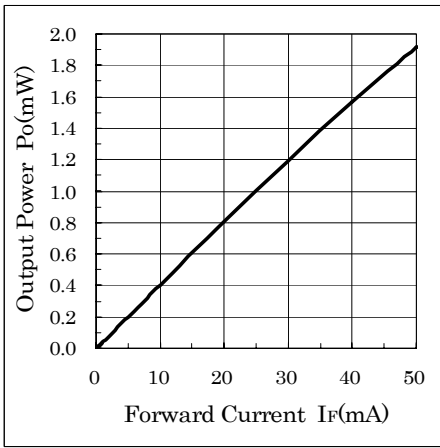


Fig4. P_o / I_f

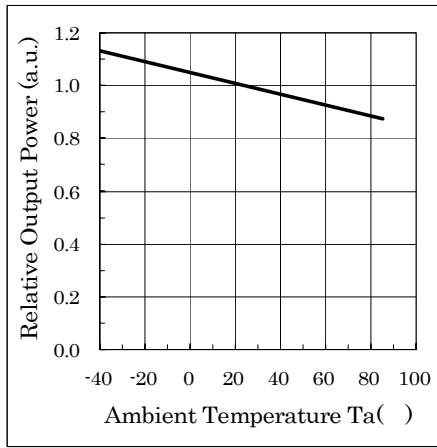


Fig5. Relative P_o / T_a

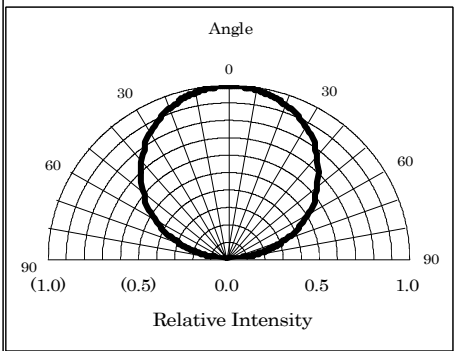


Fig6. Spatial Distribution

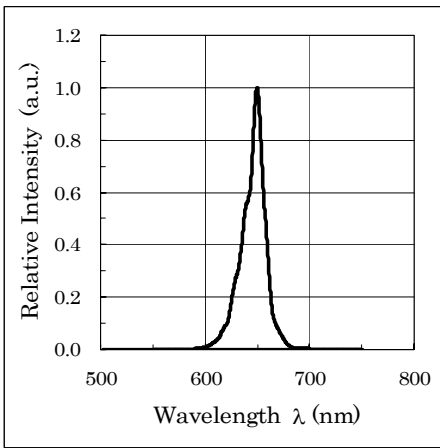


Fig7. Spectral Characteristics

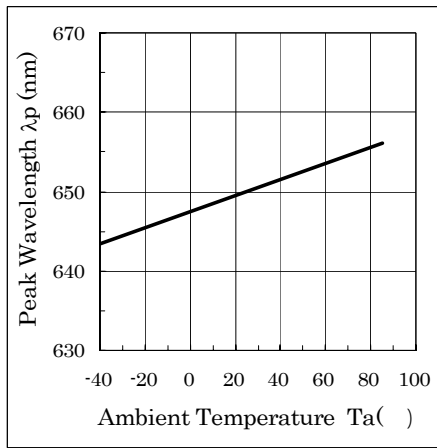


Fig8. Peak Wavelength / T_a

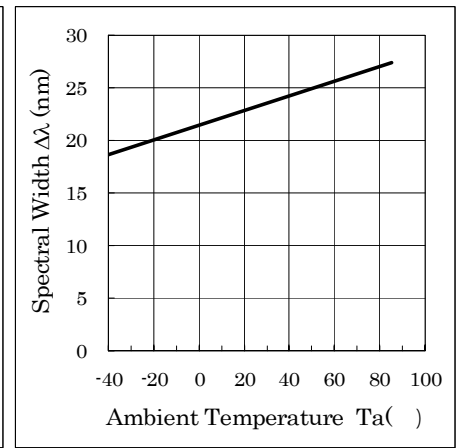


Fig9. Spectral Width / T_a

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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, medical, life-supporting units and equipment).



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