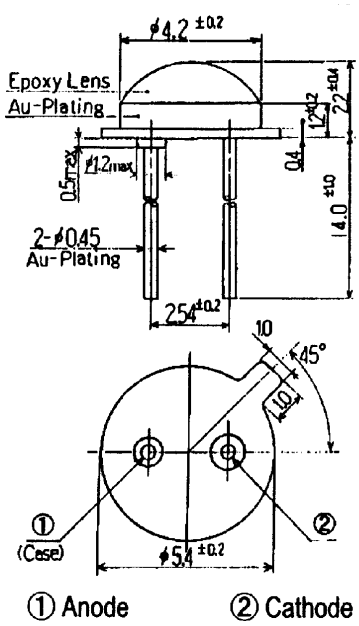
LED lamp ELD-875-095-1

Preliminary data

Color	Type	Technology	Case
Infrared	1 mm^2 power chip	AlInGaP/GaAlAs	TO-46 with epoxy

Features: High output power, wide beam angle, high reliability

Applications: Optical switches, optical sensors



Maximum Ratings*

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	500	mA
Reverse voltage	I_R=10 µA	V_R	5	V
Power dissipation		P_D	180	mW
Operating temperature range		T_{amb}	-20 to +80	°C
Storage temperature range		T_{stg}	-30 to +100	°C

Optical and Electrical Characteristics**

T_{amb} = 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 100 mA	V_F		1.4	1.6	V
Forward voltage	I_F = 300 mA	V_F		1.65	1.85	V
Radiant power**	I_F = 100 mA	Φ_e	21	30		mW
Radiant power*	I_F = 300 mA	Φ_e	65	90		mW
Peak wavelength	I_F = 100 mA	λ_p	860	875	890	nm
Spectral bandwidth at 50%	I_F = 100 mA	$\Delta\lambda_{0.5}$		50		nm
Viewing angle	I_F = 100 mA	φ		180		deg.
Switching time	I_F = 100 mA	t_r, t_f		50		ns

*Proper heat sinking is required to maintain correct device operation and reliability at currents higher than 100 mA. **Package without heatsink.

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