

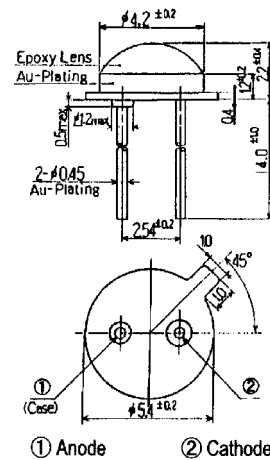
LED lamp

ELI-635-095-1

Color	Type	Technology	Case
Red	1 x 1 mm ² power chip	AllnGaP/GaAs	TO-46

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	100	mA
Peak forward current	(t _p ≤ 50 μs, t _p /T = 1/2)	I _{FM}	1000	mA
Reverse current	V _R = 5 V	I _R	10	μA
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		1.9	2.4	V
Reverse voltage	I _R = 10 μA	V _R	5			V
Radiant power	I _F = 100 mA	Φ _e	8	11		mW
Luminous intensity	I _F = 100 mA	I _v	360	520		mcd
Peak wavelength	I _F = 100 mA	λ _p	625	635	645	nm
Dominant wavelength	I _F = 100 mA	λ _d		626		nm
Spectral bandwidth at 50%	I _F = 100 mA	Δλ _{0.5}		19		nm
Viewing angle		φ		180		deg.
Switching time	I _F = 100 mA	t _r , t _f		100		ns

*Proper heat sinking is required to maintain correct device operation and reliability at currents higher than 100 mA.

**Package without heatsink.