

LED lamp

Preliminary data

ELD-810-045-2

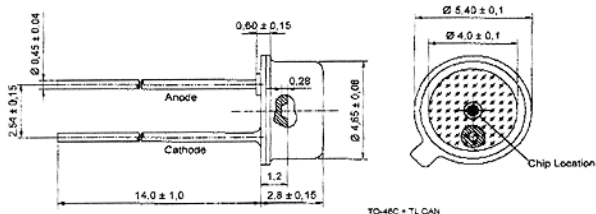
Radiation	Type	Technology	Case
Infrared	ELD-880-045-2	AlGaAs/AlGaAs	TO-46C

Description

High-power, high-speed, double heterostructure with removed substrate, in TO-52 housing

Applications

Optical communications, safety equipment



Maximum Ratings

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	100	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	I_{FM}	200	mA
Surge forward current	$(t_p \leq 10 \mu\text{s})$	I_{FSM}	2000	mA
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5	V
Operating temperature range		T_{amb}	-20 to +85	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-30 to +100	$^{\circ}\text{C}$

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 100 \text{ mA}$	V_F		1.7	2.1	V
Radiant power	$I_F = 100 \text{ mA}$	Φ_e		25		mW
Radiant intensity	$I_F = 100 \text{ mA}$	I_e		22		mW/sr
Peak wavelength	$I_F = 100 \text{ mA}$	λ_p		880		nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0.5}$		45		nm
Viewing angle		φ		40		deg.
Switching time	$I_F = 100 \text{ mA}$	t_r, t_f		40		ns