



ELD-770-524

Radiation	Type	Technology	Case
Infrared	DDH	AlGaAs/AlGaAs	5 mm plastic lens

Description

High-power, high-speed LED with narrow beam angle and high reliability, housing with standoff leads

Note: Special packages without standoff available on request

Applications

Optical communications, safety equipment, automation

Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	50	mA
Peak forward current	$(t_p \leq 50 \mu\text{s}, t_p/T = 1/2)$	I_{FM}	100	mA
Power dissipation		P_D	120	mW
Operating temperature range		T_{amb}	-20 to +100	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	-55 to +100	$^{\circ}\text{C}$
Junction temperature		T_J	100	$^{\circ}\text{C}$
Lead soldering temperature	< 5s, 3.0 mm from case	T_{sol}	260	$^{\circ}\text{C}$

Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		1.7	2.0	V
Forward voltage ¹	$I_F = 50 \text{ mA}$	V_F		2.0		V
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5			V
Radiant power	$I_F = 20 \text{ mA}$	Φ_e	4	6		mW
Radiant power ¹	$I_F = 50 \text{ mA}$	Φ_e		14		mW
Radiant intensity	$I_F = 20 \text{ mA}$	I_e	24	30		mW/sr
Radiant intensity ¹	$I_F = 50 \text{ mA}$	I_e		70		mW/sr
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	760	770	780	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		30		nm
Viewing angle	$I_F = 20 \text{ mA}$	φ		20		deg.
Switching time	$I_F = 20 \text{ mA}$	t_r, t_f		35		ns

¹for information only