



LED - Lamp

ELD-740-524-7

15.11.2007 rev. 03

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

	<p>Description</p> <p>High-power, high-speed infrared LED in standard 5 mm package, with lens for optimal beam focusing, housing with standoff leads</p> <p>Note: Special packages without standoff available on request</p> <p>Applications</p> <p>Optical communications, safety equipment, automation, optical sensors</p>
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Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I _F	50	mA
Peak forward current	(t _p ≤ 50 μs, t _p /T = 1/2)	I _{FM}	100	mA
Power dissipation		P _D	130	mW
Operating temperature range		T _{amb}	-40 to +100	°C
Storage temperature range		T _{stg}	-40 to +100	°C
Junction temperature		T _J	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 = 20 mA	V _F		1,7	2,0	V
Forward voltage*	I _F = 50 mA	V _F		2,0	2,4	V
Reverse voltage	I _R = 10 μA	V _R	5			V
Radiant power	I _F = 20 mA	Φ _e	4,5	6,0		mW
Radiant power*	I _F = 50 mA	Φ _e		14		mW
Radiant intensity	I _F = 20 mA	I _e	20	30		mW/sr
Radiant intensity*	I _F = 50 mA	I _e		70		mW/sr
Peak wavelength	I _F = 50 mA	λ _p		740	750	nm
Spectral bandwidth at 50%	I _F = 50 mA	Δλ _{0.5}		30		nm
Viewing angle	I _F = 50 mA	φ		20		deg.
Switching time	I _F = 50 mA	t _r , t _f		35		ns

*measured after 30s current flow