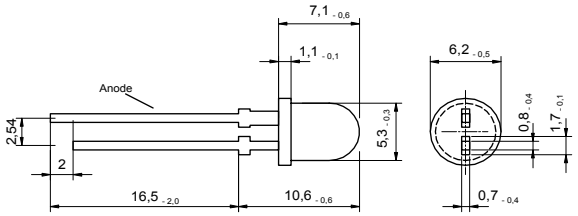
LED - Lamp

ELD-905-545

15.11.2007 rev. 04

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



Description

High-power, high-speed LED in the infrared range. Mounted in standard 5 mm housing with standoff leads

Note: Special packages without standoff available on request

Applications

Optical communications, safety equipment, automation, optical sensors, medical appliances

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	($t_P \leq 50$ µs, $t_P/T = 1/2$)	I_{FM}	200	mA
Power dissipation		P_D	190	mW
Operating temperature range		T_{amb}	-20 to +80	°C
Storage temperature range		T_{stg}	-40 to +100	°C
Junction temperature		T_J	100	°C
Soldering temperature	t ≤ 5 s, 3 mm from case	T_{Sd}	260	°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		1.3	1.5	V
Forward voltage*	I_F = 100 mA	V_F		1.45	1.9	V
Reverse voltage	I_R = 100 µA	V_F	5			V
Radiant power	I_F = 20 mA	Φ_e	5.5	8.0		mW
Radiant power*	I_F = 100 mA	Φ_e		38		mW
Radiant intensity	I_F = 20 mA	I_e	15	21		mW/sr
Radiant intensity*	I_F = 100 mA	I_e		100		mW/sr
Peak wavelength	I_F = 100 mA	λ_p	895	905	915	nm
Spectral bandwidth at 50%	I_F = 100 mA	$\Delta\lambda_{0.5}$		55		nm
Viewing angle	I_F = 100 mA	φ		40		deg.
Switching time	I_F = 100 mA	t_r, t_f		70		ns

*measured after 30s current flow

Note: All measurements carried out on *EPIGAP* equipment

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