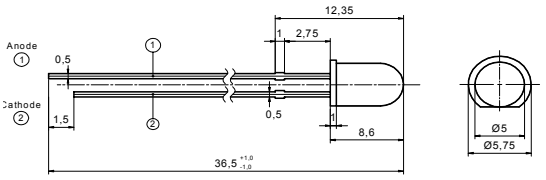
LED - Lamp

ELD-700-524-1

15.11.2007 rev. 04

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°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current (DC)		I_F	50	mA
Peak forward current	($t_P \leq 50$ µs, $t_P/T = 1/2$)	I_{FM}	100	mA
Power dissipation		P_D	120	mW
Operating temperature range		T_{amb}	-40 to +85	°C
Storage temperature range		T_{stg}	-55 to +100	°C
Junction temperature		T_J	100	°C
Lead soldering temperature	< 5s, 3.0 mm from case	T_{sol}	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		1,9	2,2	V
Forward voltage[1]	I_F = 50 mA	V_F		2,0	2,3	V
Reverse voltage	I_R = 100 µA	V_R	5			V
Radiant power	I_F = 20 mA	Φ_e	3	4		mW
Radiant power[1]	I_F = 50 mA	Φ_e		10		mW
Radiant intensity	I_F = 20 mA	I_e	15	20		mW/sr
Radiant intensity[1]	I_F = 50 mA	I_e		50		mW/sr
Peak wavelength	I_F = 20 mA	λ_p	690	700	710	nm
Spectral bandwidth at 50%	I_F = 20 mA	$\Delta\lambda_{0.5}$		45		nm
Viewing angle	I_F = 20 mA	φ		20		deg.
Switching time	I_F = 20 mA	t_r, t_f		40		ns

[1]for information only

Note: All measurements carried out on *EPIGAP* equipment

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