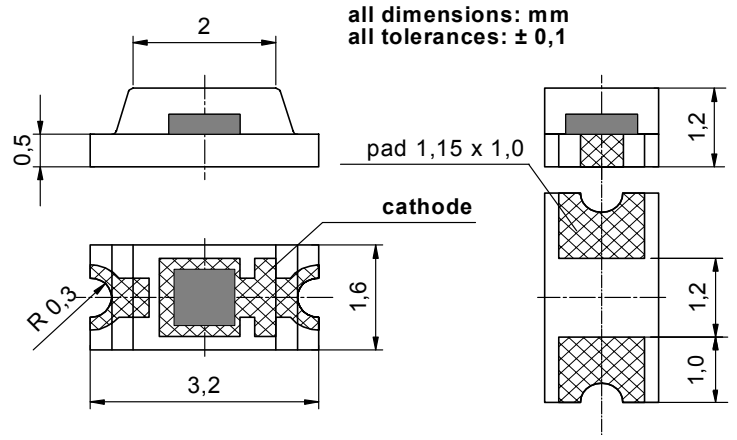
SMD-LED ELS-870-195

16.11.2007 rev. 04

Radiation	Type	Technology	Case
Infrared	SMD	AlGaAs/AlGaAs	SMD 1206



Description

High-power, high speed LED in standard SMD package, compact design allows for easy circuit board mounting and assembling of arrays

Applications

Optical communications, remote control, light barriers, measurement applications and security systems, automation

Absolute Maximum Ratings

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

Parameter	Test conditions	Symbol	Value	Unit
DC forward current		I_F	100	mA
Peak forward current	$t_p \leq 50$ µs, $t_p/T \leq 0.5$	I_{FM}	200	mA
Surge forward current	$t_p \leq 10$ µs	I_{SFM}	2000	mA
Power dissipation		P	200	mW
Operating temperature range		T_{amb}	-20 to +85	°C
Storage temperature range		T_{stg}	-55 to +100	°C

Electrical and Optical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 100 mA	V_F		1,5	2,0	V
Reverse voltage	I_F = 100 µA	V_R	5			V
Radiant power	I_F = 100 mA	Φ_e	15	20		mW
Peak wavelength	I_F = 100 mA	λ_p	865	875	890	nm
Spectral bandwidth at 50%	I_F = 100 mA	$\Delta\lambda_{0.5}$		45		nm
Viewing angle	I_F = 100 mA	φ		120		deg.
Switching time	I_F = 100 mA	t_r , t_f		25		ns

Note: All measurements carried out with *EPIGAP* equipment

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