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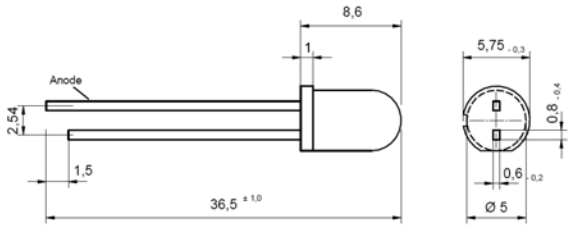
LED - Lamp

ELD-1020-525

04.11.2009 rev. 01

Radiation	Type	Technology	Case
Infrared	MQW	InGaAs/InP	5 mm plastic lens



Description

High-power, high-speed infrared LED in standard 5 mm package, housing without standoff leads

Note: Special packages with 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	100	mA
Peak forward current	($t_P \leq 50$ µs, $t_P/T = 1/2$)	I_{FM}	200	mA
Power dissipation		P_D	150	mW
Operating temperature range		T_{amb}	-20 to +80	°C
Storage temperature range		T_{stg}	-55 to +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		1.05	1.25	V
Forward voltage*	I_F = 100 mA	V_F		1.15	1.35	V
Reverse voltage	I_R = 100 µA	V_R	5			V
Radiant power	I_F = 20 mA	Φ_e		1.0		mW
Radiant power*	I_F = 100 mA	Φ_e		6.0		mW
Peak wavelength	I_F = 20 mA	λ_p	1000	1020	1040	nm
Spectral bandwidth at 50%	I_F = 20 mA	$\Delta\lambda_{0.5}$		50		nm
Viewing angle	I_F = 20 mA	φ		20		deg.
Switching time	I_F = 20 mA	t_r, t_f		25; 40		ns

*for information only