



LED - Lamp

ELD-1550-525

15.11.2007

rev. 04

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 ≤ 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		0.75	0.9	V
Forward voltage*	I _F = 100 mA	V _F		0.85		V
Reverse voltage	I _R = 100 μA	V _R	5			V
Radiant power	I _F = 20 mA	Φ _e	1,1	1,4		mW
Radiant power*	I _F = 100 mA	Φ _e		5,0		mW
Peak wavelength	I _F = 20 mA	λ _p	1530	1550	1570	nm
Spectral bandwidth at 50%	I _F = 20 mA	Δλ _{0.5}		130		nm
Viewing angle	I _F = 20 mA	φ		20		deg.
Switching time	I _F = 20 mA	t _r , t _f		10		ns

*for information only