



ELC-1550-17-1

LED Chip Infrared

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Rev. 04, 2017

Radiation	Type	Electrodes
Infrared	InGaAs/InP, MQW	P (anode) up

	typ. dimensions (μm)
	<p>typ. thickness: 260 μm</p> <p>anode: gold alloy, thickness 1.5 μm</p> <p>cathode: gold alloy, thickness 0.5 μm</p>

Maximum Ratings

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward current (DC)		I_F			200	mA
Peak forward current	$t_p \leq 50 \mu\text{s}$, $t_p/T = 1/2$	I_{FM}			400	mA

Optical and Electrical Characteristics

$T_{amb} = 25^{\circ}\text{C}$, unless otherwise specified

Parameter	Test cond.	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	V_F		0.7	0.95	V
Forward voltage	$I_F = 100 \text{ mA}$	V_F		0.8	1.0	V
Reverse voltage	$I_R = 100 \mu\text{A}$	V_R	5			V
Radiant power*	$I_F = 20 \text{ mA}$	Φ_e	1.1	1.5		mW
Radiant power*	$I_F = 100 \text{ mA}$	Φ_e	3.4	5		mW
Peak wavelength	$I_F = 20 \text{ mA}$	λ_p	1510	1550	1590	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		130		nm
Switching times	$I_F = 20 \text{ mA}$	t_r, t_f		25; 45		ns

*Measured on epoxy resin covered chip on TO-18 header

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The above specifications are for reference purpose only and subjected to change without prior notice