

Radiation	Type	Technology	Electrodes
Infrared	Point Source	AlGaAs/AlGaAs	N (cathode) up

	typ. dimensions ( $\mu\text{m}$ )
	<u>typ. thickness</u> 150 ( $\pm 25$ ) $\mu\text{m}$  <u>cathode</u> gold alloy, 1.5 $\mu\text{m}$  <u>anode</u> gold alloy, 0.5 $\mu\text{m}$

### Maximum Ratings

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward current (DC)		$I_F$			75	mA
Peak forward current	$t_p \leq 50 \mu\text{s}$ , $t_p/T = 1/2$	$I_{FM}$			150	mA

### Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	$V_F$		1.75	2.2	V
Forward voltage <sup>2</sup>	$I_F = 50 \text{ mA}$	$V_F$		1.9		V
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5			V
Radiant power <sup>1</sup>	$I_F = 20 \text{ mA}$	$\Phi_e$	0.8	1.2		mW
Radiant power <sup>1,2</sup>	$I_F = 50 \text{ mA}$	$\Phi_e$		2.8		mW
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$	730	740	750	nm
Spectral bandwidth at 50%	$I_F = 20 \text{ mA}$	$\Delta\lambda_{0.5}$		30		nm
Switching time	$I_F = 20 \text{ mA}$	$t_r, t_f$		40		ns

<sup>1)</sup> Measured on bare chip on TO-18 header with JENOPTIK Polymer Systems equipment

<sup>2)</sup> for information only

### Labeling

Type	Lot N°	$\Phi_e(\text{typ})$ [mW]	$V_F(\text{typ})$ [V]	Quantity
ELC-740-29-40				

We reserve the right to make changes to improve technical design and may do so without further notice.  
Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer.