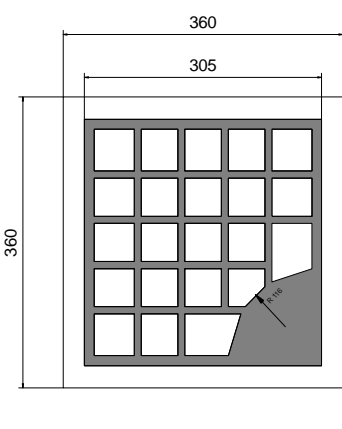


Radiation	Type	Technology	Electrodes
Infrared	MQW	InGaAs/InP	P (anode) up

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

### Maximum Ratings

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward current (DC)		$I_F$			100	mA
Peak forward current	$t_p \leq 50 \mu\text{s}$ , $t_p/T = 1/2$	$I_{FM}$			200	mA

### Optical and Electrical Characteristics

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

Parameter	Test conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 20 \text{ mA}$	$V_F$		0.7	0.95	V
Forward voltage	$I_F = 100 \text{ mA}$	$V_F$		0.9		V
Reverse voltage	$I_R = 100 \mu\text{A}$	$V_R$	5			V
Radiant power <sup>1</sup>	$I_F = 20 \text{ mA}$	$\Phi_e$	0.55	0.7		mW
Radiant power <sup>1</sup>	$I_F = 100 \text{ mA}$	$\Phi_e$		2.5		mW
Radiant power <sup>2</sup>	$I_F = 100 \text{ mA}$	$\Phi_e$		5.5		mW
Peak wavelength	$I_F = 20 \text{ mA}$	$\lambda_p$	1410	1450	1490	nm
Spectral bandwidth at 50%	$I_F = 100 \text{ mA}$	$\Delta\lambda_{0.5}$		100		nm
Switching time	$I_F = 20 \text{ mA}$	$t_r, t_f$		25; 40		ns

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

<sup>2</sup>Measured on epoxy covered chip on TO-18 header with JENOPTIK Polymer Systems equipment

### Labeling

Type	Lot N°	$\Phi_e(\text{typ})$ [mW]	$V_F(\text{typ})$ [V]	$\lambda_p(\text{typ})$ [nm]	Quantity
ELC-1450-17-1		20 mA	20 mA		

**Packing:** Chips on adhesive film with wire-bond side on top

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.

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