

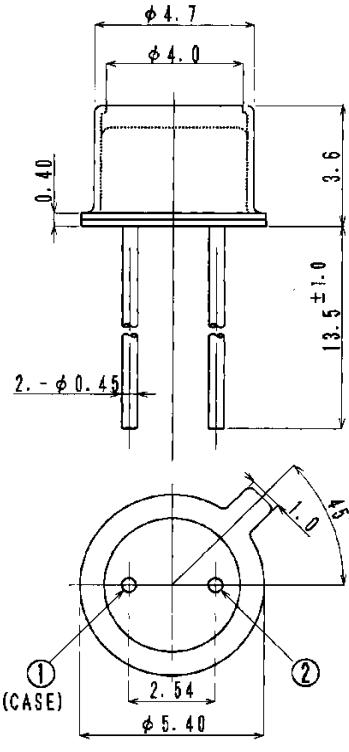
**Data sheet**

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**Infrared LED**
**EOLD-1300-095**

Rev. 02, 2017

Radiation	Type	Case
Infrared	InGaAs/InP, MQW	TO-46 package with flat window

 All dimensions in mm	<b>Description:</b> High-power, high speed, wide beam angle, high reliability
	<b>Application:</b> Optical switches, optical communication, safety equipment, automation, applications requiring high output and precise optical / mechanical axis alignment.

**Maximum Ratings**

 T<sub>amb</sub>= 25°C, unless otherwise specified

Parameter	Test conditions	Symbol	Value	Unit
Forward current		I <sub>F</sub>	100	mA
Peak forward current (pulse)	t ≤ 10 µs, T = 10 ms	I <sub>FM</sub>	1	A
Reverse voltage	I <sub>R</sub> =100 µA	V <sub>R</sub>	5	V
Power dissipation		P <sub>D</sub>	100	mW
Operating temperature range		T <sub>amb</sub>	-25 to +85	°C
Storage temperature range		T <sub>stg</sub>	-30 to +100	°C
Lead soldering temperature	t < 5 s, 3 mm from case	T <sub>sld</sub>	260	°C
Junction temperature		T <sub>J</sub>	100	°C



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.

**Data sheet**

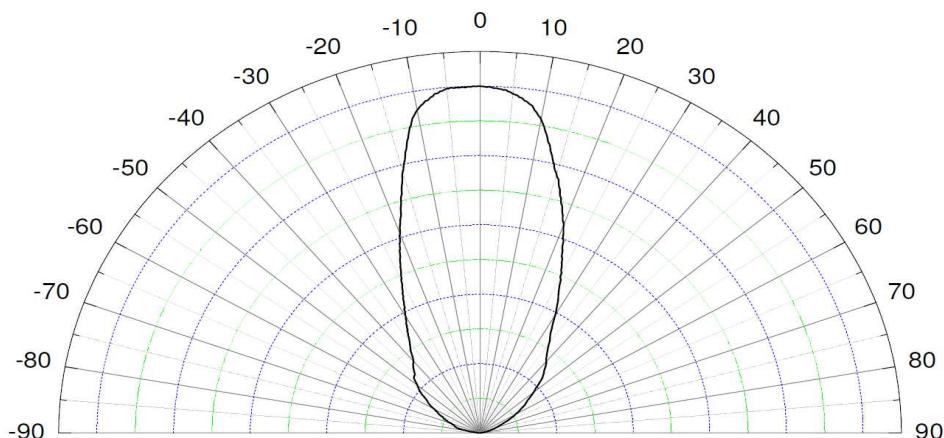
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**Infrared LED****EOLD-1300-095**

Rev. 02, 2017

**Optical and Electrical Characteristics**
 $T_{amb} = 25^\circ\text{C}$ , unless otherwise specified

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Forward voltage	$V_F$	$I_F = 20 \text{ mA}$		0.8		V
Forward voltage	$V_F$	$I_F = 50 \text{ mA}$		0.9	1.1	V
Forward voltage	$V_F$	$I_F = 100 \text{ mA}$		0.95		V
Reverse current	$I_R$	$V_R = 5 \text{ V}$		100		$\mu\text{A}$
Radiant power	$\Phi_e$	$I_F = 20 \text{ mA}$		1.6		mW
Radiant power	$\Phi_e$	$I_F = 50 \text{ mA}$		3.6		mW
Radiant power	$\Phi_e$	$I_F = 100 \text{ mA}$		6		mW
Peak wavelength	$\lambda_p$	$I_F = 50 \text{ mA}$		1300		nm
FWHM	$\Delta\lambda_{0,5}$	$I_F = 50 \text{ mA}$		85		nm
Viewing angle	$\varphi$	$I_F = 50 \text{ mA}$		$\pm 25 = 50$		deg.
Switching time	$t_r, t_f$	$I_F = 20 \text{ mA}$		10		ns

**Radiation pattern**

Art. No. 134 057



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