

# ROITHNER LASERTECHNIK

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## ELD-700-525 TECHNICAL DATA

PRELIMINARY

### INFRARED GaAlAs LED

Technology: **GaAlAs structure**  
Peak Wavelength: **700 nm typ.**  
Package: **5 mm bluish clear plastic**



#### Absolute Maximum Ratings (Tc=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Reverse Voltage	$V_R$	5	V
Reverse Current	$I_R$	10	$\mu\text{A}$
Soldering Temperature	$T_S$	260	$^{\circ}\text{C}$ for 5 s
Operating Temperature	$T_{OP}$	-20 .. +100	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-40 .. +85	$^{\circ}\text{C}$

#### Optical-Electrical Characteristics (Tc = 25°C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_O$	$I_F = 100 \text{ mA}$	15	17	20	mW
Forward Voltage	$V_F$	$I_F = 20 \text{ mA}$		1.5	2.0	V
Forward Current	$I_F$	cw		20	100	mA
Peak Forward Current	$I_P$	dutycycle 50% @ $t_p \leq 50 \mu\text{s}$		200		mA
Power Dissipation	$P_D$	25 $^{\circ}\text{C}$ , free air		130		mW
Switching time on	$t_r$			30		ns
Switchung time off	$t_f$			40		ns
Peak Wavelength	$\lambda_P$	$I_F = 100 \text{ mA}$		700		nm
Spectrum Half Width	$\Delta\lambda_{1/2}$	$I_F = 100 \text{ mA}$		25		nm
Viewing Angle	$2\theta_{1/2}$	$I_F = 100 \text{ mA}$		20		$^{\circ}$