

# **ROITHNER LASERTECHNIK**

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## **ELD-870-525 F TECHNICAL DATA**

PRELIMINARY

### **INFRARED GaAlAs LED**

Technology: **GaAlAs structure**  
Peak Wavelength: **870 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	$\mu$ A
Soldering Temperature	$T_S$	260	°C for 5 s
Operating Temperature	$T_{OP}$	-20 .. +100	°C
Storage Temperature	$T_{STG}$	-40 .. +85	°C

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	TYP	MAX	UNIT
Optical Output Power	$P_O$	$I_F = 100$ mA	22	24	26	mW
Forward Voltage	$V_F$	$I_F = 20$ mA		1.5	2.0	V
Forward Current	$I_F$	cw		20	100	mA
Peak Forward Current	$I_P$	dutycycle 50% @ $t_p \leq 50\mu$ s		200		mA
Power Dissipation	$P_D$	25 °C, free air		130		mW
Switching time on	$t_r$			10		ns
Switchung time off	$t_f$			10		ns
Peak Wavelength	$\lambda_P$	$I_F = 100$ mA		810		nm
Spectrum Half Width	$\Delta\lambda_{1/2}$	$I_F = 100$ mA		25		nm
Viewing Angle	$2\theta_{1/2}$	$I_F = 100$ mA		20		°