



ELD-1500-525

- INFRARED Light Emitting Diode
- 1500 nm, 1.4 mW
- AlGaAs/InP, MQW
- Viewing Angle: 20°
- 5 mm epoxy package



Description

ELD-1500-525 is an **AlGaAs/InP MQW** infrared LED, typically emitting at 1500 nm with an optical output power of 1.4 mW. It comes in a hermetically sealed clear 5 mm epoxy resin. **ELD-1500-525** is commonly used for optical communication and automation.

Maximum Rating ($T_{CASE} = 25^{\circ}C$)

Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation, DC	P_D		100	mW
Forward Current	I_{FM}		200	mA
Pulse Forward Current*	I_{FP}		150	mA
Operating Temperature	T_{OPR}	- 20	+ 80	°C
Storage Temperature	T_{STG}	- 30	+ 80	°C
Soldering Temperature (max 3s)	T_{SOL}		+ 260	°C
Junction Temperature	T_J		/	°C

* $t_p \leq 50 \mu s$, $t_p/T = 1/2$

Electro-Optical Characteristics ($T_{CASE} = 25^{\circ}C$, $I_F = 20 \text{ mA}$)

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	λ_P		1500		nm
Spectral Width (FWHM)	$\Delta\lambda$		130		nm
Forward Voltage @ 20 mA	V_F		0.7	0.95	V
Forward Voltage @ 100 mA	V_F		0.8	1.0	V
Reverse Voltage ($I_R = 10 \mu A$)	V_R				V
Radiant Power @ 20 mA	Φ_e	1.1	1.4		mW
Radiant Power @ 100 mA	Φ_e		5		mW
Switching time	t_R / t_F		25 / 45		ns
Viewing Angle	φ		20		deg.

