



ELD-1650-525

- **INFRARED** Light Emitting Diode
- **1650 nm, 1.5 mW**
- **InGaAs/InP, MQW structure**
- **5 mm epoxy package**



Description

ELD-1650-525 is an **InGaAs/InP MQW** infrared LED, typically emitting at 1650 nm with an optical output power of 1.5 mW. It comes in a hermetically sealed clear 5 mm epoxy resin.

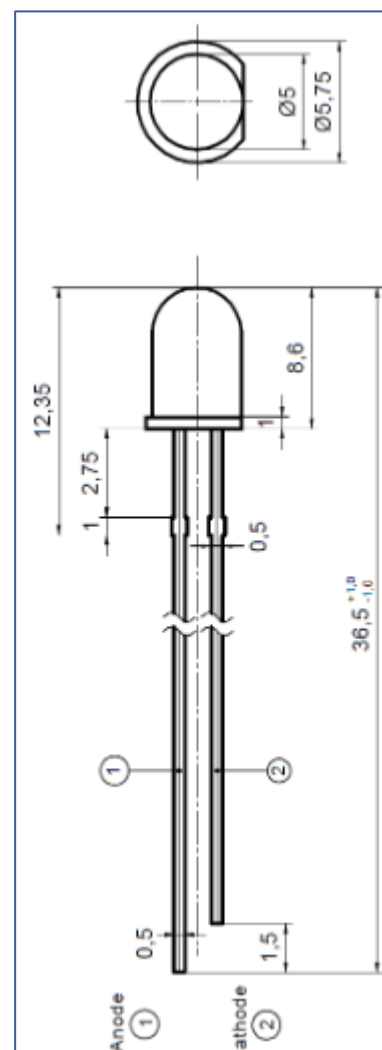
Maximum Rating ($T_{CASE} = 25^{\circ}C$)

Parameter	Symbol	Values		Unit
		Min.	Max.	
Power Dissipation, DC	P_D		100	mW
Pulse Forward Current*	I_{FP}		200	mA
Operating Temperature	T_{OPR}	- 20	+ 80	$^{\circ}C$
Storage Temperature	T_{STG}	- 55	+ 100	$^{\circ}C$
Soldering Temperature (max 3s)	T_{SOL}		+ 260	$^{\circ}C$

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

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

Parameter	Symbol	Values			Unit
		Min.	Typ.	Max.	
Peak Wavelength	λ_P	1610	1650	1690	nm
Dominant Wavelength	λ_D		455		nm
Spectral Width (FWHM)	$\Delta\lambda$		100		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	5			V
Radiant Power @ 20 mA	Θ_e	1.1	1.5		mW
Radiant Power @ 100 mA	Θ_e	3.4	5		mW
Radiant Intensity @ 20 mA	I_E		5.3		mW/sr
Radiant Intensity @ 100 mA	I_E		25		mW/sr
Switching time	t_R, t_F		25, 45		ns
Viewing Half Angle	$\Theta_{1/2}$		10		deg.



All dimensions in mm