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AUSTRIA



## 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.

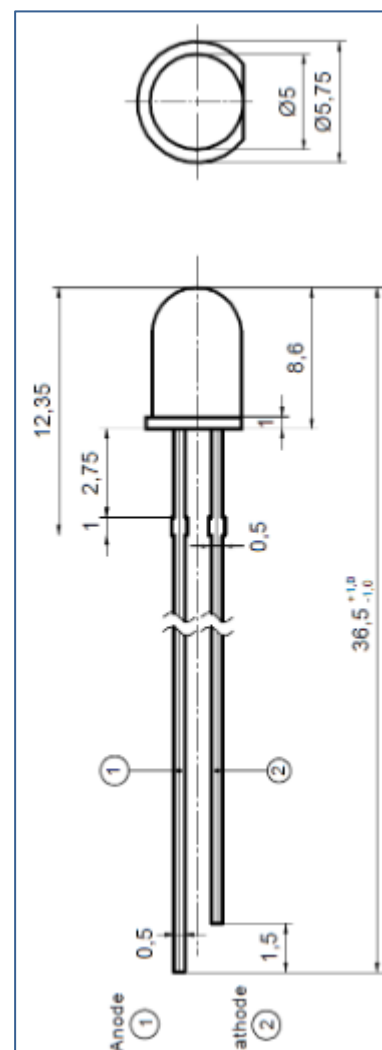
### Maximum Rating ( $T_{CASE} = 25^{\circ}C$ )

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.	
<b>Peak Wavelength</b>	$\lambda_P$	<b>1610</b>	<b>1650</b>	<b>1690</b>	<b>nm</b>
Dominant Wavelength	$\lambda_D$		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	$\Theta_e$	1.1	1.5		mW
Radiant Power @ 100 mA	$\Theta_e$	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