

P761/02_1

- ✓ 760 nm single-mode VCSEL
- ✓ 2 nm tuning range
- ✓ Designed for TDLAS application
- ✓ ESD protection built in



Electro-Optical performance

ELECTRO-OPTICAL CHARACTERISTICS						
PARAMETER	SYMBOL	UNIT	MIN	TYP	MAX	CONDITIONS
Emission wavelength*	λ_R	nm	759	761	763	T = 20°C, I _{OP} = 2.0 mA
Threshold current	I _{TH}	mA		0,5	1,0	T = 20°C
Output power	P _{opt}	mW	0,3			T = 20°C
Laser current	I _{OP}	mA			2,0	P _{opt} = 0.3 mW
Laser voltage	U _{OP}	V		2,0		P _{opt} = 0.3 mW
Slope efficiency	η_S	W/A		0,5		T = 20°C
Differential series resistance	R _S	Ω		150		T = 20°C, I _{OP} = 2.0 mA
3dB modulation bandwidth	v _{3dB}	GHz	0,1			T = 20°C, I _{OP} = 2.0 mA (due to ESD protection diode)
Wavelength tuning over current		nm/mA	0,2	0,4	0,6	
Wavelength tuning over temperature		nm/K		0,06		
Thermal resistance (VCSEL chip)	R _{thermal}	K/mW	3		5	
Side mode suppression		dB	20			T = 20°C, I _{OP} = 2.0 mA
Beam divergence	θ	°	10		25	T = 20°C, I _{OP} = 2.0 mA, full width 1/e ²

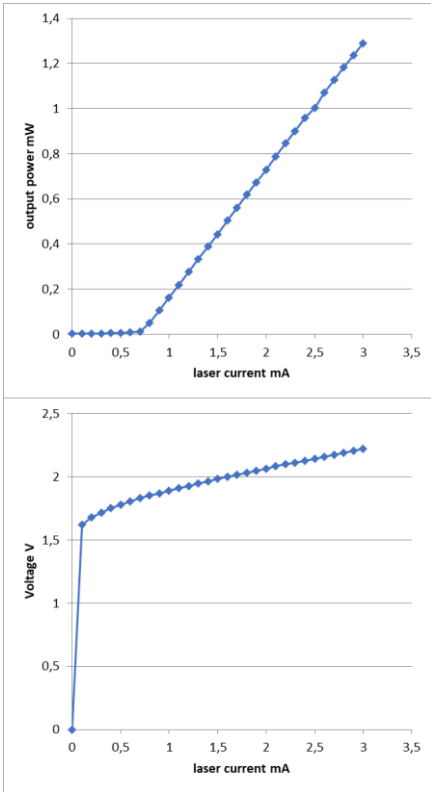
*typical emission wavelength can be determined between 759 and 764nm

Maximum ratings

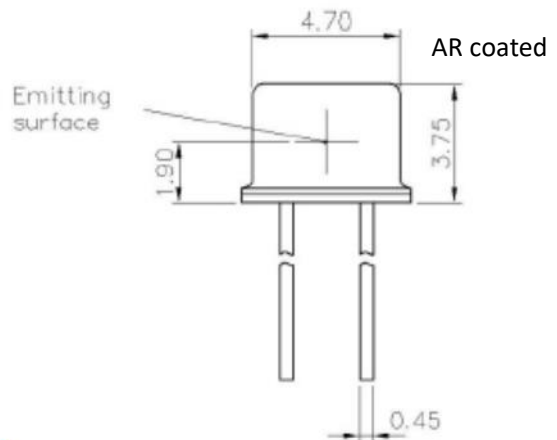
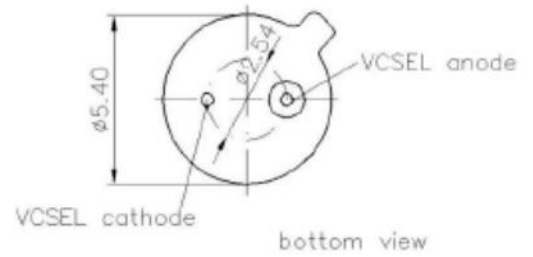
- 3 mA laser forward current
- 10 mA reverse current



LIV(T)

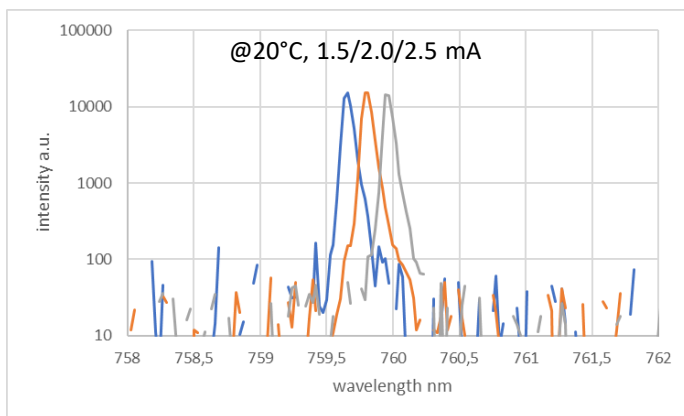


Top view TO46



Dimensions in mm

OS(T)



Product ID: P761/02_1

TO46, ESD protection