

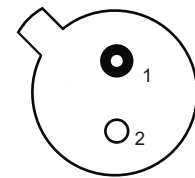
## Singlemode - VCSEL 1550 nm (VCSEL = Vertical Cavity Surface Emitting Laser)

### Features of Diode

- 1550 nm single-mode VCSEL in TO-46
- Optical output power: 3.5 mW
- High data-rate modulation up to 3.125 Gbps
- Low power consumption
- Low drive currents and low threshold voltage
- Integrated monitoring diode optional
- available with angled cap and anti-reflection window



### PINOUT



Bottom view

### Absolute maximum ratings

Parameter	Min.	Max.
Storage temperature	-40 °C	85 °C
Operating temperature	-20 °C	70 °C
Laser continuous forward current		20 mA
Laser reverse voltage		1.0 V

Number	Function
1	VCSEL Cathode
2	VCSEL Anode

### Electrical-optical characteristics

Parameter VCSEL	Test Condition	Min.	Typ.	Max.
Wavelength	$T_o = 20\text{ °C}$ , @ $P_{max}/2$	1540 nm	1550	1560 nm
Threshold current	$T_o = 20\text{ °C}$	0.5 mA	1.5 mA	2.5 mA
Laser forward voltage		1.1 V	1.3 V	2.0 V
Bandwidth			3.125 Gbps	
Operating current	$T_o = 20\text{ °C}$		16 mA	20 mA
Parameter Receptacle		Min.	Typ.	Max.
Optical output power ( <b>type A</b> )	Singlemode 9/125 $\mu\text{m}$ fiber	500 $\mu\text{W}$	1000 $\mu\text{W}$	
	Multimode 50/125 $\mu\text{m}$ fiber	1000 $\mu\text{W}$	2000 $\mu\text{W}$	
Possible receptacle ( <b>type A</b> )	ST1, ST2, ST4, P2, LC, SC, FC1, FC2, Fiberdip, SMA1 <sup>1)</sup> , SMA2 <sup>1)</sup>			

Compliant with RoHS-requirements (2002/95/EG vom 27.01.2003)