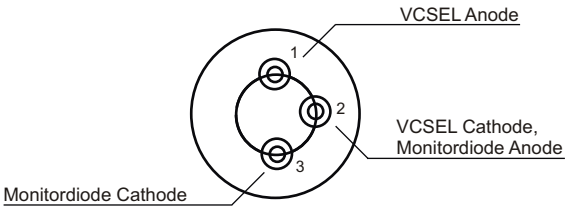
High Speed - VCSEL 850 nm

(VCSEL = Vertical Cavity Surface Emitting Laser)

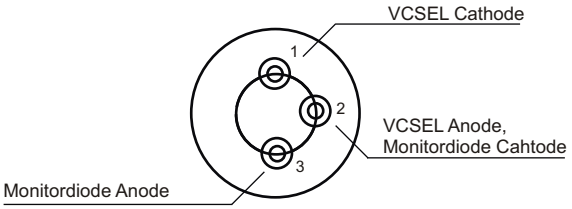
Features of Diode

- 850 nm multi-mode oxide isolated VCSEL
- Capable of modulation operation from DC to 2.5 Gbps
- TO-46 flat window metal can component
- Designed for drive currents between 3-15 mA average
- Packaged with a back monitor
- Attenuated version

PINOUT (Bottom View)



Type A



Type B

Absolute maximum ratings

Parameter	Min.	Max.
Storage temperature	-40 °C	100 °C
Operating temperature	-40 °C	85 °C
Laser continuous forward current		12 mA
Laser reverse voltage		5.0 V

Electrical-optical characteristics

Parameter VCSEL	Test Condition	Min.	Typ.	Max.
Wavelength	I_F= 7 mA, T_A= 0 °C to 85 °C	830 nm	850 nm	860 nm
Threshold current		0.5 mA	1.8 mA	2.5 mA
Laser forward voltage	I_F= 7 mA		1.8 V	2.0 V
Rise and fall time	P_{AVG}= 0.625 mW, extinct. Ratio=10			150 ps
Parameter Monitordiode	**Test Condition**	**Min.**	**Typ.**	**Max.**
Monitor current	P_O= 0.625 mW, T_A= 25 °C	0.100 mA		0.600 mA
Dark current	P_O= 0 mW, V_R= 3 V			20 nA
PD capacitance	V_R= 3 V, f = 1 MHz		40 pF	55 pF
Parameter Receptacle		**Min.**	**Typ.**	**Max.**
Optical output power (**type A**)	Multimode 50/125 µm fiber		500 µW	
Possible receptacle (**type A**)	ST1, ST2, ST4, P2, LC, SC, FC1, FC2, Fiberdip, SMA1[1)], SMA2[1)]			

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

Note: The above product specifications are subject to change without notice.

[1)] only multimode