

1A085VC OECA-FC100

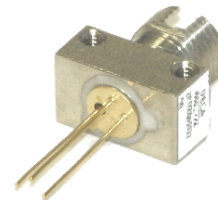
The device contains a Vertical Cavity Surface Emitting Laser (VCSEL) with monitor diode, assembled in a FC housing. The assembled TO-46 device is electrical isolated from the FC-receptacle (maximum voltage 20V) to protect the diode against ESD-damaging.

Applications

- Fiber Channel, Gigabit Ethernet, ATM
- General Applications

Features

- Wavelength $\lambda = 850 \text{ nm}$
- Laser Class 3B



Device can differ from picture.
For details and pin out please refer to the drawing

Absolute Maximum Ratings

($T_C = 25^\circ\text{C} \pm 2^\circ\text{C}$)

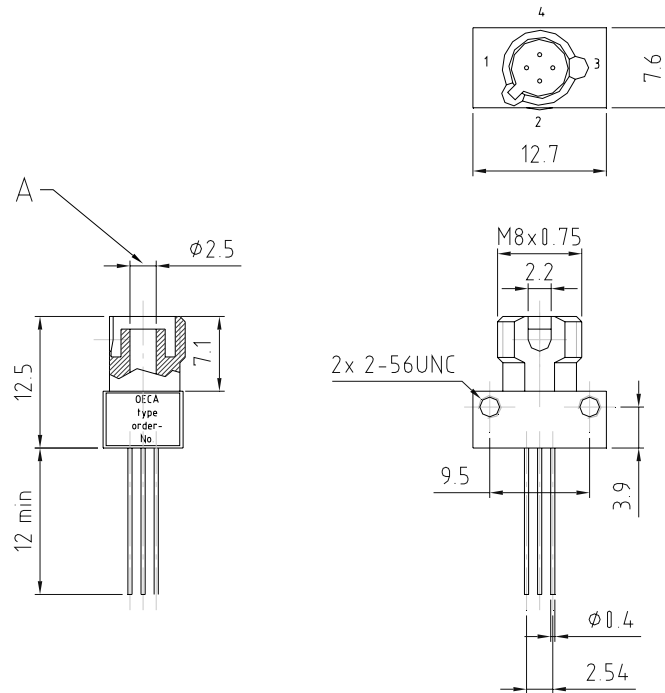
Parameter	Symbol	min.	max.	Unit
Reverse Voltage	V_R		5	V
Continuous Forward Current ($f < 10 \text{ KHz}$)	I_F		12	mA
PD Forward Current	I_{FPD}		10	mA
PD Reverse Voltage	V_{RPD}		15	V
Operating Temperature	$T_{OP} = T_C$	0	+85	$^\circ\text{C}$
Storage Temperature	T_{stg}	-40	+85	$^\circ\text{C}$
Soldering Temperature / Soldering Time	T_{sold} / t_{sold}		260/10	$^\circ\text{C/s}$

Optical and Electrical Characteristics

($T_C = 25^\circ\text{C} \pm 2^\circ\text{C}$)

Parameter	Symbol	Condition	min.	typ.	max.	Unit
Fiber Coupled Power	P_{fiber}	Fiber: 100/140 NA = 0.29 $I_F = 7 \text{ mA}$	1000	2000		μW
Bandwidth	f_C	$I_F = 7 \text{ mA}$		4		GHz
Peak Wavelength	λ_p	$I_F = 7 \text{ mA}$	840	850	860	nm
Spectral Width (FWHM)	$\Delta\lambda$	$I_F = 7 \text{ mA}$			2	nm
Forward Voltage	V_F	$I_F = 7 \text{ mA}$		1.9		V
Threshold Current	I_{th}			1.0	1.4	mA
PD Monitor Current	I_M	$V_{RPD}=2\text{V}$, $P_{fiber}=1000\mu\text{W}$		20		μA
PD Dark Current	I_D	$V_{RPD}=5\text{V}$		0.1		nA
PD Capacitance	C_T	$V_{RPD}=2\text{V}$; $f=1\text{MHz}$		50	60	pF

Drawing

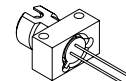


A - ϕ 2.5, tolerance grade 3, DIN EN 61754-13

tolerances acc. to DIN ISO 2768mH
Pinout acc. to specification

all dimensions in mm

accessories:
dust cap
screw 2-56 UNC |2x|



Pin-Out

Pin	VCSEL
1	LD Anode /PD Cathode
2	LD Cathode
3	PD Anode
4	Case

The chip is isolated from the case.

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