



1.25G 850nm VCSEL LD TO-CAN Series

Features:

- Data rates up to 1.25Gb/s
- 850nm multimode emission
- Low threshold and operation current

Applications:

- Digital Optical Communication

Specifications:

Absolute Maximum Ratings:

Parameter	Symbol	Min.	Max.	Unit
Reverse Voltage	V_R	—	5	V
Forward Current	I_F	—	12	mA
Optical Output Power	P_{out}	—	2.2	mW
MPD reverse voltage	V_R	20	—	V
MPD forward current	V_f	—	10	mA
Operating Temperature	T_{op}	-5	+70	°C
Storage Temperature	T_{stg}	-40	+85	°C
Lead Solder Temperature	—	—	260	°C
Lead Solder Time	—	—	10	s

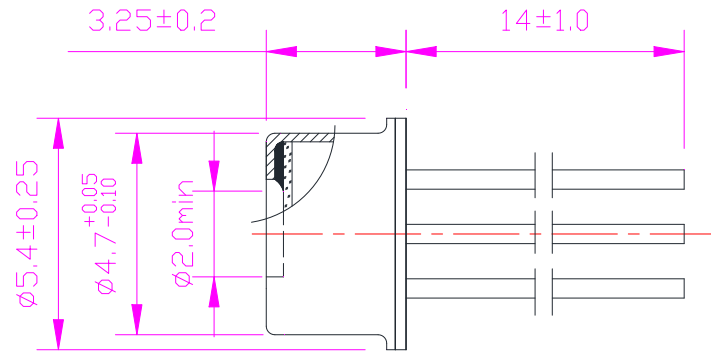
Characteristics: ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	$T=25^\circ\text{C}$	0.5	1.0	1.4	mA
Optical Output Power	P_{out}	$I_{op} = 6.0\text{mA}$	0.8	1.2	—	mW
Emission Wavelength	λ	$I_{op} = 6.0\text{mA}$	830	850	860	nm
Spectral Bandwidth, RMS	$\Delta\lambda$	$I_{op} = 6.0\text{mA}$	—	—	0.65	nm
Slope Efficiency	η	$I_{op} = 6.0\text{mA}$	0.17	0.23	—	W/A
Differential resistance	R_d	$I_{op} = 6.0\text{mA}$	—	50	—	Ω
3dB modulation bandwidth	V_{3dB}	$I_{op} = 6.0\text{mA}$	3	—	—	GHz
Rise Time	t_r	$I_{op} = 6.0\text{mA}$, 20-80%	—	70	80	ps
Fall Time	t_f		—	70	80	ps
Monitor Current(MPD)	I_m	$I_{op} = 6.0\text{mA}, V_R=3\text{V}$	150	—	—	μA
Dark Current(MPD)	I_d	$P_{oc}=0\text{mW}, V_R=3\text{V}$	—	—	20	nA

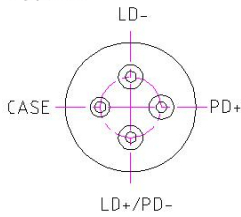


Mechanical Dimension and Pin Assignment:

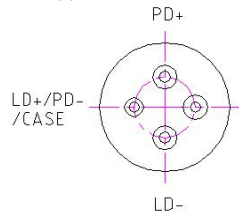
LD 850nm VCSEL 1.25G-TO46-4pin-FW:



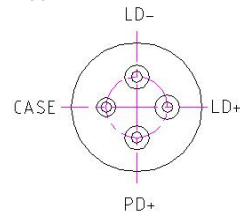
Type B



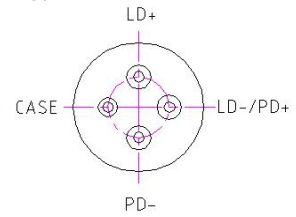
Type F



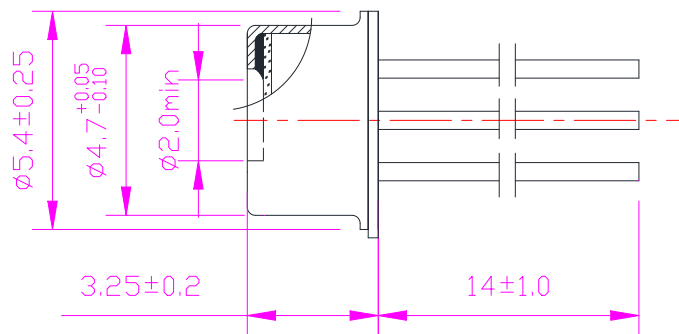
Type G



Type H

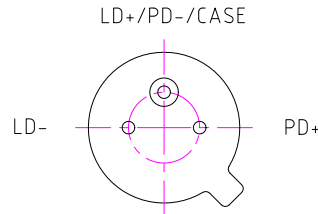


LD 850nm VCSEL 1.25G-TO46-3pin-FW:





Type F



BOTTOM VIEW

Order Information:

LD 850nm VCSEL	—	□	—	□	—	□	—	□
<u>Data rates:</u> 1.25G		<u>Header Type:</u> TO46		<u>Numbers of Pin:</u> 4pin 3pin		<u>Pin Assignment</u> B: Type B F: Type F G: Type G H: Type H		

Statement:

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