



10G 850nm VCSEL LD TO-CAN Series

Features:

- Data rates up to 10 Gb/s
- 850nm multimode emission
- Low threshold and operation current

Applications:

- High speed Data Communication
- 10Gigabit Ethernet

Specifications:

Absolute Maximum Ratings:

Parameter	Symbol	Min.	Max.	Unit
Reverse Voltage	V_R	—	5	V
Forward Current	I_F	—	12	mA
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

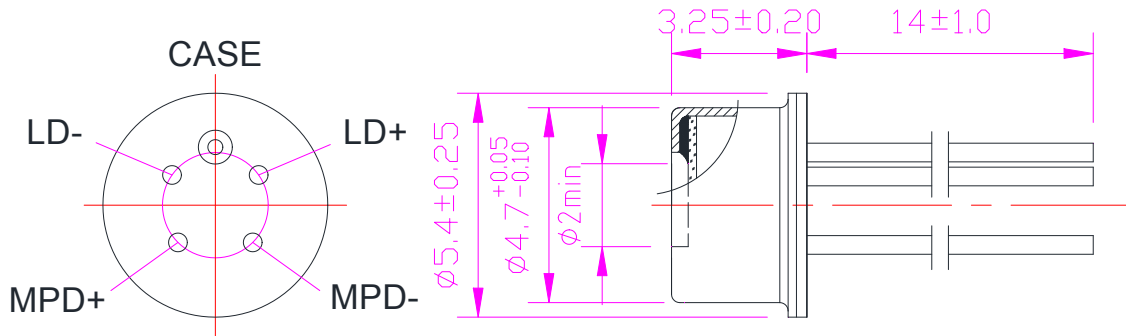
Characteristics: ($T_a=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I_{th}	$T=25^\circ\text{C}$	—	0.8	1.2	mA
Optical Output Power	P_{out}	$I_{op} = 6.5\text{mA}$	0.85	1.0	—	mW
Operating Voltage	V_{op}	$I_{op} = 6.5\text{mA}$	—	1.9	—	V
Emission Wavelength	λ	$I_{op} = 6.5\text{mA}$	840	850	860	nm
Spectral Bandwidth, RMS	$\Delta\lambda$	$I_{op} = 6.5\text{mA}$	—	—	0.4	nm
Slope Efficiency	η	$I_{op} = 6.5\text{mA}$	0.15	0.17	—	mW/mA
Differential resistance	R_d	$I_{op} = 6.5\text{mA}$	—	95	—	Ω
Rise Time	t_r	$I_{op} = 6.5\text{mA}, 20\text{-}80\%$	—	30	40	ps
Fall Time	t_f		—	40	45	ps
Monitor Current(MPD)	I_m	$I_{op} = 6.5\text{mA}, V_R=3\text{V}$	150	—	—	μA



Dark Current(MPD)	Id	Poc=0mW, VR=3V	—	—	20	nA
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Mechanical Dimension and Pin Assignment:



BOTTOM VIEW

Order Information:

LD 850nm VCSEL — — — —

<u>Data rates:</u> 10Gb/s	<u>Header Type:</u> TO46	<u>Numbers of Pin:</u> 5pin	<u>Cap Type:</u> FW: Flat Window
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Statement:

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Contact Information:

Address: N501-505 Weiye Bldg., Xiamen Pioneering Park For Overseas Chinese Scholars, Xiamen, Fujian, China

Tel: +86-592-3898601, 3898608, 5318000

Fax: +86-592-5703588

Email: sales@san-u.com

<http://www.san-u.com>