10G CWDM EML Coaxial TOSA

Classification:Laser Product

- Data rate up to 10 Gbps
- Operation temperature -5°C to 75°C
- High reliability laser and EA modulator

The **10G CWDM EML Coaxial TOSA** is a crucial component in high - speed optical communication systems.

In terms of performance, it is designed to support a data rate of 10Gbps, enabling fast and efficient transmission of large amounts of data. The CWDM technology allows for multiple wavelengths to be used simultaneously on a single fiber, increasing the capacity of the optical network.

The EML technology incorporated in this TOSA offers excellent modulation capabilities. It can precisely control the laser output, ensuring accurate encoding of data onto the optical signal. This results in reliable and high - quality transmission over long distances.

The coaxial design of the TOSA provides several advantages. It offers good mechanical stability, which is essential for maintaining the alignment of the optical components within the sub - assembly. This, in turn, helps to minimize signal loss and improve the overall performance of the transmitter.

Moreover, this 10G CWDM EML Coaxial TOSA is often designed with compact size and low power consumption requirements. The compactness makes it suitable for integration into various optical communication devices, while the low power consumption is beneficial for reducing the overall power budget of the system. Overall, it is a key enabler for modern high - speed and high - capacity optical communication networks.

Contact: WhatsApp sales@sygdtop.com

Inquiry

Features

- Data rate up to 10 Gbps
- Operation temperature -5°C to 75°C
- High reliability laser and EA modulator

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Applications

- High speed, high performance data communication
- Telecommunication applications
- Ethernet
- Fiber channel

Parameter

Absolute Maximum Ratings

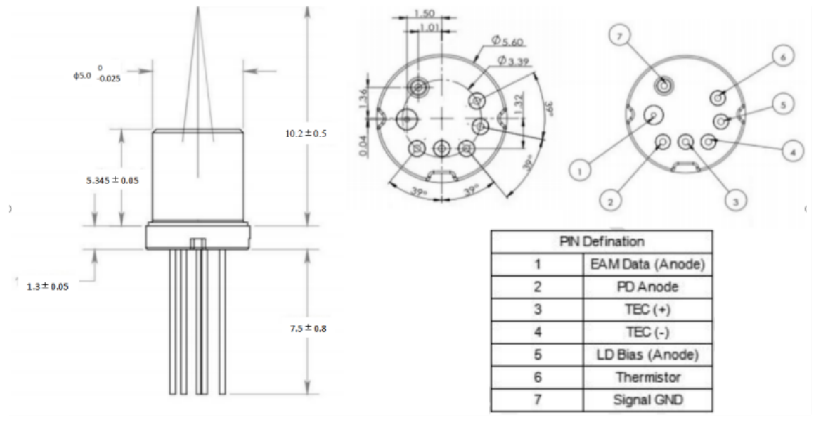
Parameters	Symbol	Condition/Notes	Min	Max	Unit
Laser Diode Forward Voltage	V_F	Continuous	-	2	V
Laser Diode Forward Current	Iop	Continuous	-	150	mA
EAModulator Voltage	V_{EA}	Continuous	-1.5	0	V
Operating Chip Temperature	Top	Continuous	-5	75	℃
Storage Temperature	T_{STG}	Non-Operation	-40	95	℃
Flex Pad Soldering Temperature	-	-	-	260	℃
Flex Pad Soldering Duration	-	-	-	10	S

Electrical/Optical Characteristics (T=25℃)

Parameters	Symbol	Test conditions	Min	Typ	Max	Unit
Set temperature for laser operation	T_{LD}	Temperature set for TEC		45		℃

Optical Output Power	Po	CW, Iop=110mA,Vea=0V	12.5	-	-	mW
Threshold Current	Ith	CW	-	-	25	mA
Operating current	Iop	CW	-	110	120	mA
EAM Offset Voltage	Vea	-	-1.5	-	0	V
Operating Voltage	Vop	CW,Iop=110mA	-	1.6	2	V
Modulator Voltage (EA)	Vpp		-	-	2.5	V
Center Wavelength	Δλc	CW,Vea=0V,Iop=110mA	1575	1577	1580	nm
Spectral Width(-20 dB)	Δλ		-	0.2	0.4	nm
Side-mode Suppression Ratio	SMSR		35	40	-	dB
Kink	Kink	ILD=Ith+5~120mA,EA=Open	-	-	80	%
Center Wavelength Tuning Coefficient	dλ/dT	CW,T_{LD}=40~60℃	-	0.09	-	nm/ ℃
Monitor Current (MPD)	Im	CW,Iop=110mA,Vea=0V	100	-	2000	uA
Dark Current (MPD)	Id	Vr=5V	-	-	100	nA
Focal length	FL	From the To header surface	9.7	10.2	10.7	mm
Thermal Characteristics						
Themistor Resistance	Rth	Tc=25℃	9.9k	10k	10.1k	Ω
B Constant of Rth	B		3890	3930	3969	K
Themoelectric Cooler Current	Itec	CW,T_{LD}=50℃	-	-	0.61	A
Themoelectric Cooler Voltage	Vtec	CW,T_{LD}=50℃	-	-	2.38	V
Themoelectric Cooler Power	Ptec	CW,T_{LD}=50℃	-	-	0.89	W

Outline Drawings & Pin Connection Type



PIN Defination	
1	EAM Data (Anode)
2	PD Anode
3	TEC (+)
4	TEC (-)
5	LD Bias (Anode)
6	Thermistor
7	Signal GND

Keyword: customized 1653.7nm Pigtail TOSA quality 1653.7nm TOSA for Gas Sensing 10G CWDM EML Coaxial TOSA

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Next Page 2.5Gbps 1490nm DFB LD TO-CAN（Non-Sphere）


证书号第17287218号

实用新型专利证书

实用新型名称：一种探测器芯片封装结构

发 明 人：张萌

专 利 号：ZL 2022 2 1208058.1

专利申请日：2022年05月18日

专 利 权 人：武汉斯优光电技术有限公司

地 址：430000 湖北省武汉市东湖新技术开发区光谷二路219号鼎杰现代机电信息孵化园一期14栋5层1号

授权公告日：2022年08月26日 授权公告号：CN 217306481 U

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证书号第17311799号

实用新型专利证书

实用新型名称：一种T046全自动分脚装置

发 明 人：冉杰;钱义龙;张萌

专 利 号：ZL 2022 2 1216389.X

专利申请日：2022年05月18日

专 利 权 人：武汉斯优光电技术有限公司

地 址：430000 湖北省武汉市东湖新技术开发区光谷二路219号鼎杰现代机电信息孵化园一期14栋5层1号

授权公告日：2022年08月30日 授权公告号：CN 217316770 U

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证书号第17565465号

实用新型专利证书

实用新型名称：一种全新T046全自动双工位下料装置

发 明 人：冉杰;梁雪峰;张萌

专 利 号：ZL 2022 2 1661939.9

专利申请日：2022年06月29日

专 利 权 人：武汉斯优光电技术有限公司

地 址：430000 湖北省武汉市东湖新技术开发区光谷二路219号鼎杰现代机电信息孵化园一期14栋5层1号

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