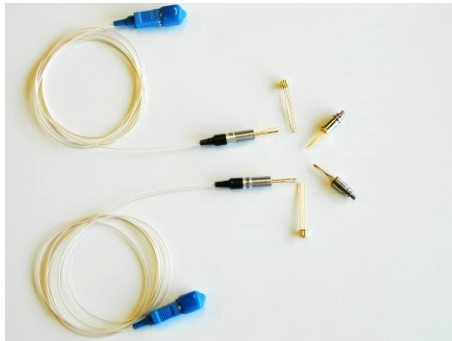


Pluggable CWDM Laser Diodes: TOSA



2022 V1

For customized projects please Contact us:

sales@simtrum.cn

Pluggable CWDM Laser Diodes: TOSA

TOSA lasers are 1.27μm-1.61μm Multiple Quantum Well (MQW) structured distributed-feedback (DFB) laser modules. These laser diodes are built in a pluggable T056 package with monitoring P1N-PD for fiberoptic communication systems. These modules are ideally suitable for 2.5/10Gbps transmission applications. Among products, 4 products of 1.27μm, 1.29μm, 1.31μm and 1.33μm are suitable for 10Gbps transmission. The products are Telcordia GR-468 qualified, and in compliance with RoHS requirement.

Applications

- Telecommunication transceivers
- Datacom transceivers
- Fiberoptic sensors

Features

- CWDM laser diode module
- Signal rate up to 10Gb/s
- High output power(>2mW)
- LC receptacle TOSA package

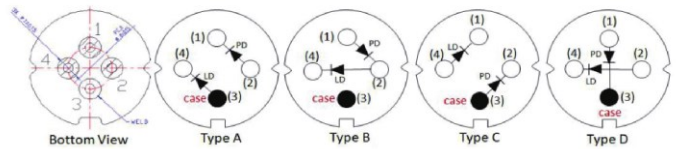
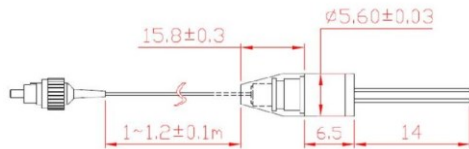
Product Photo



Optical and Electric Specifications

Parameters	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Peak Optical Output Power	P_P	$I_f=I_{TH}+20mA$	1.8	2	-	mW
Threshold Current	I_{TH}	$TL=25^{\circ}C$	-	7	15	mA
Laser Reverse Voltage	VLR	—	-	-	2	V
Laser Forward Voltage	V_{IF}	CW	-	1.2	2	V
Monitor Reverse Voltage	V_{RMON}	—	3	5	10	V
Monitor Current	I_{RMON}	CW, $I_f=I_{TH}+20mA$, $VRD=5V$	100	-	800	μA
Monitor Dark Current	I_D	$IF=0mA$, $VRMON=5V$	-	0.01	0.2	μA
Capacitance (PD)	C_T	$Vrd=5V$, $f=1MHz$	-	5	15	pF
Center Wavelength	λ_c	CW, $I_f=I_{TH}+20mA$	λ_n-3	λ_n	λ_n+3	nm
Side-mode Suppression Ratio	SMSR	$I_f=I_{TH}+20mA$	35	-	-	dB
Optical Isolation	-	$T=25^{\circ}C$	30	-	-	dB
Tracking Error	TE	1m hold(@ $P_f=1mW(25^{\circ}C)$)	-1	-	1	dB
Wavelength/ Temperature Coefficient	$d\lambda/dT$	—	-	0.09	-	nm/°C
Spectral Width(-20dB)	$\Delta\lambda$	$P_o = 2mW$, $TC = 0$ to $70^{\circ}C$	-	0.1	1	nm

Mechanical Dimensions



PIN Assignment

PIN	Type A	Type B	Type C	Type D (Selected)
1	PD Cathode	PD Anode	LD Cathode	PD Anode
2	PD Anode	LD Anode/PD Cathode	PD Cathode	LD Anode
3	LD Anode(Case)	Case	PD Anode(Case)	PD Cathode(Case)
4	LD Cathode	LD Cathode	LD Anode	LD Cathode

Ordering Information

TOSA-	LD Type	Wavelength	Data	Package type	Pin Out	Output Power	Fiber type	Pigtail length	Connector
	F:FP	27:1270	1:2.5Gb/s	1:Receptacle/without Isolator	A:Type A	1: 1mW	0: SMF-28e	0:None	0:None
	D:DFB	29:1290	2:10Gb/s	2:Receptacle/with Isolator	B:Type B	2: 2mW	1:PMF-1310	1:50cm	1:FC/UPC
	S:SLED	3:Pigtail /without Isolator	C:Type C	5: 5mW	2:PMF-1550	2:100cm	2:FC/APC
	V: VCSEL	61:1610	...	4:Pigtail/with Isolator	D:Type D	A: 10mW B: 20mW	C: Customized	3:150cm 4:200cm	3:SC/UPC 4:SC/APC
								C:Customized	5:LC/UPC 6:LC/APC C:Customized

Example of Ordering Form: TOSA-D2714B2022-01

TOSA-	D	27	1	4	B	2	0	2	2
	DFB	1270nm	2.5Gb/s	Pigtail/with Isolator	Type B	2mW	SMF-28e	100cm	FC/APC