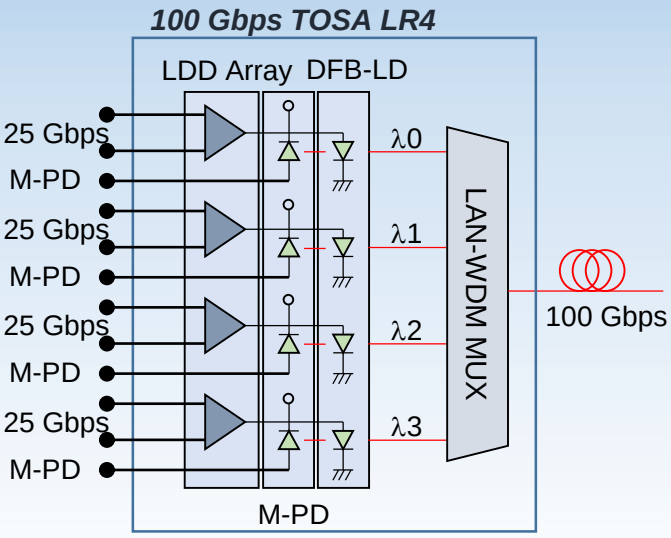
100 Gbps LAN-WDM TOSA LR4



Features

- ✓ 4 x 25 Gbps LAN-WDM 100GBASE-LR4 Ethernet
- ✓ Compatible to CFP4/QSFP28 Transceivers Up to 10 km
- ✓ Low Insertion Loss Optical Filter Based MUX
- ✓ Integrated Quad LD Driver IC, DFB-LD's, Monitor PD's and I^2C Controller
- ✓ Controllable of DML Bias, Modulation Current, and Eye Cross Point
- ✓ Cooled Operation by Thermoelectric Cooler and Thermistor
- ✓ Electrical Interfaces Via Separate RF and DC FPCB's
- ✓ Optical Interface with SMF XMD-MSA LC Receptacle
- ✓ Outline Dimension of 26.3 x 6.7 x 5.5 mm^3

Applications

- ✓ 100 Gbps LAN-WDM IEEE 802.3ba Ethernet Application
- ✓ 112 Gbps LAN-WDM ITU-T G.959.1 OTU4 Application
- ✓ 100 Gbps CFP2/CFP4/QSFP28 LR4 Transceivers
- ✓ Optical Test Equipment

Related Products

- ✓ 100 Gbps CWDM TOSA CLR4
- ✓ 100 Gbps LAN-WDM ROSA LR4
- ✓ 100 Gbps LAN-WDM ROSA ER4 Lite
- ✓ 100 Gbps CWDM ROSA CLR4

Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit
Center Wavelengths of Channels[1,2]	λ_{cn}	1295.56, 1300.05, 1304.58, 1309.14			nm
Optical Output Power at I_{th}+30 mA[1]	P_o	0.9	1.5	2.0	mW
Threshold Current[1]	I_{th}	-	15	20	mA
Side Mode Suppression Ratio[1,2]	SMSR	30	-	-	dB
Small Signal 3 dB Bandwidth[1,2]	BW	15	-	-	GHz
Monitor PD Voltage[1,2]	V_{M-PD}	0.5	-	2.0	A/W
Differential Input Data Amplitude	IN - INB	700	-	1400	mV_{p-p}
LD Driver Power Supply Voltage	V_{cc}	2.9	3.3	3.47	V
Operating Temperature	T_{op}	-5	25	+75	°C

1. *DFB-LD characteristics are tested on the condition of 50 °C by controlling of TEC temperature.*
2. *DFB-LD operation current condition is I_{th} + 30 mA.*

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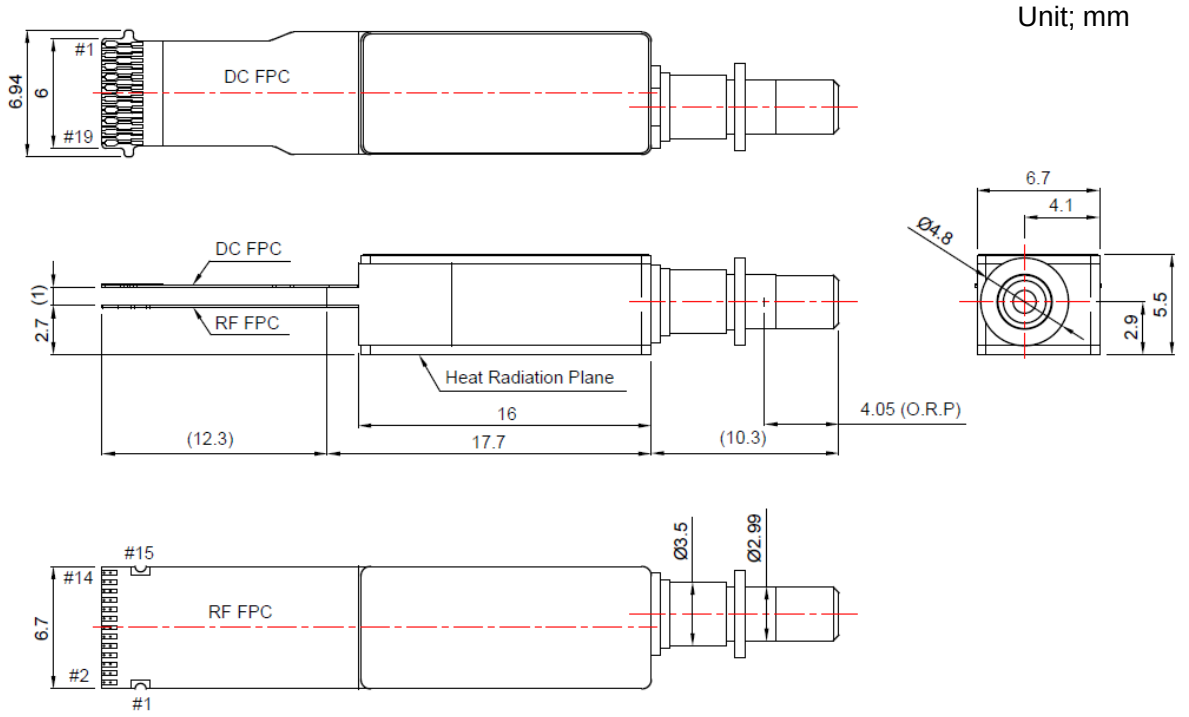
Package Specifications



Electrical Pad Configurations

Pad Number	DC FPCB		RF FPCB	
	Pad Name	Description	Pad Name	Description
1	TEC(+)	TEC (+)	GND	Ground
2	TEC(+)	TEC (+)	GND	Ground
3	TEC(-)	TEC (-)	IN0B	Data Input(-) for L0
4	TEC(-)	TEC (-)	IN0	Data Input(+) for L0
5	GND	Ground	GND	Ground
6	VD	Power Supply	IN1B	Data Input(-) for L1
7	NC	No Connection	IN1	Data Input(+) for L1
8	Thermistor	Thermistor	GND	Ground
9	TXDIS	Laser Disable Input	IN2	Data Input(+) for L2
10	SDA	Serial Data Input	IN2B	Data Input(-) for L2
11	SCL	Serial Clock Input	GND	Ground
12	GND	Ground	IN3	Data Input(+) for L3
13	MPD0	M-PD Output for L0	IN3B	Data Input(-) for L3
14	MPD1	M-PD Output for L1	GND	Ground
15	MPD2	M-PD Output for L2	GND	Ground
16	MPD3	M-PD Output for L3	-	-
17	RESET	Reset Control Signal	-	-
18	NC	No Connection	-	-
19	VD	Power Supply	-	-

** Each channel from L0 to L3 is corresponding to the input signal with center wavelength of 1296.59, 1300.05, 1304.58, and 1309.14 nm respectively.*

For sales information, please contact sales@coset.com