

2.5Gbps 1310nm DFB Laser

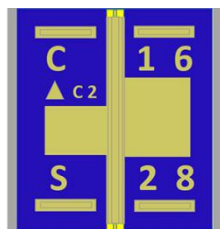
The laser is a ridge structure design with multi-quantum well (MQW) active layers and a distributed-feedback (DFB) grating. This high performance and reliability laser is suitable for GPON and other data communication applications.

Features:

- AlGaInAs MQW(Multiple Quantum Well)
- Single mode
- Edge-emitting
- Low threshold current
- High output power
- Narrow beam divergence angle
- Operating temperature -5°C to 85°C
- RoHS compliant and design for Telcordia-GR468

Applications:

- Uncooled applications
- PON



Absolute maximum ratings:

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T _s	-40	100	°C
Forward current	I _f	--	120	mA
Forward power**	P _f	--	40	mW
Reverse Voltage	V _R	--	2	V
ESD(HBM)	ESD	--	500	V

Electro-Optical Characteristics:

Parameter	Symbol	Test Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I _{th}	T _c =25°C & CW	--	10	15	mA
		T _c =85°C & CW	--	18	35	mA
Slope Efficiency	η	T _c =25°C & CW	0.45	0.5	--	W/A
		T _c =85°C & CW	0.28	--	--	W/A
Optical Output Power	P _f	T _c =25°C & CW I _{th} +20mA	9	--	--	mW
Series Resistance	R _s	T _c =25°C & CW	--	--	15	Ohm
Peak Wavelength	λ _p	T _c =25°C & CW I _{th} +20mA	1300	1310	1320	nm
		T _c =85°C & CW I _{th} +20mA	1300	--	1320	nm
Side Mode Suppression Ratio	SMSR ₀	T _c =-5 to & 85°C I _{th} +20mA	35	--	--	dB
Farfield (Vertical)	θ _v	T _c =25°C & CW I _{th} +20mA	--	21	--	°
Farfield (Horizontal)	θ _h	T _c =25°C & CW I _{th} +20mA	--	20	--	°