

750um 1310 DFB Laser

The laser is a ridge structure design with multi-quantum well (MQW) active layers and a distributedfeedback (DFB) grating.

Features:

- Single mode
- Edge-emitting
- AlGaInAs MQW(Multiple Quantum Well)
- High output power
- RoHS compliant and design for Telcordia-GR468
- Operating Temperature 0~70°C

Applications:

- Gigabit Ethernet
- CW(Continuous Wave)
- Silicon Photons



Absolute maximum ratings:

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T _s	-40	85	°C
Forward current	I _f	--	300	mA
Forward power**	P _f	--	110	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	--	35		mA
Slope Efficiency	η	T _c =25°C & CW	0.35	--	--	W/A
Operating Current	I _{op}	P _o =50mW & T _c =25°C	--	145	160	mA
		P _o =50mW & T _c =70°C	--	200	250	mA
Series Resistance	R _s	T _c =25°C & CW	--	4.5	--	Ohm
Peak Wavelength	λ _p	0~70°C, P=50mW & CW	1300	1310	1320	nm
Side Mode Suppression Ratio	SMSR ₀	T _c =25°C & CW 250mA	45	55	--	dB
Farfield (Vertical)	θ _v	T _c =25°C & CW 250mA	--	24	--	°
Farfield (Horizontal)	θ _h	T _c =25°C & CW 250mA	--	18	--	°