

### 1000um 1310 DFB Laser

The laser is a ridge structure design with multi-quantum well (MQW) active layers and a distributedfeedback (DFB) grating with output power up to 70mW.

#### 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



### 60mW Electro-Optical Characteristics:

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I <sub>th</sub>	T <sub>c</sub> =25°C & CW	--	25	--	mA
Slope Efficiency	η	P=10mW, T <sub>c</sub> =25°C & CW	--	0.3	--	W/A
Operating Current	I <sub>OP</sub>	P=60mW, T <sub>c</sub> =70°C & CW	--	270	350	mA
		P=60mW, T <sub>c</sub> =25°C & CW	--	200	250	mA
Series Resistance	R <sub>s</sub>	T <sub>c</sub> =25°C & CW	--	2	6	Ohm
Peak Wavelength	λ <sub>p</sub>	-5~70°C, P=70mW & CW	1300	1310	1320	nm
Side Mode Suppression Ratio	SMSR <sub>0</sub>	T <sub>c</sub> =25°C & CW 300mA	50	55	--	dB
Farfield (Vertical)	θ <sub>v</sub>	T <sub>c</sub> =25°C & CW 300mA	--	25	--	°
Farfield (Horizontal)	θ <sub>h</sub>	T <sub>c</sub> =25°C & CW 300mA	--	15	--	°

### 70mW Electro-Optical Characteristics:

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Threshold Current	I <sub>th</sub>	T <sub>c</sub> =25°C & CW	--	25	--	mA
Slope Efficiency	η	P=10mW, T <sub>c</sub> =25°C & CW	--	0.3	--	W/A
Operating Current	I <sub>OP</sub>	P=70mW, T <sub>c</sub> =70°C & CW	--	270	350	mA
		P=70mW, T <sub>c</sub> =25°C & CW	--	200	250	mA
Series Resistance	R <sub>s</sub>	T <sub>c</sub> =25°C & CW	--	2	6	Ohm
Peak Wavelength	λ <sub>p</sub>	-5~70°C, P=70mW & CW	1300	1310	1320	nm
Side Mode Suppression Ratio	SMSR <sub>0</sub>	T <sub>c</sub> =25°C & CW 300mA	50	55	--	dB
Farfield (Vertical)	θ <sub>v</sub>	T <sub>c</sub> =25°C & CW 300mA	--	25	--	°
Farfield (Horizontal)	θ <sub>h</sub>	T <sub>c</sub> =25°C & CW 300mA	--	15	--	°