2.5Gbps 1490nm DFB Laser

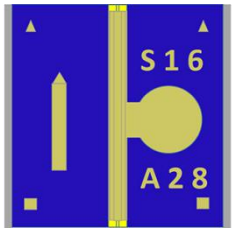
The laser is a ridge structure design with multi-quantum well (MQW) active layers and a distributed-feedback (DFB) grating. This high performance and reliability laser is suitable for GPON and other data communication applications.

Features:

- AlGaInAs MQW(Multiple Quantum Well)
- Single mode
- Edge-emitting
- Low threshold current
- High output power
- Narrow beam divergence angle
- Operating temperature -5℃ to 85℃
- 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	℃
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	Ith	Tc=25℃&CW	--	10	15	mA
		Tc=85℃&CW	--	25	35	mA
Optical Output Power	P_f	Tc=25℃&CW Ith+20mA	7.7	--	--	mW
		Tc=85℃&CW Ith+20mA	3.0	--	--	mW
Back Optical Output Power	B_p	Tc=25℃&CW Ith+20mA	--	0.2	--	mW
Series Resistance	R_s	Tc=25℃&CW	--	--	15	Ohm
Peak Wavelength	λ_p	Tc=-5℃ to +85℃&CW Ith+20mA	1480	1490	1500	nm
Wavelength/Temperature Coefficient	$d\lambda/dT$	T=-5℃ to +85℃	--	0.09	--	nm/℃
Side Mode Suppression Ratio	$SMSR_0$	Tc=-5℃& Ith+20mA	35	--	--	dB
Farfield (Vertical)	θ_v	Tc=25℃&CW Ith+20mA	--	25	--	°
Farfield (Horizontal)	θ_h	Tc=25℃&CW Ith+20mA	--	25	--	°