

10G C-band DWDM DFB Laser

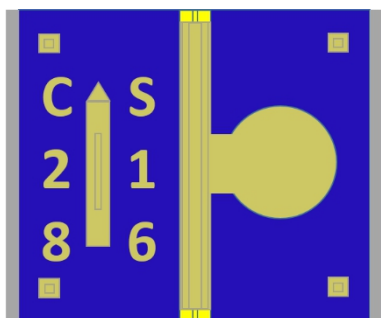
The laser is a promising light source for modern dense wavelength division multiplexing (DWDM) systems, with a direct modulation up to 18GHz.

Features:

- Single mode
- Edge-emitting
- AlGaInAs MQW(Multiple Quantum Well)
- High output power
- RoHS compliant and design for Telcordia-GR468
- C01-C61 DFB(Distributed-Feedback) LD(Laser Diode)

Applications:

- Single TEC (Thermo-Electric Cooler) for DFB temperature control
- DWDM



Absolute maximum ratings:

Parameter	Symbol	Min.	Max.	Unit
Storage Temperature	T _s	-40	85	°C
Forward current	I _f	--	120	mA
Forward power**	P _f	--	25	mW
Reverse Voltage	V _R	--	2	V
ESD(HBM)	ESD	--	500	V

Electro-Optical Characteristics:

Parameter	Symbol	Test Conditions	Unit	Min.	Typ.	Max.
Threshold Current	I _{th}	T _c =25°C & CW	mA	--	10	12
Optical Output Power	P _f	T _c =25°C & CW I _{th} +20mA	mW	4.5	5	--
Operating Voltage	V _f	T _c =25°C & CW I _{th} +20mA	V		1.2	1.5
Series Resistance	R _s	T _c =25°C & CW	Ohm	--	--	12
Peak Wavelength	λ _p	T _c =25°C & QCW I _{th} +20mA	nm	λ -0.4	λ	λ +0.4
Wavelength/Temperature Coefficient	dλ/dT	T=-40°C to +85°C	nm/°C	--	0.08	--
Spectral Width(-20 dB)	λ	T _c =25°C & I _{th} +20mA	nm		0.3	1
Side Mode Suppression Ratio	SMSR ₁	T _c =25°C & CW I _{th} +20mA	dB	38	41	--
Modulation Bandwidth	BW	-3dB, T _c =25°C & CW I _{th} +20mA	GHZ	15		
Farfield (Vertical)	θ _v	T _c =25°C & CW I _{th} +20mA	°	--	35	--
Farfield (Horizontal)	θ _h	T _c =25°C & CW I _{th} +20mA	°	--	30	--
λ= C01-C61						