

### 10G CWDM DFB

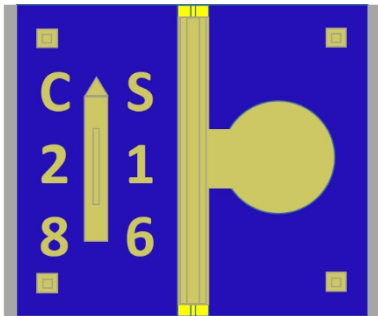
The laser is a ridge-type structure with multi-quantum well (MQW) active layers and a distributedfeedback (DFB) grating with direct modulation bandwidth up to 15GHz.

#### Features:

- Single mode
- Edge-emitting
- Operating temperature -40~85 °C
- Good uniformity
- RoHS compliant and design for Telcordia-GR468
- For =1471nm, 1491nm, 1511nm, 1531nm, 1551nm, 1571nm

#### Applications:

- Uncooled applications
- Gigabit Ethernet
- Data Center



#### Absolute maximum ratings:

Parameter	Symbol	Min.	Max.	Unit
Operating Temperature	T <sub>o</sub>	-40	85	°C
Storage Temperature	T <sub>s</sub>	-40	100	°C
Forward current	I <sub>f</sub>	--	80	mA
Forward power**	P <sub>f</sub>	--	25	mW
Reverse Voltage	V <sub>R</sub>	--	2	V
ESD(HBM)	ESD	--	500	V

#### Electro-Optical Characteristics:

Parameter	Symbol	Test Conditions	Unit	Min.	Typ.	Max.
Threshold Current	I <sub>th</sub>	T <sub>c</sub> =25 °C & CW	mA	--	8	--
		T <sub>c</sub> =85 °C & CW	mA	--	20	25
Slope Efficiency	η	T <sub>c</sub> =25 °C & CW	W/A	0.25	--	--
Optical Output Power	P <sub>f</sub>	T <sub>c</sub> =25 °C & CW I <sub>th</sub> +20mA	mW	5	6	--
		T <sub>c</sub> =85 °C & CW I <sub>th</sub> +20mA	mW	2.5	3	--
Operating Voltage	V <sub>f</sub>	T <sub>c</sub> =25 °C & CW I <sub>th</sub> +20mA	V		1.2	1.5
Series Resistance	R <sub>s</sub>	T <sub>c</sub> =25 °C & CW	Ohm	--	--	12
Peak Wavelength	λ <sub>p</sub>	T <sub>c</sub> =25 °C & CW I <sub>th</sub> +20mA	nm	λ-3	λ	λ+3
Wavelength/Temperature Coefficient	dλ/dT	T=-40~85 °C	nm/°C	--	0.09	--
Spectral Width(-20 dB)	λ	T <sub>c</sub> =25 °C & I <sub>th</sub> +20mA	nm		0.3	1
Side Mode Suppression Ratio	SMSR <sub>1</sub>	T <sub>c</sub> =25 °C & CW I <sub>th</sub> +20mA	dB	38	40	--
	SMSR <sub>2</sub>	T <sub>c</sub> =85 °C & CW I <sub>th</sub> +20mA	dB	35	37	--
Modulation Bandwidth (-3dB)	BW	T <sub>c</sub> =25 °C & CW I <sub>th</sub> +20mA	GHZ	10	15	