

# 1550nm DFB Laser Diode Module (with Isolator)

## Features

- 1550nm DFB Laser
- High Optical Isolation
- High Output Power
- Coaxial Pintail Package

## Electrical and optical characteristics (Tc=25 , unless otherwise noted.)

Parameter	Symbol	Condition	Min	Typ	Max	Unit
Threshold current	I <sub>th</sub>	CW	-	10	15	mA
		CW, Tc=85	-	-	40	mA
Optical output power	P <sub>r</sub>	CW, I <sub>f</sub> =I <sub>op</sub> ,	0.8	1.0	1.5	mW
		CW, I <sub>f</sub> =I <sub>op</sub> ,	1.5	2.0	2.5	
Operating current	I <sub>op</sub>	CW, P <sub>f</sub> =1.0/2.0/4.0mW	25	-	40	mA
Operating voltage	V <sub>f</sub>	CW	-	1.1	1.5	V
Peak wavelength	λ	CW, I <sub>f</sub> =I <sub>op</sub>	1530	1550	1570	nm
Isolation	I <sub>so</sub>	Tc=25	-30	-	-	dB
Side-mode suppression ratio	SMSR	CW, I <sub>f</sub> =I <sub>op</sub>	30	-	-	dB
Spectral Width		CW, I <sub>f</sub> =I <sub>op</sub>	-	-	1.0	nm
Tracking error	E <sub>r</sub>	I <sub>m</sub> hold (@P <sub>f</sub> =1mW/2mW/4mW(25 )), Tc=-40 ~ +85 , APC	-1.5	-	1.5	dB
Rise and Fall time	t <sub>r</sub> , t <sub>f</sub>	I <sub>b</sub> =I <sub>th</sub> , 10 ~ 90%	-	0.5	-	ns.
Monitor current	I <sub>m</sub>	CW , I <sub>f</sub> =I <sub>op</sub> , V <sub>RD</sub> =5V	100	-	1000	μ A
Capacitance (PD)	C <sub>t</sub>	V <sub>rd</sub> =5V, f=1MHz	-	10	20	pF
Dark current (PD)	I <sub>d</sub>	V <sub>rd</sub> =5V	-	0.01	0.1	μ A

## Ordering Information

