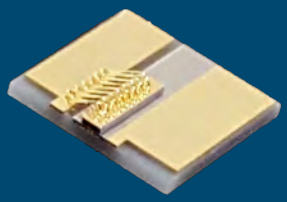
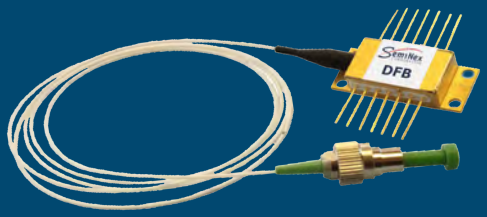
SemiNex CORPORATION

NEW

High Power DFB Laser Diodes

The new high power DFB laser diodes are offered in both C-band and O-band. They can achieve a superior detection range for LiDAR or transmission distance for optical communication and data centers. DFB multichannel and multiwavelength arrays are also available per custom request.



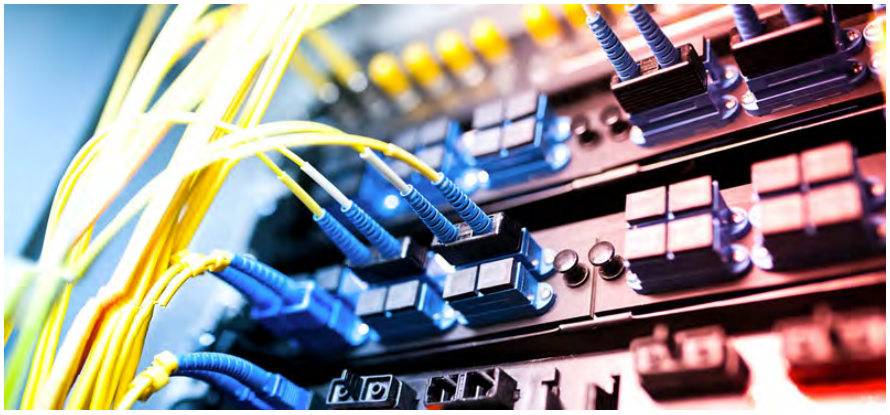


Key Benefits

- High optical power
- Market leading performance
- Both C-Band and O-Band
- Submount & Butterfly fiber package
- DFB arrays per request
- Multiwavelength DFB array per request

Applications

- Long range FMCW LiDAR
- Optical Communications
- Data Centers



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1310nm & 1550nm High Power DFB Lasers

High Power DFB Lasers

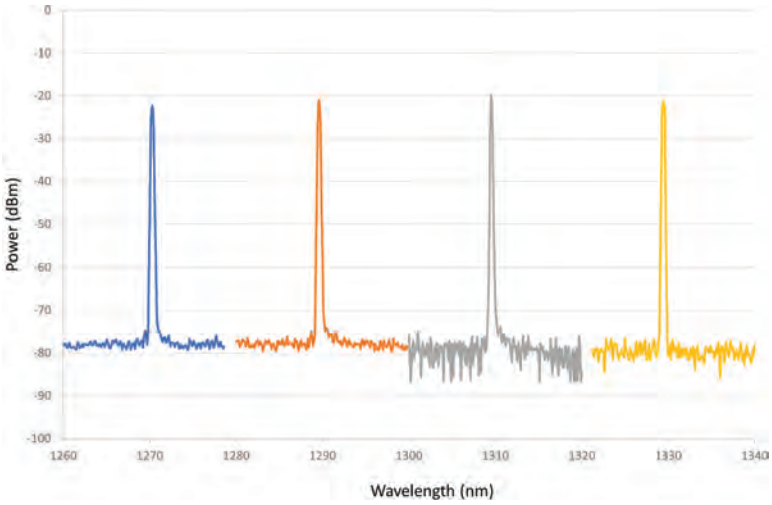
DFB Lasers

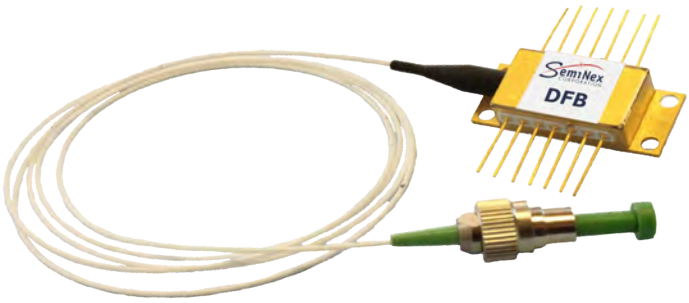
Optical	Symbol	CHP-450	CHP-451	Units
Center Wavelength	λc	1310	1550	nm
Output Power@250mA	P_{out}	>100	80	mW
Linewidth	δf	<30	<30	kHz
Side Mode Suppression Ratio	SMSR	>50	>50	dB
Relative Intensity Noise	RIN	-150	-150	dB/Hz
Electrical				
Power Conversion Eff.	η	23	18	%
Operating Voltage	V_{op}	1.75	1.75	V
Operating Current	I_{op}	250	250	mA
Threshold Current	I_{TH}	<30	<30	mA
Mechanical				
Operating Temp.**	°C	-20 to 85	-20 to 85	°C
Storage Temp.	°C	-40 to 95	-40 to 95	°C

**Specified operating conditions are based on 20°C heat sink temperature. High temperature operation w ill reduce performance and MTTF.

**Specified values are based on the P-side dow n configuration and rated at a constant heat sink temperature of 20°C.

Unless otherw ise indicated all values are nominal.





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