

1550nm High Power DFB Laser

Bare Die

DS-DF50701D-L10

APPLICATIONS

- DWDM
- Free Space Optics
- Fiber Optic Sensing

FEATURES

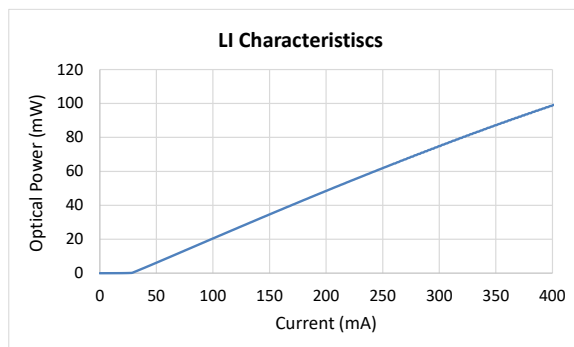
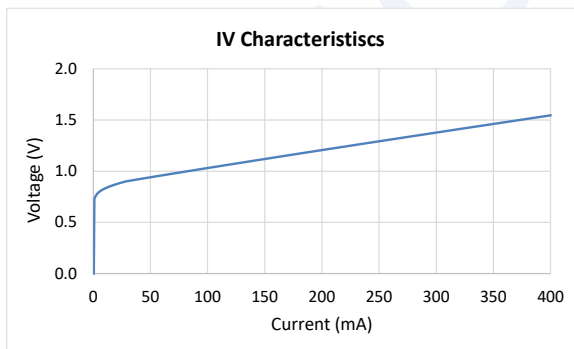
- Output power of 70mW
- Linewidth ≤ 500 kHz
- Excellent SMSR of >40 dB
- Optimized FF divergence for efficient fiber coupling
- Bare die form factor

DenseLight DS-DF50701D-L10 is a 1550nm High Power DFB Laser with Narrow Linewidth Output. Its form factor is in bare die, designed for p-up eutectic assembly onto a heat-dissipating submount.

ELECTRICAL AND OPTICAL CHARACTERISTICS (CW, T=25°C)

Parameter	Symbol	Test Conditions	MIN	TYP	MAX	Unit
Operating Current	I_{OP}	-	-	350	450	mA
Optical Power	P_o	I_{OP}	70	-	-	mW
Operation Voltage	V_{OP}	I_{OP}	-	1.5	2.0	V
Threshold Current	I_{TH}	-	-	30	40	mA
Peak Wavelength	λ_p	I_{OP}	-	1550	-	nm
Side Mode Suppression Ratio	SMSR	I_{OP}	40	-	-	dB
FF Divergence (Transverse)	θ_T	I_{OP}	22	26	30	°
FF Divergence (Lateral)	θ_L	I_{OP}	18	22	26	°
Linewidth	LW	I_{OP}	-	-	500	kHz
Polarization Extinction Ratio	PER	I_{OP}	20	-	-	dB

TYPICAL PERFORMANCE



ABSOLUTE MAXIMUM RATINGS

Parameter	Symbol	Ratings	Unit
Laser forward current	I_F	500	mA
Laser reverse voltage	V_R	2.0	V
Laser forward voltage	V_F	2.0	V
Operation temperature	T_C	18 ~ 35	°C

