

1550nm High Power CW Laser

DS-DF50401A10-FP-1550.12

APPLICATIONS

- DWDM
- Free Space Optics
- Fiber Optic Sensing

FEATURES

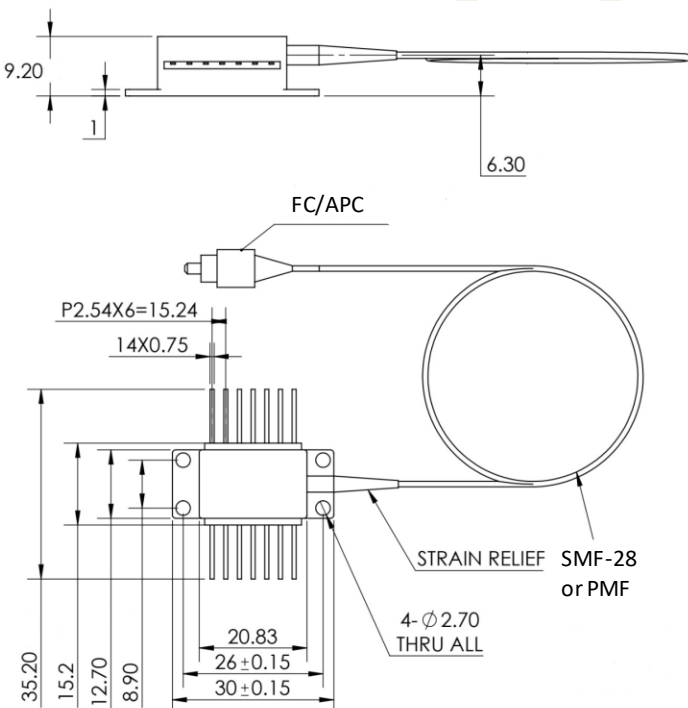
- High Pigtail Power output
- PMF Pigtail
- Integrated Isolator
- Integrated monitor photodiode
- DWDM wavelengths available

The DenseLight DS-DF50401A10-FP-1550.12 is a family of high power CW laser source. It consists of an InGaAsP laser diode chip optimized for high power, single-mode operations. It is packaged with built-in TEC cooler and integrated optical isolator, hermetically sealed in a reliable 14-pin Butterfly package. Denselight's advanced technology enables mode-hop free tunability, high power, excellent SMSR, and high accuracy of the lasing wavelength.

ELECTRICAL AND OPTICAL CHARACTERISTICS (Test Condition: $T_{CHIP}=25^{\circ}C$, UNLESS OTHERWISE STATED)

Parameter	Symbol	Test Conditions	MIN	TYP	MAX	Unit
Peak Wavelength	λ_p	T_{CHIP}	-	1550.12	-	nm
Chip Temperature	T_{CHIP}		18	-	35	$^{\circ}C$
Optical Power	P_O		40	-	-	mW
Operating Current	I_{OP}		-	-	350	mA
Threshold Current	I_{TH}		-	20	30	mA
Operation Voltage	V_{OP}		-	-	2.0	V
Side Mode Suppression Ratio	SMSR	I_{OP}	-	40	-	dB
Linewidth	LW	I_{OP}	-	-	1	MHz
Polarization Extinction Ratio	PER	I_{OP}	18	-	-	dB
Relative Intensity Noise	RIN	I_{OP}	-	-	-160	dB/Hz

PACKAGE DIMENSIONS



FAMILY OPTIONS (DF5-SERIES)

DS-DF5XXX1A10-YY-ZZZZ

Wavelength Options:
 (Empty): 1550 +/-5nm
 1550.12
 1545.32
 1542.94
 (Enquire for other wavelengths)

Pigtail Options:
 (Panda PMF, Slow axis aligned)
 FP: FC/APC, Bare
 FQ: FC/APC, 900um loosetube

Optical Power Options:
 020 >20mW
 040 >40mW
 050 >50mW
 063 >63mW
 080 >80mW
 100 >100mW

Short Form Datasheet