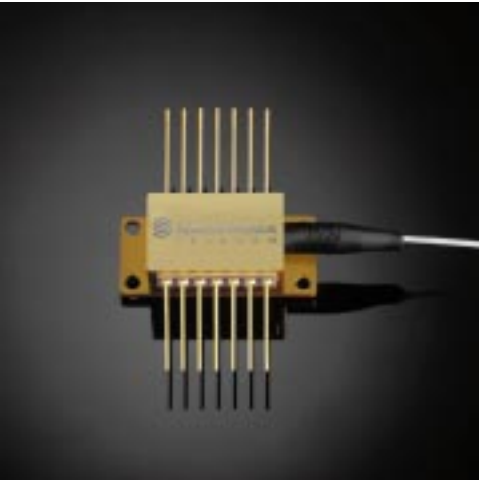


New! Higher Power

Product Summary

Multimode Pump Laser Modules

BT20-915
BT20-975

915 nm and 975 nm pump lasers in fiber-coupled 14-pin butterfly packages.

Multi-mode Pump Laser modules from Spectra-Physics Telecom are available at wavelengths of 915 nm and 975 nm, packaged in a fiber-coupled 14-pin butterfly package. Laser chip is optimized for over 50% power efficiency and high-temperature operation. Improved fiber-coupling techniques result in 2 Watts out of a 100 µm , 0.15 NA fiber, making it a high brightness multimode pump laser module. Spectra-Physics Telecom has also leveraged its high-volume laser diode fabrication expertise to ramp up production of these Telecom pump lasermodules. Full qualification for high reliability Telecom pump application is ongoing.

Features

- Fiber-coupled power output of 2 W
- 100 µm core, 0.15 NA high-brightness fiber-coupled output
- Available at 915 nm & 975 nm wavelengths
- TE-cooled internally
- Electrically isolated case

Applications

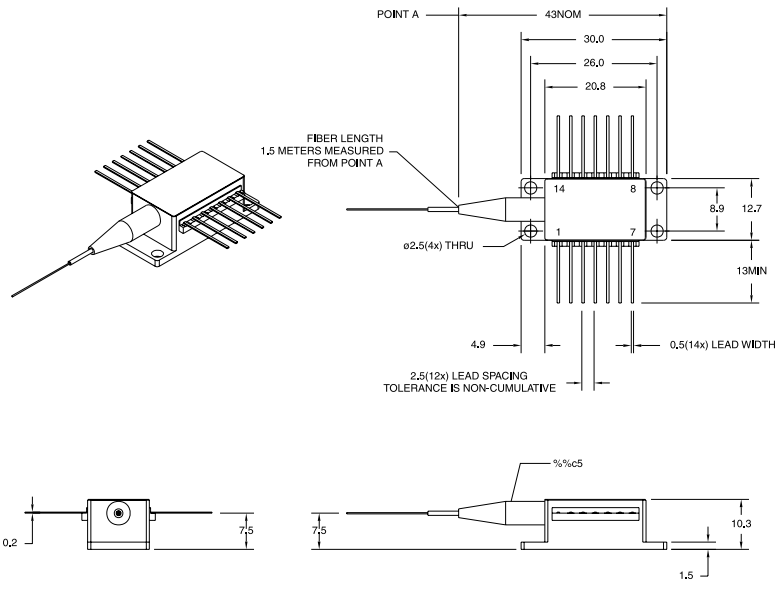
- Pumping Raman fiber lasers
- Pumping ytterbium-doped double-clad fiber lasers
- Pumping double-clad fiber amplifiers
- Pumping waveguide amplifiers
- Pumping speciality fiber amplifiers

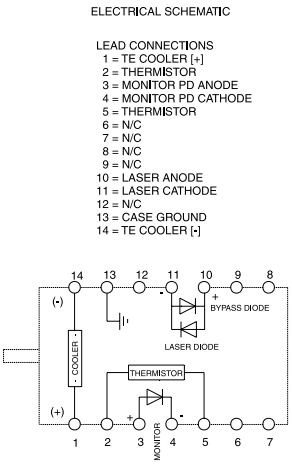
Spectra-Physics TELECOM

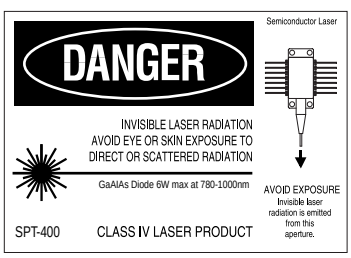
1335 Terra Bella Avenue, Mountain View CA 94043 Toll free 1-888-735-5774
Telephone +1-650-966-5444 e-mail: telecomsales@splasers.com

BT20-915*
BT20-975*

Parameter	Condition	Symbol	Min.	Max.	Units
Laser Characteristics					
Optical power (fiber)	I_{op}= 3.20 A	P_{op}	1.9	-	W
Center wavelength	T_s = 25°C	λp	910/970	920/980	nm
Operating current		I_{op}	-	3.8	A
Laser threshold	T_s = 25°C	Ith	-	600	mA
Output W/A	Fiber output		0.55	-	W/A
Operating voltage	I_f = I_{op}	V_f	-	1.9	V
Spectral bandwidth	FWHM	Δλ	-	5	nm
Power in spectral band	λ=λ p ±2.5 nm	P_{band}	90	-	%
Spectral shift with temperature		Δλ /ΔT	-	0.38 (TYP)	nm/°C
Monitor Photodiode					
Current	I_f = I_{op}	I_m	50	800	µA
Reverse voltage		Vr	-	5.0	V
Temperature Control					
Sensor	T_s = 25°C	R_T	9.5	10.5	kΩ
TEC drive current	P_{op}=2.0 W, ΔT=45°C	I_{TEC}	-	3.5	A
TEC drive voltage	P_{op}=2.0 W, ΔT=45°C	V_{TEC}	-	3.2	V
Temperature range	Case to laser	ΔT	-	45	°C
Storage temperature	Hum. < 20%		-40	80	°C
Fiber Pigtail				**Typical**	
Fiber core diameter				105	µm
Fiber N.A.				0.15	
Fiber cladding				125	µm
Fiber buffer diameter				250	µm
Fiber length				1.5	meter
Fiber bend diameter				> 5	cm
Fiber end style	cleaved end				







*Please call the factory for additional wavelengths.
Due to our continuous improvement program, specifications are subject change without notice.