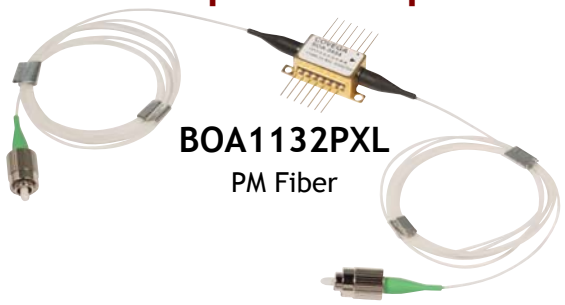
O-Band Booster Optical Amplifier



BOA1132PXL
PM Fiber

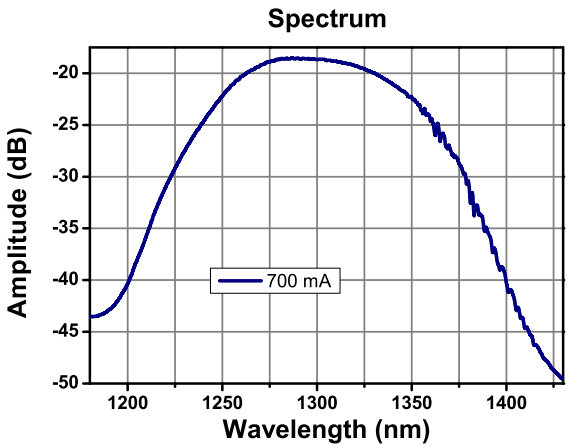
Description

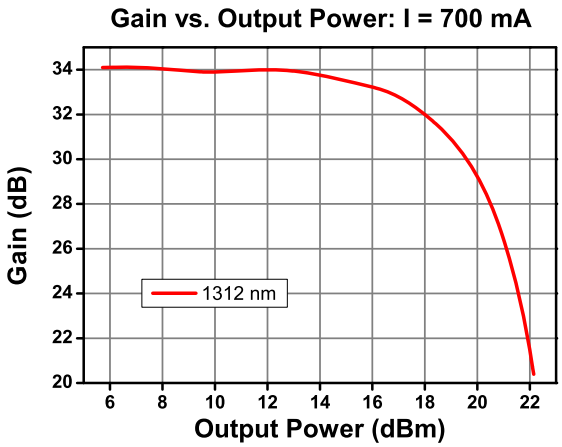
Thorlabs' BOA1132PXL is a high saturation output power, high bandwidth, polarization-maintaining Booster Optical Amplifier. The BOA1132PXL, which is a premium-grade version of the BOA1132P, incorporates a highly efficient InP/InGaAsP Quantum Well (QW) layer structure and a reliable ridge waveguide design. This BOA is housed in a standard 14-pin butterfly package with an integrated thermoelectric cooler (TEC) and thermistor.

Specifications

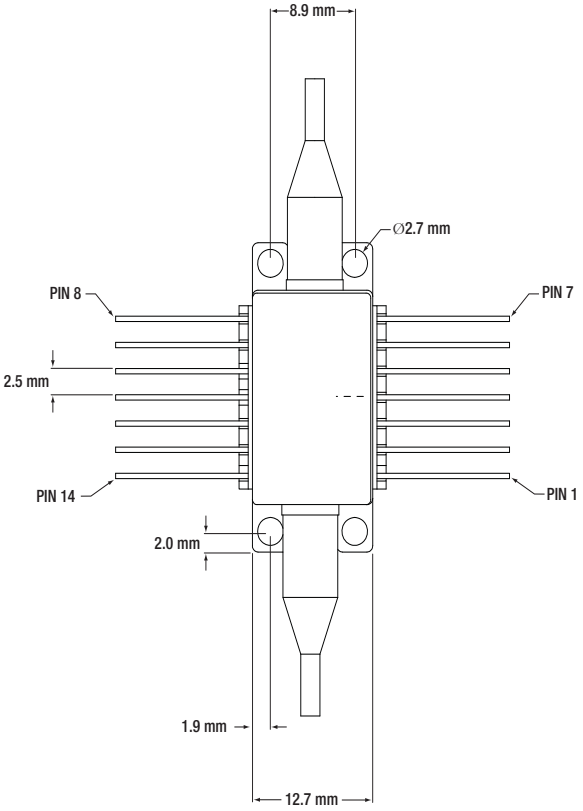
BOA1132PXL				
	Symbol	Min	Typical	Max
Operating Current	I_{OP}	-	700 mA	750 mA
Center Wavelength	λ_C	1290 nm	1300 nm	1315 nm
Optical 3 dB Bandwidth	BW	90 nm	-	-
Saturation Output Power @ -3 dB	P_{SAT}	17 dBm	18 dBm	-
Small Signal Gain @ P_{IN}= -20 dBm, λ = 1312 nm	G	30 dB	-	-
Gain Ripple (RMS) @ I_{op}	δG	-	0.1 dB	0.2 dB
Noise Figure	NF	-	6 dB	7 dB
Forward Voltage	V_F	-	1.6 V	2.0 V
TEC Operation (Typical / Max @ T_{CASE} = 25 °C / 70 °C)				
TEC Current	I_{TEC}	-	0.4 A	1.5 A
TEC Voltage	V_{TEC}	-	0.5 V	4.0 V
Thermistor Resistance	R_{TH}	-	10 kΩ	-

Performance Plots





Drawings



T. Case

1. TEC +	8. NC
2. Thermistor	9. NC
3. NC	10. Dev Anode
4. NC	11. Dev Cathode
5. Thermistor	12. NC
6. NC	13. Case
7. NC	14. TEC -