



BOA1007C

Description

Thorlabs' BOA1007C is a high saturation output power, high bandwidth, polarization-maintaining Booster Optical Amplifier. The BOA1007C incorporates a highly efficient InP/InGaAsP Quantum Well (QW) layer structure and a reliable ridge waveguide design.

Specifications

BOA1007C*				
	Symbol	Min	Typical	Max
Operating Current	I_{OP}	-	600 mA	750mA
Center Wavelength	λ_C	1530 nm	1550 nm	1580 nm
Optical 3 dB Bandwidth	BW	80 nm	85 nm	-
Saturation Output Power @ -3 dB	P_{SAT}	15 dBm	18 dBm	-
Small Signal Gain across BW @ $P_{IN} = -20$ dBm, $\lambda = 1550$ nm	G	26 dB	30 dB	-
Gain Ripple (RMS) @ I_{op}	δG	-	0.05 dB	0.2 dB
Polarization Extinction Ratio	PER	-	18 dB	-
Chip Noise Figure	NF	-	6.0 dB	8.0 dB
Forward Voltage	V_F	-	1.3 V	1.6 V
Chip Length	L	-	1.5 mm	-
Lateral Beam Exit Angle	θ_{EXT}	-	19.5°	-
Beam Divergence Angle (FWHM)				
-Transverse	θ_T	26°	34°	42°
-Lateral	θ_L	10°	14°	30°

* $T_{CHIP} = 25^\circ C$



Performance Plots

