

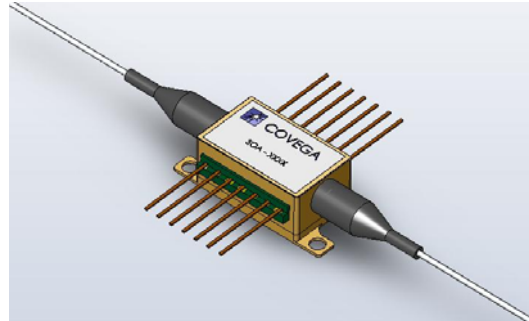
BOA 1036: 1350nm Booster Optical Amplifier

Limited Availability

Description

The BOA 1036 is a high saturation output power high bandwidth polarization maintaining Booster Optical Amplifier (BOA). It incorporates a highly efficient InP/InGaAsP Quantum Well (QW) layer structure and a reliable ridge waveguide design.

It is housed in a standard 14-pin butterfly package with integrated thermoelectric cooler and thermistor. Packaging options include isolator(s) and choice of single mode fiber and polarization maintaining fiber tails.



Features

Applications

- ✓ Telecom & Datacom
- ✓ Booster Amplifier of Fixed and Tunable ITU Lasers and Transmitters
- ✓ Research & Non-Linear Applications

- High Saturation Output Power
- Broad Spectral Bandwidth
- High Fiber-to-Fiber Gain
- High Polarization Extinction Ratio

Specifications

CW; T (Chip) = 25°C, T (Case) = 0 - 70°C

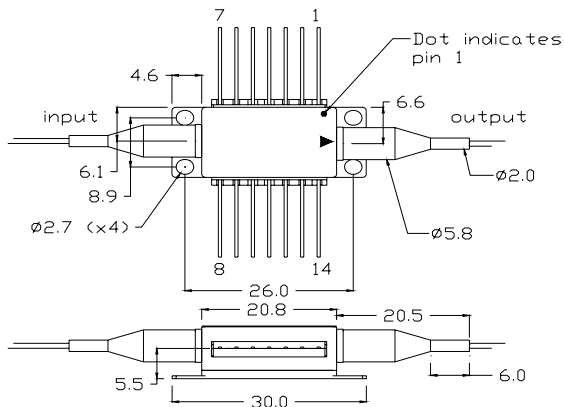
Parameter		Min	Typ	Max	Units
Operating Current	I_{OP}		800		mA
Central Wavelength	λ_C		1350		nm
ASE Power @ I_{OP}	P_{ASE}		3.1		mW
Optical 3 dB Bandwidth	BW	65	80		nm
Saturation Output Power @ -3 dB	P_{SAT}	12	15		dBm
Small Signal Gain across BW @ $P_{in} = -20$ dBm	G	17	23		dB
Gain Ripple (p-p) @ I_{OP}	δG		0.25	0.4	dB
Polarization Extinction Ratio	PER		16		dB
Noise Figure	NF		8	12	dB
Forward Voltage	V_F		1.4	2.0	V
TEC Operation (typ / max @ $T_{CASE} = 25^\circ C / 70^\circ C$)					
- TEC Current	I_{TEC}		0.12	1.5	A
- TEC Voltage	V_{TEC}		0.35	4	V
- Thermistor Resistance	R_{TH}		10K		Ω

SPECIFICATIONS SUBJECTED TO CHANGE WITHOUT NOTICE

The picture is a representation. The actual part may vary from the one shown.

BOA 1036

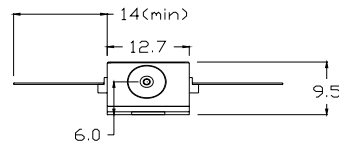
Packaging



PIN IDENTIFICATION

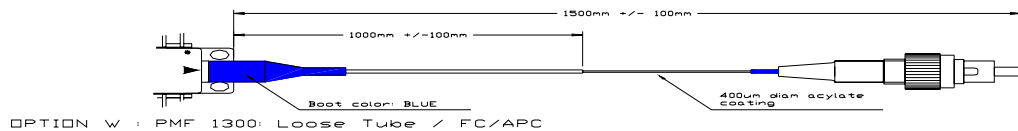
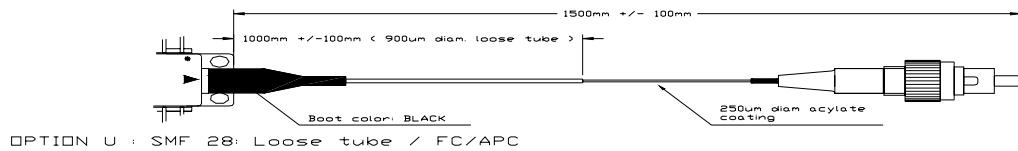
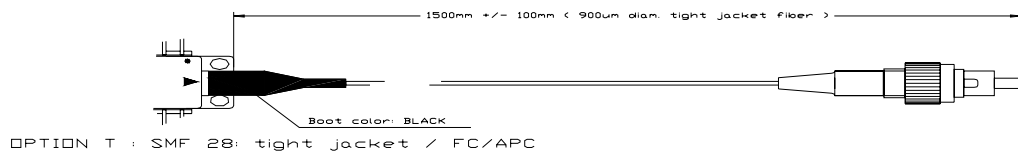
- | | |
|---------------|-----------------|
| 1. TEC + | 14. TEC - |
| 2. Thermistor | 13. Case |
| 3. NC | 12. NC |
| 4. NC | 11. SDA Cathode |
| 5. Thermistor | 10. SDA Anode |
| 6. NC | 9. NC |
| 7. NC | 8. NC |

Recommended mounting torque is 10-20oz.in (0.07-0.14N.m).



all dimensions in mm

Fibertail Options



Ordering Information

BOA 1036 - X - 0 - X - X - X - X - X

X	0	X	X	X	X	X	Numeric
Isolator	Reserved	Fiber jacket configuration*	Input Fiber	Output Fiber	Input Connector	Output Connector	Reserved
0 = none		U = SMF-8, loose tube	S = SMF	S = SMF	A = FC/APC	A = FC/APC	
1 = input only		T = SMF-28, tight jacket	P = PMF	P = PMF			
2 = output only		W = PMF 1300 nm, loose tube					
3 = input & output							

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