

Predistortion Linearizers Can Give TWTAs an Effective 4X Power Increase with Multicarrier Traffic.

LINEARIZER

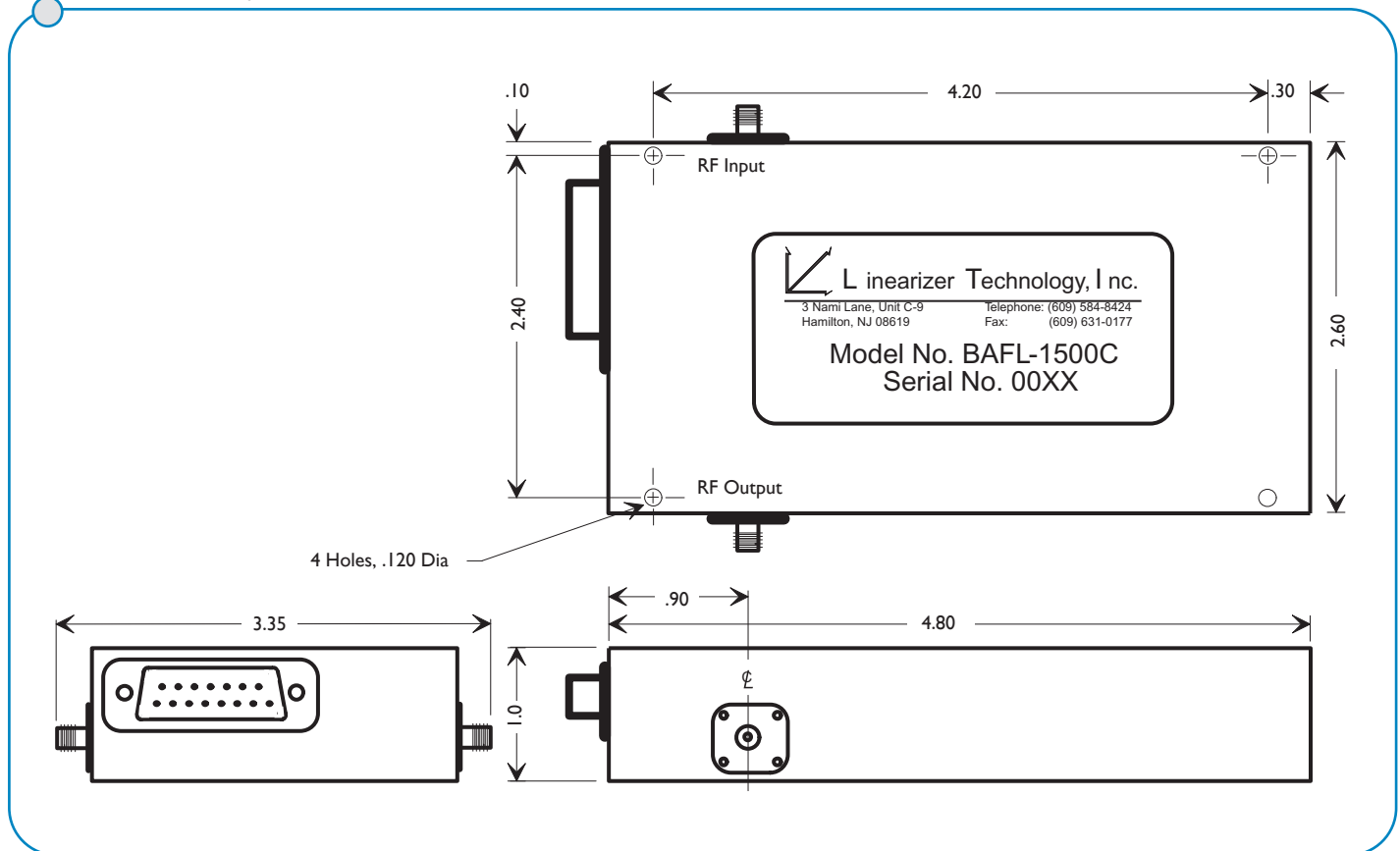
L + S Band

BAFL-1500C/2000C



- Compact Design
- For TWTAs + Klystrons
- Easy to Align
- Wide Dynamic Range
- High Performance

BAFL - 1500C/2000C OUTLINE SPECIFICATIONS



BAFL - 1500C/2000C PERFORMANCE SUMMARY

1. Frequency Range	□□	BAFL-1500	□	1,600 to 1,700 MHz *
	□ □ □ □	BAFL-2000	□ □	2,300 to 2,400 MHz *
2. Power Level In for TWTA Rated Power	□ □			0 dBm to +10 dBm
Power Level Out for TWTA Rated Power	□ □			0 dBm to +10 dBm
3. Output Backoff (from Single Carrier Rated Power)	□□			Minimum Carrier to Intermodulation (C/I) Ratio (with TWTA)
	□ □ □	3 dB	□□ □	> 25 dB
	□	≥ 4 dB	□□ □	> 30 dB
4. Gain Flatness	□ □	□ □	□ □	< ± 0.5 dB Over Any 500MHz
5. Gain Slope	□ □	□ □	□ □	< 0.020 dB/MHz
6. Gain Stability Over Temperature	□□	□ □	□ □	< ± 1 dB, -10 to 50 ° C (optional < ± 0.5 dB)
7. Static Phase Shift	□ □	□ □	□ □	< ± 5 degrees to Rated Power (with TWTA)
8. Group Delay	□ □	□ □	□ □	< 1 ns/60 MHz
9. AM/PM Conversion	□ □	□ □	□ □	< 2 deg/dB to Rated Power (with TWTA) (1 deg/dB typical)
10. Spurious/Noise	□□	□ □	□ □	< -135 dBw/4 KHz (at 0 dB gain)
11. Input/Output VSWR	□ □	□ □	□ □	< 1.8
12. Power	□□	□ □	□ □	+15 Volts dc, < 200 mA
13. RF Interface	□ □	□ □	□ □	2 SMA Female Connectors

*Other ranges available (UHF to 4.0GHz)

BAFL - 1500C/2000C FUNCTIONAL BLOCK DIAGRAM

