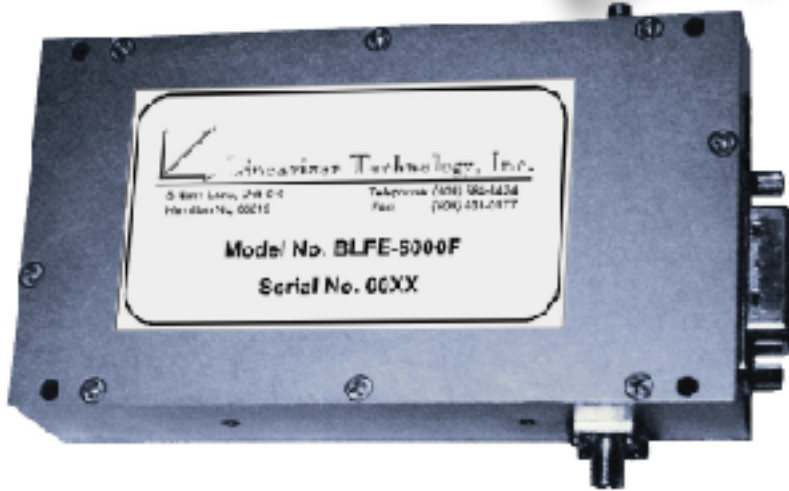


Predistortion Linearizers Can Give TWTAs an Effective 4X Power Increase with Multicarrier Traffic.

FRONT END LINEARIZER

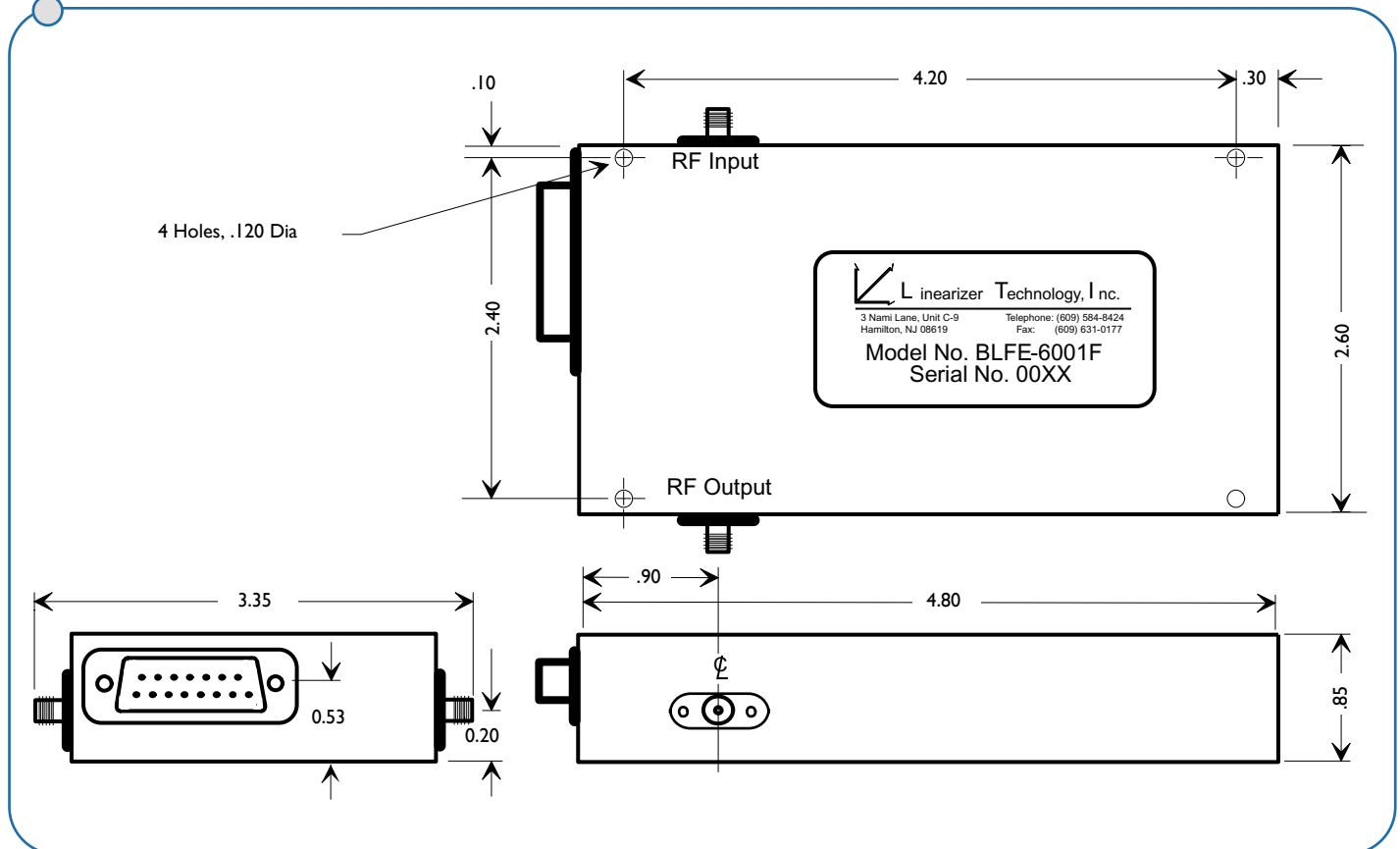
C + X Band

BLFE-6000F/8000F
Series



- >40 dB Gain
- Full Uplink Bandwidths
- >25 dB Adj. Attn.
- Compact Design
- Wide Dynamic Range
- For Digital, Analog, & Mixed Signals

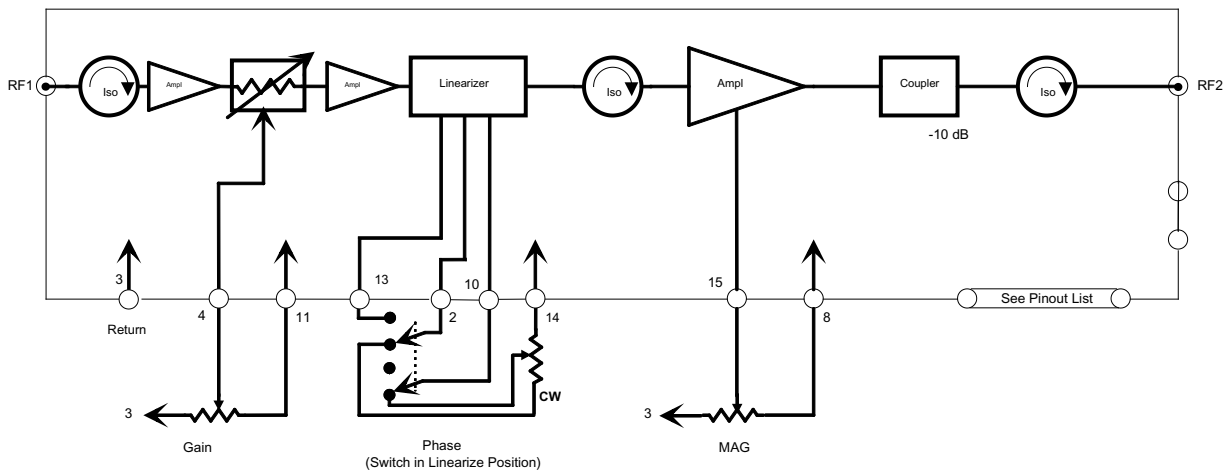
BLFE - 6000F OUTLINE SPECIFICATIONS



BLFE - 6000F/8000F PERFORMANCE SUMMARY

1. Option/Frequency Range	□ □	6001	□ □	□ □	□ □	□ □	□ □	5,850 to 6,650 MHz
	□ □	6002	□ □	□ □	□ □	□ □	□ □	5,850 to 7,100 MHz
	□ □	6003	□ □	□ □	□ □	□ □	□ □	5,850 to 6,450 MHz
	□ □	6004	□ □	□ □	□ □	□ □	□ □	5,700 to 6,650 MHz
	□ □	6005	□ □	□ □	□ □	□ □	□ □	5,800 to 6,725 MHz
	□ □	8000	□ □	□ □	□ □	□ □	□ □	7,900 to 8,400 MHz (Other Ranges Available)
2. Power Level In for TWTA Rated Power								
	□ □	□ □	□ □	□ □	□ □	□ □	□ □	FA_ □ □ □ -30 to -5 dBm (Extended Range Available)
3. Power Level Out for TWTA Rated Power								
	□ □	□ □	□ □	□ □	□ □	□ □	□ □	FAH □ □ □ Adj. from 7 dBm to 17 dBm
	□ □	□ □	□ □	□ □	□ □	□ □	□ □	FAM □ □ □ Adj. from 2 dBm to 12 dBm
	□ □	□ □	□ □	□ □	□ □	□ □	□ □	FAL □ □ □ Adj. from -10 dBm to 0 dBm
4. Output Backoff (From Single Carrier Rated Power) □ Minimum Carrier to Intermodulation (C/I) Ratio (with TWTA)								
	□ □	□ □	3 dB	□ □	□ □	□ □	□ □	> 25 dB
	□ □	□ □	≥ 4 dB	□ □	□ □	□ □	□ □	> 30 dB
5. Gain Flatness □ □ □ □ □ < +/- 0.5 dB Over Any 500 MHz								
6. Gain Slope □ □ □ □ □ < 0.020 dB/MHz								
7. Gain Stability Over Temperature □ □ □ □ □ < ± 1 dB, -10 to 50 ° C (optional < ± 0.5 dB)								
8. Static Phase Shift □ □ □ □ □ < ± 5 degrees to Rated Power (with TWTA)								
9. Group Delay □ □ □ □ □ < 1 ns/60 MHz								
10. AM/PM Conversion □ □ □ □ □ < 2 deg/dB to Rated Power (with TWTA) (<1 deg/dB typical)								
11. Spurious/Noise □ □ □ □ □ < -135 dBw/4 KHz (at 0 dB gain)								
12. Input/Output VSWR □ □ □ □ □ < 1.35								
13. Power □ □ □ □ □ 15 Volts dc, < 350 mA								
14. RF Interface □ □ □ □ □ 2 SMA Female Connectors								

BLFE - 6000F/8000F FUNCTIONAL BLOCK DIAGRAM



DB15P Pin #	Pin Designation	DB15P Pin #	Pin Designation
1	+15 Vdc Input	9	15 Vdc Return (Ground)
2	Phase Adj. (+)	10	Phase Adjust Wiper
3	Gain/MAG Return	11	Gain Adjust (+)
4	Gain Wiper	12	Not Used
5	Not Used	13	Bypass Switch
6	Not Used	14	Phase Return
7	Not Used	15	MAG Adjust Wiper
8	MAG Adjust (+)		