C, X, Ku, K, Ka & Q Band

Compact Design
Full Uplink Bandwidths
> 40 dB Gain
> 25 dB Adj. Gain Attenuator
Control Options:
Analog or
8/9 Bit Digital
Wide Dynamic Range
For Digital, Analog & Mixed Signals
Optional: O/P Power Detection
Mute Control

S-Series Outline Specifications

Predistortion Linearizers Can Give an Effective 4X Power Increase with Multicarrier Traffic
### BLFE-S Series—Performance Summary

1. **Standard Frequency Range***
   - 6000: 5.85 to 6.725 GHz
   - 8000: 7.90 to 8.40 GHz
   - 14001: 13.75 GHz to 14.5 GHz
   - 18000: 17.3 GHz to 18.4 GHz
   - 28000: 27 GHz to 31 GHz
   - 45000: 43 GHz to 46 GHz

*Wider and custom ranges available

2. **Power Level In HPA Rated Power**
   - -30 to -5 dBm (Extended Range Available)

3. **Power Level Out HPA Rated Power**
   - **P**: > 17 dBm
   - **H**: Adj. from 7 dBm to 17 dBm
   - **M**: Adj. from 2 dBm to 12 dBm
   - **L**: 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**
   - < 0.02 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 HPA)

9. **Group Delay**
   - < 1 ns/60 MHz

10. **AM/PM Conversion**
    - < 2 deg/dB to Rated Power (with HPA)
    - (< 1 deg/dB typical)

11. **Spurious/Noise**
    - < - 135 dBw/4 KHz at Max Gain

12. **Input/Output VSWR**
    - < 1.35:1

13. **Power**
    - 15 Volts dc, < 350 mA (typ.)

14. **RF Interface**
    - 2 SMA or K Female Connectors

15. **DC Interface**
    - 15 Pin Male (Analog Atten.)
    - 25 Pin Male (8/9 Bit Atten.)