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

BLFE - 28000J OUTLINE SPECIFICATIONS

- >40 dB Gain
- Full Uplink Bandwidths
- Compact Design
- Wide Dynamic Range
- For Digital, Analog, & Mixed Signals
- Digital or Analog Control

Linearizer Technology, Inc.
### 1. Option/Bandwidth Range (26 to 32 GHz)

<table>
<thead>
<tr>
<th>Option</th>
<th>Bandwidth Range</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>28010</td>
<td>1.0 GHz BW</td>
<td></td>
</tr>
<tr>
<td>28015</td>
<td>1.5 GHz BW</td>
<td></td>
</tr>
<tr>
<td>28020</td>
<td>2.0 GHz BW</td>
<td></td>
</tr>
<tr>
<td>28025</td>
<td>2.5 GHz BW</td>
<td></td>
</tr>
<tr>
<td>28030</td>
<td>3.0 GHz BW</td>
<td></td>
</tr>
<tr>
<td></td>
<td>&gt;4 GHz BW available</td>
<td></td>
</tr>
</tbody>
</table>

### 2. Power Level In for TWTA Rated Power

- **JA**
  -25 to -10 dBm

### 3. Power Level Out for TWTA Rated Power*

- **JAH**
  Adj. from 6 dBm to 16 dBm
- **JAM**
  Adj. from -2 dBm to 8 dBm
- **JAL**
  Adj. from -10 dBm to 0 dBm

### 4. Output Backoff (From Single Carrier Rated Power)

<table>
<thead>
<tr>
<th>Carrier</th>
<th>Minimum Carrier to Intermodulation (C/I) Ratio (with TWTA)</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 dB</td>
<td>&gt; 25 dB</td>
</tr>
<tr>
<td>≥ 4 dB</td>
<td>&gt; 30 dB</td>
</tr>
</tbody>
</table>

### 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 º 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

< 1.5

### 13. Power

15 Volts dc, < 400 mA*

### 14. RF Interface

2 Female K Connectors (SMA compatible)

*except 2800 JAH  ** Up to 25 dB available