

New Limiting Amplifier Featuring Excellent Harmonic Rejection and Output Power BIT Circuit

The PEC-25-5R68R4-19LM-15-SFF is designed to provide an ultra flat gain response from 5.6 to 8.4GHz. This amplifier yields 25dB minimum of gain and a limited output power of 19dBm \pm 2dBm. The amplifier is internally filtered to suppress 2nd harmonics while in limiting. A BIT TTL circuit is incorporated on the output of the amplifier in order to monitor the amplifiers output level.

Typical Specifications:

Frequency:	5.6 to 8.4GHz
Gain:	25dB Min.
Gain Flatness:	\pm 0.25dB Max.
Noise Figure:	4dB Max.
VSWR In/Out:	1.5:1 Max.
Pout (limiting):	19dBm \pm 2dBm
2 nd Harmonic Rejection:	-40dBc Min.
RF Response & Recovery:	8nsec. Max. @ Pin=8dBm
Pin:	20dBm CW Max.
Operating Current:	300mA@+15VDC Max.



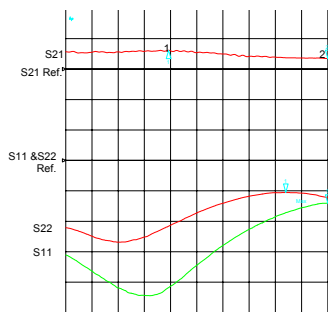
Internally Regulated / Reverse Voltage Protected
 AC Coupled RF Input and Output
 Connectors In/Out SMA(F)
 Housing (3.68" x 1.85" x 0.85")

BIT TTL Circuit:

TTL "1" when Pout > +15dBm (Other Threshold Levels Available. Internally Set)
 TTL "0" when Pout < +10dBm

Typical Test Data

Below: S-Parameter Plot (5.6 to 8.4GHz)

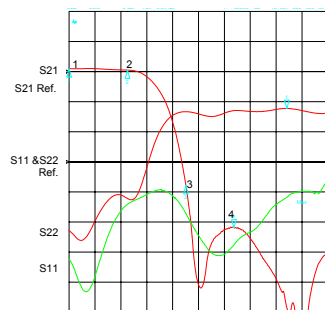


S21: 1dB/Div Ref. 26dB
 S11: 5dB/Div Ref. -9.54dB
 S22: 5dB/Div. Ref. -9.54dB

S21 Markers:

- 1. 26.61dB @ 6.69GHz
- 2. 26.34dB @ 8.4GHz

Below: Broadband S-Parameter Plot (5.6 to 18GHz)



S21: 5dB/Div Ref. 26dB
 S11: 5dB/Div Ref. -9.54dB
 S22: 5dB/Div. Ref. -9.54dB

S21 Markers:

- 1. 26.45dB @ 5.6GHz
- 2. 26.24dB @ 8.4GHz
- 3. 7.02dB @ 11.2GHz
- 4. 0.62dB @ 13.5GHz

Below: Noise Figure Plot (5.6 to 8.4GHz)



Markers:

- 1: 3.27dB @ 5.6GHz
- 2: 3.57dB @ 8.4GHz