

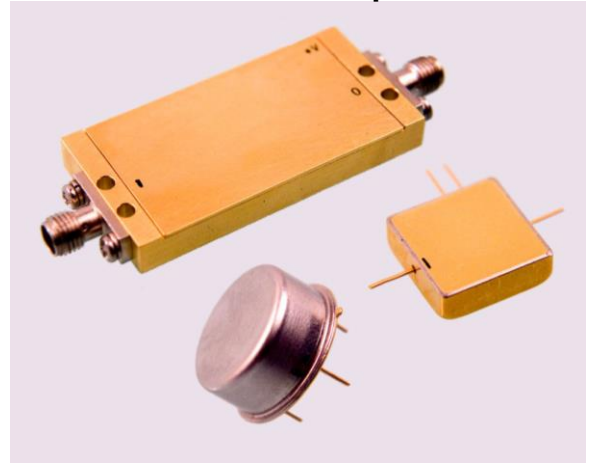
Features: (typical values)

- Low Distortion
- High Second Order IP2 +70.0 dBm.
- High Third Order IP3 +47.0 dBm.
- Low NF 4.0 dB.
- Hermetic Package (Surface Mount available)
- No external components required

Maximum Ratings

Storage Temperature -62°C to +125°C
 DC Voltage +20 volts
 RF Input Power +20.0 dBm.
 Case Temperature +90°C

**1-200 MHz
Push Pull Amplifier**

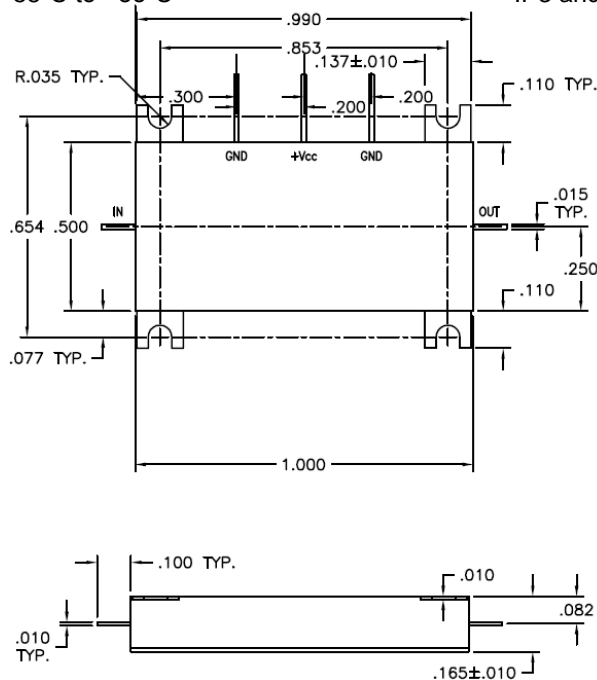


Specifications (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency		1	200	MHz.
Gain	18	17.0	20.0	dB.
Gain Flatness	±0.5		±1.0	dB.
Gain Var. over temp	0.7			ΔdB.
Pout @ 1dB Comp	+30	+26		dBm.
Noise Figure	4.0		5.0	dB.
Reverse Isolation	22			dB.
IP ₃ /IP ₂ (two-tone)*	47/70	41/60		dBm.
HIP2 (2 nd harm.)	76	63		dBm.
VSWR In/Out	1.5:1		2.0:1	
Supply Required	+15/250		+18/280	v/mA.

Min. and max. values are from -55°C to +85°C

*IP₃ and IP₂ are in band output intercept points

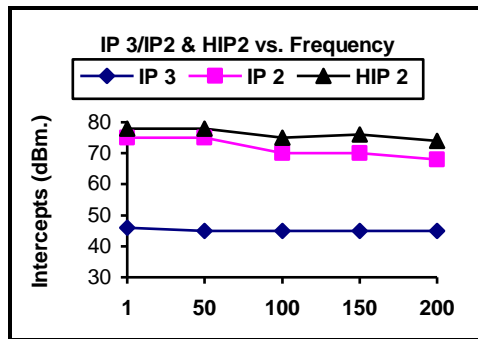
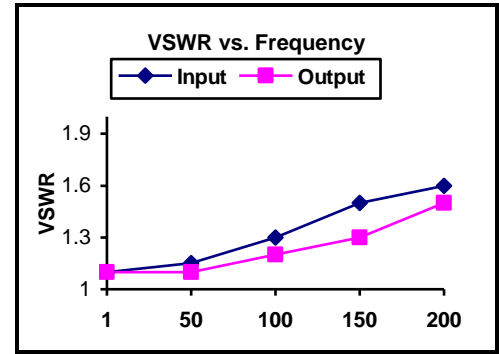
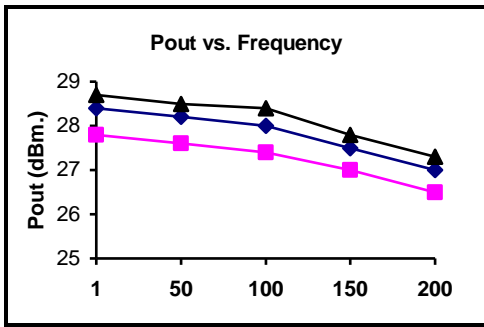
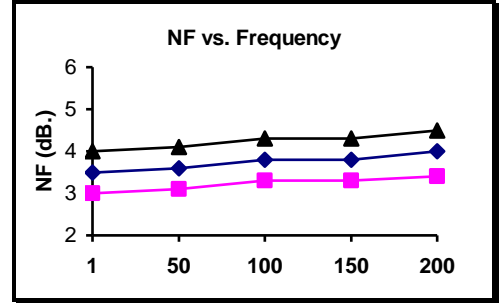
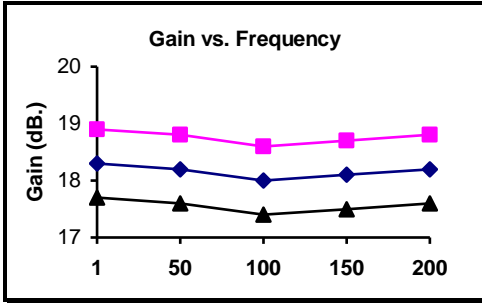


FINAL TEST REPORT

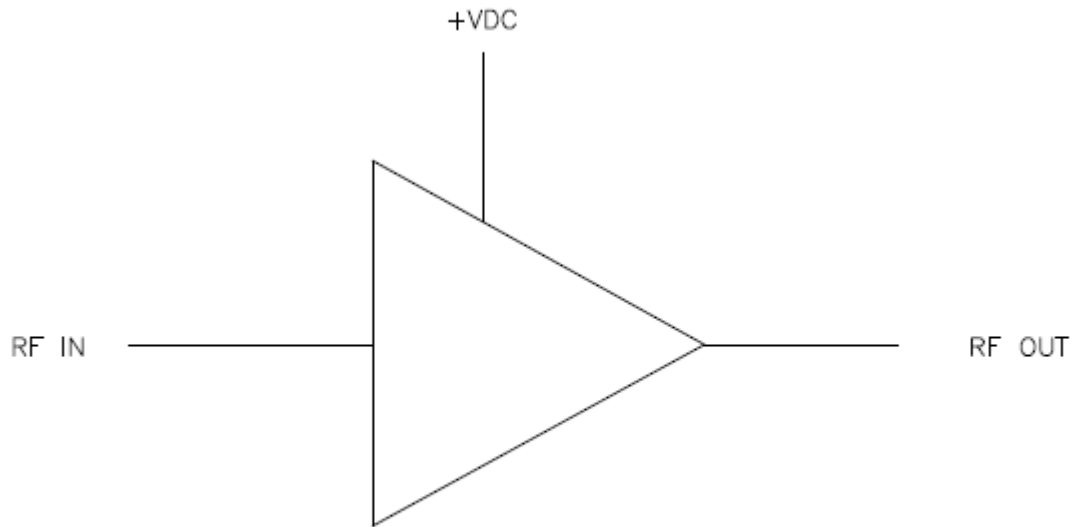
TEST	LIMIT / S/N	ACTUAL DATA
Gain 1 MHz to 200 MHz	17.0 dB min 20.0 dB max	18.9 19.1
Gain Flatness (peak to peak) 1 MHz to 200 MHz	±1.0 dB max	±0.1
Noise Figure 1 MHz to 200 MHz	5.0 dB max	4.0
DC Current at +18 Vdc	280 mA max	210
Input VSWR 1 MHz to 200 MHz	2.0: 1 max	1.3
Output VSWR 1 MHz to 200 MHz	2.0: 1 max	1.5
Power Output @ 1dB Comp @ 1 MHz to 200 MHz	+26.0 dBm min	>28
IP3 @ Pout = +15.0 dBm 1) F(1,2)= 5, 6 MHz Fc(4, 7 MHz) 2) F(1,2)= 198, 199 MHz Fc(197, 200 MHz)	41.0 dBm min	43.0
IP2 @ Pout = +15.0 dBm 1) F(1+2) = 2 MHz +198 MHz Fc = 200 MHz 2) F(1-2) = 200 MHz - 198 MHz Fc = 2 MHz	60.0 dBm min	73.0
HIP2 (2 nd harm)	63.0 dBm min	71.0
Stability Test : For all frequencies Where $ S_{21} > 0\text{dB}$	0 dB max	<0

Typical Performance Curves

■ --55°C ◆ --25°C ▲ --85°C



FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED