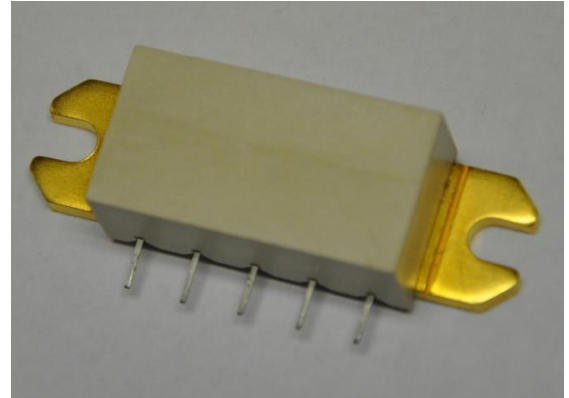


Features: (typical values)

- Ultra High Linearity
- Low Noise Figure
- Rugged Construction
- Single voltage supply
- Usable for 50 ohm operation
- Unconditional Stability
- No external components required

**20 – 550 MHz
22dB Ultra-linear
Amplifier**



Maximum Ratings

Storage temperature -40°C to +100°C
 DC Operating Voltage +26.0 volts
 RF Input Voltage 40 dBmV max.
 Operating Base Temp. +100°C

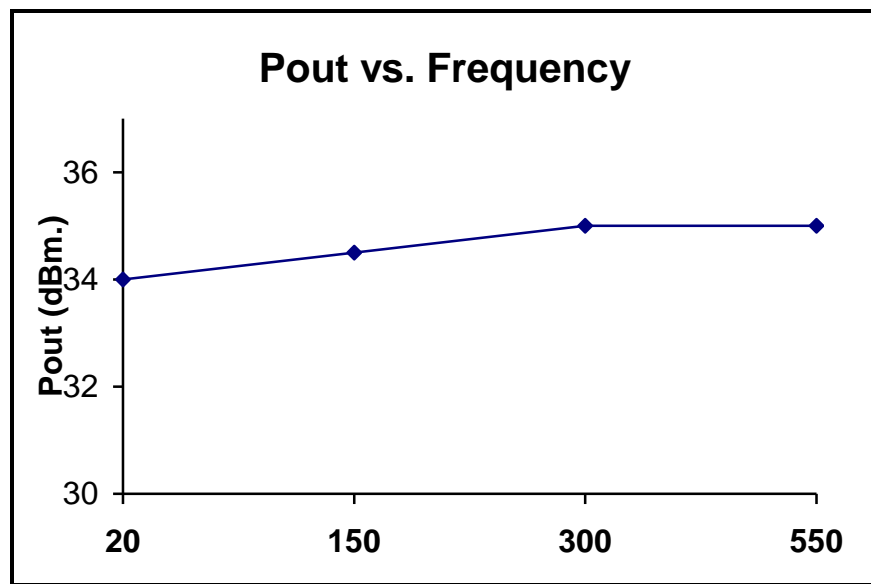
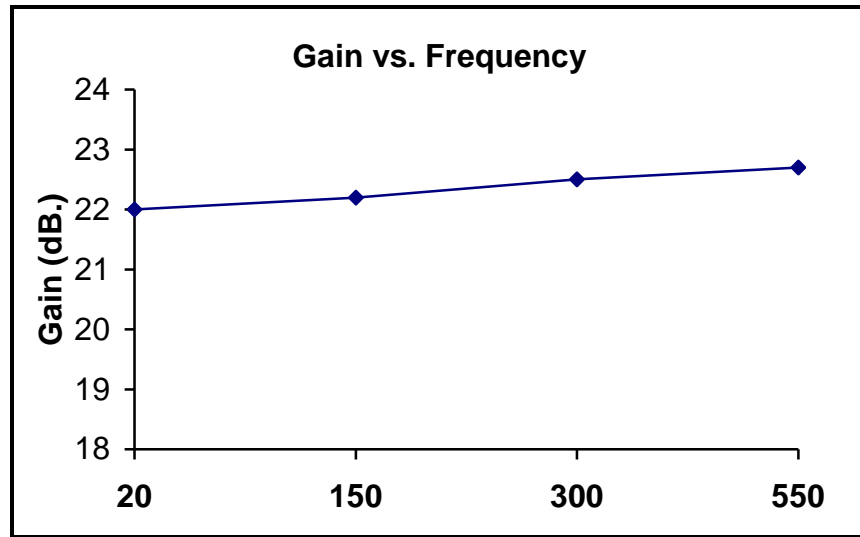
Specifications @ Tcase = 30°C (Referenced to 50 ohms)

Parameter	Typical Conditions	Min Value	Max Value	Units
Frequency Range		20	550	MHz.
Power Gain	F = 50MHz.	21.0	23.0	dB.
Cable equivalent slope	F = 40MHz. TO 550MHz.	0	1.0	dB.
Gain Flatness (peak to valley)	F = 40MHz. TO 550MHz.		0.8	dB.
VSWR In	1.9:1		2.2:1	dB.
VSWR In	1.9;1		2.2:1	dB.
IP ₃ 2 tones @ +15dbm per tone	52	49		dBm.
IP ₂ 2 tones @ +15dbm per tone	80	70		
P1dB	+35	33		dbm
Noise Figure (NF)	2.3 dB		4.0	dB.
Total Current (I _{TOT})	+24V/400mA		440	mA.

FINAL ELECTRICAL TEST REPORT
RECORD DATA @ +25°C ONLY

TEST Vdc +24V	LIMITS +25°C	ACTUAL DATA
Power Gain 20 MHz – 550 MHz	21.0 dB min 23.0 dB max	21.5 22.2
Gain Flatness (peak to peak) 20 MHz – 550 MHz	1.0 dB pp max	0.7
Noise Figure	4.0 dB max	2.22
DC Current at +24 Vdc	440 mA max	421
P1dB	33.0 dBm Min	>34.0
VSWR In	2.2:1 max	1.97
VSWR Out	2.2 :1 max	1.9
IP3 @ Pout = +15.0 dBm 1) F(1,2)= 22,24 MHz Fc(20,26 MHz) 2.)F(1,2)= 548,549 MHz Fc(547,550) MHz)	+49.0 dBm min	50.0
IP2 @ Pout = +15 dBm 1) (F1-F2) = (550-530) MHz Fc = 20 MHz 2) (F1+F2) = (210+340) MHz Fc = 550 MHz	+70.0 dBm min	81.0
Stability Test for all frequency range where S21 > 0 dB	0 dB max	<0

Typical Performance Curves @ 25°C



OUTLINE DRAWING

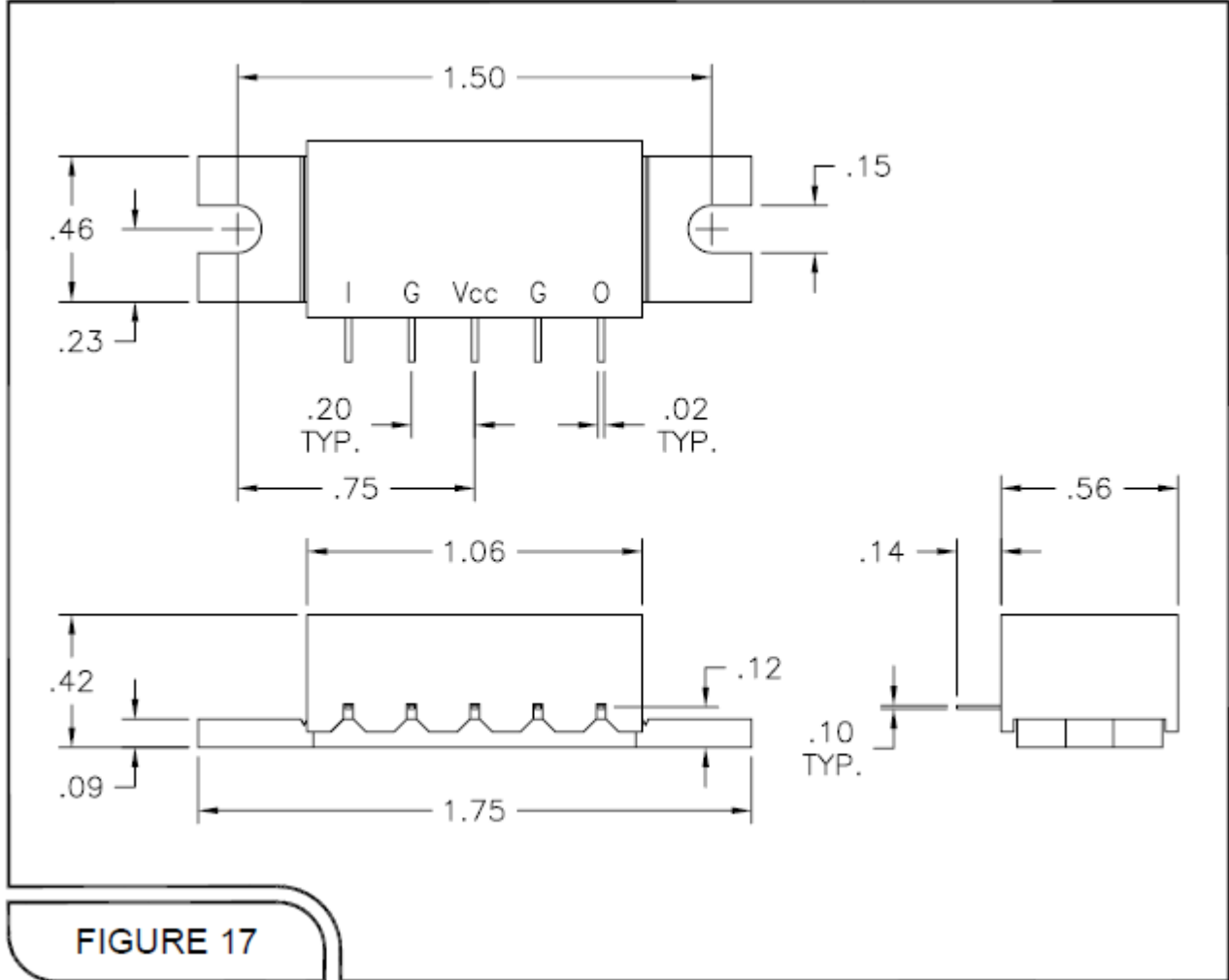
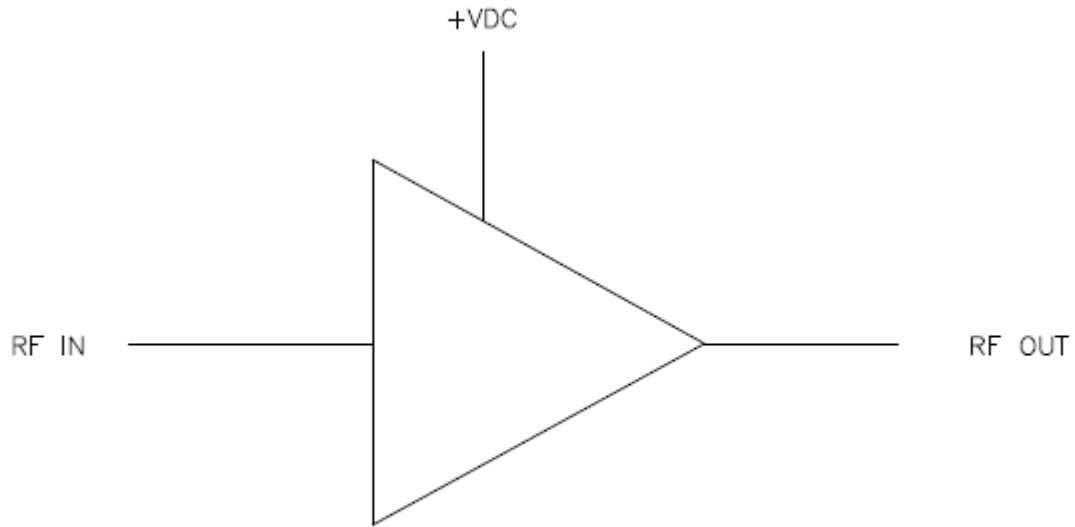


FIGURE 17

Pin Configuration

PIN#	Description
I	Input
G	Ground
Vcc	+24V.
O	Output

FUNCTIONAL BLOCK DIAGRAM



NO EXTERNAL COMPONENT REQUIRED