

RF AMPLIFIER

MODEL *TR9604*

Available as: RN9604, 4 Pin Surface Mount (SM19)
BR9604, Connectorized Housing (H2)

Features

- High Output Power: +21 dBm Typical
- High Gain: +23 dB Typical

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 500 MHz	30 - 500 MHz
Gain (dB)	23	21.0 Min.
Power @ 1 dB Comp. (dBm)	+21	+19.0 Min.
Reverse Isolation (dB)	- 32	- 30 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	5.0	6.0 Max.
Power Vdc	+15	+15
mA	125	140 Max.

Note: Care should always be taken to effectively ground the case of each unit.

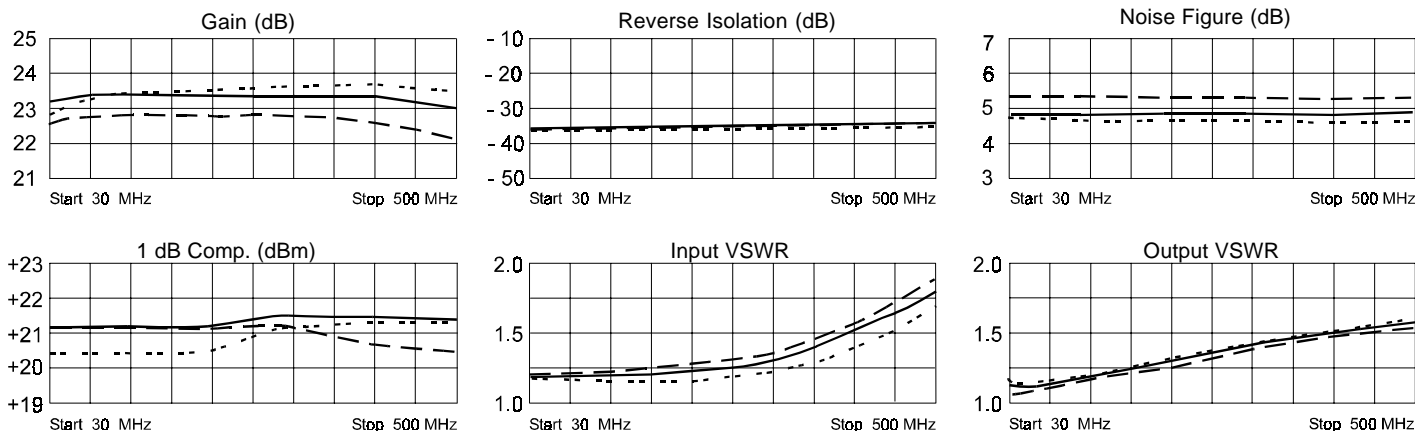
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +46 (Typ.)
Second Order Two Tone Intercept Point +40 (Typ.)
Third Order Two Tone Intercept Point +33 (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
Storage Temperature -62°C to + 125 °C
Case Temperature + 125 °C
DC Voltage + 18 Volts
Continuous RF Input Power + 13 dBm
Short Term RF Input Power 50 Milliwatts
(1 Minute Max.)
Maximum Peak Power 0.5 Watt
3 µsec Max.)

Typical Performance Data



Legend ——— + 25 °C - - - - + 85 °C -55 °C

Linear S-Parameters

FREQ. MHz	Mag	S11 Deg	Mag	S21 Deg	Mag	S12 Deg	Mag	S22 Deg
10	.07	-19	13.69	22	.02	2	.09	48
30	.08	-7	14.45	-3	.01	-2	.07	-4
50	.08	-7	14.54	-14	.02	0	.06	-29
100	.08	-10	14.63	-3	.02	2	.09	-63
200	.09	-7	14.72	-79	.02	1	.15	-101
300	.13	-8	14.81	-121	.02	4	.18	-129
400	.20	-22	14.65	-164	.02	6	.21	-149
500	.30	-43	14.06	150	.02	-3	.23	-167

Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001