

RF AMPLIFIER

MODEL TR9604

Available as: TR9604, 4 Pin TO-8B (T8)
 RN9604, 4 Pin Surface Mount (SM19)
 BR9604, SMA Connectorized Housing (H2)

Features

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

Typical Intermodulation Performance at 25 °C

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

Specifications

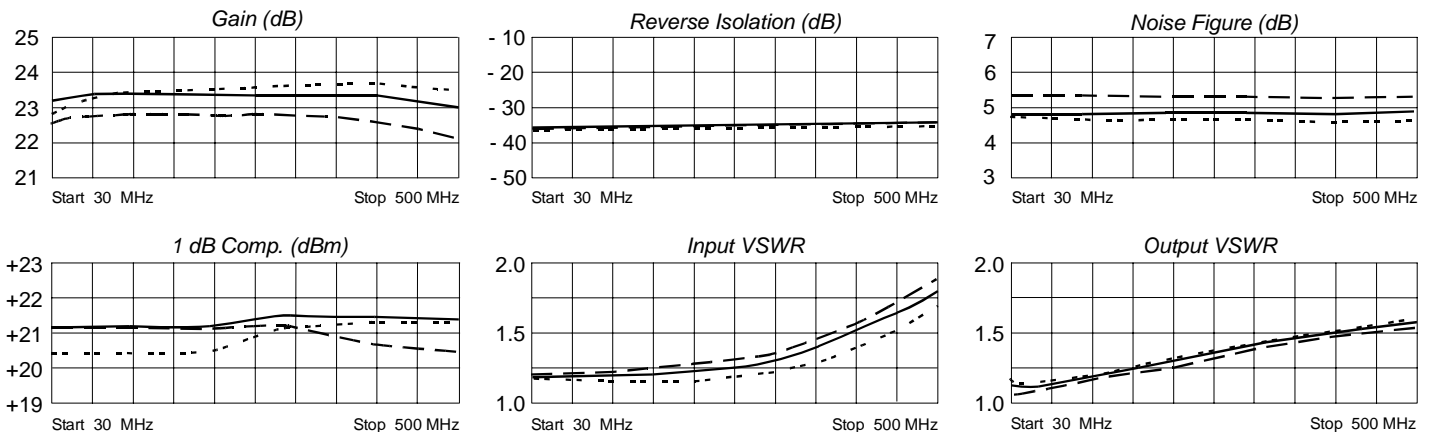
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 500 MHz	30 - 500 MHz
Gain (dB)	23	21.0 Min.
Power @ 1 dB Comp. (dBm)	+21	+19.0 Min.
Reverse Isolation (dB)	-32	-30 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	5.0	6.0 Max.
Power Vdc	+15	+15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

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

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	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	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



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 3/30/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001