

RF AMPLIFIER

MODEL TR9737

Available as: TR9737, 4 Pin TO-8B (T8)
 RN9737, 4 Pin .525" Sq. Surface Mount (SM19)
 BR9737, SMA Connectorized Housing (H2)

Features

- GaAs FET: Low Noise Figure: <4.0 dB Typical
- High Output Power: +24 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	100 - 2000 MHz	200 - 2000 MHz
Gain (dB)	10.5	9.5 Min.
Power @ 1 dB Comp. (dBm)	+24	+23.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<4.0	5.0 Max.
VSWR Vdc	+15	+15
mA	150	160 Max.

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

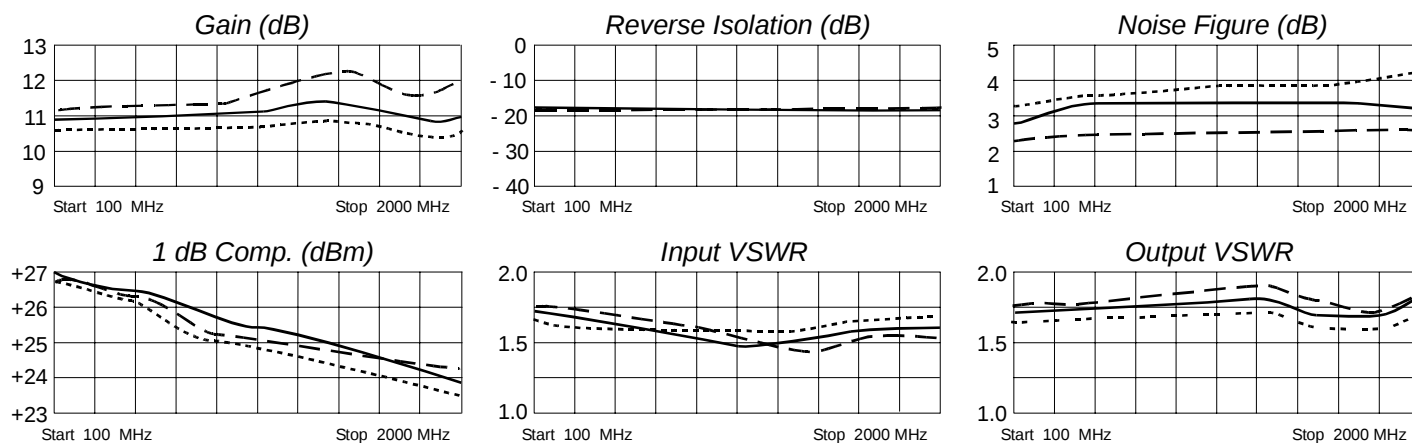
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.... +54 dBm (Typ.)
 Second Order Two Tone Intercept Point.... +49 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +38 dBm (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 + 18 dBm
 Short Term RF Input Power.... 100 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
100	.24	179	2.97	171	.13	- 3	.26	163
200	.24	171	2.95	161	.13	- 7	.26	147
500	.20	154	2.93	132	.14	-18	.24	101
1000	.08	133	3.01	84	.15	-41	.24	24
1500	.09	-140	3.11	29	.16	-69	.22	-54
2000	.15	177	3.00	-34	.16	-106	.24	-127



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