

RF AMPLIFIER

MODEL *TM9702*

Available as: TM9702, 4 Pin TO-8 (T4)
 TN9702, 4 Pin Surface Mount (SM3)
 BX9702, SMA Connectorized Housing (H1)

Features

- GaAs FET; Medium Gain: 12 dB Typical
- High Output: +20 dBm 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 +31 dBm (Typ.)

Specifications

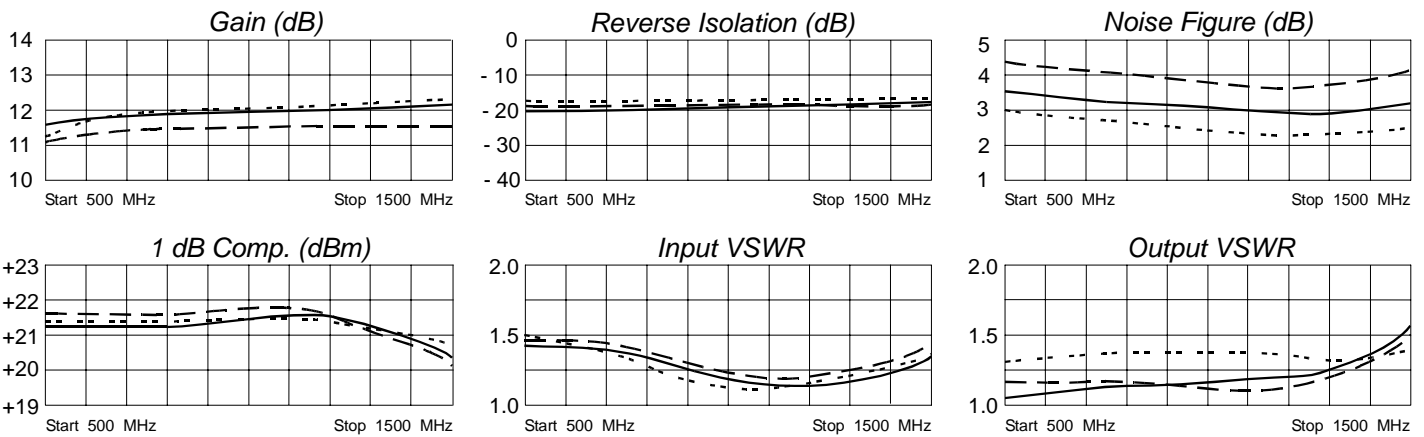
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	500 - 1500 MHz	500 - 1500 MHz
Gain (dB)	12	10.5 Min.
Power @ 1 dB Comp. (dBm)	+20	+19.0 Min.
Reverse Isolation (dB)	-18	-16 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	3.0	4.5 Max.
Power Vdc	+8	+8
mA	105	110 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 10 Volts
 Continuous RF Input Power + 20 dBm
 Short Term RF Input Power 200 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

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

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
300	.19	- 20	3.61	172	.09	- 1	.07	62
500	.17	- 18	3.74	148	.10	- 18	.02	177
700	.14	- 29	3.97	127	.10	- 34	.07	170
900	.08	43	3.99	106	.10	- 48	.10	139
1100	.02	-174	3.97	94	.11	- 68	.10	104
1300	.11	132	3.79	61	.11	- 97	.07	53
1500	.23	121	3.63	38	.11	-108	.09	- 46



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