

RF AMPLIFIER

MODEL *TM9324*

Available as: TM9324, 4 Pin TO-8 (T4)
 TN9324, 4 Pin Surface Mount (SM3)
 FP9324, 4 Pin Flatpack (FP4)
 BX9324, Connectorized Housing (H1)

Features

- Medium Gain: 16 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +43 dBm (Typ.)
 Second Order Two Tone Intercept Point +37 dBm (Typ.)
 Third Order Two Tone Intercept Point +19 dBm (Typ.)

Specifications

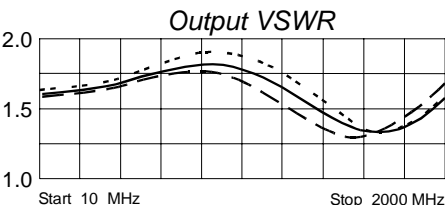
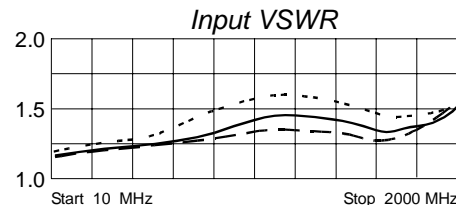
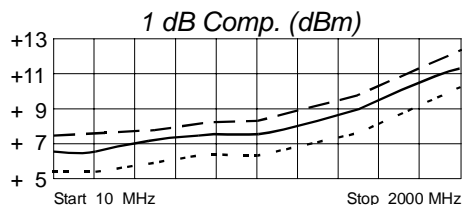
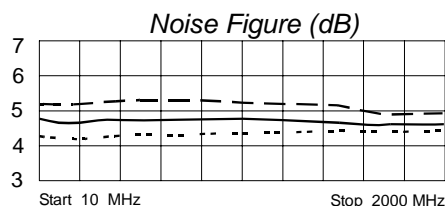
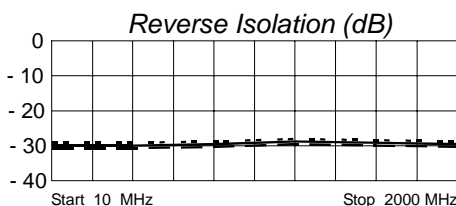
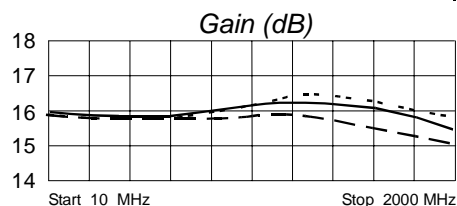
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 2000 MHz	10 - 2000 MHz
Gain (dB)	16	14.0 Min.
Power @ 1 dB Comp. (dBm)	+6.5	+4.5 Min.
Reverse Isolation (dB)	-28	-27 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.8:1	2.0:1 Max.
Noise figure (dB)	4.75	6.0 Max.
Power Vdc	+15	+15
mA	38	43 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	.10	-173	6.98	0	.03	4	.21	-176
50	.11	177	6.88	-8	.03	-0	.22	-180
100	.11	172	6.84	-16	.03	1	.22	178
250	.12	156	6.83	-39	.03	-4	.24	173
500	.15	129	6.90	-79	.03	-3	.28	158
750	.18	100	7.01	-119	.03	-7	.31	132
1000	.21	70	7.17	-160	.03	-11	.30	98
1250	.18	44	7.04	158	.03	-21	.23	55
1500	.14	39	6.92	117	.03	-43	.15	-9
1750	.16	50	7.04	75	.03	-46	.16	-99
2000	.27	29	7.61	22	.03	-54	.30	-165



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 3/19/03

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