

RF AMPLIFIER

MODEL *TM9327*

Available as: TM9327, 4 Pin TO-8 (T4)
 TN9327, 4 Pin Surface Mount (SM3)
 FP9327, 4 Pin Flatpack (FP4)
 BX9327, Connectorized Housing (H1)

Features

- Medium Gain: 15 dB Typical
- Medium Output Power: +17.5 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	10 - 2000 MHz	10 - 2000 MHz
Gain (dB)	15	13.0 Min.
Power @ 1 dB Comp. (dBm)	+17.5	+16.0 Min.
Reverse Isolation (dB)	-27.5	-26.0 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<6.5	7.5 Max.
Power Vdc	+15	+15
mA	108	118 Max.

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

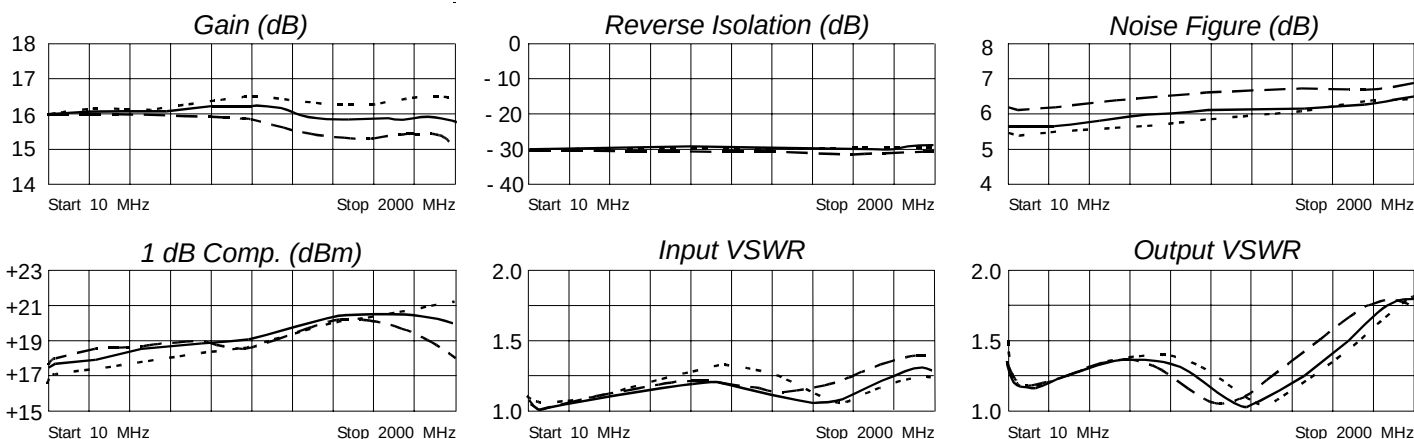
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +44 dBm (Typ.)
 Second Order Two Tone Intercept Point +38 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 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 +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	.03	126	6.32	8	.03	11	.15	136
50	.01	172	6.43	-7	.03	2	.08	164
100	.01	-150	6.44	-17	.03	-1	.08	177
250	.03	-141	6.40	-45	.03	-5	.10	-173
500	.06	-175	6.38	-90	.03	-11	.14	171
750	.08	150	6.44	-134	.03	-16	.14	143
1000	.08	113	6.59	179	.03	-24	.09	104
1250	.05	85	6.37	132	.03	-38	.01	-141
1500	.04	111	6.27	85	.03	-48	.12	-153
1750	.09	105	6.32	35	.04	-55	.22	166
2000	.11	65	5.74	-27	.04	-76	.26	111



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 · 2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001