

RF AMPLIFIER

MODEL *TM9128*

Available as: TM9128, 4 Pin TO-8 (T4)
 TN9128, 4 Pin Surface Mount (SM3)
 FP9128, 4 Pin Flatpack (FP4)
 BX9128, Connectorized Housing (H1)

Features

- Medium Output Power: +15 dBm Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +49 dBm (Typ.)
 Second Order Two Tone Intercept Point +43 dBm (Typ.)
 Third Order Two Tone Intercept Point +29 dBm (Typ.)

Specifications

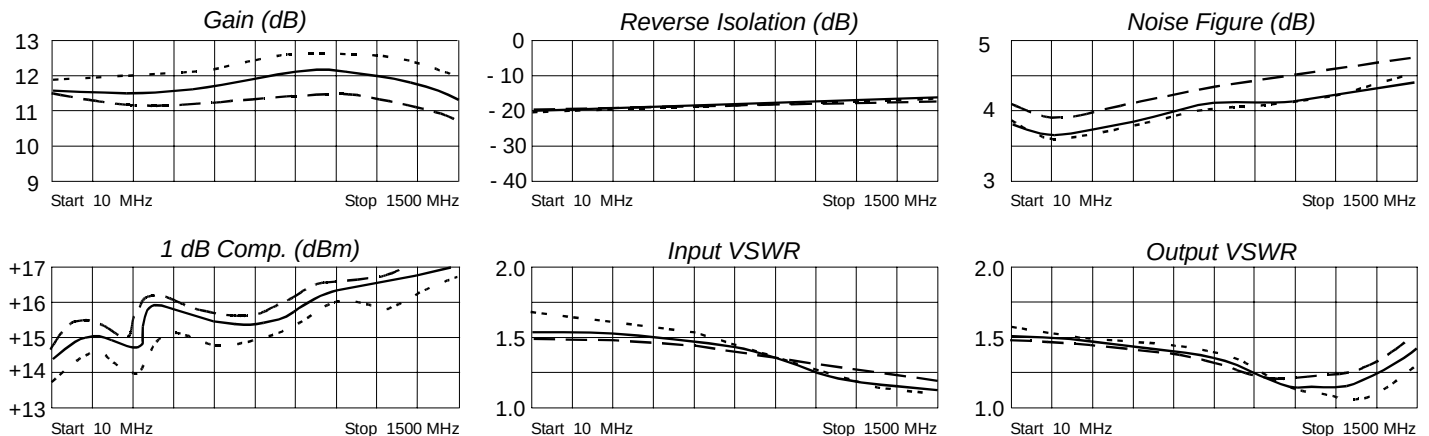
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1500 MHz	10 - 1500 MHz
Gain (dB)	11.5	10 Min.
Power @ 1 dB Comp. (dBm)	+15	+13.5 Min.
Reverse Isolation (dB)	-14.4	-13.5 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	4.5	6.0 Max.
Power Vdc	+15	+15
mA	40	45 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	.22	-161	3.85	-174	.14	7	.24	167
50	.22	-177	3.89	176	.15	1	.21	168
100	.22	179	3.90	169	.15	- 0	.21	163
300	.21	167	3.88	146	.15	- 4	.20	132
500	.20	157	3.92	124	.16	- 8	.19	100
700	.17	149	3.98	100	.16	-14	.16	67
900	.14	140	4.02	76	.17	-19	.11	25
1100	.10	139	4.04	51	.17	-24	.07	- 42
1300	.09	131	3.96	23	.18	-31	.07	-143
1500	.05	128	3.71	- 5	.19	-37	.16	167



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 07/26/04

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