

RF AMPLIFIER

MODEL *TM9129*

Available as: TM9129, 4 Pin TO-8 (T4)
 TN9129, 4 Pin Surface Mount (SM3)
 FP9129, 4 Pin Flatpack (FP4)
 BX9129, Connectrized Housing (H1)

Features

- High Output Power: +20 dBm Typical
- Environmental Screening Available
- Operating Temp. -55 °C to +85 °C

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+48 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+42 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+34 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)	8	6.0 Min.
Power @ 1 dB Comp. (dBm)	+20	+19 Min.
Reverse Isolation (dB)	-15	-13.0 Min.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	<8	9.5* Max.
Power Vdc	+15	+15
mA	95	100 Max.

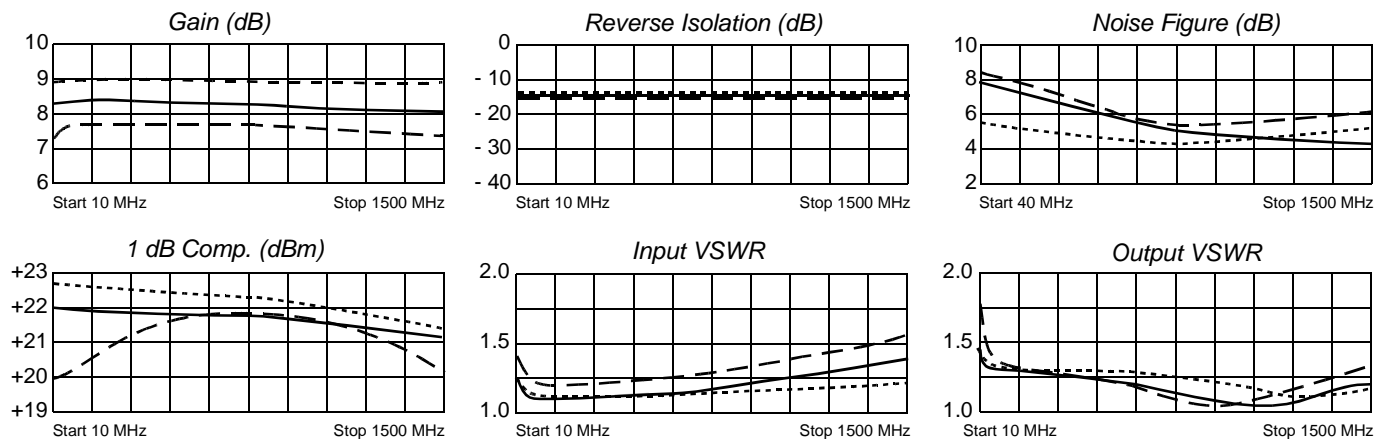
Maximum Ratings

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 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.

* Noise Figure will be Greater Below 40 MHz

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	.11	- 81	2.58	-167	.165	10	.19	151
50	.03	- 98	2.64	-180	.168	1	.14	166
100	.02	-118	2.65	176	.169	0	.13	167
250	.02	-141	2.66	167	.171	- 7	.12	163
500	.02	-171	2.64	153	.173	- 15	.10	159
750	.03	177	2.59	139	.167	- 23	.09	152
1000	.04	177	2.54	125	.164	- 31	.08	139
1250	.06	163	2.50	112	.158	- 40	.05	120
1500	.06	161	2.42	99	.144	- 46	.02	25



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 08/05/04

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