

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)
 PN9129, Reduced Size Surface Mount (SM11)

Features

- High Output Power: > +24 dBm Typical
- High Third Order Intercept: +34 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 - 1500 MHz	10 - 1500 MHz
Gain (dB)	8	6.0 Min.
Power @ 1 dB Comp. (dBm)	>+20.5	+19 Min.
Reverse Isolation (dB)	- 15	-13.0 Max.
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.

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

Typical Intermodulation Performance at 25 ° C

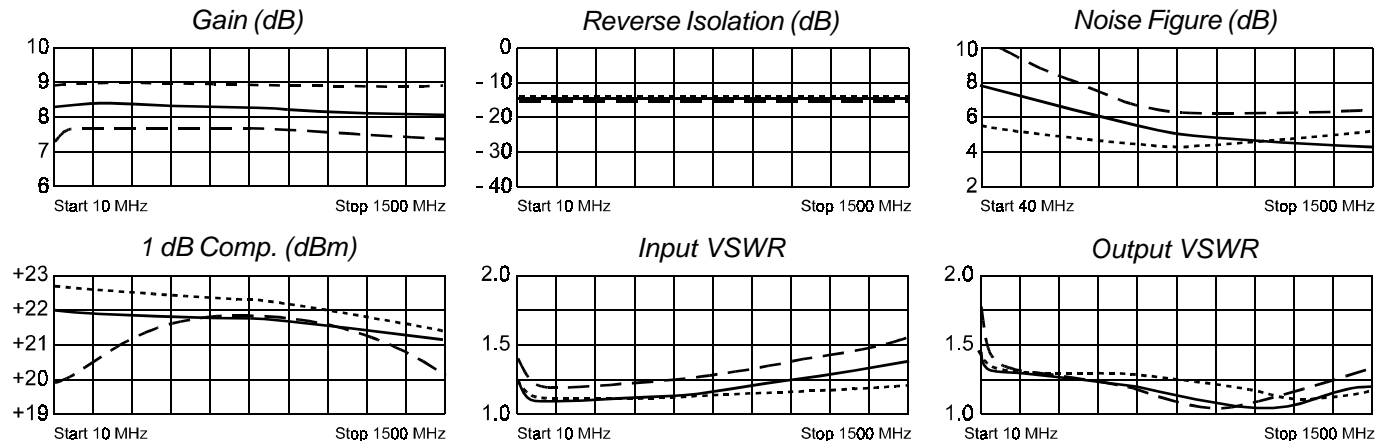
Second Order Harmonic Intercept Point +48 (Typ.)
 Second Order Two Tone Intercept Point +42 (Typ.)
 Third Order Two Tone Intercept Point +34 (Typ.)

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 + 18 dBm
 Short Term RF Input Power 200 Milliwatts
 (1 Minute Max.)
 Maximum Peak Power 0.5 Watt
 (3 µsec Max.)

* 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

Amplifonix

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