

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

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.
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.

* Noise Figure will be Greater Below 40 MHz

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.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C

Storage Temperature -62°C to + 125 °C

Case Temperature + 125 °C

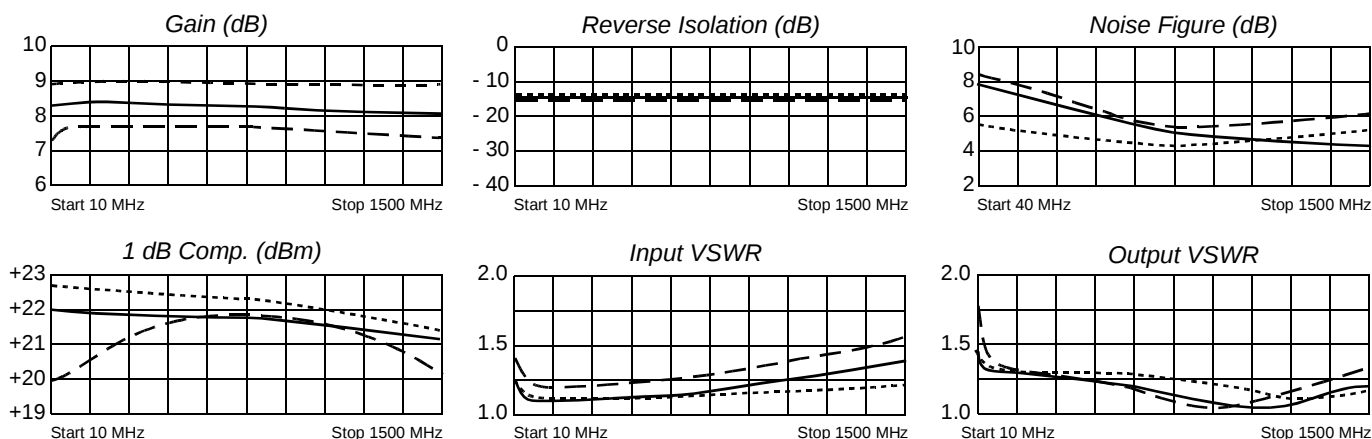
DC Voltage + 18 Volts

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.)

Typical Performance Data



Legend ——— + 25 °C - - - - + 85 °C -55 °C

Linear S-Parameters

FREQ. MHz	----- S11 ----- Mag. Deg.	----- S21 ----- Mag. Deg.	----- S12 ----- Mag. Deg.	----- S22 ----- 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



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