

RF AMPLIFIER

MODEL *TM9127*

Available as: TM9127, 4 Pin TO-8 (T4)
 TN9127, 4 Pin Surface Mount (SM3)
 FP9127, 4 Pin Flatpack (FP4)
 BX9127, Connectorized Housing (H1)

Features

- Medium Gain: 9 dB Typical
- Medium Output Power: +16 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)	9	8.0 Min.
Power @ 1 dB Comp. (dBm)	+16.0	+14.0 Min.
Reverse Isolation (dB)	- 11	- 10 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<6.0	8.0 Max.
Power Vdc	+15	+15
mA	52	57 Max.

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

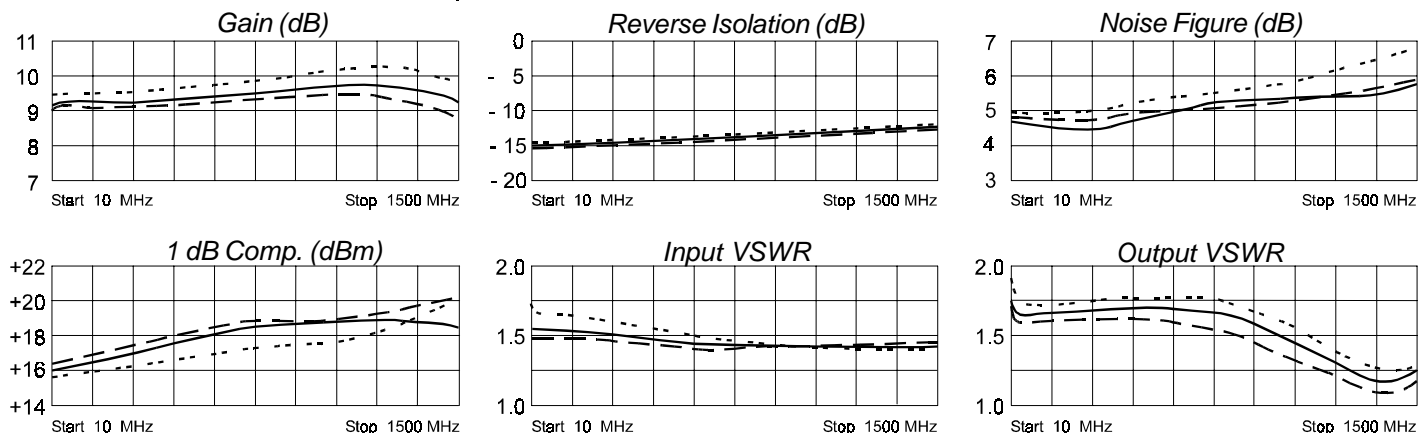
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +48 (Typ.)
 Second Order Two Tone Intercept Point +42 (Typ.)
 Third Order Two Tone Intercept Point +32 (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	.23	-156	2.83	-173	.17	9	.28	165
100	.22	178	2.89	168	.18	0	.24	162
250	.21	167	2.89	149	.18	-3	.25	141
500	.19	156	2.92	117	.19	9	.25	107
750	.17	148	2.92	85	.21	-17	.24	77
1000	.17	135	2.96	52	.23	-26	.20	53
1250	.17	104	2.95	18	.25	-39	.13	41
1500	.17	48	2.81	-19	.28	-53	.11	80
1750	.23	-19	2.43	-58	.30	-72	.21	77

Amplifonix

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