RF AMPLIFIER
MODEL *TM9106*

Available as: TM9106, 4 Pin TO-8 (T4)
TN9106, 4 Pin Surface Mount (SM3)
FP9106, 4 Pin Flatpack (FP4)
BX9106,Connectorized Housing (H1)

Features

- High Output Power: +19 dBm Typical
- Medium Gain: +12 dB Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	12	10.5 Min.
Power @ 1 dB Comp. (dBm)	+19	+16 Min.
Reverse Isolation (dB)	-14.5	-13.5 Max.
VSWR In Out	<1.75:1 <1.5:1	2.0:1 Max. 2.0:1 Max.
Noise Figure* (dB)	4.8	6.0 Max.
Power Vdc mA	+15 70	+15 75 Max.

Note: Care should always be taken to effectively ground the case of each unit.
*Noise Figure is 1 dB higher above 900 MHz.

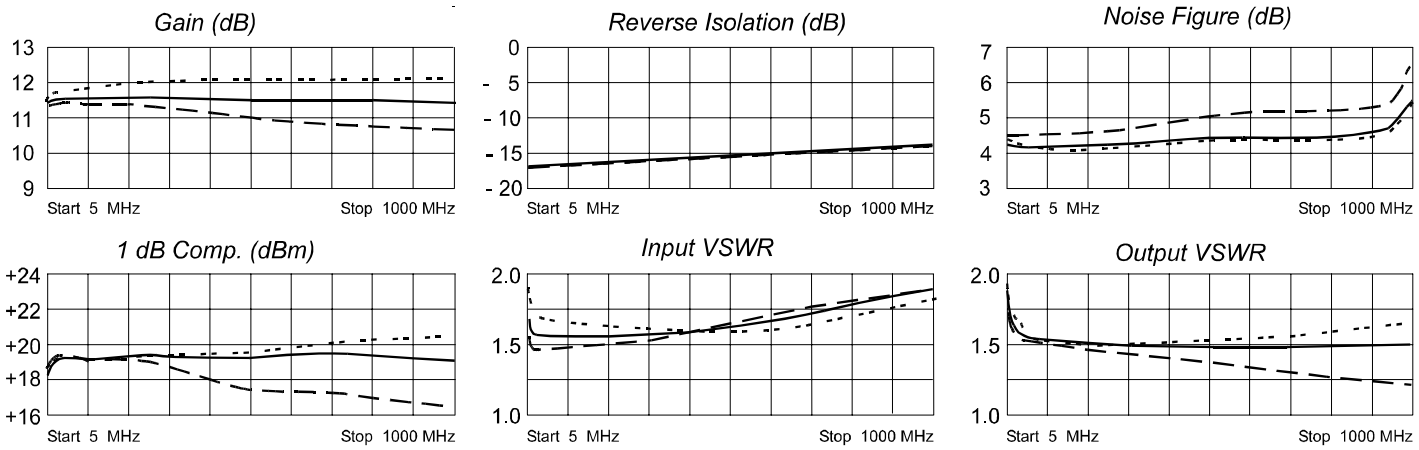
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+38 dBm (Typ.)
Second Order Two Tone Intercept Point.....+32 dBm (Typ.)
Third Order Two Tone Intercept Point.....+27 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature .....-55ºC to +100 ºC
Storage Temperature .....-62ºC to +125 ºC
Case Temperature ..... +125 ºC
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 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ.	S11		S21		S12		S22	
MHz	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.27	-133	3.82	-164	.14	16	.30	153
10	.23	-156	3.88	-173	.15	8	.24	163
50	.22	-177	3.93	176	.15	2	.22	168
100	.23	179	3.93	168	.15	1	.22	165
200	.22	174	3.92	156	.15	1	.21	153
400	.23	167	3.91	131	.16	0	.20	131
600	.25	160	3.90	105	.17	-2	.20	110
800	.28	149	3.81	79	.18	-5	.19	90
1000	.32	133	3.69	52	.20	-9	.19	72

Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532
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www.SpectrumMicrowave.com *Spectrum Microwave · 2707 Black Lake Place · Philadelphia, Pennsylvania 19154 · PH (215) 464-4000 · Fax (215) 464-4001*