

RF AMPLIFIER

MODEL *TM9123*

Available as: TM9123, 4 Pin TO-8 (T4)
 TN9123, 4 Pin Surface Mount (SM3)
 FP9123, 4 Pin Flatpack (FP4)
 BX9123, Connectorized Housing (H1)

Features

- Medium Gain: 12 dB Typical
- Medium Noise Figure: <4.0 dB 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)	12	10 Min.
Power @ 1 dB Comp. (dBm)	+4	+3 Min.
Reverse Isolation (dB)	-16	-14 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<4.0	4.5 Max.
Power Vdc	+15	+15
mA	14	16 Max.

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

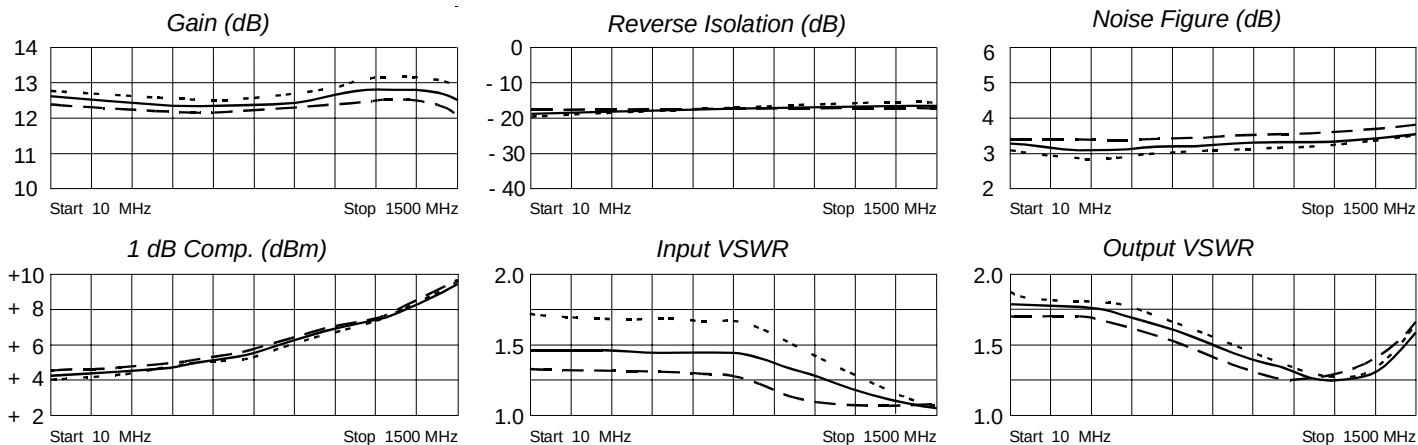
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+28 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+22 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+17 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 + 13 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power..... 0.5 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.20	-175	4.00	-178	.13	4	.30	-175
50	.19	173	3.98	175	.13	- 0	.29	174
100	.19	166	3.95	169	.13	- 0	.29	167
250	.19	143	3.92	153	.13	- 1	.28	147
500	.18	113	3.82	129	.13	- 3	.25	115
800	.18	75	3.80	99	.15	- 9	.19	76
1000	.14	54	3.84	80	.15	-16	.15	46
1200	.11	34	4.06	59	.16	-21	.12	- 2
1400	.05	- 1	4.20	33	.16	-28	.12	- 77
1600	.06	-170	4.09	2	.16	-32	.20	-144



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