

RF AMPLIFIER

MODEL *TM9323*

Available as: TM9323, 4 Pin TO-8 (T4)
 TN9323, 4 Pin Surface Mount (SM3)
 FP9323, 4 Pin Flatpack (FP4)
 BX9323, Connectorized Housing (H1)

Features

- Medium Gain: 8.5 dB Typical
- Medium Output Power: +15 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 - 2000 MHz	10 - 2000 MHz
Gain (dB)	8.5	7.5 Min.
Power @ 1 dB Comp. (dBm)	+15	+14.0 Min.
Reverse Isolation (dB)	-13	-11 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	5.5	7.5 Max.
Power Vdc	+15	+15
mA	50	55 Max.

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

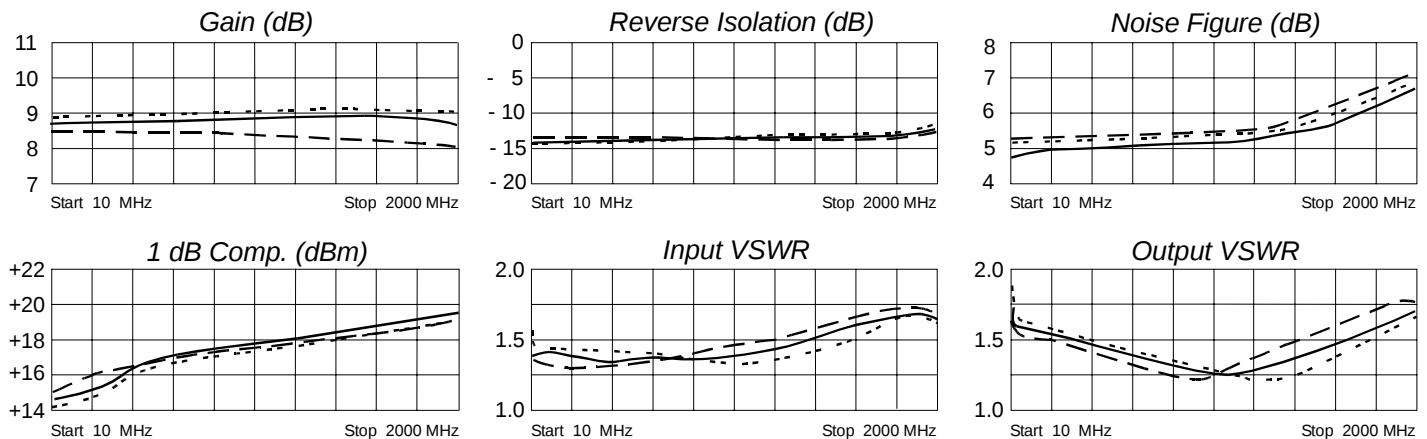
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 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
10	.16	-134	2.53	-170	.18	13	.26	152
100	.14	-173	2.66	173	.19	2	.18	160
250	.15	-175	2.68	158	.19	1	.17	143
500	.15	-180	2.69	135	.20	- 2	.15	108
750	.17	-177	2.70	113	.20	- 6	.12	62
1000	.17	-179	2.73	90	.21	- 9	.11	7
1250	.18	-178	2.78	67	.21	-14	.14	- 47
1500	.21	-168	2.79	44	.21	-16	.18	- 88
1750	.24	-148	2.74	21	.23	-19	.23	-120
2000	.24	-117	2.68	- 5	.26	-24	.24	-149



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