

RF AMPLIFIER

MODEL *TM9101*

Available as: TM9101, 4 Pin TO-8 (T4)
 TN9101, 4 Pin Surface Mount (SM3)
 FP9101, 4 Pin Flatpack (FP4)
 BX9101, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.4 dB Typical
- Medium Gain: 15 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	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	15	14.0 Min.
Power @ 1 dB Comp. (dBm)	+1	-2.0 Min.
Reverse Isolation (dB)	- 18	- 17 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	2.4	4.0 Max.
Power Vdc	+15	+15
mA	9	12 Max.

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

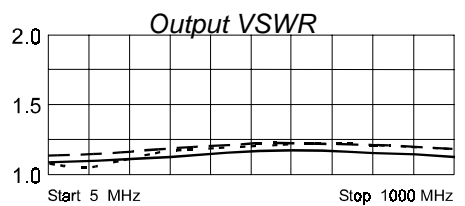
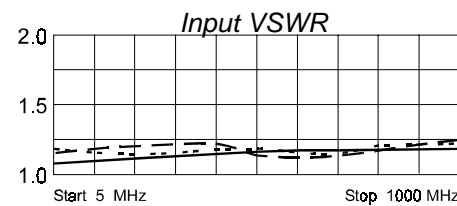
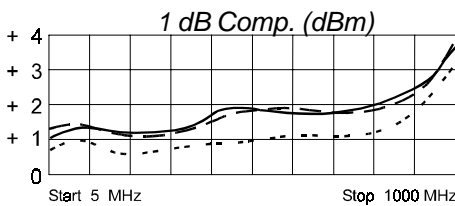
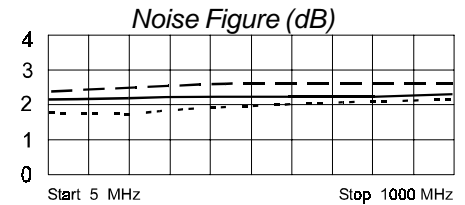
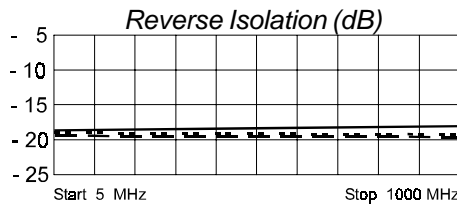
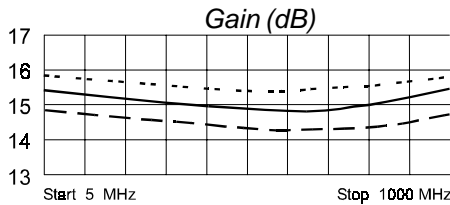
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +20 (Typ.)
 Second Order Two Tone Intercept Point +15 (Typ.)
 Third Order Two Tone Intercept Point +12 (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
5	.03	-11	5.89	-178	.11	3	.03	- 23
100	.04	21	5.82	165	.11	- 2	.04	12
200	.05	22	5.76	150	.11	- 6	.04	7
400	.07	14	5.61	121	.11	-12	.07	- 19
600	.08	- 4	5.50	92	.11	-19	.08	- 55
800	.08	-37	5.60	83	.11	-27	.07	- 94
1000	.11	-97	5.94	30	.12	-36	.05	-131



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