

RF AMPLIFIER

MODEL *TM9102*

Available as: TM9102, 4 Pin TO-8 (T4)
 TN9102, 4 Pin Surface Mount (SM3)
 FP9102, 4 Pin Flatpack (FP4)
 BX9102, Connectorized Housing (H1)

Features

- Medium Gain: 15 dB Typical
- Medium Output Power: +10 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	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	15	13.5 Min.
Power @ 1 dB Comp. (dBm)	+10	+7.5 Min.
Reverse Isolation (dB)	-17.5	-16.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3.0	4.5 Max.
Power Vdc	+15	+15
mA	23	25 Max.

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

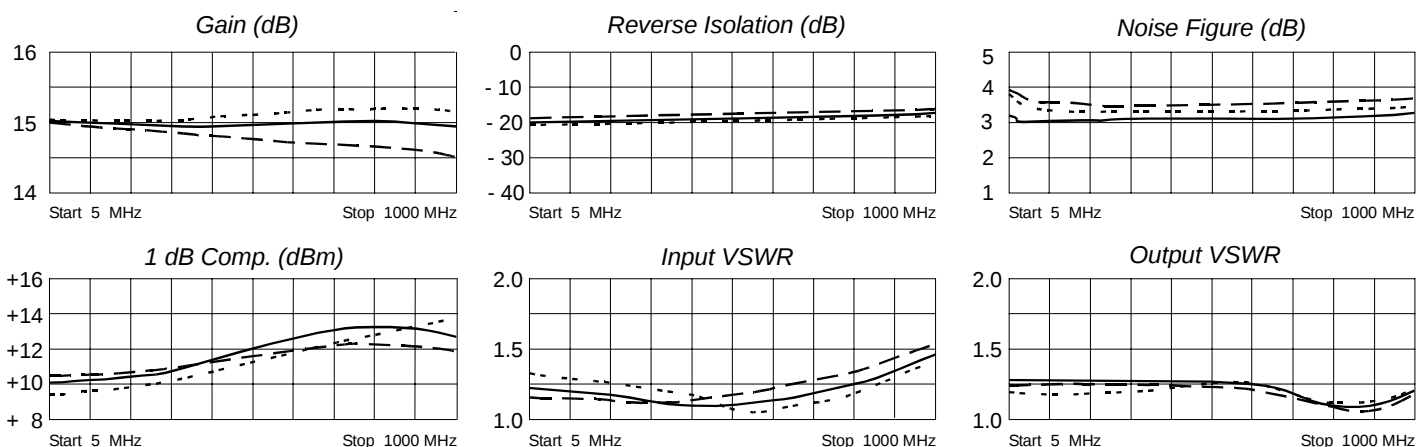
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+38 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+32 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+23 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



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	.12	-169	5.58	-178	.10	4	.14	-171
50	.11	179	5.58	172	.10	0	.14	169
100	.11	173	5.55	164	.11	- 2	.14	158
200	.10	168	5.52	147	.11	- 5	.14	138
400	.07	177	5.43	115	.11	-10	.14	103
600	.08	-163	5.39	83	.12	-18	.13	78
800	.10	-167	5.43	50	.13	-27	.09	78
1000	.08	-169	5.36	13	.14	-36	.17	108



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