RF AMPLIFIER
MODEL *TM9511*

Available as: TM9511, 4 Pin TO-8 (T4)
TN9511, 4 Pin Surface Mount (SM3)
FP9511, 4 Pin Flatpack (FP4)
BX9511, Connectrized Housing (H1)

Features

- Low Noise Figure: 2.3 dB Typical
- Operating Temp. - 55 ºC to + 85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+21 dBm (Typ.)
Second Order Two Tone Intercept Point.....+16 dBm (Typ.)
Third Order Two Tone Intercept Point.....+14 dBm (Typ.)

Specifications

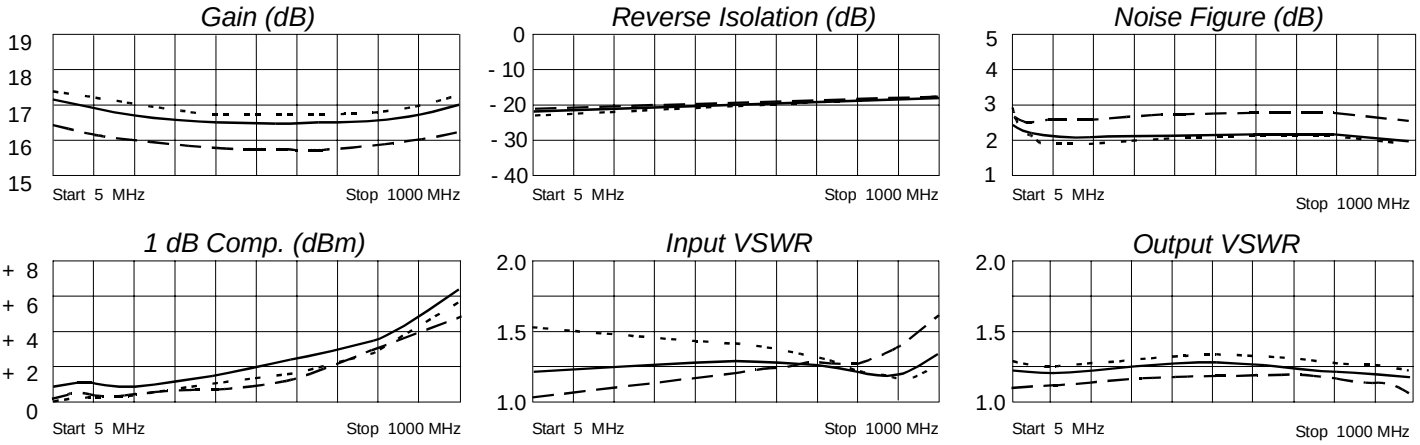
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5 - 1000 MHz	5 - 1000 MHz
Gain (dB)	16.5	15.0 Min.
Power @ 1 dB Comp. (dBm)	+1	-1 Min.
Reverse Isolation (dB)	-18.5	-18 Max.
VSWR In Out	<1.5:1 <1.5:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	2.3	3.0 Max.
Power Vdc mA	+15 9.5	+15 11 Max.

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

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 Wattts (3 µsec Max.)

Typical Performance Data



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
5	.11	-173	7.19	-177	.09	4	.10	-172
50	.11	173	7.04	172	.09	- 0	.09	159
100	.11	163	6.99	164	.09	- 2	.09	140
200	.11	145	6.89	149	.09	- 3	.10	109
400	.10	115	6.69	120	.10	- 8	.12	63
600	.10	88	6.62	91	.10	-13	.12	29
800	.08	60	6.76	61	.11	-21	.10	9
1000	.02	23	7.14	26	.12	-29	.11	- 4

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