

RF AMPLIFIER

MODEL *TM9164*

Available as: TM9164, 4 Pin TO-8 (T4)
 TN9164, 4 Pin Surface Mount (SM3)
 FP9164, 4 Pin Flatpack (FP4)
 BX9164, Connectorized Housing (H1)

Features

- Low Noise Figure: 3.6 dB Typical
- High Gain: 26 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 - 1200 MHz	10 - 1200 MHz
Gain (dB)	26	24.0 Min.
Power @ 1 dB Comp. (dBm)	+8.5	+6.5 Min.
Reverse Isolation (dB)	- 34	- 33 Max.
VSWR In	<1.6:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	3.6	4.5 Max.
Power Vdc	+15	+15
mA	35	40 Max.

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

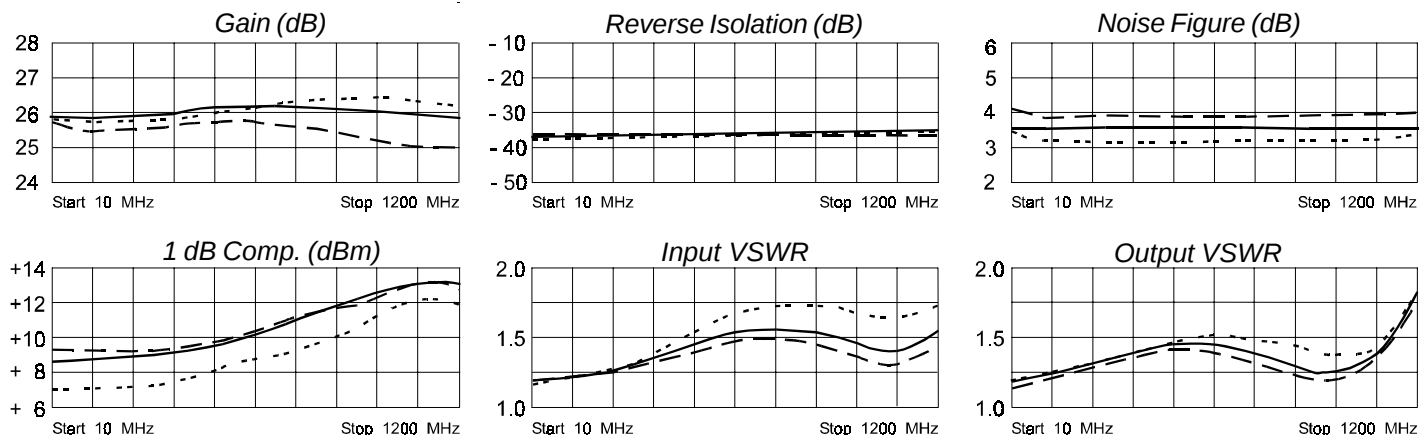
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +39 (Typ.)
 Second Order Two Tone Intercept Point +33 (Typ.)
 Third Order Two Tone Intercept Point +20 (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 + 6 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
10	.09 -173	19.73 - 1	.01 4	.08 -175
50	.09 -178	19.35 - 12	.01 -0	.09 -171
100	.09 178	19.33 - 24	.01 -6	.10 -168
300	.15 155	19.80 - 72	.01 7	.16 -178
500	.21 123	20.59 -122	.01 -3	.21 157
700	.25 90	20.46 -176	.01 3	.19 126
900	.22 64	19.55 129	.02 0	.12 109
1100	.16 64	19.09 72	.01 -5	.15 149
1200	.18 77	19.06 40	.02 -8	.25 140

Amplifonix

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