

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

- High Gain: 26 dB Typical
- Operating Temp. - 55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+39 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+33 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+20 dBm (Typ.)

Specifications

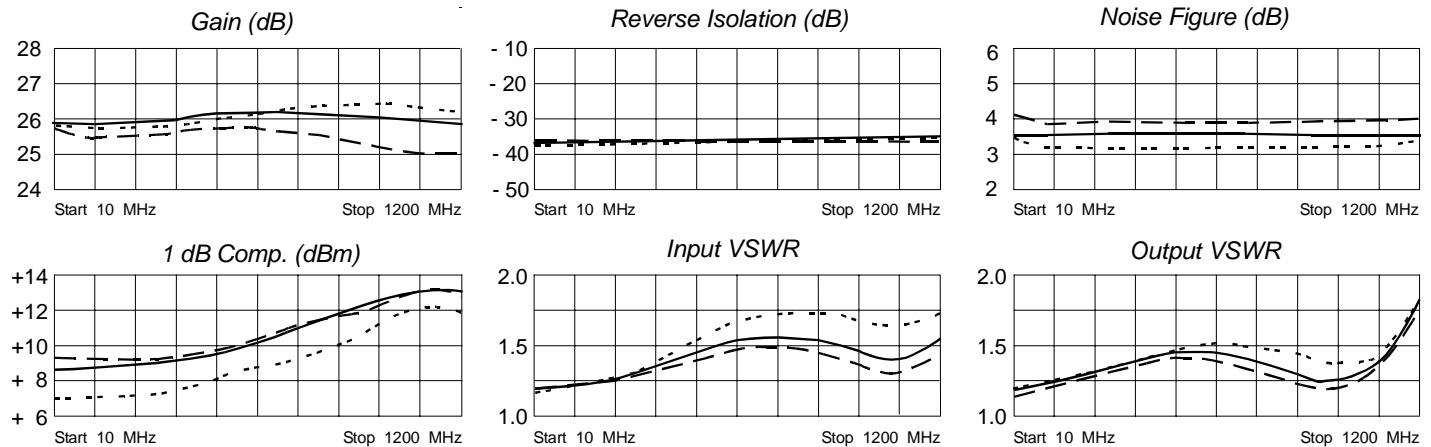
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1200 MHz	10 - 1200 MHz
Gain (dB)	26	24 Min.
Power @ 1 dB Comp. (dBm)	+8.5	+6.5 Min.
Reverse Isolation (dB)	-34	-33 Max.
VSWR In	<1.6:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3.6	4.5 Max.
Power Vdc	+15	+15
mA	35	40 Max.

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.)

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

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



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