

RF AMPLIFIER

MODEL *TM9134*

Available as: TM9134, 4 Pin TO-8 (T4)
 TN9134, 4 Pin Surface Mount (SM3)
 FP9134, 4 Pin Flatpack (FP4)
 BX9134, Connectorized Housing (H1)

Features

- High Gain: 16.5 dB Gain Typical
- Medium Output Power: +6 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	10-2000 MHz	10-2000 MHz
Gain (dB)	16.5	14.0 Min.
Power @ 1 dB Comp. (dBm)	+6	+3.0 Min.
Reverse Isolation (dB)	-28	-27 Max.
VSWR In	<1.5:1	<2.0:1 Max.
Out	<1.75:1	<2.0:1 Max.
Noise Figure (dB)	<4.5	6.0 Max.
Power Vdc	+15	+15
mA	35	40 Max.

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

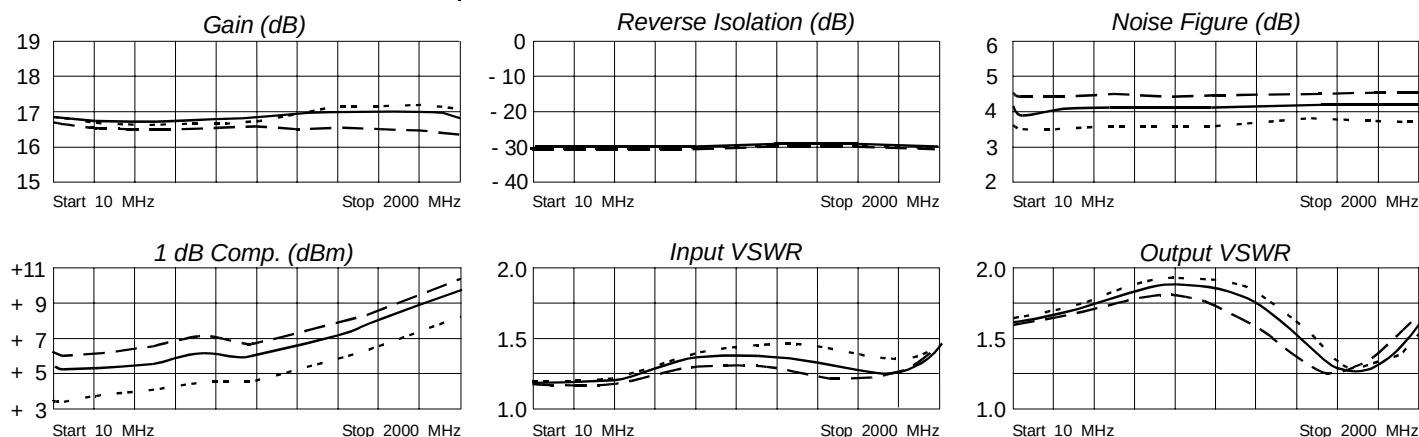
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point..... +39 dBm (Typ.)
 Second Order Two Tone Intercept Point..... + 33 dBm (Typ.)
 Third Order Two Tone Intercept Point..... +16 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 + 10 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	.01	-70	6.38	0	.03	4	.19	-174
50	0.00	-30	6.28	-8	.03	3	.19	-180
100	0.00	126	6.24	-16	.03	1	.19	178
250	.02	100	6.22	-38	.03	-7	.20	172
500	.05	102	6.32	-77	.03	-10	.24	160
750	.08	93	6.43	-117	.03	-20	.26	141
1000	.10	83	6.49	-156	.03	-31	.27	116
1250	.11	79	6.60	165	.04	-39	.24	88
1500	.11	93	6.81	127	.03	-64	.15	56
1750	.17	111	7.35	87	.03	-68	.04	-13
2000	.32	123	8.70	45	.03	-68	.13	-145



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