RF AMPLIFIER MODEL *TM9133*

Available as: TM9133, 4 Pin TO-8 (T4)
TN9133, 4 Pin Surface Mount (SM3)
FP9133, 4 Pin Flatpack (FP4)
BX9133,Connectorized Housing (H1)

Features

- Medium Gain: 9.5 dB Gain Typical
- Low Noise Figure: <4.5 dB Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	10-2000 MHz	10-2000 MHz
Gain (dB)	9.5	8.0 Min.
Power @ 1 dB Comp. (dBm)	+3	+2.0 Min
Reverse Isolation (dB)	-15	-14 Max.
VSWR In Out	<1.5:1 <1.5:1	<2.0:1 Max. <2.0:1 Max.
Noise Figure (dB)	<4.5	5.5 Max.
Power Vdc mA	+15 14	+15 16 Max.

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

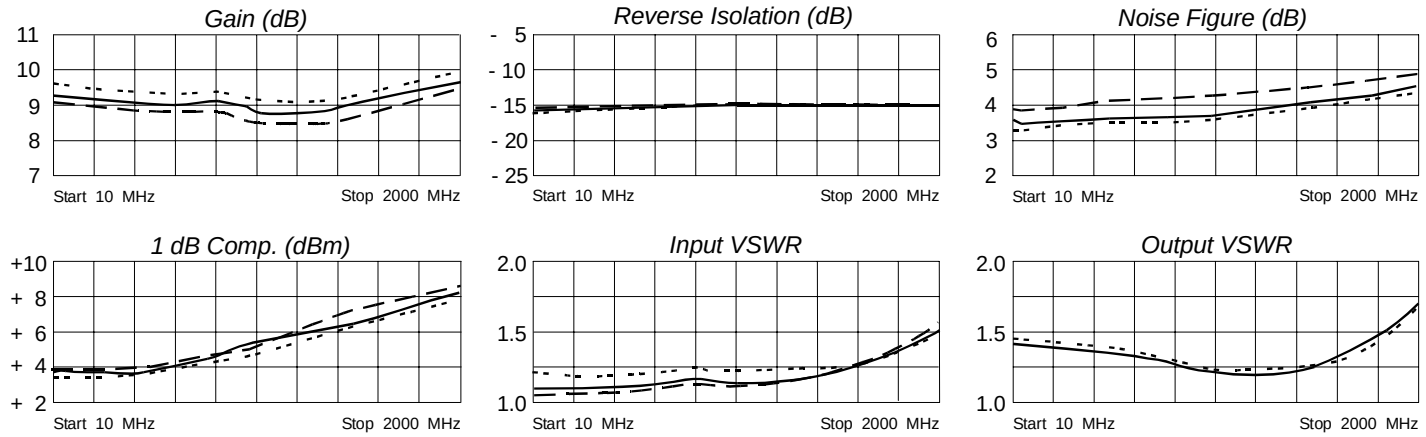
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point..... +29 dBm (Typ.)
Second Order Two Tone Intercept Point..... +23 dBm (Typ.)
Third Order Two Tone Intercept Point.....+16 dBm (Typ.)

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 Watt (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
10	.05	-169	2.94	-179	.16	2	.16	-175
50	.05	179	2.94	176	.16	1	.16	175
100	.05	178	2.93	171	.16	-1	.15	170
250	.05	160	2.90	158	.16	-3	.15	149
500	.05	150	2.86	137	.16	-6	.14	120
750	.07	141	2.86	116	.17	-10	.12	79
1000	.07	123	2.79	95	.17	-16	.09	44
1250	.08	134	2.83	76	.17	-22	.08	-6
1500	.11	134	2.95	57	.17	-28	.11	-53
1750	.14	138	3.16	36	.16	-33	.16	-89
2000	.19	153	3.42	15	.16	-35	.23	-119

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