

RF AMPLIFIER

MODEL *TM9135*

Available as: TM9135, 4 Pin TO-8 (T4)
 TN9135, 4 Pin Surface Mount (SM3)
 FP9135, 4 Pin Flatpack (FP4)
 BX9135, Connectorized Housing (H1)

Features

- Gain: 10 dB Typical
- Output Power: +10 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)	10	8.5 Min.
Power @ 1 dB Comp. (dBm)	+9	+7.5 Min.
Reverse Isolation (dB)	-16	-13 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	5.0	6.5 Max.
Power Vdc	+15	+15
mA	25	29 Max.

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

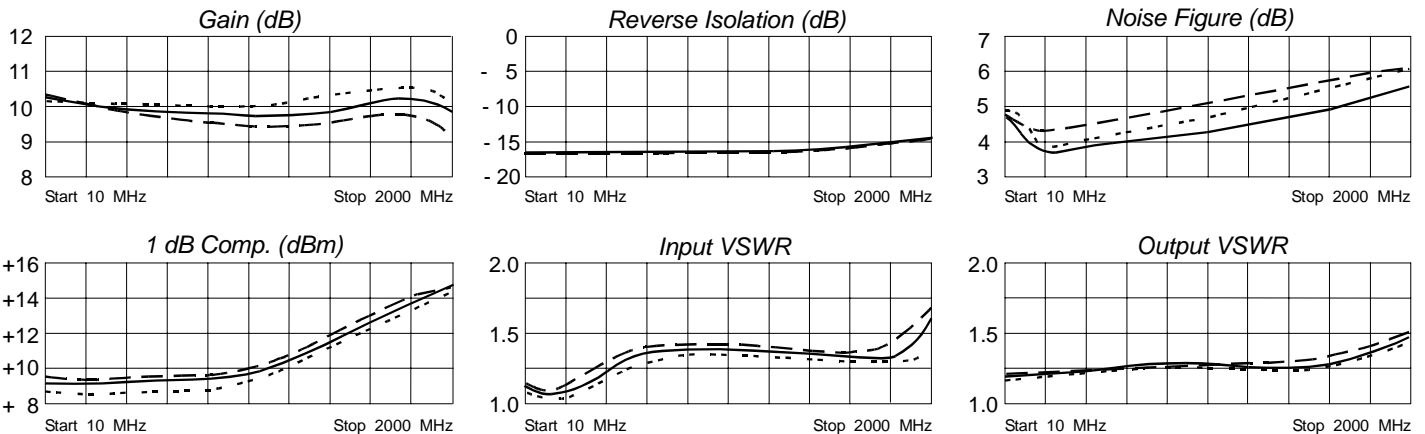
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+41dBm (Typ.)
 Second Order Two Tone Intercept Point.....+35 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+23 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 + 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 °C - - - - + 85 °C ······ -55 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.07	- 9	3.29	-180	.15	1	.07	-178
100	.07	- 30	3.25	168	.15	- 4	.08	153
200	.08	- 57	3.22	156	.15	- 7	.08	130
400	.10	- 99	3.13	133	.15	- 16	.10	88
600	.12	-134	3.06	112	.15	- 24	.12	53
800	.14	-160	3.01	90	.15	- 31	.13	27
1000	.16	173	2.97	69	.15	- 40	.13	- 2
1200	.16	144	3.02	47	.15	- 47	.13	- 33
1400	.16	109	3.10	24	.16	- 56	.12	- 71
1600	.16	65	3.17	- 1	.17	- 66	.13	-108
1800	.17	12	3.18	- 29	.18	- 77	.16	-151
2000	.23	- 36	3.01	- 61	.19	- 92	.19	170



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 7/28/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001