

RF AMPLIFIER

MODEL *TM9266*

Available as: TM9266, 4 Pin TO-8 (T4)
 TN9266, 4 Pin Surface Mount (SM3)
 FP9266, 4 Pin Flatpack (FP4)
 BX9266, Connectorized Housing (H1)

Features

- High Gain - Two Stages: 17.0 dB Typical
- High Output Level: +15.0 dBm Typical
- High Third Order I.P.: +27.5 dBm Typical
- Operating Temp. - 55 °C to +85 °C

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 2000 MHz	10 - 2000 MHz
Gain (dB)	17.0	15.0 Min.
Power @ 1 dB Comp. (dBm)	+14.5	+14* Min.
Reverse Isolation (dB)	-26	-24 Max.
VSWR In	<1.8:1	2.0:1 Max.
Out	<1.8:1	2.0:1 Max.
Noise Figure (dB)	4.5	6.7 Max.
Power Vdc	+15	+15
mA	75	80 Max.

Note: Care should always be taken to effectively ground the case of each unit.
 * 1.0 dB less below 500 MHz.

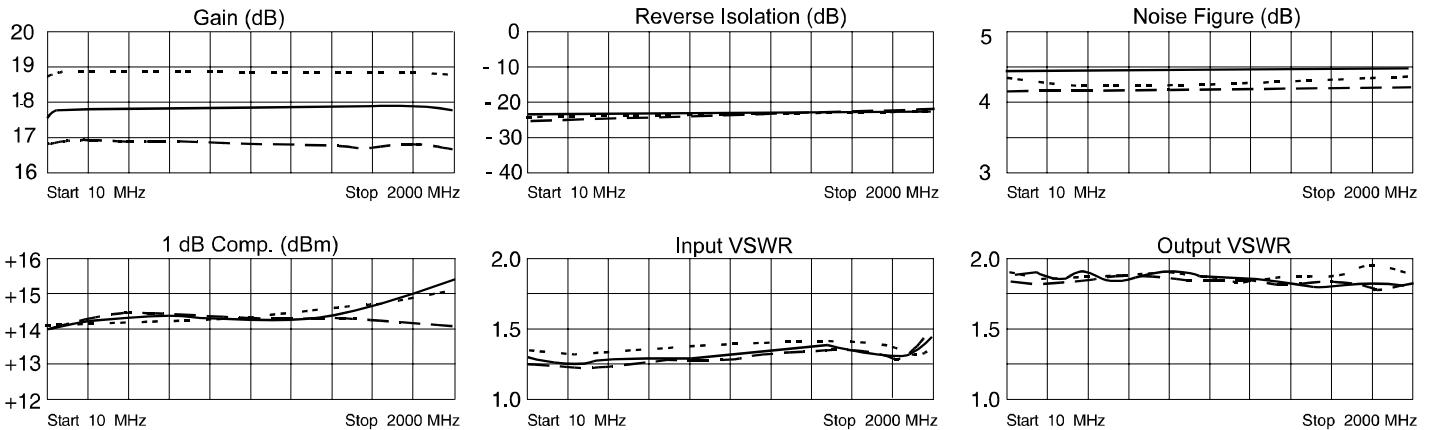
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +43 dBm (Typ.)
 Third Order Two Tone Intercept Point +27.5 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	.21	175	8.28	10	.0300	15	.15	89
50	.20	177	8.36	-7	.0323	-1	.03	21
100	.20	176	8.40	-17	.0291	7	.04	-44
250	.20	169	8.42	-45	.0320	2	.11	-100
500	.21	154	8.51	-91	.0315	3	.21	-147
750	.20	131	8.49	-138	.0392	-3	.27	173
1000	.15	101	8.70	175	.0420	-14	.28	129
1250	.06	57	8.47	128	.0448	-28	.20	85
1500	.04	-118	8.42	80	.0452	-39	.07	21
1750	.12	170	8.48	29	.0487	-55	.13	-147
2000	.17	89	8.06	-33	.0524	-75	.28	149



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