

RF AMPLIFIER

MODEL *TM9566*

Available as: TM9566, 4 Pin TO-8 (T4)
 TN9566, 4 Pin Surface Mount (SM3)
 FP9566, 4 Pin Flatpack (FP4)
 BX9566, Connectorized Housing (H1)

Features

- Low Noise Figure: <3 dB Typical
- High Gain: +26 dBm Typical
- Low +5 Volt Supply
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+26 dBm (Typ.)
 Second Order Two Tone Intercept Point.....+21 dBm (Typ.)
 Third Order Two Tone Intercept Point.....+12 dBm (Typ.)

Specifications

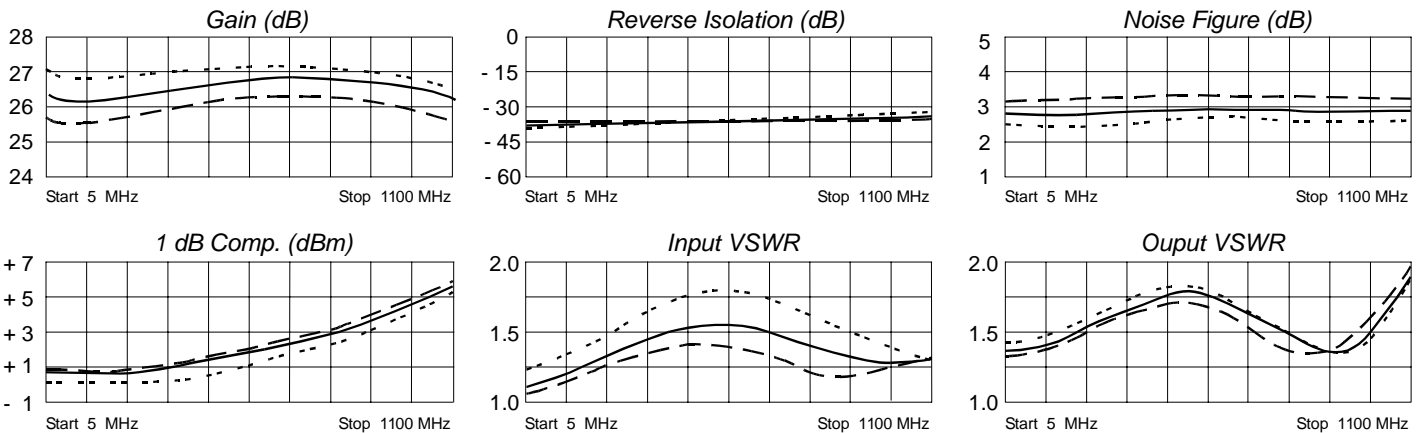
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 1100 MHz	10 - 1000 MHz
Gain (dB)	26	24.5 Min.
Power @ 1 dB Comp. (dBm)	+0.5	-0.5 Min.
Reverse Isolation (dB)	-35	-34 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3.0	4.0 Max.
Power Vdc	+5	+5
mA	18	20 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 10 Volts
 Continuous RF Input Power + 20 dBm
 Short Term RF Input Power 200 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.
5	.03	-38	21.05	4	.02	8	.21	-174
10	.04	-30	20.93	-0	.01	-1	.21	-175
50	.04	-67	20.48	-13	.01	3	.21	-176
100	.07	-83	20.67	-26	.01	-11	.22	-176
200	.13	-124	20.92	-52	.01	7	.24	-180
400	.19	-169	21.86	-105	.01	4	.29	-165
600	.20	138	22.11	-162	.02	-1	.28	-139
800	.14	62	22.13	139	.02	-1	.17	126
1000	.11	-44	21.70	75	.02	-25	.20	177
1200	.15	-144	18.54	-2	.02	2	.44	143



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