

RF AMPLIFIER

MODEL *TM9167*

Available as: TM9167, 4 Pin TO-8 (T4)
 TN9167, 4 Pin Surface Mount (SM3)
 FP9167, 4 Pin Flatpack (FP4)
 BX9167, Connectorized Housing (H1)

Features

- Medium Gain: 12.5 dB Typical
- Medium Output Power: +15.5 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 - 800 MHz	10 - 800 MHz
Gain (dB)	12.5	11.5 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+14.5 Min.
Reverse Isolation (dB)	- 15	- 14 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<4.5	5.5 Max.
Power Vdc	+15	+15
mA	32	35 Max.

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

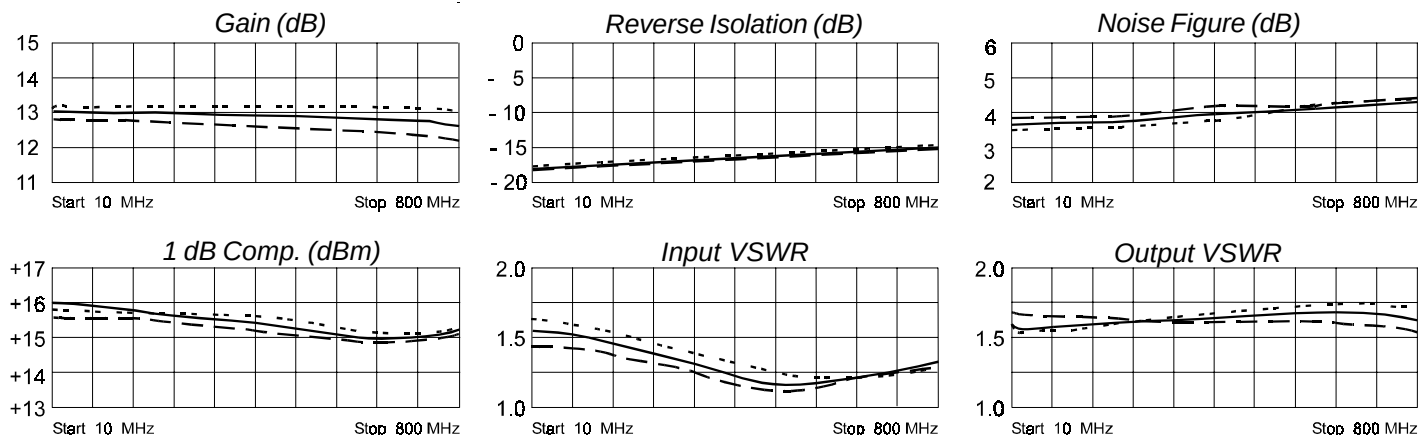
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +51 (Typ.)
 Second Order Two Tone Intercept Point +45 (Typ.)
 Third Order Two Tone Intercept Point +30 (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	.22	-172	4.49	-179	.13	4	.24	177
50	.21	172	4.49	170	.13	- 1	.23	179
100	.21	181	4.48	159	.13	- 4	.23	177
200	.18	140	4.45	137	.13	- 7	.24	174
400	.11	90	4.42	94	.14	-17	.24	168
600	.08	- 13	4.38	48	.16	-32	.25	153
800	.12	-101	4.28	- 3	.18	-51	.25	109
1000	.09	144	3.65	- 71	.20	-82	.30	- 23

Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001 3/19/03