

RF AMPLIFIER

MODEL *TM7487*

Available as: TM7487, 4 Pin TO-8 (T4)
 TN7487, 4 Pin Surface Mount (SM3)
 FP7487, 4 Pin Flatpack (FP4)
 BX7487, Connectorized Housing (H1)

Features

- Low Noise Figure: <3 dB Typical
- Low Power Dissipation: 65 mW @ +5 Volts
- 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	5 - 350 MHz	10 - 300 MHz
Gain (dB)	15.5	14.5 Min.
Power @ 1 dB Comp. (dBm)	+ 8	+ 7.0 Min.
Reverse Isolation (dB)	- 20	- 19 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	3	4.0 Max.
Power Vdc	+5	+5
mA	13	14.5 Max.

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

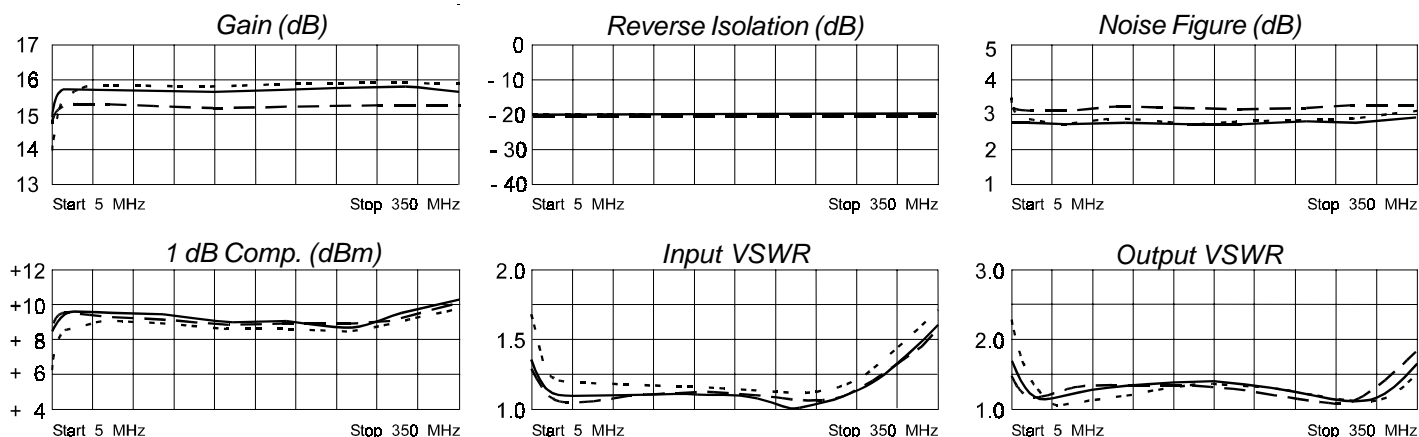
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +36 (Typ.)
 Second Order Two Tone Intercept Point +30 (Typ.)
 Third Order Two Tone Intercept Point +22 (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
5	.19	-72	5.47	-163	.08	18	.27	144
10	.10	-86	5.76	-173	.09	9	.18	142
50	.02	173	6.00	164	.09	-8	.09	-174
100	.04	100	5.99	145	.09	-19	.12	-153
150	.04	61	5.95	127	.10	-30	.15	-156
200	.02	26	5.96	108	.10	-40	.15	-168
250	.03	-136	6.00	89	.10	-53	.10	170
300	.11	-167	6.04	67	.10	-67	.04	58
350	.23	165	5.97	42	.10	-86	.21	-13

Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001 3/18/03