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 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point..... +36 dBm (Typ.)
Second Order Two Tone Intercept Point..... +30 dBm (Typ.)
Third Order Two Tone Intercept Point..... +22 dBm (Typ.)

Specifications

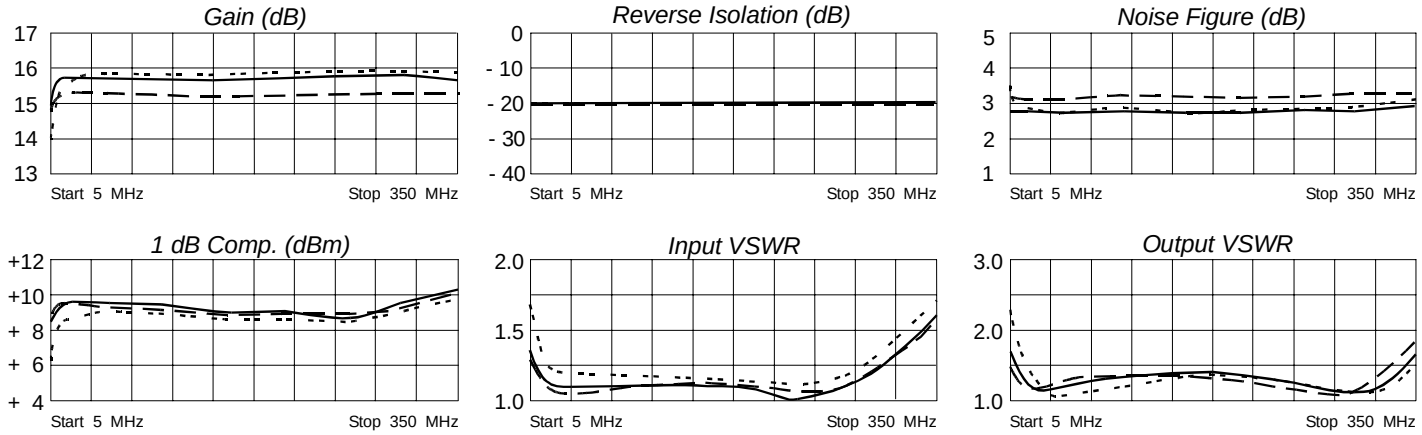
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5-350 MHz	10-300 MHz
Gain (dB)	15.5	14.5 Min.
Power @ 1 dB Comp. (dBm)	+8	+7.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	3	4.0 Max.
Power Vdc	+5	+5 Min.
Power mA	13	14.5 Max.

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 8 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 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 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

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7/6/04

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