

RF AMPLIFIER

MODEL *TM6487*

Available as: TM6487, 4 Pin TO-8 (T4)
 TN6487, 4 Pin Surface Mount (SM3)
 FP6487, 4 Pin Flatpack (FP4)
 BX6487, Connectorized Housing (H1)

Features

- High Output at 1dB Compression: +17.5 dBm
- High Efficiency: 33 mA at 15V
- 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 - 400 MHz	10 - 400 MHz
Gain (dB)	15.5	14.0 Min.
Power @ 1 dB Comp. (dBm)	+17.5	+15.0 Min.
Reverse Isolation (dB)	-20	-18 Max.
VSWR In	1.50:1	2.0:1* Max.
Out	1.70:1	2.0:1 Max.
Noise figure (dB)	3.2	5.0 Max.
Power Vdc	+15	+15
mA	33	37 Max.

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

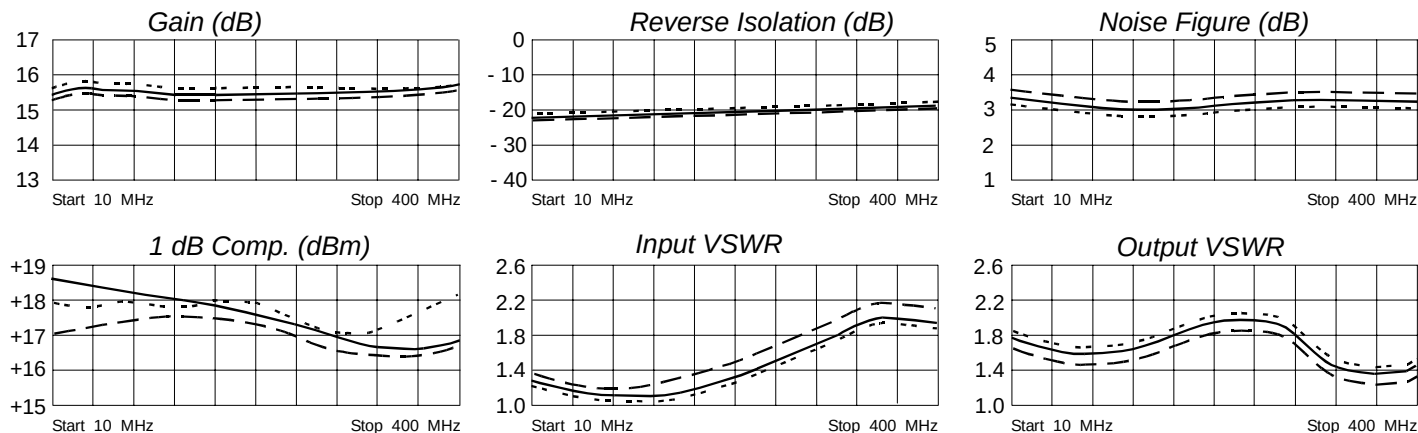
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +51dBm (Typ.)
 Second Order Two Tone Intercept Point +45 dBm (Typ.)
 Third Order Two Tone Intercept Point +32 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.....5 0 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	.15	-136	6.09	-175	.09	8	.28	166
50	.13	174	6.25	161	.09	- 7	.23	-180
100	.09	155	6.17	139	.09	- 18	.24	-172
200	.02	- 79	5.95	97	.10	- 39	.26	-166
300	.15	-111	5.93	54	.10	- 61	.24	-170
400	.20	178	5.91	4	.11	- 93	.05	-156
500	.38	39	4.77	- 64	.10	-146	.55	- 69



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/10/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001