

RF AMPLIFIER

MODEL *TM6587*

Available as: TM6587, 4 Pin TO-8 (T4)
 TN6587, 4 Pin Surface Mount (SM3)
 FP6587, 4 Pin Flatpack (FP4)
 BX6587, Connectorized Housing (H1)

Features

- High Output Power: +17 dBm Typical
- High 3rd Order Intercept: +32 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 - 400 MHz	10 - 400 MHz
Gain (dB)	13	12 Min.
Power @ 1 dB Comp. (dBm)	+17	+16.0 Min.
Reverse Isolation (dB)	- 19	- 18 Max.
VSWR In	1.75:1	2.0:1 Max.
VSWR Out	1.75:1	2.0:1 Max.
Noise figure (dB)	4.0	5.0 Max.
Power Vdc	+15	+15
mA	32	35 Max.

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

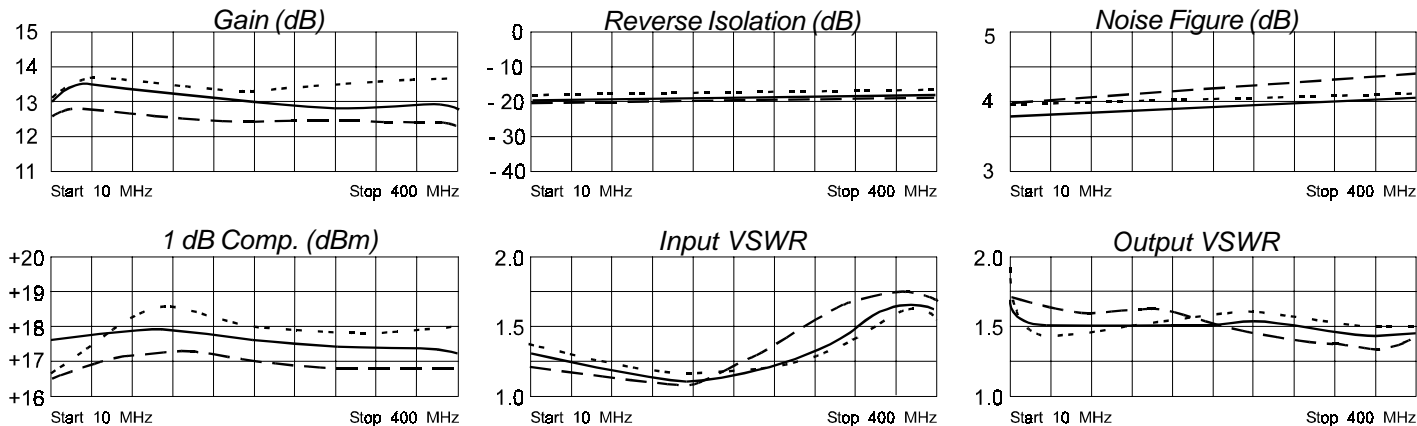
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +53 (Typ.)
 Second Order Two Tone Intercept Point +47 (Typ.)
 Third Order Two Tone Intercept Point +32 (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	.14	- 93	4.46	-167	.11	14	.24	156
10	.09	-110	4.54	-176	.12	6	.18	163
50	.05	-151	4.61	167	.12	- 3	.16	-174
100	.04	-145	4.60	151	.12	-10	.18	-162
200	.06	- 99	4.52	121	.12	-21	.25	-166
300	.15	- 99	4.51	90	.13	-34	.27	172
400	.26	-118	4.54	55	.13	-52	.21	118

Amplifonix

2707 Black Lake Place, Philadelphia, PA 19154

TEL 215-464-4000 • • • • FAX 215-464-4001 3/17/03