

RF AMPLIFIER

MODEL *TM7380*

Available as: TM7380, 4 Pin TO-8 (T4)
 TN7380, 4 Pin Surface Mount (SM3)
 FP7380, 4 Pin Flatpack (FP4)
 BX7380, Connectorized Housing (H1)

Features

- High Gain: 27.5 dB Typical
- Low Noise: 2.2 dB 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	5 - 200 MHz	10 - 200 MHz
Gain (dB)	27.5	26.0 Min.
Power @ 1 dB Comp. (dBm)	+17.0	+15.0 Min.
Reverse Isolation (dB)	- 32	- 31 Max.
VSWR In	<1.75:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	2.2	3.0 Max.
Power Vdc	+15	+15
mA	28	32 Max.

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

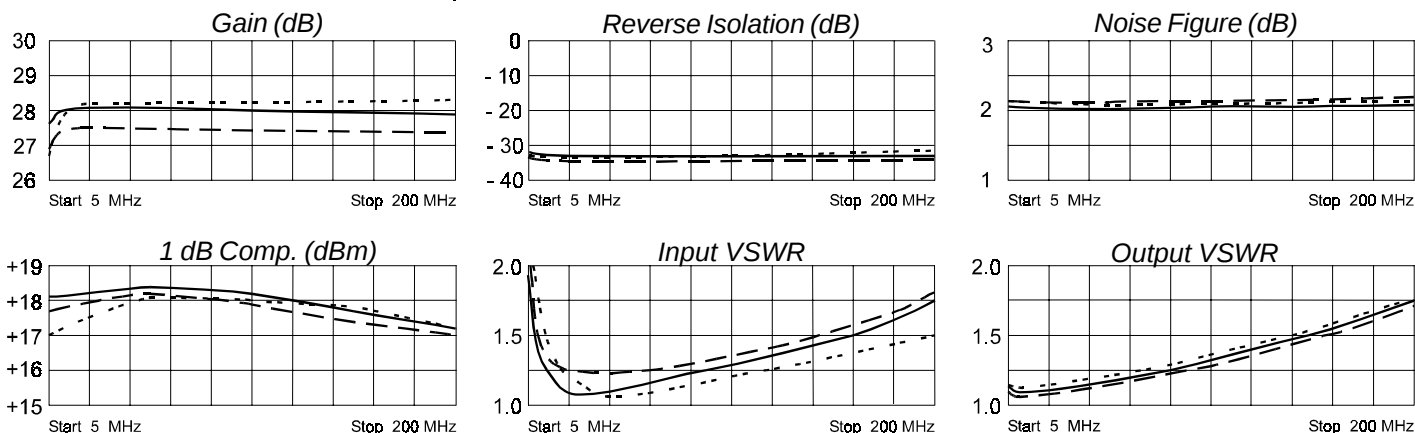
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +40 (Typ.)
 Second Order Two Tone Intercept Point +35 (Typ.)
 Third Order Two Tone Intercept Point +31 (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	.31	- 87	24.07	-156	.03	- 4	.12	- 89
10	.17	-113	25.12	-172	.02	- 4	.10	-131
50	.08	140	25.31	156	.02	- 7	.08	-165
100	.12	83	25.12	128	.02	-12	.08	-152
150	.18	43	25.05	100	.02	-23	.13	-138
200	.26	9	25.03	72	.02	-33	.21	-145
250	.35	- 25	25.22	42	.02	-48	.28	-158

Amplifonix

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