

RF AMPLIFIER

MODEL *TM7388*

Available as: TM7388, 4 Pin TO-8 (T4)
 TN7388, 4 Pin Surface Mount (SM3)
 FP7388, 4 Pin Flatpack (FP4)
 BX7388, Connectorized Housing (H1)

Features

- High Output Power: +23.0 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 - 250 MHz
Gain (dB)	15.5	14 Min.
Power @ 1 dB Comp. (dBm)	+23.0	+21.5 Min.
Reverse Isolation (dB)	-19	-18.5 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise Figure (dB)	4.5	6.0 Max.
Power Vdc	+15	+15
mA	70	75 Max.

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

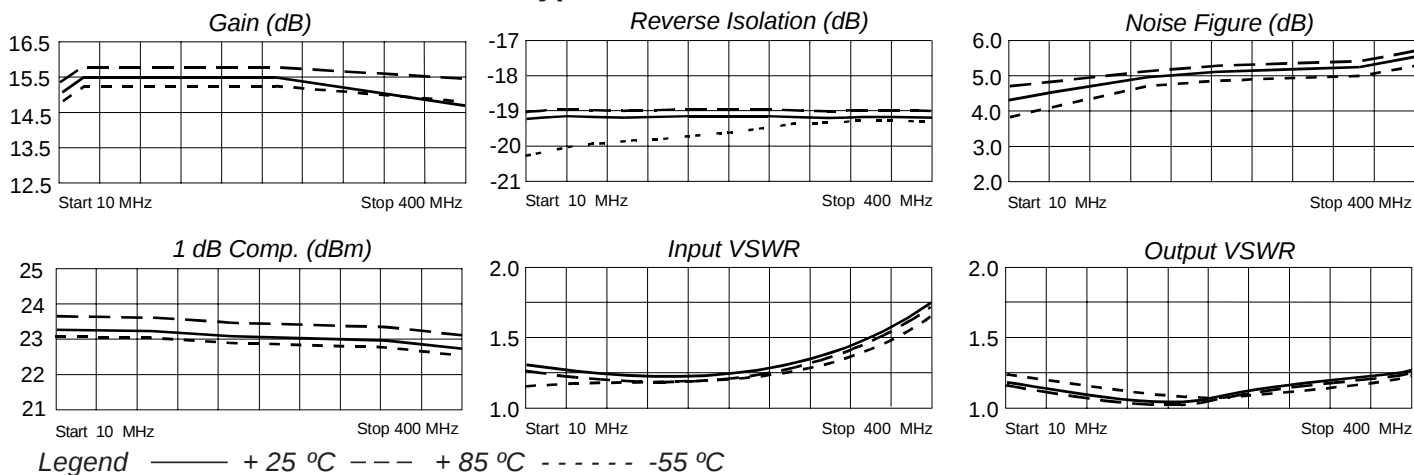
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +51 dBm (Typ.)
 Second Order Two Tone Intercept Point +45 dBm (Typ.)
 Third Order Two Tone Intercept Point +37 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 + 17 Volts
 Continuous RF Input Power + 17 dBm
 Short Term RF Input Power 100 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MH	S11		S21		S12		S22	
	Ma	De	Ma	De	Ma	De	Ma	De
10	.14	-27	6.11	-171	.1052	-170	.05	-120
100	.14	-27	6.16	-173	.1074	-173	.05	-128
130	.13	-25	6.14	-176	.1055	-175	.04	-130
160	.14	-26	6.14	-177	.1074	-176	.05	-131
190	.14	-25	6.14	-178	.1069	-177	.05	-140
220	.13	-28	6.15	-180	.1056	180	.05	-131
250	.14	-30	6.18	179	.1049	-180	.05	-143
280	.14	-30	6.16	178	.1084	179	.05	-145
310	.13	-31	6.16	177	.1069	178	.05	-146
340	.13	-32	6.19	176	.1082	177	.05	-147
370	.13	-33	6.18	175	.1070	176	.05	-145
400	.13	-34	6.19	174	.1089	176	.05	-143



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 7/7/04

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