RF AMPLIFIER
MODEL *TM6712*

Available as: TM6712, 4 Pin TO-8 (T4)
TN6712, 4 Pin 0.450" Surface Mount (SM3)
FP6712, 4 Pin Flatpack (FP4)
BX6712, SMA Connectorized Housing (H1)

Features

- Low Noise Figure: <1.7 dB Typical
- Medium Output Power: +9 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point ..... +42 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +36 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +20 dBm (Typ.)

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	33	31.0 Min.
Power @ 1 dB Comp. (dBm)	+9	+8.0 Min.
Reverse Isolation (dB)	-42	-40 Max.
VSWR In Out	1.75:1 1.5:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	1.7	2.0 Max.
Power Vdc mA	+12 35	+12 38 Max.

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

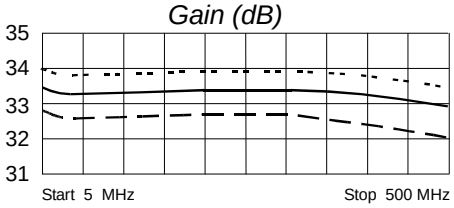
Maximum (No Damage) Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
DC Voltage ..... + 15 Volts
Continuous RF Input Power ..... + 6 dBm
Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.5 Watt (3 µsec Max.)

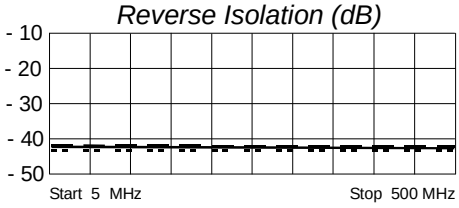
Revision 7/18/2013

Typical Performance Data

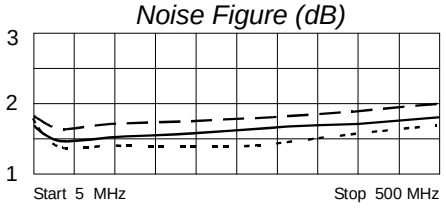
Gain (dB)



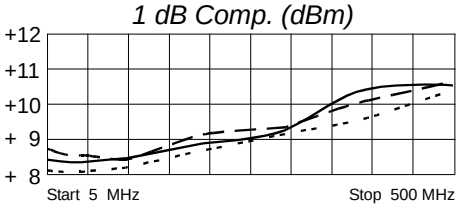
Reverse Isolation (dB)



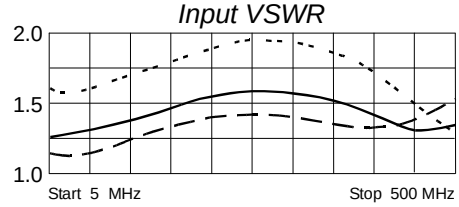
Noise Figure (dB)



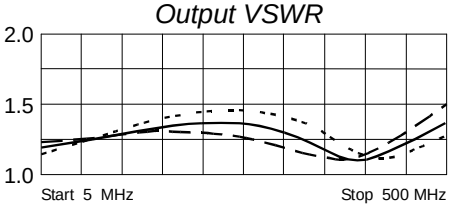
1 dB Comp. (dBm)



Input VSWR



Output VSWR



Legend ——— *+ 25 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ.	S11		S21		S12		S22	
MHz	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.11	-163	47.18	3	.01	12	.09	-163
50	.13	-166	46.15	-24	.01	-20	.10	-165
100	.16	-165	45.93	-48	.01	-5	.13	-164
200	.20	-173	46.18	-97	.01	-8	.16	179
300	.21	171	46.31	-147	.01	-16	.13	160
400	.17	165	46.10	160	.01	-25	.06	-171
500	.16	-158	44.77	104	.01	-41	.17	-148

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