

RF AMPLIFIER

MODEL *TM6721*

Available as: TM6721, 4 Pin TO-8 (T4)
 TN6721, 4 Pin Surface Mount (SM3)
 FP6721, 4 Pin Flatpack (FP4)
 BX6721, Connectorized Housing (H1)

Features

- High Gain: 30 dB Typical
- Low Noise Figure: < 3 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 - 500 MHz	5 - 500 MHz
Gain (dB)	30	28.0 Min.
Power @ 1 dB Comp. (dBm)	+9	+7.5 Min.
Reverse Isolation (dB)	- 36	- 34 Max.
VSWR In	<1.75:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<3.0	4.0 Max.
Power Vdc	+15	+15
mA	38	41 Max.

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

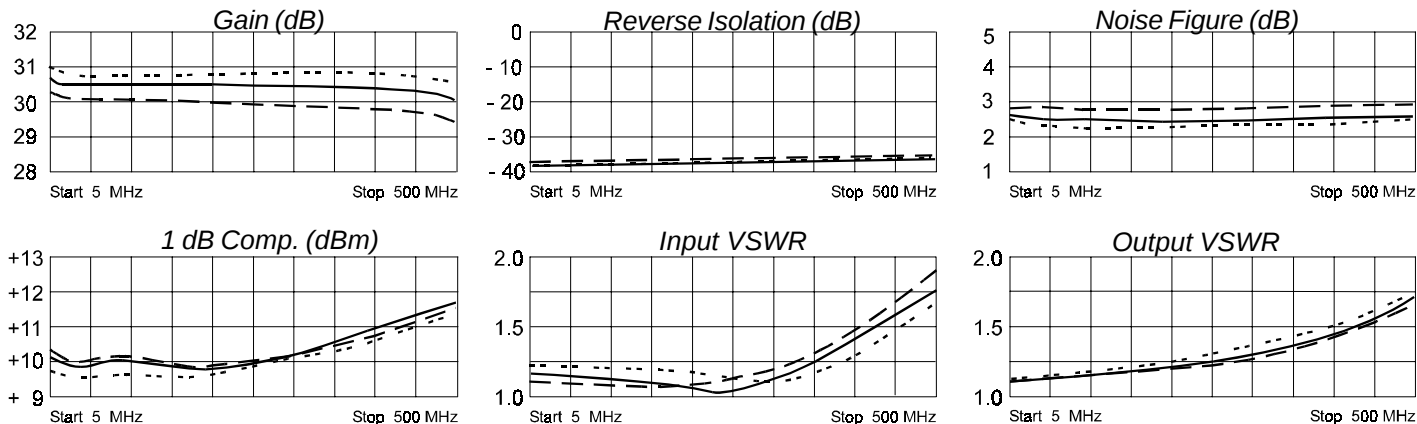
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +43 (Typ.)
 Second Order Two Tone Intercept Point +37 (Typ.)
 Third Order Two Tone Intercept Point +22 (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 + 6 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	.08	-163	34.22	3	.01	9	.06	-169
50	.07	165	33.49	-21	.01	-13	.06	-165
100	.06	151	33.32	-42	.01	-3	.08	-161
200	.02	138	33.35	-84	.01	-15	.10	-158
300	.06	-100	33.19	-128	.01	-13	.14	-162
400	.16	-130	32.86	-173	.01	-15	.19	-170
500	.29	-161	31.51	139	.01	-16	.27	172

Amplifonix

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