

RF AMPLIFIER

MODEL *TM6421*

Available as: TM6421, 4 Pin TO-8 (T4)
 TN6421, 4 Pin Surface Mount (SM3)
 FP6421, 4 Pin Flatpack (FP4)
 BX6421, Connectorized Housing (H1)

Features

- High Gain: 30 dB Typ.
- Medium Output Power: +9 dBm Typ.
- 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 - 400 MHz	5 - 400 MHz
Gain (dB)	30	27 Min
Power @ 1 dB Comp. (dBm)	+9	+7 Min.
Reverse Isolation (dB)	-36	-33 Max.
VSWR In	1.35:1	2.0:1 Max.
Out	1.65:1	2.0:1Max.
Noise figure (dB)	3.5	6.0 Max.
Power Vdc	+15	+15
mA	37	40Max.

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

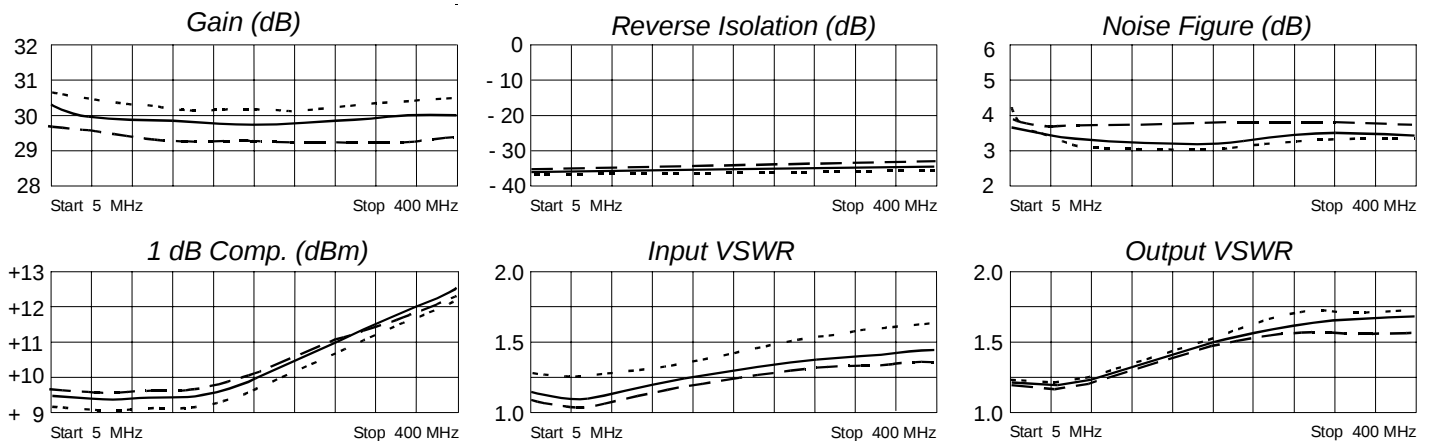
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +41 dBm (Typ.)
 Second Order Two Tone Intercept Point +36 dBm (Typ.)
 Third Order Two Tone Intercept Point +22 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 + 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	.06	-148	32.67	3	.01	7	.07	-162
50	.06	163	31.75	- 21	.01	2	.08	-165
100	.07	147	31.43	- 41	.01	6	.11	-162
200	.11	112	31.15	- 82	.01	14	.17	-176
300	.15	85	31.19	-123	.01	13	.23	163
400	.19	61	31.59	-166	.02	- 3	.26	140



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