RF AMPLIFIER MODEL *TM6416*

Available as: TM6416, 4 Pin TO-8 (T4)
TN6416, 4 Pin Surface Mount (SM3)
FP6416, 4 Pin Flatpack (FP4)
BX6416, Connectorized Housing (H1)

Features

- Medium Gain: 15 dB Typical
- Medium Output Power: +13.5 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point .....+41 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +35 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +27 dBm (Typ.)

Specifications

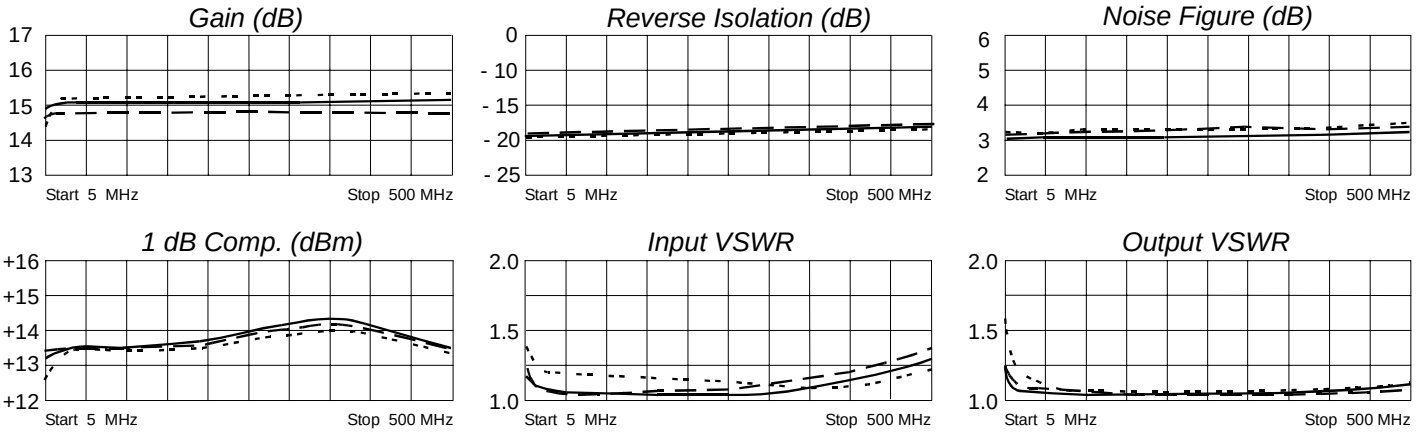
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5 - 500 MHz	5 - 500 MHz
Gain (dB)	15	14.0 Min.
Power @ 1 dB Comp. (dBm)	+13.5	+12.0 Min.
Reverse Isolation (dB)	-17.5	-17.0 Max.
VSWR In Out	<1.25:1 <1.25:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	3.5	4.5 Max.
Power Vdc mA	+15 35	+15 38 Max.

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 Deg
5	.08	-118	5.54	-173	.11	9	.09	129
50	.05	-173	5.65	173	.11	-0	.02	154
100	.05	179	5.63	164	.12	-1	.03	175
200	.04	-176	5.65	147	.12	-3	.03	177
300	.04	-145	5.66	130	.12	-4	.04	172
400	.07	-128	5.69	113	.13	-8	.04	145
500	.12	-127	5.73	96	.14	-12	.06	111

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