

RF AMPLIFIER

MODEL *TM6661*

Available as: TM6661, 4 Pin TO-8 (T4)
 TN6661, 4 Pin Surface Mount (SM3)
 FP6661, 4 Pin Flatpack (FP4)
 BX6661, Connectorized Housing (H1)

Features

- High Output Power: +27 dBm Typical
- GaAs FET Design
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 700 MHz	10 - 500 MHz
Gain (dB)	13.5	12.0 Min.
Gain Flatness (dB)	±0.3	±0.7 Max.
Power @ 1 dB Comp. (dBm)	+27	+24.5 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	1.8:1 Max.
Out	<1.7:1	2.0:1 Max.
Noise Figure (dB)	5.0	7.0 Max.
Power Vdc	+15	+15
mA	175	185 Max.

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

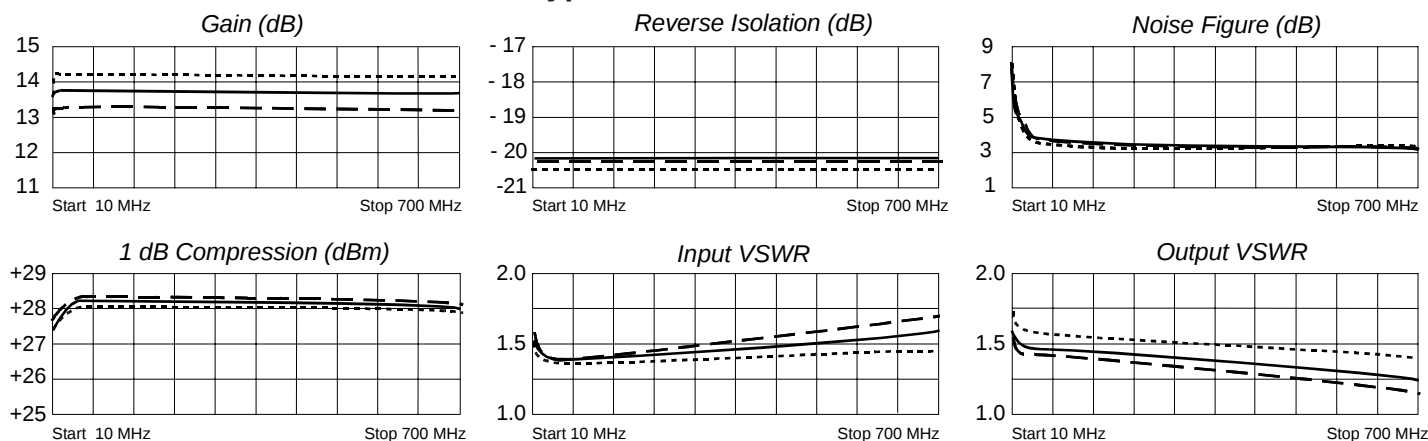
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +54 dBm (Typ.)
 Second Order Two Tone Intercept Point +48 dBm (Typ.)
 Third Order Two Tone Intercept Point +41 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 +15 dBm
 Short Term RF Input Power 100 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.	---S11---		---S21---		---S12---		---S22---	
MHz	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.17	-58	4.70	-166	.1017	13	.25	147
20	.10	-50	4.76	-175	.1026	6	.20	155
30	.08	-40	4.77	-178	.1023	3	.19	160
40	.08	-34	4.77	179	.1042	3	.18	161
50	.08	-36	4.77	178	.1025	1	.18	162
100	.07	-34	4.78	171	.1029	-4	.17	159
200	.08	-54	4.76	160	.1022	-8	.17	147
300	.09	-68	4.74	149	.1038	-14	.16	134
400	.10	-84	4.66	138	.1021	-19	.15	115
500	.11	-97	4.64	128	.0999	-24	.14	101
600	.12	-106	4.56	117	.1015	-29	.13	85
700	.13	-118	4.51	107	.0997	-36	.12	70



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