

RF AMPLIFIER

MODEL *TM6670*

Available as: TM6670, 4 Pin TO-8 (T4)
 TN6670, 4 Pin Surface Mount (SM3)
 FP6670, 4 Pin Flatpack (FP4)
 BX6670, Connectorized Housing (H1)

Features

- Low Noise Figure: 1.8 dB Typical
- High Output Power: > +20 dBm 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	10 - 300 MHz	10 - 300 MHz
Gain (dB)	8.0	6.0 Min.
Power @ 1 dB Comp. (dBm)	>+20	+18.0 Min.
Reverse Isolation (dB)	- 11	- 10 Max.
VSWR In	<1.5:1	2.5:1 Max.
VSWR Out	<1.5:1	2.5:1 Max.
Noise figure (dB)	1.8	3.0 Max.
Power Vdc	+15	+15
mA	25	30 Max.

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

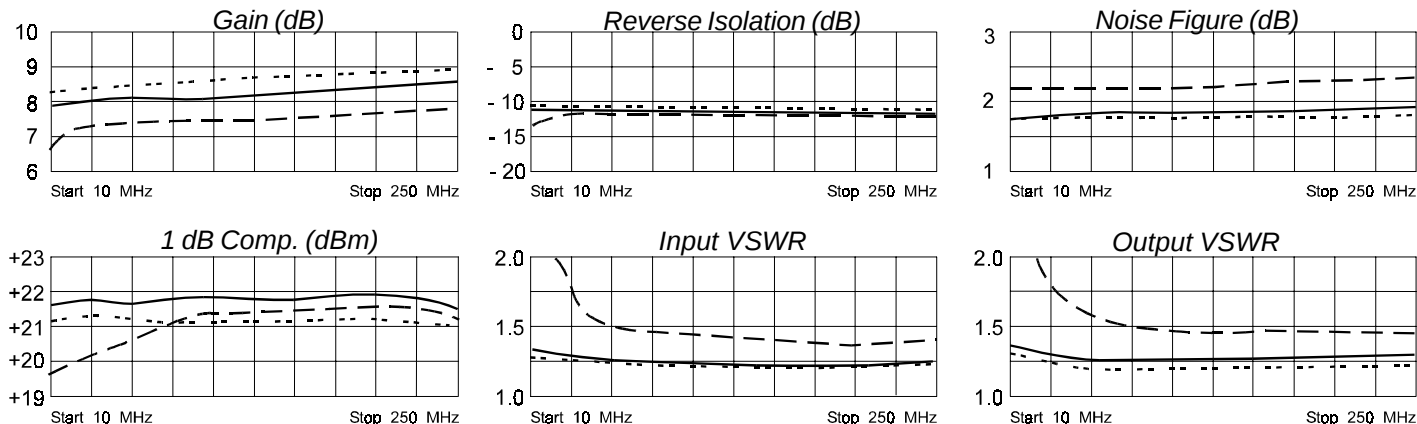
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +52 (Typ.)
 Second Order Two Tone Intercept Point +46 (Typ.)
 Third Order Two Tone Intercept Point +36 (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	.19	138	2.48	17	.28	18	.21	141
10	.12	146	2.56	8	.29	8	.13	144
20	.09	160	2.58	1	.29	2	.10	159
50	.08	-179	2.60	- 7	.29	- 7	.08	173
100	.11	-164	2.60	-18	.29	-17	.08	-171
150	.14	-164	2.62	-27	.28	-27	.09	-160
200	.19	-167	2.64	-37	.27	-37	.11	-149
250	.25	-175	2.67	-48	.26	-47	.16	-149
300	.32	177	2.67	-59	.25	-58	.21	-152

Amplifonix

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