

# RF AMPLIFIER

## MODEL *TM6672*

Available as: TM6672, 4 Pin TO-8 (T4)  
 TN6672, 4 Pin Surface Mount (SM3)  
 FP6672, 4 Pin Flatpack (FP4)  
 BX6672, Connectorized Housing (H1)

### Features

- High Efficiency: +13 dBm Typ. @ 270 mW DC
- Low Noise Figure: < 4.5 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)	14.7	13.5 Min.
Power @ 1 dB Comp. (dBm)	+13	+11.0 Min.
Reverse Isolation (dB)	- 18	- 16 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	4.0	5.5 Max.
Power Vdc	+ 9	+ 9
mA	30	35 Max.

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

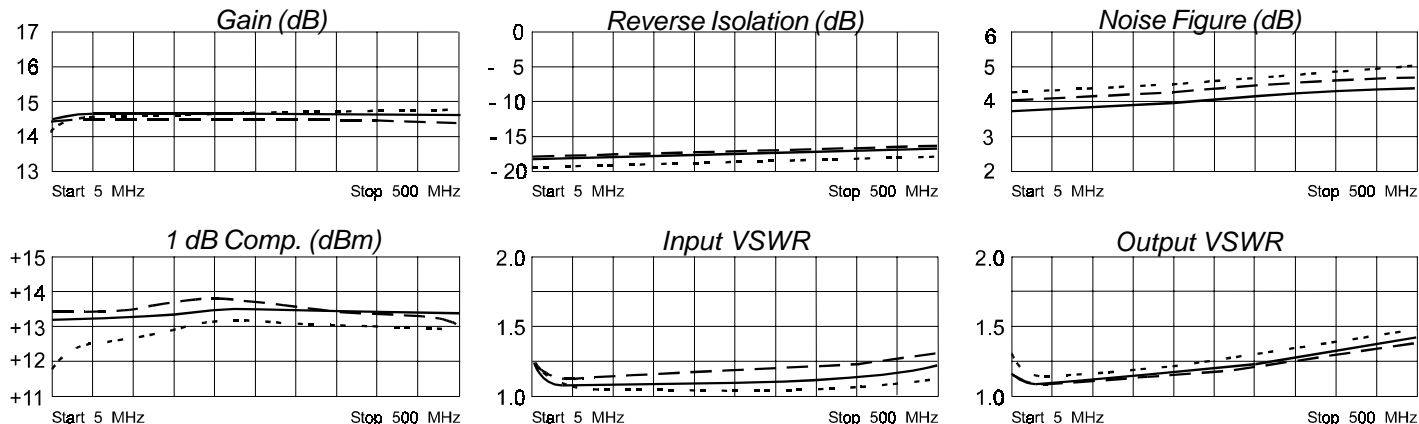
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point ..... +44 (Typ.)  
 Second Order Two Tone Intercept Point ..... +38 (Typ.)  
 Third Order Two Tone Intercept Point ..... +27 (Typ.)

### Maximum Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 12 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	.12	-129	5.57	-171	.11	10	.14	138
50	.09	170	5.68	172	.11	1	.06	163
100	.09	150	5.66	163	.11	- 1	.06	169
200	.10	119	5.63	146	.11	- 4	.05	167
300	.10	89	5.57	129	.12	- 7	.04	-177
400	.11	61	5.55	112	.12	-10	.04	-152
500	.11	34	5.54	94	.12	-14	.07	-145
600	.11	- 2	5.54	76	.12	-17	.09	-154

# Amplifonix

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