

RF AMPLIFIER

MODEL *TM5670*

Available as: TM5670, 4 Pin TO-8 (T4)
 TN5670, 4 Pin Surface Mount (SM3)
 FP5670, 4 Pin Flatpack (FP4)
 BX5670, Connectorized Housing (H1)

Features

- Low Noise Figure: 2.0 dB Typical
- +5 Volt Operation
- 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	20-250 MHz	20-250 MHz
Gain (dB)	8.2	7.0 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+13.5 Min.
Reverse Isolation (dB)	-11	-10 Max.
VSWR In	1.35:1	2.0:1 Max.
Out	1.20:1	2.0:1 Max.
Noise Figure (dB)	2.0	3.0 Max.
Power Vdc	+5	+5 Min.
mA	25	30 Max.

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

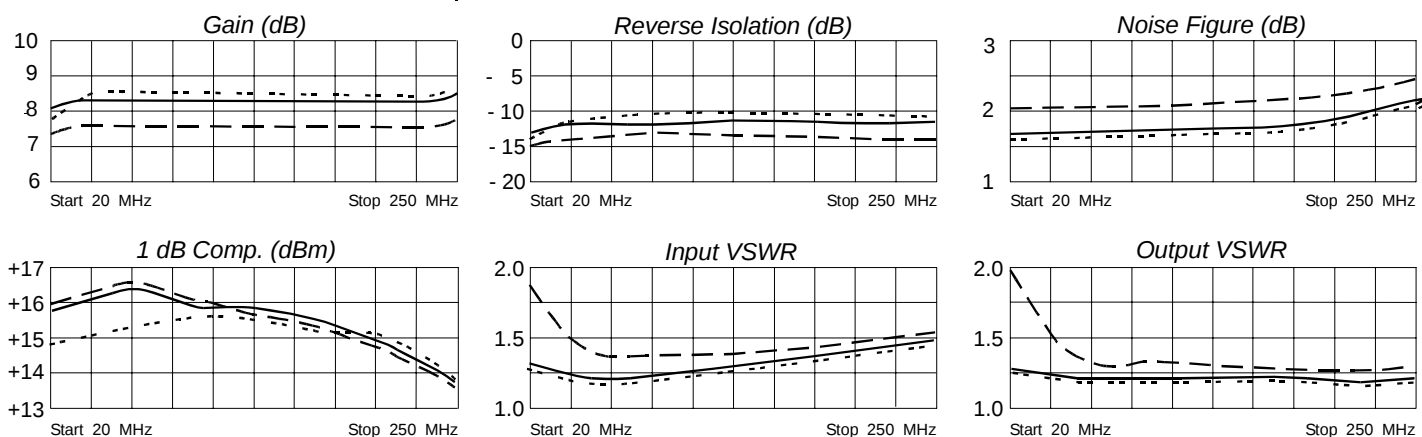
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +38 dBm (Typ.)
 Second Order Two Tone Intercept Point +33 dBm (Typ.)
 Third Order Two Tone Intercept Point +28 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 + 8 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



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.14	153	2.50	7	.28	7	.13	150
50	.11	-180	2.54	-9	.28	-9	.09	165
100	.12	-174	2.54	-21	.28	-20	.09	165
150	.14	-169	2.54	-32	.27	-31	.10	167
200	.18	-171	2.56	-44	.27	-43	.11	168
250	.23	-173	2.58	-56	.26	-55	.14	166



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