

RF AMPLIFIER

MODEL *TM6674*

Available as: TM6674, 4 Pin TO-8 (T4)
 TN6674, 4 Pin Surface Mount (SM3)
 FP6674, 4 Pin Flatpack (FP4)
 BX6674, Connectorized Housing (H1)

Features

- High Gain: 28 dB Typical
- Low DC Power: +65 mW @ 5V 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)	28	26.0 Min.
Power @ 1 dB Comp. (dBm)	-1.0	-2.0 Min.
Reverse Isolation (dB)	-39	-37 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<2.5	<4.0 Max.
Power Vdc	+5	+5
mA	13	15 Max.

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

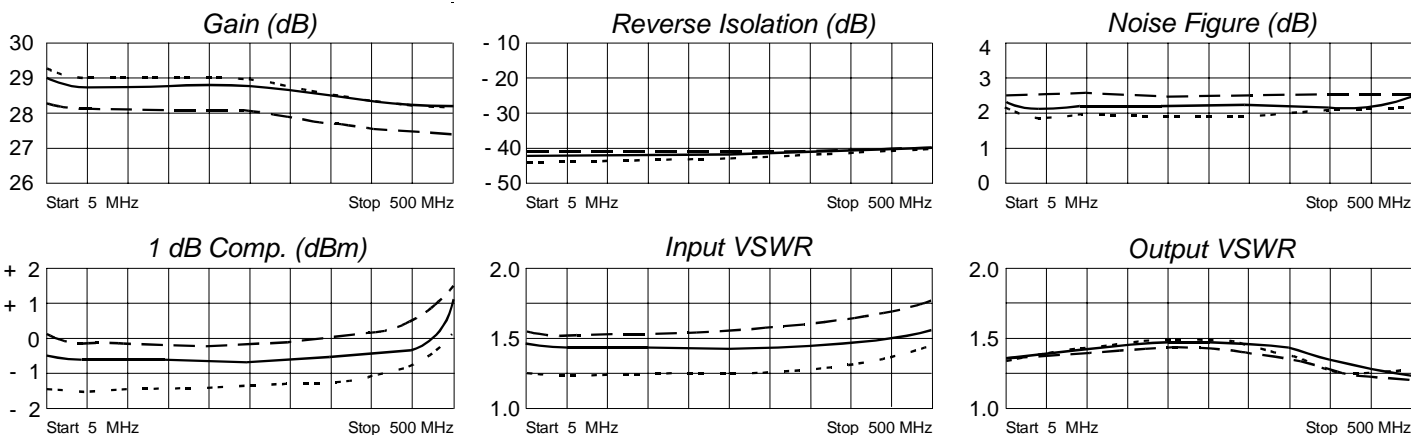
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +23 dBm (Typ.)
 Second Order Two Tone Intercept Point +17 dBm (Typ.)
 Third Order Two Tone Intercept Point +9 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 + 10 Volts
 Continuous RF Input Power + 6 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	.21	- 7	27.22	3	.01	- 14	.16	-169
50	.20	- 10	26.32	- 19	.01	7	.17	-175
100	.20	- 21	26.42	- 37	.01	- 12	.17	-174
200	.20	- 39	26.34	- 74	.01	11	.17	-178
300	.21	- 61	25.78	-113	.01	- 10	.18	-178
400	.23	- 83	25.76	-150	.01	16	.16	-171
500	.25	-112	25.74	170	.01	4	.14	-177
600	.32	-135	26.01	130	.01	-41	.16	-177



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 4/11/05

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001