

RF AMPLIFIER

MODEL *TM6605*

Available as: TM6605, 4 Pin TO-8 (T4)
 TN6605, 4 Pin Surface Mount (SM3)
 FP6605, 4 Pin Flatpack (FP4)
 BX6605, Connectorized Housing (H1)

Features

- Medium Gain: 15.5 dB Typical
- Medium Output Power: +10 dBm
- 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 - 600 MHz	10 - 600 MHz
Gain (dB)	15.5	14.0 Min.
Power @ 1 dB Comp. (dBm)	+10	+8.0 Min.
Reverse Isolation (dB)	-18.5	-17 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<3.0	4.5 Max.
Power Vdc	+15	+15 Max.
mA	24	27 Max.

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

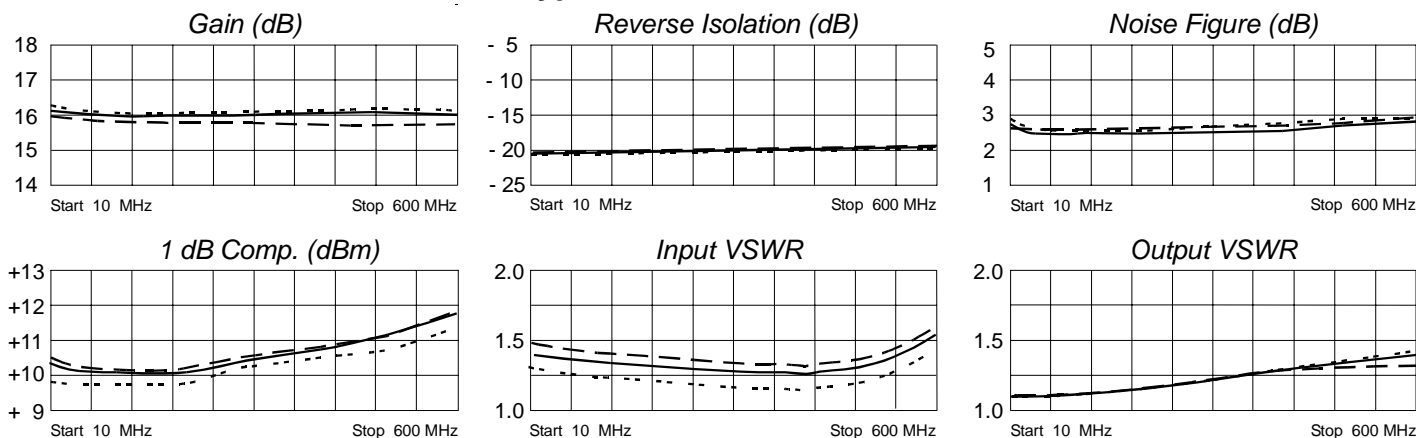
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +38 dBm (Typ.)
 Second Order Two Tone Intercept Point +32 dBm (Typ.)
 Third Order Two Tone Intercept Point +23 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 + 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



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
10	.14	-3	6.42	179	.09	0	.03	1
50	.13	-9	6.32	170	.09	-2	.04	-28
100	.13	-15	6.29	161	.09	-2	.04	-56
200	.12	-33	6.29	141	.09	-5	.07	-91
300	.11	-60	6.29	122	.10	-8	.09	-121
400	.10	-100	6.32	102	.10	-13	.12	-146
500	.14	-146	6.35	81	.11	-17	.15	-178
600	.22	175	6.31	59	.11	-25	.18	150



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 11/16/04

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