

RF AMPLIFIER

MODEL *TM6603*

Available as: TM6603, 4 Pin TO-8 (T4)
 TN6603, 4 Pin Surface Mount (SM3)
 FP6603, 4 Pin Flatpack (FP4)
 BX6603, Connectorized Housing (H1)

Features

- 24 Volt Operation
- Medium Output Power: +15.5 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	5 - 500 MHz	5 - 500 MHz
Gain (dB)	10	8.5 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+14.0 Min.
Reverse Isolation (dB)	-15.5	-14 Max.
VSWR In	1.5:1	2.0:1 Max.
Out	1.5:1	2.0:1 Max.
Noise figure (dB)	5.5	7.0 Max.
Power Vdc	+24	+24
mA	50	55 Max.

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

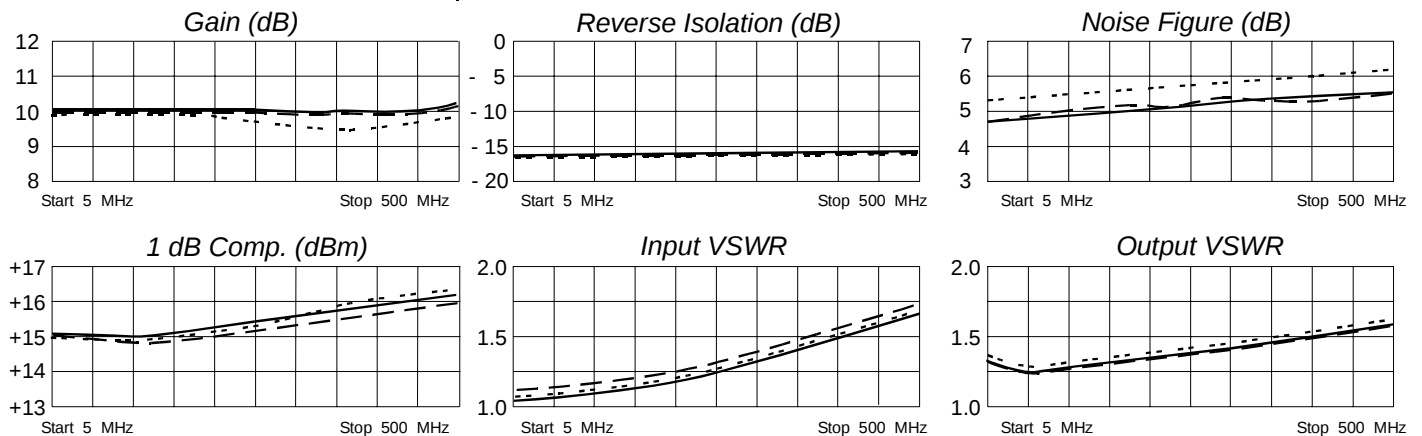
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +42 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 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 + 26 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	.02	- 72	3.20	-178	.14	4	.13	-164
50	.02	- 87	3.30	172	.14	1	.13	-176
100	.04	- 89	3.19	164	.14	0	.13	-174
200	.09	-107	3.19	148	.15	-0	.15	-170
300	.14	-120	3.18	132	.15	-1	.17	-169
400	.19	-132	3.21	116	.16	-2	.20	-174
500	.26	-145	3.24	100	.17	-2	.23	-180



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