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 ºC to +85 ºC
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
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 Out	1.5:1 1.5:1	2.0:1 Max. 2.0:1 Max.
Noise figure (dB)	5.5	7.0 Max.
Power Vdc mA	+24 50	+24 55 Max.

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

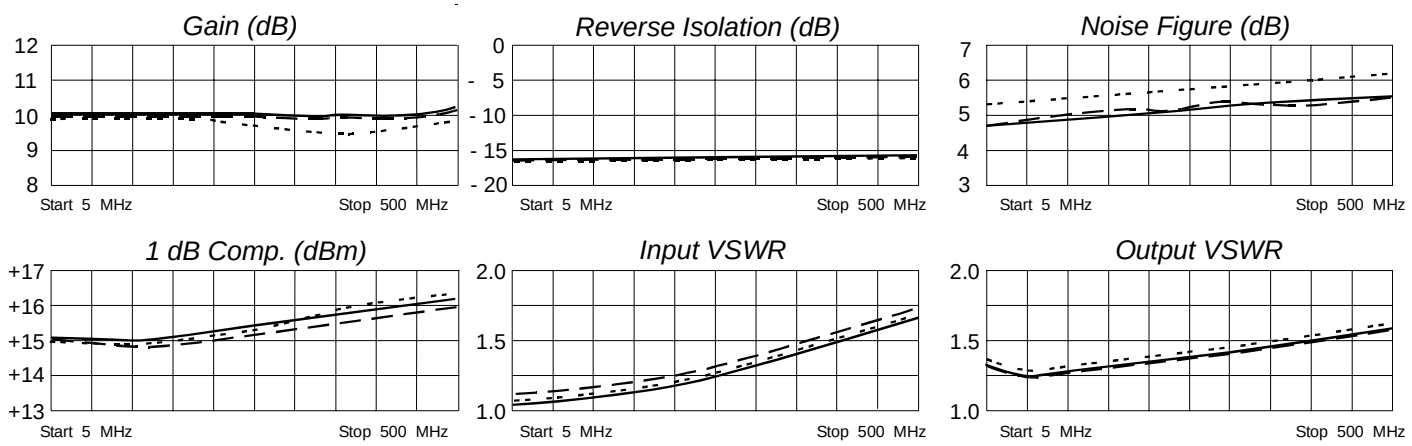
Typical Intermodulation Performance at 25 º C

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 ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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 ºC* – – – *+ 85 ºC* - - - - - - *-55 ºC*

Linear S-Parameters

FREQ. MHz	S11 Mag	S11 Deg	S21 Mag	S21 Deg	S12 Mag	S12 Deg	S22 Mag	S22 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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