RF AMPLIFIER
MODEL *TM9705*

Available as: TM9705, 4 Pin TO-8 (T4)
TN9705, 4 Pin Surface Mount (SM3)
WP9705, 4 Pin Gullwing (SG -15)
BX9705, Connectorized Housing (H1)
PN9705, Reduced Size Surface Mount (SM11)

Features

- GaAs FET; Low Noise Figure: 1.5 dB Typical
- High Output Power: 23 dBm Typical
- Operating Temp. - 55 ºC to +85 ºC
- Environmental Screening Available

Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point ..... +49 dBm (Typ.)
Second Order Two Tone Intercept Point ..... +44 dBm (Typ.)
Third Order Two Tone Intercept Point ..... +34 dBm (Typ.)

Specifications

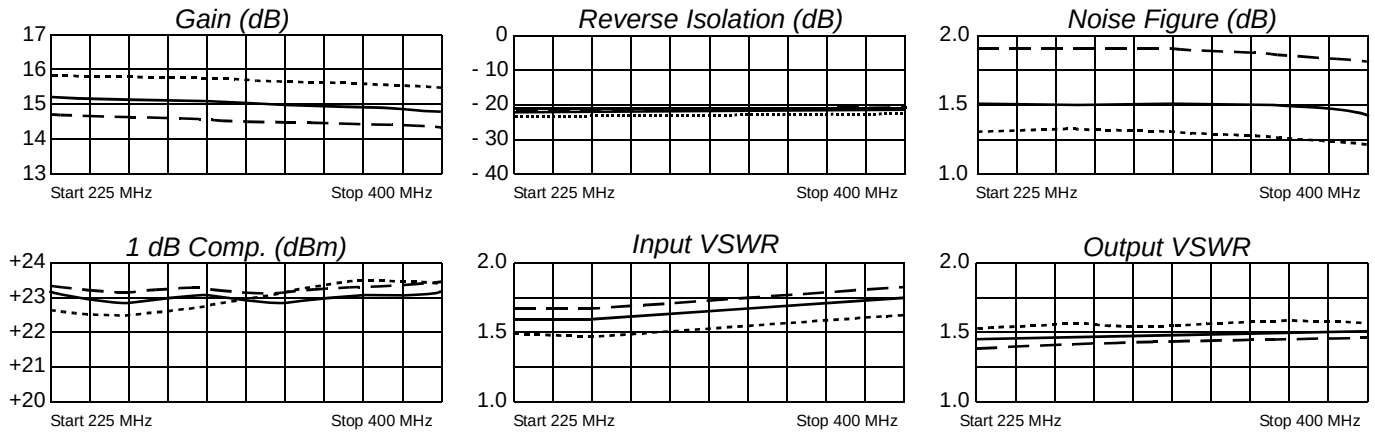
CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	225 - 400 MHz	225 - 400 MHz
Gain (dB)	15.0	14 Min./ 16 Max.
Power @ 1 dB Comp. (dBm)	+23.0	+22.0 Min.
Reverse Isolation (dB)	-21.0	-15 Max.
VSWR In	1.7:1	2.0:1 Max.
VSWR Out	1.7:1	2.0:1 Max.
Noise figure (dB)	1.5	2.0 Max.
Power Vdc	+15	+15
Power mA	90	100 Max.

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

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 95 ºC
DC Voltage ..... + 17 Volts
Continuous RF Input Power ..... + 15 dBm
Short Term RF Input Power ... 100 Milliwatts (1 Minute Max.)
Maximum Peak Power ..... 0.2 Watt (3 µsec Max.)

Typical Performance Data



Legend——— + 25 ºC – – – + 85 ºC - - - - - - -55 ºC

Linear S-Parameters

FREQ.	S11		S21		S12		S22	
MHz	Mag.	Deg.	Mag.	Deg.	Mag.	Deg.	Mag.	Deg.
225	.22	-11	5.75	165	.0819	8	.17	- 159
260	.22	-28	5.71	160	.0825	6	.17	- 163
295	.22	-43	5.66	155	.0832	4	.17	- 166
300	.22	-57	5.61	151	.0837	2	.17	- 168
400	.23	-80	5.45	142	.0852	- 1	.18	- 173

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