

RF AMPLIFIER

MODEL **TM9725**

Available as: TM9725, 4 Pin TO-8
 TN9725-3, 4 Pin Surface Mount (SM3)
 FP9725-4, 4Pin Flatpack (FP4)
 BX9725, Connectorized Housing (H1)

Features

- Medium Gain: 11 dB Typical
- High Output Power: +26.5 dBm Typical
- High IP₃: +38 dBm Typical

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	500 - 2000 MHz	500 - 2000 MHz
Gain (dB)	11	10.0 Min.
Power @ 1 dB Comp. (dBm)	+26.5	+25.0 Min.
Reverse Isolation (dB)	- 19	- 18 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	3.75	6.0 Max.
Power Vdc	+15	+15 Max.
mA	165	190 Max.

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

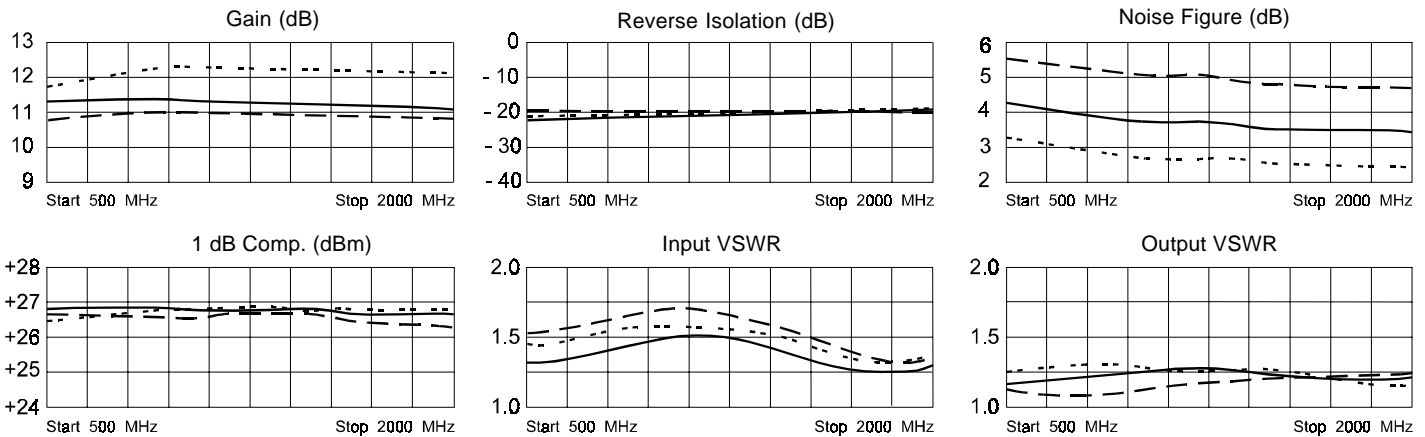
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +51(Typ.)
 Second Order Two Tone Intercept Point +45(Typ.)
 Third Order Two Tone Intercept Point +38(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 + 20 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
500	.20	- 76	3.73	153	.11	- 5	.05	108
750	.24	-100	3.77	131	.10	-13	.08	80
1000	.25	-126	3.71	110	.10	-19	.10	48
1250	.24	-152	3.62	90	.10	-23	.11	20
1500	.21	179	3.52	70	.10	-26	.12	- 12
1750	.17	139	3.41	49	.11	-32	.11	- 44
2000	.14	79	3.26	28	.12	-39	.13	- 82



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