

RF AMPLIFIER

MODEL TR9721

Available as: TR9721, 4 Pin TO-8B (T8)
 RN9721, 4 Pin Surface Mount (SM19)
 BR9721, SMA Connectorized Housing (H2)

Features

- Ultra Low Noise Figure: 0.8 dB Typical
- High Output Power: +22 dBm Typical
- Operating Temp. 0 °C to +70 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +70 °C
Frequency	200-500 MHz	200 - 500 MHz
Gain (dB)	+34	32 Min.
Power @ 1 dB Comp. (dBm)	+22	+20 Min.
Reverse Isolation (dB)	-45	-40 Max.
VSWR In	2.3:1	2.5:1 Max.
Out	1.5:1	2.0:1 Max.
Noise Figure (dB)	0.8	1.3 Max.
Power Vdc	+15	+15
mA	105	110 Max.

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

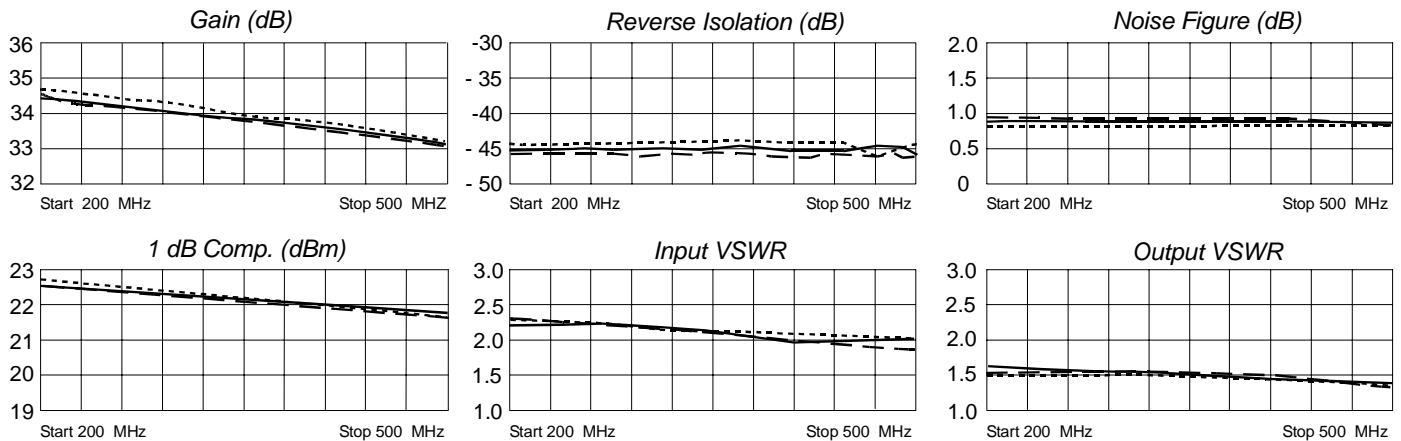
Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +48 dBm (Typ.)
 Second Order Two Tone Intercept Point +43 dBm (Typ.)
 Third Order Two Tone Intercept Point +33 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature -55°C to + 85 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 85 °C
 DC Voltage + 18 Volts
 Continuous RF Input Power 0 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 - - - - + 70 °C ······ 0 °C

Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
200	.41	-32	54.19	-40	.0030	51	.21	169
250	.39	-42	53.46	-57	.0034	0	.20	155
300	.38	-52	52.09	-74	.0025	37	.20	144
350	.36	-61	50.75	-90	.0033	3	.18	134
400	.35	-70	49.24	-105	.0038	-9	.17	125
450	.34	-78	47.44	-120	.0044	-9	.16	114
500	.33	-86	45.49	-134	.0032	-2	.14	103



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