

RF AMPLIFIER

MODEL TR9666

Available as: TR9666, 4 Pin TO-8B (T8)
 RN9666, 4 Pin Surface Mount (SM19)
 BR9666, Connectorized Housing (H2)

Features

- High Gain: 37 dB Typical
- Low Noise Figure: <3.5 dB Typical

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	37	34.0 Min.
Power @ 1 dB Comp. (dBm)	+15.5	+14.0 Min.
Reverse Isolation (dB)	-52	-49 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.6:1	2.0:1 Max.
Noise figure (dB)	<3.5	4.5 Max.
Power Vdc	+15	+15
mA	82	87 Max.

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

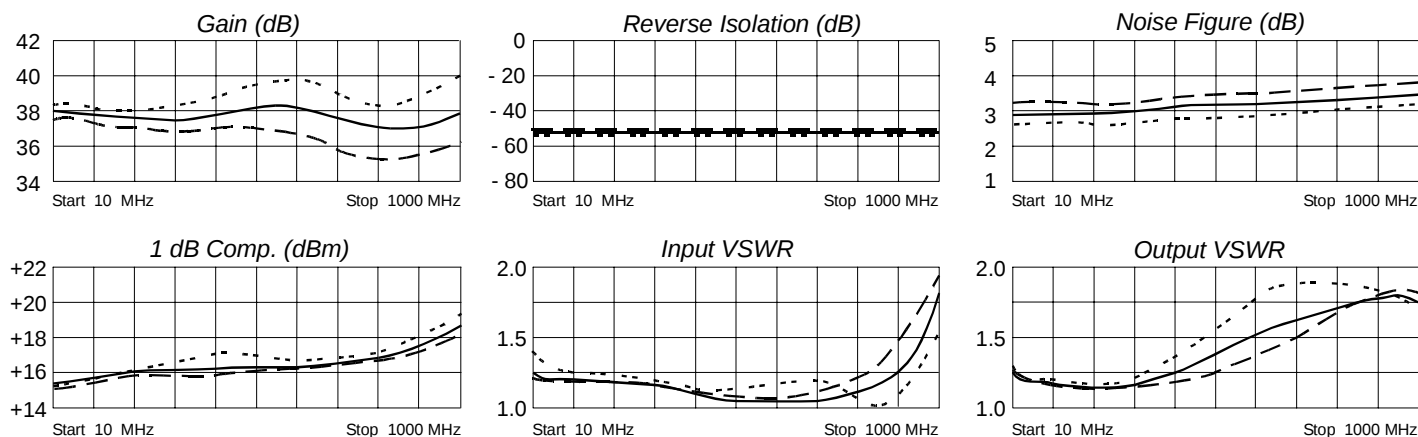
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +37 dBm (Typ.)
 Second Order Two Tone Intercept Point +31 dBm (Typ.)
 Third Order Two Tone Intercept Point +25 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 + 18 Volts
 Continuous RF Input Power + 20 dBm
 Short Term RF Input Power ... 200 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
10	.12	-169	80.22	-178	.002	-19	.13	157
50	.10	160	80.76	158	.002	20	.10	164
100	.10	142	79.59	134	.002	-13	.09	162
200	.09	108	76.91	89	.002	-12	.07	162
400	.04	55	78.05	2	.002	-7	.11	150
600	.02	149	83.56	-95	.002	24	.21	72
800	.02	-146	73.82	166	.002	-134	.25	-30
1000	.30	-165	80.90	59	.002	172	.22	-121



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