RF AMPLIFIER
MODEL *TR7215*

Available as: TR7215, 4 Pin TO-8B (T8)
RN7215, 4 Pin Surface Mount (SM19)
BR7215, Connectorized Housing (H2)

Features

- High Gain: 31.5 dB Typical
- Output Power: +13 dBm Typical
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 ºC	MIN/MAX Ta = -55 ºC to +85 ºC
Frequency	5-200 MHz	5-200 MHz
Gain (dB)	31.5	30.0 Min.
Power @ 1 dB Comp. (dBm)	+13	+10.0 Min.
Reverse Isolation (dB)	-40	-35 Max.
VSWR In Out	<1.10:1 <1.25:1	1.5:1 Max. 1.5:1 Max.
Noise Figure (dB)	2.5	4.0 Max.
Power Vdc mA	+15 58	+15 Min. 70 Max.

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

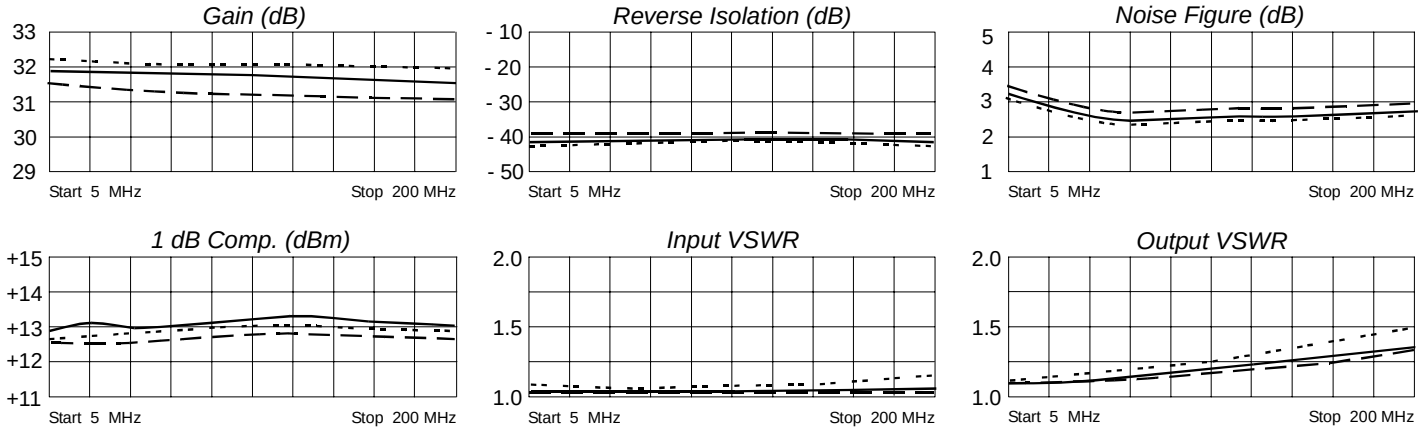
Typical Intermodulation Performance at 25 º C

Second Order Harmonic Intercept Point.....+45 dBm (Typ.)
Second Order Two Tone Intercept Point.....+39 dBm (Typ.)
Third Order Two Tone Intercept Point.....+26 dBm (Typ.)

Maximum Ratings

Ambient Operating Temperature ..... -55ºC to + 100 ºC
Storage Temperature ..... -62ºC to + 125 ºC
Case Temperature ..... + 125 ºC
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 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	.03	- 54	39.35	2	.01	4	.07	-175
25	.01	- 86	38.74	- 9	.01	- 2	.08	-176
50	.02	-160	38.53	- 19	.01	10	.09	-168
75	.04	-160	38.23	- 28	.01	21	.10	-168
100	.05	-150	38.26	- 37	.01	7	.12	-175
125	.05	-148	38.18	- 46	.01	29	.13	178
150	.04	-162	38.18	- 56	.01	15	.12	173
175	.03	161	37.93	- 66	.01	31	.14	174
200	.05	147	38.06	- 75	.01	27	.16	172

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