

RF AMPLIFIER

MODEL TZ9210

Available as: TZ9210, 4 Pin TO-8 (T4)
 TN9210, 4 Pin Surface Mount (SM3)
 FP9210, 4 Pin Flatpack (FP4)
 BX9210, Connectorized Housing

Features

- High Gain: 29 dB Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	0.1 - 200 MHz	0.1 - 200 MHz
Gain (dB)	29	27.5 Min.
Power @ 1 dB Comp. (dBm)	+7	+5.0 Min.
Reverse Isolation (dB)	-41	-39 Max.
VSWR In	<1.25:1	2.0:1 Max.
Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.5	6.0 Max.
Power Vdc	+15	+15
mA	35	40 Max.

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

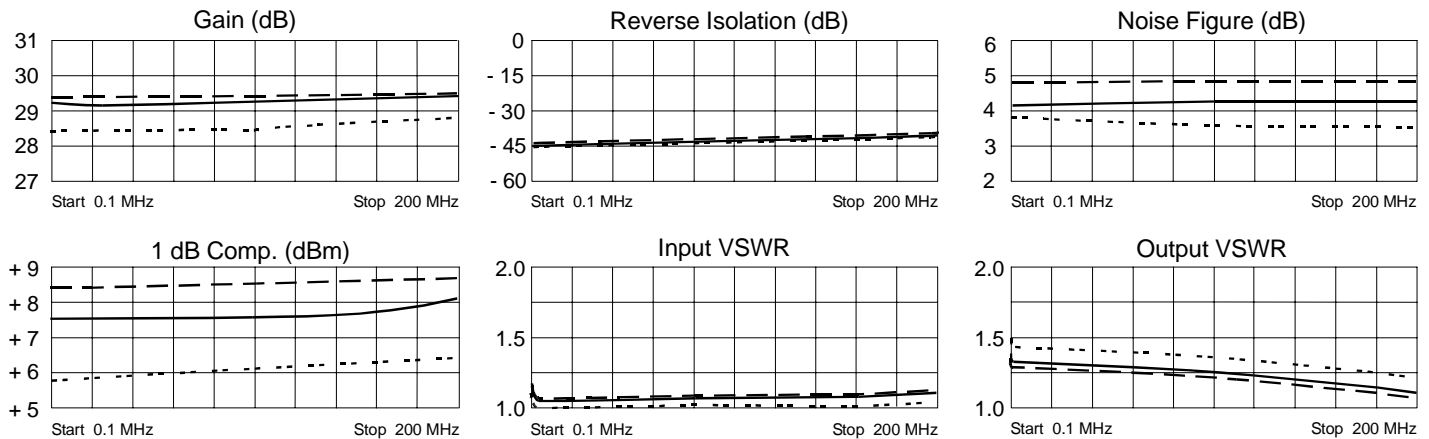
Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +39 dBm (Typ.)
 Second Order Two Tone Intercept Point +33 dBm (Typ.)
 Third Order Two Tone Intercept Point +19 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 + 6 dBm
 Short Term RF Input Power 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μsec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.01	-17	28.83	-2	.01	-1	.13	-2
10	.01	-13	28.81	-4	.01	4	.13	-2
50	.02	-31	28.72	-22	.01	-16	.12	-5
100	.02	-31	28.92	-45	.01	21	.11	-12
150	.03	-32	29.14	-68	.01	19	.08	-11
200	.04	-28	29.35	-91	.01	26	.05	6



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 1/21/04

www.spectrummicrowave.com Spectrum Microwave (Europe) · 2707 Black Lake Place · Philadelphia, Pa. 19154 · PH (215) 464-4000 · Fax (215) 464-4001