

RF AMPLIFIER

MODEL TZ9209

Available as: TZ9209, 4 Pin TO-8 (T4)
 TZ9209, 4 Pin Surface Mount (SM3)
 FP9209, 4 Pin Flatpack (FP4)
 BX9209, Connectorized Housing (H1)

Features

- High Gain: 30.5 dB Typical
- Low Noise Figure: <3.5 dB Typical
- Operating Temp. -55 °C to + 85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +34 dBm (Typ.)
 Second Order Two Tone Intercept Point +28 dBm (Typ.)
 Third Order Two Tone Intercept Point +18 dBm (Typ.)

Specifications

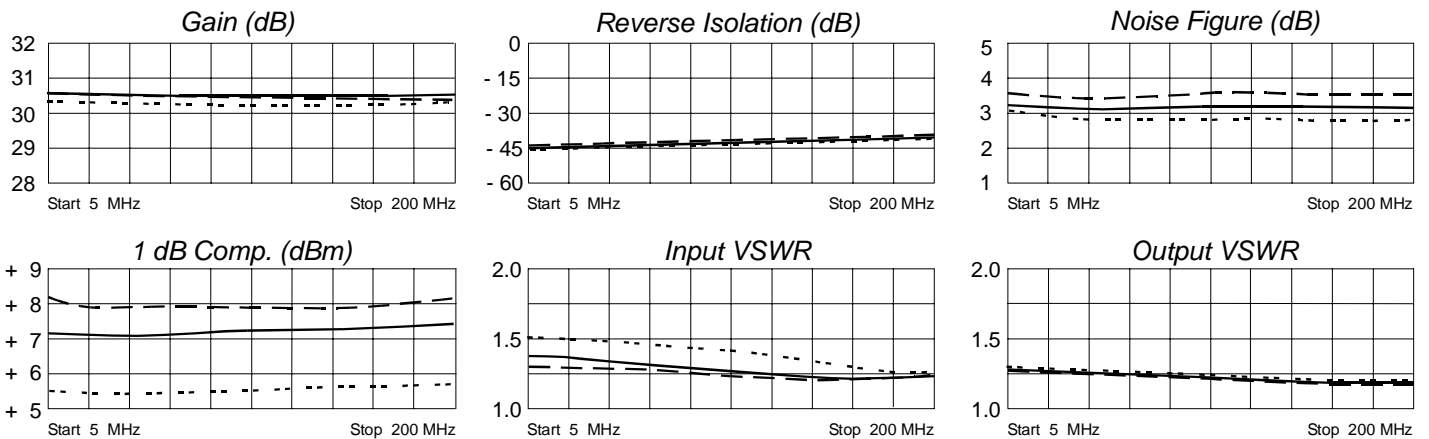
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	30.5	29.0 Min.
Power @ 1 dB Comp. (dBm)	+7	+5.0 Min.
Reverse Isolation (dB)	-40	-38 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<3.5	4.0 Max.
Power Vdc	+12	+12
mA	36	40 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to + 100 °C
 Storage Temperature -62°C to + 125 °C
 Case Temperature + 125 °C
 DC Voltage + 15 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.)

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

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
5	.28	-172	44.53	3	0.00	19	.14	- 9
10	.28	-178	44.48	- 3	0.00	11	.14	- 8
50	.26	171	43.93	- 27	0.00	30	.13	- 23
100	.22	164	42.98	- 53	0.00	39	.13	- 47
150	.16	166	42.56	- 79	0.01	25	.13	- 73
200	.11	-168	42.27	-106	0.01	26	.13	-102



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