

RF AMPLIFIER

MODEL TZ9202

Available as: TZ9202, 4 Pin TO-8 (T4)
 TN9202, 4 Pin Surface Mount (SM3)
 FP9202, 4 Pin Flatpack (FP4)
 BX9202, Connectorized Housing (H1)

Features

- Low Cost; High Gain: 28.5 dB Typical
- Medium Output Power: +16 dBm Typical
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point +50 dBm (Typ.)
 Second Order Two Tone Intercept Point +44 dBm (Typ.)
 Third Order Two Tone Intercept Point +28 dBm (Typ.)

Specifications

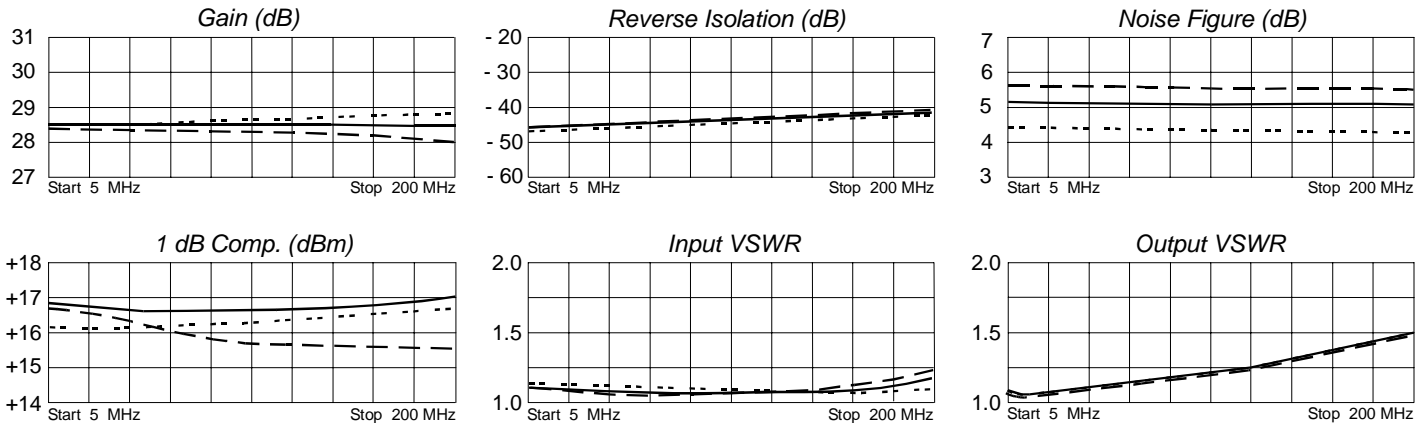
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	28.5	26.0 Min.
Power @ 1 dB Comp. (dBm)	+16.5	+15.0 Min.
Reverse Isolation (dB)	-40	-38 Max.
VSWR In	<1.25:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<5.25	6.0 Max.
Power Vdc	+15	+15
mA	90	95 Max.

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 + 13 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	.04	-137	26.93	3	.01	11	.04	-123
25	.03	-175	26.89	-12	.01	16	.04	-142
50	.02	168	26.99	-25	.00	15	.05	-140
100	.02	128	27.10	-51	.01	29	.09	-150
150	.03	49	27.23	-78	.01	42	.14	-165
200	.08	10	27.02	-105	.01	44	.21	178



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Rev.
2/23/07

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