

RF AMPLIFIER

MODEL TZ9205

Available as: TZ9205, 4 PinTO-8 (T4)
 TN9205, 4 Pin Surface Mount (SM3)
 FP9205, 4 Pin Flatpack (FP4)
 BX9205, Connectorized Housing (H1)

Features

- Low Cost; High Gain: 20.5 dB Typical
- Medium Output Power: +14.5 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

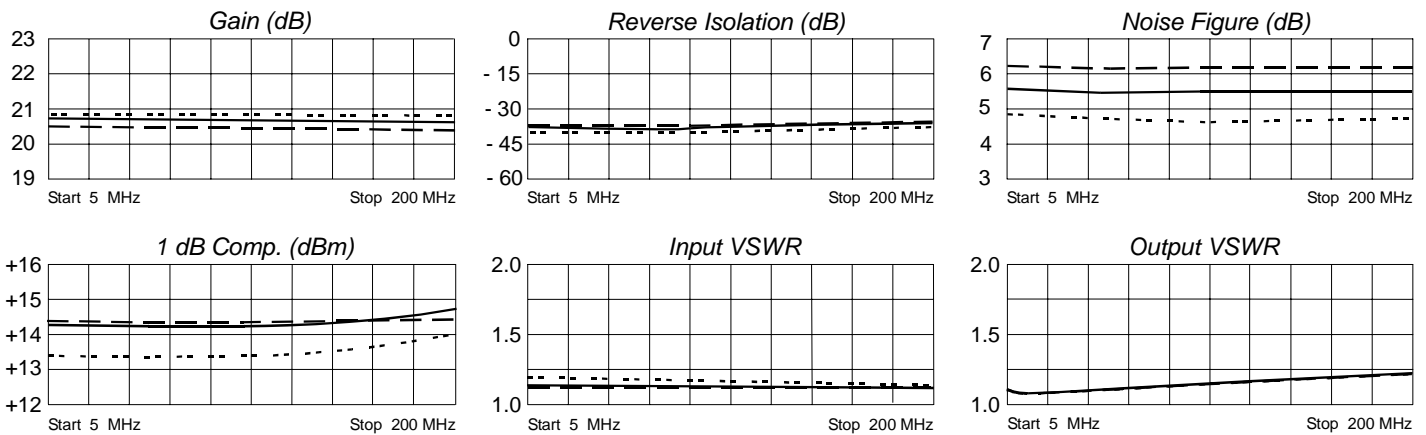
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	20.5	20.0 Min.
Power @ 1 dB Comp. (dBm)	+14.5	+13.0 Min.
Reverse Isolation (dB)	-36	-34 Max.
VSWR In	<1.25:1	2.0:1 Max.
VSWR Out	<1.25:1	2.0:1 Max.
Noise figure (dB)	<6.0	7.0 Max.
Power Vdc	+15	+15
mA	90	96 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	.07	-167	11.00	4	.01	6	.06	-147
25	.07	-175	10.98	-9	.01	12	.05	-171
50	.06	-174	10.99	-21	.01	5	.06	-168
100	.06	-170	10.93	-42	.01	22	.07	-164
150	.06	-163	10.91	-63	.01	15	.08	-161
200	.05	-155	10.90	-84	.02	31	.11	-165



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