

RF AMPLIFIER

MODEL TZ9214

Available as: TZ9214, 4 Pin TO-8 (T4)
 TN9214, 4 Pin Surface Mount (SM3)
 FP9214, 4 Pin Flatpack (FP4)
 BX9214, Connectorized Housing (H1)
 PN9214, Reduced Size Surface Mount (SM11)

Features

- Low Cost
- High Output Power: +21 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 +34 dBm (Typ.)

Specifications

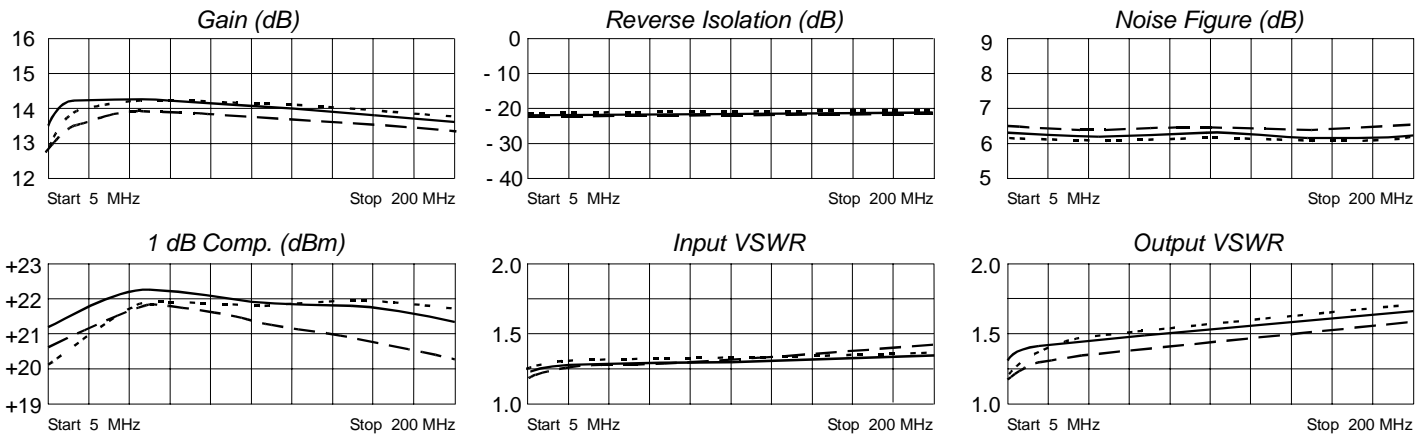
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	14	12.5 Min.
Power @ 1 dB Comp. (dBm)	+21	+20.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<6.5	7.5 Max.
Power Vdc	+15	+15
mA	95	105 Max.

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

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 + 18 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 µsec Max.)

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	.12	-146	4.71	-171	.08	11	.13	57
50	.14	-172	5.16	168	.08	5	.20	-16
100	.14	-170	5.07	154	.08	5	.21	-43
150	.16	-167	4.97	140	.09	8	.23	-66
200	.17	-167	4.77	127	.09	8	.25	-87



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 01/12/05

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