

RF AMPLIFIER

MODEL TZ9403

Available as: TZ9403, 4 Pin TO-8 (T4)
 TN9403, 4 Pin Surface Mount (SM3)
 FP9403, 4 Pin Flatpack (FP4)
 BX9403, Connectorized Housing (H1)
 PN9403, Reduced Size Surface Mount (SM11)

Features

- Low Cost
- Cascadable
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +44 dBm (Typ.)
 Second Order Two Tone Intercept Point +38 dBm (Typ.)
 Third Order Two Tone Intercept Point +30 dBm (Typ.)

Specifications

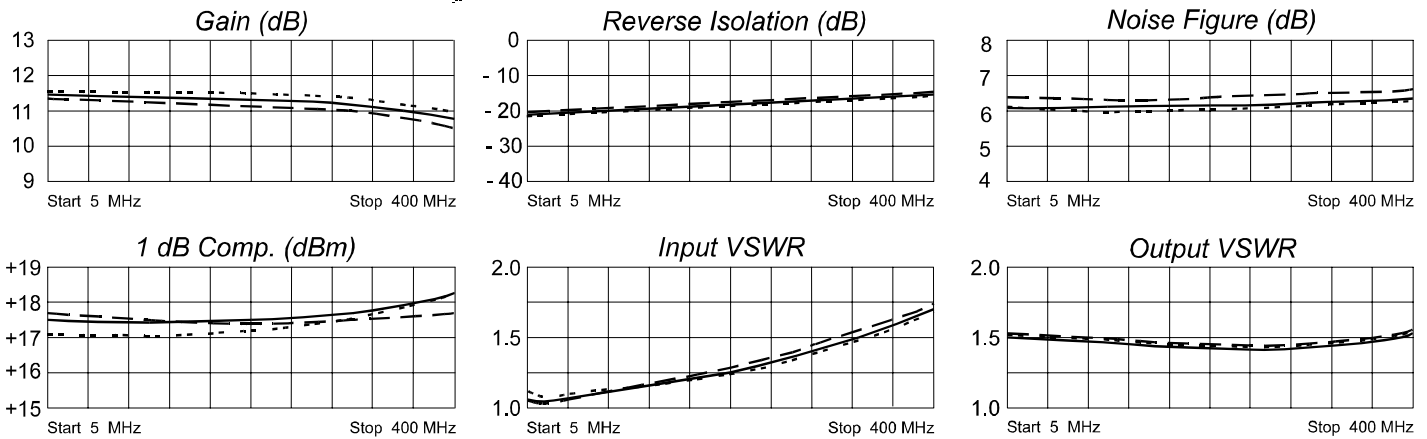
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	11	9.5 Min.
Power @ 1 dB Comp. (dBm)	+17	+15.0 Min.
Reverse Isolation (dB)	-15	-14 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<6.5	7.5 Max.
Power Vdc	+24	+24
Power mA	62	70 Max.

Maximum Ratings

Ambient Operating Temperature -55°C to +100 °C
 Storage Temperature -62°C to +125 °C
 Case Temperature +125 °C
 DC Voltage +27 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



Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.02	-111	3.75	-179	.09	3	.20	- 4
50	.02	-110	3.73	166	.09	2	.20	- 17
100	.05	-117	3.73	151	.10	4	.19	- 33
200	.11	-136	3.69	121	.11	5	.17	- 73
300	.18	-168	3.59	90	.14	- 3	.17	-123
400	.26	150	3.40	58	.16	-15	.21	-177



Spectrum Microwave · 2144 Franklin Drive N.E. · Palm Bay, Florida 32905 · PH (888) 553-7531 · Fax (888) 553-7532 04/23/93

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