

RF AMPLIFIER

MODEL TZ9400

Available as: TZ9400, 4 Pin TO-8 (T4)
 TN9400, 4 Pin Surface Mount (SM3)
 FP9400, 4 Pin Flatpack (FP4)
 BX9400, Connectorized Housing (H1)
 PN9400, 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 +11 dBm (Typ.)
 Second Order Two Tone Intercept Point + 5 dBm (Typ.)
 Third Order Two Tone Intercept Point +10 dBm (Typ.)

Specifications

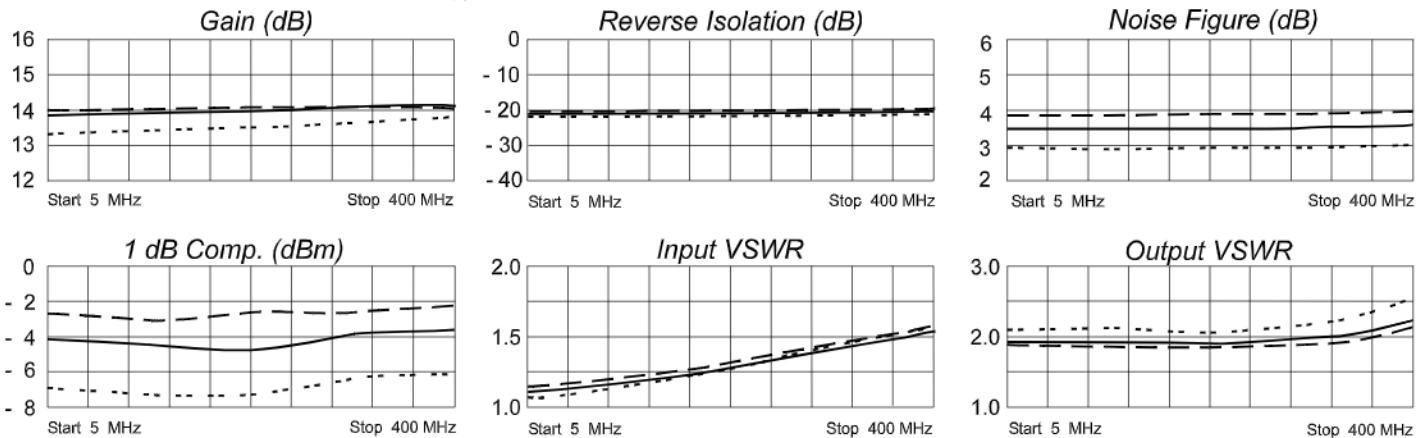
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	14	13.0 Min.
Power @ 1 dB Comp. (dBm)	-4	-8.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<2.0:1	2.5:1 Max.
Noise Figure (dB)	<3.5	4.5 Max.
Power Vdc	+15	+15
mA	8	9 Max.

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 +13 dBm
 Short Term RF Input Power..... 50 Milliwatts (1 Minute Max.)
 Maximum Peak Power 0.5 Watt (3 μ sec Max.)

Typical Performance Data



Linear S-Parameters

FREQ. MHz	S11 Mag Deg	S21 Mag Deg	S12 Mag Deg	S22 Mag Deg
5	.05 - 18	4.96 -179	.09 3	.32 - 1
50	.05 - 42	4.96 169	.09 - 0	.32 - 14
100	.07 - 66	4.96 159	.09 - 3	.32 - 28
200	.12 - 97	5.01 137	.09 - 5	.33 - 58
300	.17 -118	5.06 114	.09 - 8	.33 - 93
400	.21 -136	5.04 89	.10 -13	.36 -135



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