

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

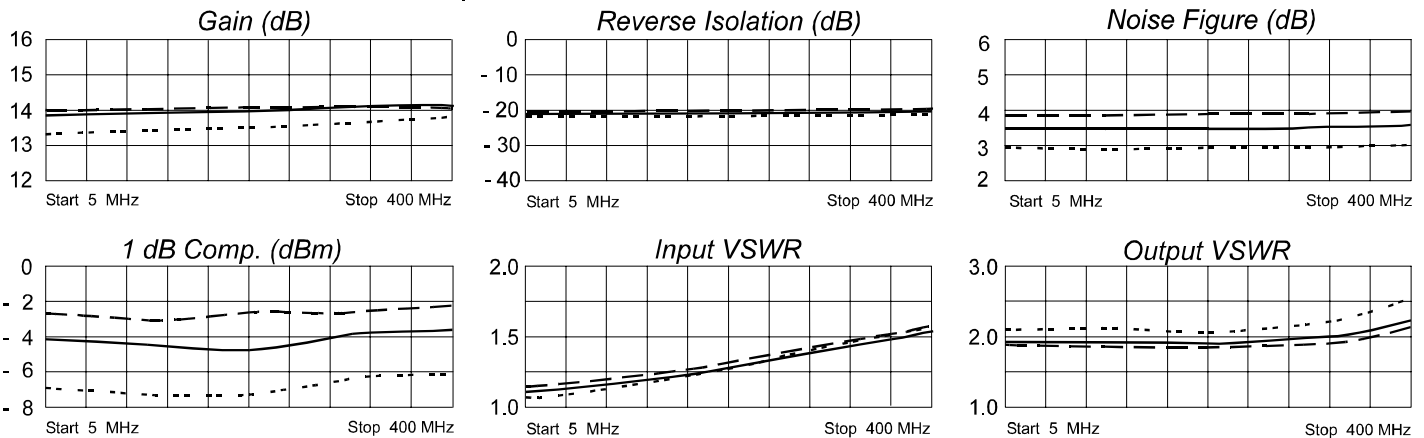
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	14	13.0 Min.
Power @ 1 dB Comp. (dBm)	-4	-8.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<2.0:1	2.5:1 Max.
Noise Figure (dB)	<3.5	4.5 Max.
Power Vdc	+15	+15
mA	8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