

RF AMPLIFIER

MODEL TZ9401

Available as: TZ9401, 4 Pin TO-8 (T4)
 TN9401, 4 Pin Surface Mount (SM3)
 FP9401, 4 Pin Flatpack (FP4)
 BX9401, Connectorized Housing (H1)
 PN9401, 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 +18 dBm (Typ.)
 Second Order Two Tone Intercept Point +13 dBm (Typ.)
 Third Order Two Tone Intercept Point +11 dBm (Typ.)

Specifications

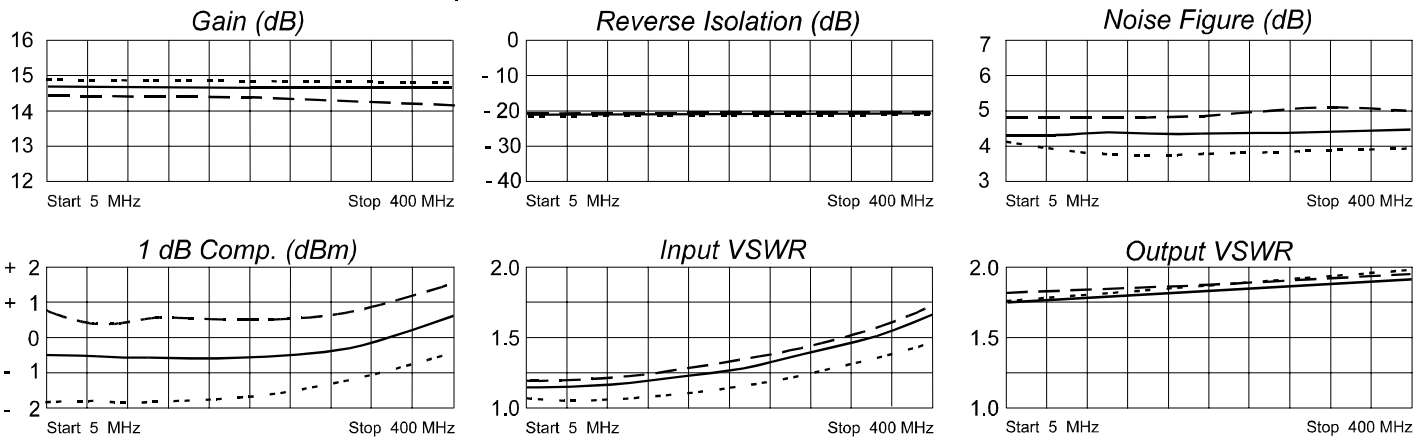
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	14.7	13.0 Min.
Power @ 1 dB Comp. (dBm)	-1	-4.0 Min.
Reverse Isolation (dB)	-20	-19 Max.
VSWR In	<1.5:1	2.0:1 Max.
VSWR Out	<1.9:1	2.2:1 Max.
Noise Figure (dB)	<4.5	5.5 Max.
Power Vdc	+15	+15
mA	10	12 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 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	.06	-14	5.27	-179	.09	2	.29	-1
50	.06	-21	5.26	167	.09	-2	.29	-14
100	.08	-39	5.27	154	.09	-4	.30	-29
200	.12	-62	5.25	127	.09	-8	.31	-61
300	.18	-80	5.27	99	.09	-10	.32	-97
400	.24	-96	5.19	69	.09	-13	.32	-142



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