

RF AMPLIFIER

MODEL TZ9416

Available as: TZ9416, 4 Pin TO-8 (T4)
 TN9416, 4 Pin Surface Mount (SM3)
 FP9416, 4 Pin Flatpack (FP4)
 BX9416, Connectorized Housing (H1)

Features

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

Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point +17 dBm (Typ.)
 Second Order Two Tone Intercept Point +11 dBm (Typ.)
 Third Order Two Tone Intercept Point +9 dBm (Typ.)

Specifications

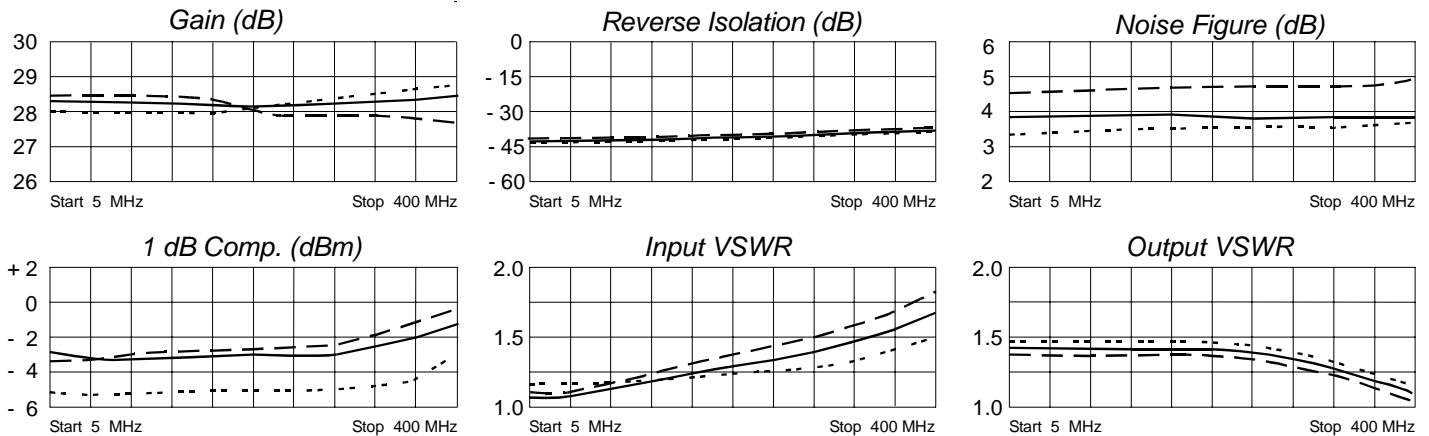
CHARACTERISTIC		TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency		5 - 400 MHz	5 - 400 MHz
Gain (dB)		28	27.0 Min.
Power @ 1 dB Comp. (dBm)		-3.4	-6.0 Max.
Reverse Isolation (dB)		-40	-35 Max.
VSWR	In	<1.25:1	2.0:1 Max.
	Out	<1.5:1	2.0:1 Max.
Noise figure (dB)		4.0	5.5 Max.
Power	Vdc	+15	+15
	mA	20	25 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	.03	-138	27.48	1	.01	10	.18	- 5
50	.05	-126	27.26	- 20	.01	6	.17	- 1
100	.08	-127	26.97	- 42	.01	46	.17	- 2
200	.12	-132	26.45	- 84	.01	44	.18	- 5
300	.16	-130	26.67	-125	.01	24	.14	-15
400	.25	-123	27.49	-168	.01	14	.02	72



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