

# RF AMPLIFIER

## MODEL CZ8404

Available as: CZ8404, 4 Pin TO-12 (T7)  
 TN8404, 4 Pin Surface Mount (SM3)  
 BX8404, Connectorized Housing (H1)

### Features

- Lower Cost
- High Output Power: +17.0 dBm Typical
- Operating Temp. 0 °C to +70 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +70 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	11.0	9.5 Min.
Power @ 1 dB Comp. (dBm)	+17.0	+15.0 Min.
Reverse Isolation (dB)	-17.5	-16.0 Max.
VSWR In	<1.50:1	2.0:1 Max.
VSWR Out	<1.75:1	2.0:1 Max.
Noise figure (dB)	<6.5	7.5 Max.
Power Vdc	+15	+15
mA	65	70 Max.

Note: Care should always be taken to effectively ground the case of each unit.

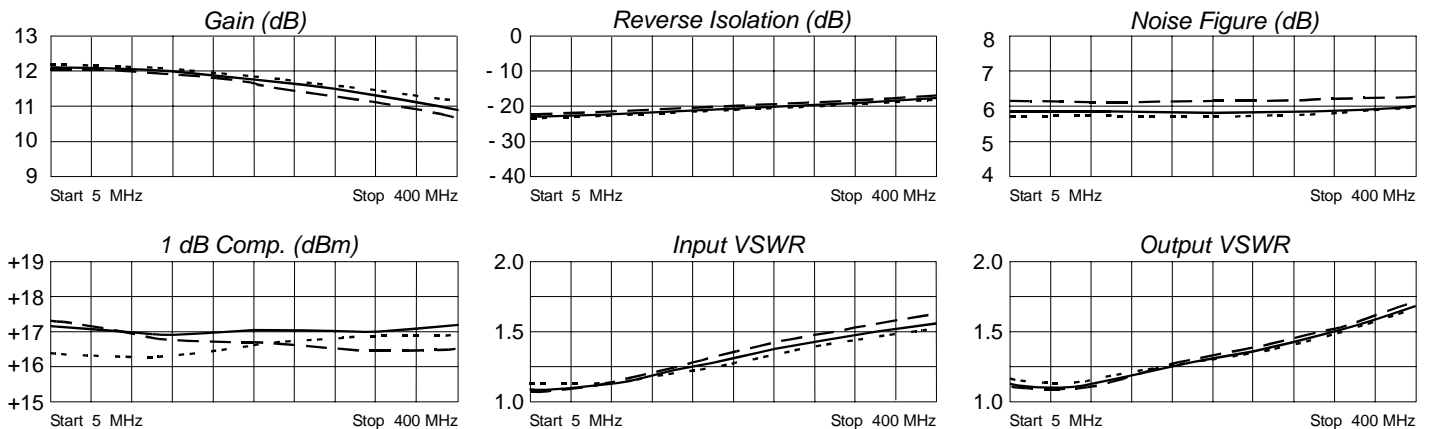
### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+45 dBm (Typ.)  
 Second Order Two Tone Intercept Poin.....+39 dBm (Typ.)  
 Third Order Two Tone Intercept Point.....+30 dBm (Typ.)

### 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 - - - - +70 °C ······ 0 °C

### Linear S-Parameters

FREQ. MHz	S11		S21		S12		S22	
	Mag	Deg	Mag	Deg	Mag	Deg	Mag	Deg
5	.05	-145	4.06	-178	.08	4	.06	-30
50	.05	-144	4.04	165	.08	1	.06	-48
100	.08	-142	4.02	151	.08	2	.08	-77
200	.14	-153	3.91	121	.09	-0	.13	-113
300	.18	-179	3.72	92	.11	-4	.19	-138
400	.22	139	3.53	62	.13	-7	.27	-162



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