

# RF AMPLIFIER

## MODEL CZ8207

Available as: CZ8207, 4 Pin TO-12 (T7)  
 TN8207, 4 Pin Surface Mount (SM3)

### Features

- 5 Volt Operation
- High Gain: 18 dB Typical

### Typical Intermodulation Performance at 25 °C

Second Order Harmonic Intercept Point.....+ 23 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+ 17 dBm (Typ.)  
 Third Order Two Tone Intercept Point .....+ 15 dBm (Typ.)

### Specifications

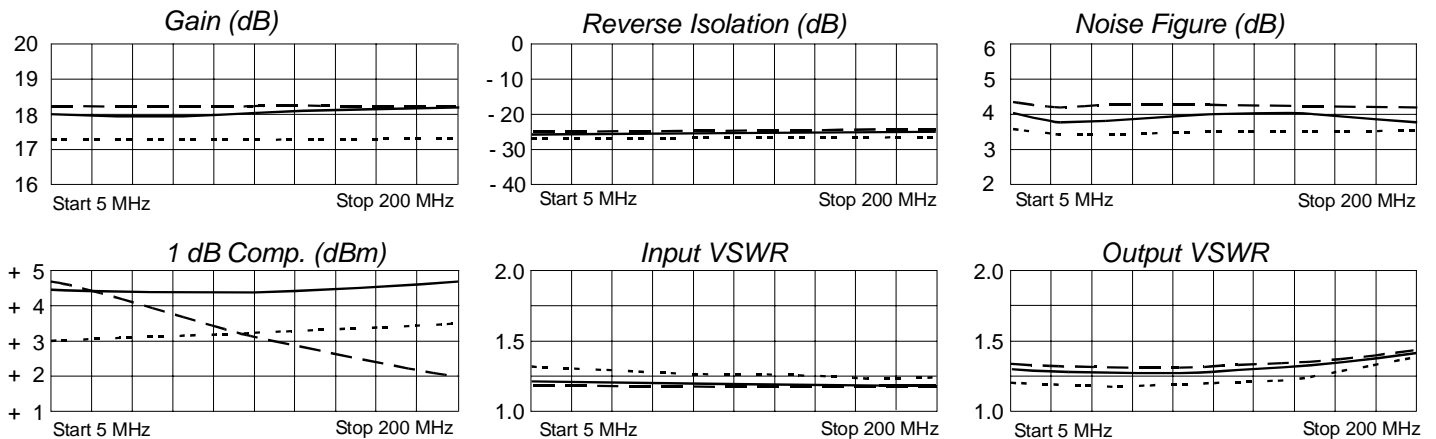
CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = 0 °C to +70 °C
Frequency	5 - 200 MHz	5 - 200 MHz
Gain (dB)	18	17.0 Min.
Power @ 1 dB Comp. (dBm)	+4	0 Min.
Reverse Isolation (dB)	-25	-24 Max.
VSWR In	<1.25:1	2.0:1 Max.
VSWR Out	<1.5:1	2.0:1 Max.
Noise figure (dB)	<4.0	5.0 Max.
Power Vdc	+5	+5
mA	17	21 Max.

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  
 Continuous RF Input Power ..... + 13 dBm  
 Short Term RF Input Power ... 200 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.2 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	.09	-167	7.89	-178	.05	3	.12	-170
25	.09	179	7.87	174	.05	2	.12	-177
50	.09	176	7.88	167	.05	0	.12	-175
100	.08	174	7.91	153	.05	3	.12	-173
150	.07	178	7.96	139	.06	1	.14	-170
200	.07	-177	8.05	125	.05	5	.17	-168
250	.07	-163	8.13	110	.06	2	.22	-171



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