

# RF AMPLIFIER

## MODEL CZ8403

Available as: CZ8403, 4 Pin TO-12 (T7)  
 TN8403-3, 4 Pin Surface Mount (SM3)  
 FP8403-4, 4 Pin Flatpack (FP4)  
 BX8403, Connectorized Housing (H1)  
 PN8403, Reduced Size Surface Mount (SM11)

### Features

- Lower Cost
- Cascadable
- Operating Temp. -55 °C to +85 °C
- Environmental Screening Available

### Specifications

CHARACTERISTIC	TYPICAL Ta= 25 °C	MIN/MAX Ta = -55 °C to +85 °C
Frequency	5 - 400 MHz	5 - 400 MHz
Gain (dB)	10.5	9.0 Min.
Power @ 1 dB Comp. (dBm)	+17	+15 Min.
Reverse Isolation (dB)	- 15	-14 Max.
VSWR In	<1.5:1	2.0:1 Max.
Out	<1.75:1	2.0:1 Max.
Noise Figure (dB)	<6.8	7.5 Max.
Power Vdc	+24	+24
mA	62	70 Max.

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

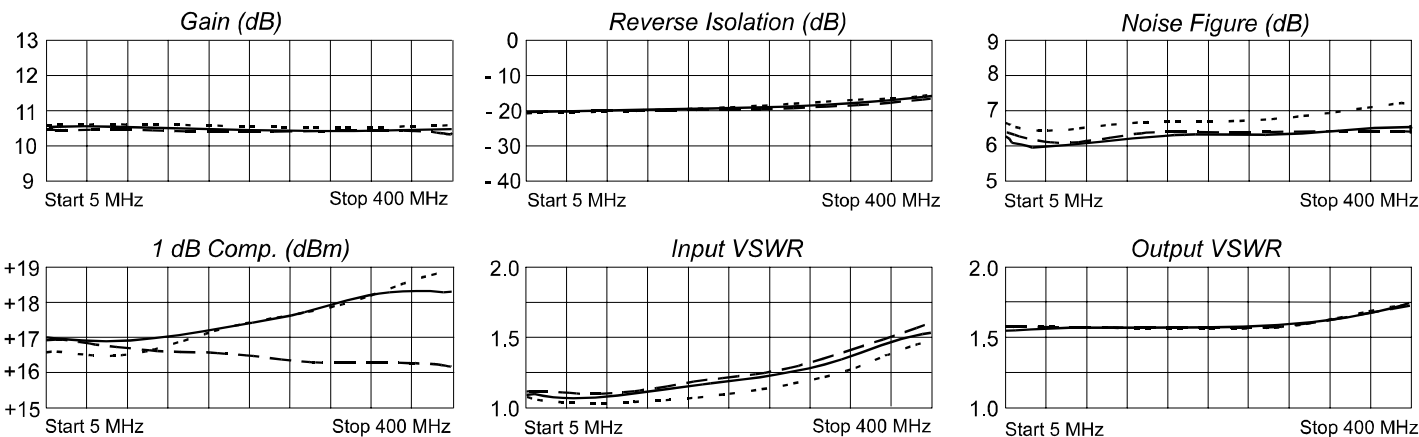
### Typical Intermodulation Performance at 25 ° C

Second Order Harmonic Intercept Point.....+42 dBm (Typ.)  
 Second Order Two Tone Intercept Point.....+36 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 ..... +27 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	- 39	3.41	-178	.09	3	.22	- 4
50	.03	- 43	3.40	166	.09	2	.22	- 17
100	.04	- 73	3.41	151	.10	5	.23	- 33
200	.09	-115	3.42	122	.11	7	.22	- 70
300	.14	-156	3.41	92	.14	2	.24	-109
400	.22	-159	3.40	61	.17	- 8	.29	-151

