

# RF AMPLIFIER

## MODEL QBH-1424

Available as: QBH-1424, 4 Pin TO-8 (T4)  
 QBH-5024, 4 Pin Surface Mount (SM3)  
 QBH-9-1424, SMA Connectorized Housing

### Features

- Superior Phase Noise Performance
- Replaces Competitor's "1024" Design
- 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	10 - 1000 MHz	10 - 1000 MHz
Gain (dB)	13.0	12.0 Min.
Gain Flatness (dB)	±0.75	± 0.75 Max.
Power @ 1 dB Comp. (dBm) (10-500 MHz) (500-1000 MHz)	26.0 24.0	24.0 Min. 21.5 Min.
Reverse Isolation (dB)	-15	---
Noise Figure (dB)	7.0	7.5 Max.
VSWR In	1.5:1	2.0:1 Max.
VSWR Out	1.5:1	2.0:1 Max.
Power Vdc	+15	+15
mA	165	175 Max.

Revision April 21, 2026  
 ECN: Removed Rev. Iso. Max  
 Updated NF from 7 dB to 7.5 dB Max.  
 Updated Typ. Values

### Typical Intermodulation Performance at 25 ° C

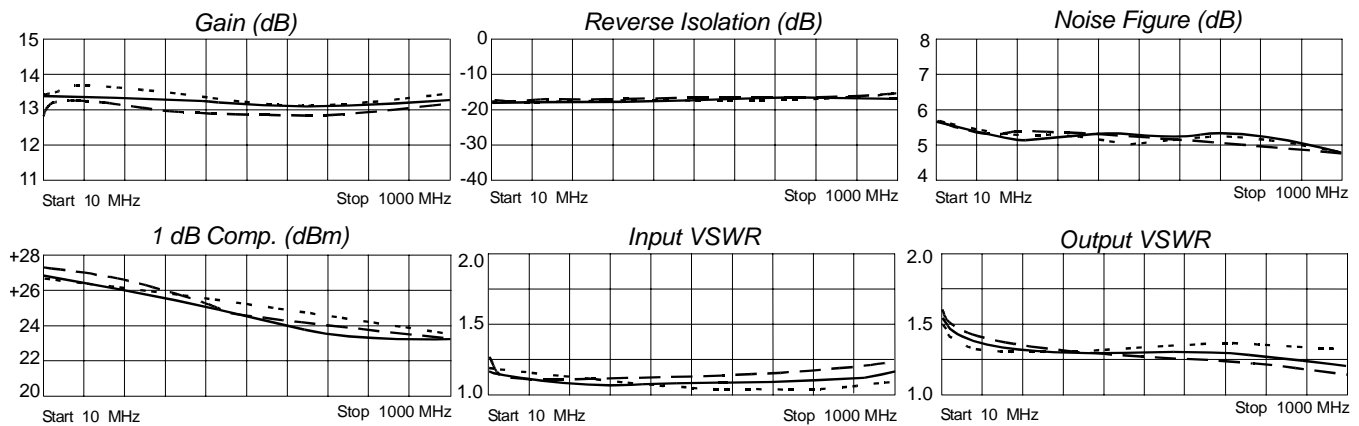
Second Order Harmonic Intercept Point ..... +46 dBm (Typ.)  
 Second Order Two Tone Intercept Point ..... +40 dBm (Typ.)  
 Third Order Two Tone Intercept Point ..... +35 dBm (Typ.)  
 (Intermod values measured at midband)

### Maximum (NO DAMAGE) Ratings

Ambient Operating Temperature ..... -55°C to + 100 °C  
 Storage Temperature ..... -62°C to + 125 °C  
 Case Temperature ..... + 125 °C  
 DC Voltage ..... + 17 Volts  
 Continuous RF Input Power ..... + 13 dBm  
 Short Term RF Input Power ..... 50 Milliwatts (1 Minute Max.)  
 Maximum Peak Power ..... 0.1 Watt (3 µsec Max.)

Note: Care should always be taken to effectively ground the case of each unit.  
 Guaranteed when used in a 50 ohm circuit.

### Typical Performance Data



Legend ——— + 25 °C    - - - - + 85 °C    ······ -55 °C