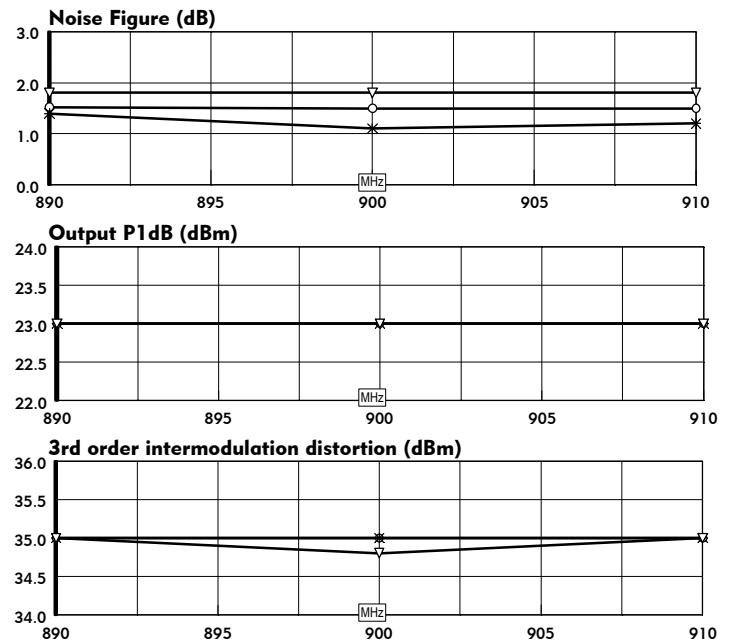
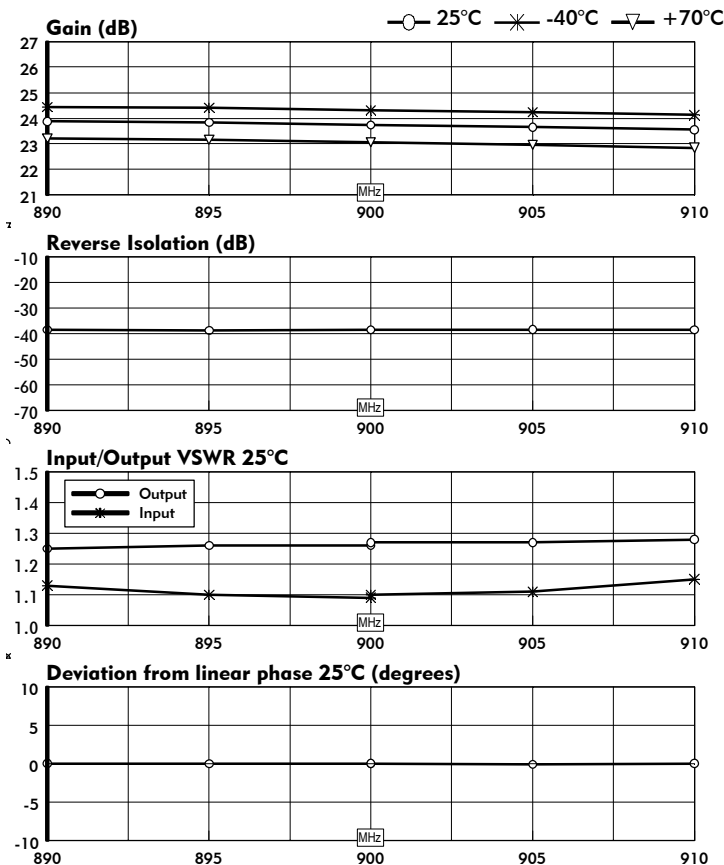


# QBH-8712

- **890-910 MHz bandwidth**
- **High intercept point, +35 dBm typical IP3**
- **Low noise figure, 1.5 dB typical**
- **15 Vdc operation**

| Parameters             | Typical<br>25°C  | Guaranteed<br>-40 to +70°C | Units   |
|------------------------|------------------|----------------------------|---------|
| Frequency range        | 890 - 910        |                            | MHz     |
| Small signal gain      | 23.5             |                            | dB      |
| Gain flatness          | 0.3              | 0.6                        | dB p-p  |
| Reverse isolation      | 38               | 37                         | dB      |
| VSWR Input             | 1.2:1            | 1.5:1                      |         |
| Output                 | 1.3:1            | 1.5:1                      |         |
| 1 dB compression       | +23              | +22                        | dBm     |
| Output intercept point |                  |                            |         |
| 3rd Order              | +35              | +32                        | dBm     |
| 2nd Order              |                  |                            | dBm     |
| Noise figure           | 1.5              | 2.0                        | dB      |
| DC supply voltage*     | 15               |                            | Vdc     |
| DC supply current      | 180              | 220                        | mA      |
| Gain vs. Vdc           |                  |                            | dB/Volt |
| Package/Housing        | LCSM (E52-19422) |                            |         |

\*all specification ratings are based on DC supply voltage  $\pm 1\%$



## TYPICAL S-PARAMETER DATA

|     | S11   |        | S21  |      | S12   |       | S22   |       |
|-----|-------|--------|------|------|-------|-------|-------|-------|
| MHz | dB    | Ang    | dB   | Ang  | dB    | Ang   | dB    | Ang   |
| 890 | -24.7 | 158.0  | 23.9 | 36.9 | -38.5 | -52.5 | -19.2 | -47.5 |
| 895 | -26.7 | 171.4  | 23.8 | 34.0 | -38.8 | -58.2 | -18.9 | -51.6 |
| 900 | -28.2 | -168.5 | 23.7 | 31.1 | -38.6 | -59.9 | -18.7 | -55.6 |
| 900 | -27.8 | -169.4 | 23.7 | 31.1 | -38.6 | -57.9 | -18.6 | -55.4 |
| 905 | -27.1 | -154.3 | 23.7 | 28.2 | -38.5 | -63.1 | -18.4 | -59.3 |
| 910 | -23.9 | -144.3 | 23.5 | 25.4 | -38.6 | -66.2 | -18.2 | -62.9 |

## ABSOLUTE MAXIMUM RATINGS

|                      |               |
|----------------------|---------------|
| Power supply voltage |               |
| Sustaining           | +17.0 Vdc     |
| Pulse (transient)    | +20.0 Vdc     |
| Temperature          |               |
| Operating            | -55 to +85°C  |
| Storage              | -65 to +150°C |
| Maximum input drive  | 2.0 Vrms      |