

Hybrid Amplifiers High Dynamic Range

Electrical Specifications ⁽¹⁾:

| Parameter | Specification Limit | | Units |
|-------------------------------------|-----------------------|-------------|-------------|
| Temperature | +25 (Typical) | -40 to +70 | °C |
| Frequency Range | 800 - 960 | | MHz |
| Small Signal Gain | 22.0 ± 0.5 | | dB |
| Gain vs. Temperature | | +0.7 / -0.7 | dB Max |
| Gain Flatness | 1.0 | | dB Max p-p |
| Reverse Isolation | | | dB Min |
| VSWR Input | 1.5:1 | 1.5:1 | Max |
| VSWR Output | 1.5:1 | 1.5:1 | Max |
| 1 dB Compression | +31.5 | +31 | dBm Min |
| Output Intercept Point 3rd Order | +47 | +46 | dBm Min |
| Output Intercept Point 2nd Order | | | dBm Min |
| Noise Figure | 3.0 | 3.0 | dB Max |
| DC Power @ 15 Vdc ± 1% | 350 | 370 | mA Max |
| Gain vs. Vdc | 0.20 | | dB/Volt Max |
| Housing | Hybrid SM (E52-19422) | | |

QBH-8900

Absolute Maximum Ratings

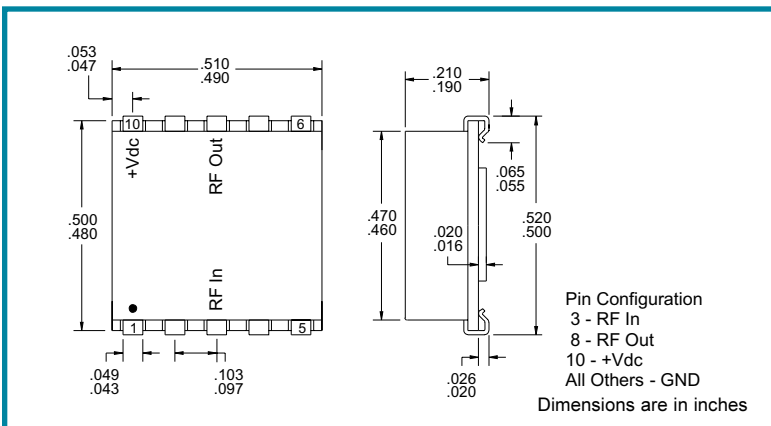
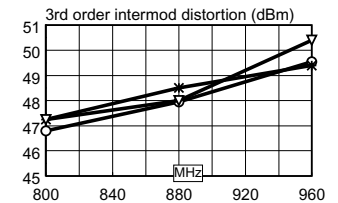
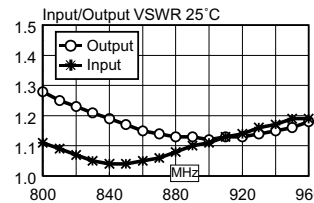
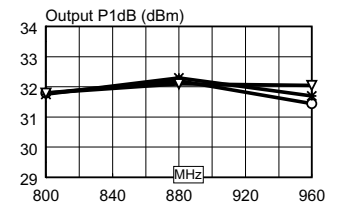
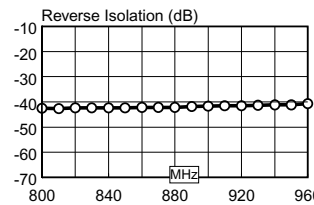
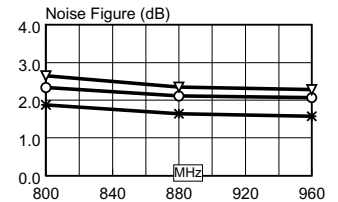
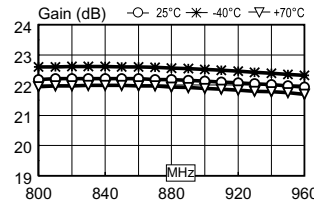
| | |
|--------------------------------|---------------|
| Power Supply Voltage | |
| Sustaining | 18.0 Vdc |
| Pulse (transient) | 20.0 Vdc |
| Temperature | |
| Operating | -55 to +100°C |
| Storage | -65 to +125°C |
| Max Input Drive | 3.0 VRMS |
| Thermal Rise, junction-to-case | +34°C |

Notes:

1. Specifications are guaranteed when tested in a 50 Ohm system. Specifications indicated as typical are not guaranteed.

Typical S-Parameter Data

| MHz | S11 | | S21 | | S12 | | S22 | |
|-----|-------|-------|------|-------|-------|------|-------|--------|
| | dB | Ang | dB | Ang | dB | Ang | dB | Ang |
| 800 | -26.2 | -72.8 | 22.2 | 101.9 | -42.6 | 29.5 | -18.2 | -133.0 |
| 830 | -31.6 | -36.3 | 22.2 | 89.0 | -42.4 | 26.0 | -20.5 | -134.5 |
| 850 | -38.1 | -12.4 | 22.2 | 80.6 | -42.4 | 23.6 | -22.2 | -133.3 |
| 870 | -30.6 | -7.6 | 22.2 | 72.4 | -42.2 | 22.4 | -23.6 | -129.1 |
| 890 | -26.6 | -4.7 | 22.2 | 64.4 | -41.8 | 18.8 | -24.6 | -120.8 |
| 910 | -24.4 | -7.1 | 22.1 | 56.5 | -41.5 | 17.9 | -24.6 | -107.0 |
| 930 | -22.7 | -11.1 | 22.0 | 48.8 | -41.3 | 15.9 | -24.0 | -90.7 |
| 950 | -21.5 | -15.8 | 22.0 | 41.2 | -41.1 | 13.0 | -22.8 | -75.7 |
| 960 | -21.1 | -19.5 | 21.9 | 37.4 | -40.7 | 11.7 | -22.1 | -70.0 |



Specifications subject to change without notice.