Available as: QBH-8756, Hybrid SM (E52-19422)

**Features**
- High Gain: 22.5 dB Typical
- High Power: +20 dBm Typical
- Environmental Screening Available

**Specifications**

<table>
<thead>
<tr>
<th>CHARACTERISTIC</th>
<th>TYPICAL</th>
<th>MIN/MAX</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ambient Operating Temp.</td>
<td>25 °C</td>
<td>-55 to +125 °C</td>
</tr>
<tr>
<td>Storage Temp.</td>
<td>-65 to +150 °C</td>
<td></td>
</tr>
<tr>
<td>Case Temp.</td>
<td>+125 °C</td>
<td></td>
</tr>
<tr>
<td>DC Voltage</td>
<td>+15.5 Volts</td>
<td></td>
</tr>
<tr>
<td>RF Input Power</td>
<td>+13 dBm</td>
<td></td>
</tr>
<tr>
<td>Short Term RF Power</td>
<td>50 Milliwatts (1 Min. Max.)</td>
<td>+13 dBm</td>
</tr>
<tr>
<td>Maximum Peak Power</td>
<td>0.5 Watt (3 µsec Max.)</td>
<td></td>
</tr>
</tbody>
</table>

- **Features**
  - High Gain: 22.5 dB Typical
  - High Power: +20 dBm Typical
  - Environmental Screening Available

- **Absolute Maximum (No Damage) Ratings**
  - Ambient Operating Temperature: -55 °C to +125 °C
  - Storage Temperature: -65 °C to +150 °C
  - Case Temperature: +125 °C
  - DC Voltage: +15.5 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.)

  **Note:** Specifications are guaranteed when tested in a 50 Ohm system.
  Specifications indicated as typical are not guaranteed.

- **Typical Performance Data**
  - Gain (dB)
    - Frequency: 1850 - 1910 MHz
    - Typical: 22.5 dB
    - Min/Max: 19 - 25 dB
  - Reverse Isolation (dB)
    - Frequency: 1850 - 1910 MHz
    - Typical: -40 dB
    - Min/Max: -70 to 0 dB
  - Noise Figure (dB)
    - Frequency: 1850 - 1910 MHz
    - Typical: 1.0 dB
    - Min/Max: 0.0 to 2.0 dB
  - 1 dB Compression (dBm)
    - Frequency: 1850 - 1910 MHz
    - Typical: +20 dBm
    - Min/Max: 19 to 25 dBm
  - Output Intercept Point
    - 3rd Order: +35 dBm
    - 2nd Order: +22.5 dBm
  - Gain (dB)
    - Frequency: 1850 - 1910 MHz
    - Typical: 22.5 dB
    - Min/Max: 19 - 25 dB
  - Gain Flatness
    - Frequency: 1850 - 1910 MHz
    - Typical: 0.7 dB
    - Min/Max: 0.5 to 1.0 dB

  **Linear S-Parameters Data**

<table>
<thead>
<tr>
<th>FREQUENCY (MHz)</th>
<th>S11 (dB)</th>
<th>S12 (dB)</th>
<th>S21 (dB)</th>
<th>S22 (dB)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1850</td>
<td>-24.0</td>
<td>-66.5</td>
<td>107.5</td>
<td>-23.9</td>
</tr>
<tr>
<td>1860</td>
<td>-25.6</td>
<td>-69.9</td>
<td>114.4</td>
<td>-23.4</td>
</tr>
<tr>
<td>1870</td>
<td>-27.7</td>
<td>-71.5</td>
<td>119.8</td>
<td>-22.9</td>
</tr>
<tr>
<td>1880</td>
<td>-29.9</td>
<td>-74.0</td>
<td>124.0</td>
<td>-22.5</td>
</tr>
<tr>
<td>1890</td>
<td>-30.4</td>
<td>-76.0</td>
<td>130.0</td>
<td>-22.1</td>
</tr>
<tr>
<td>1900</td>
<td>-28.0</td>
<td>-79.0</td>
<td>137.0</td>
<td>-21.8</td>
</tr>
<tr>
<td>1910</td>
<td>-26.6</td>
<td>-81.6</td>
<td>143.4</td>
<td>-21.5</td>
</tr>
</tbody>
</table>

Legend: +25 °C — — — +70 °C — — — — — -40 °C