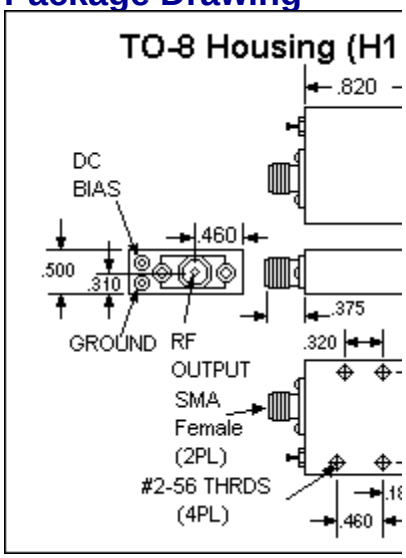
# BX9771 / SX9771*

* Part number for additional environmental screening.

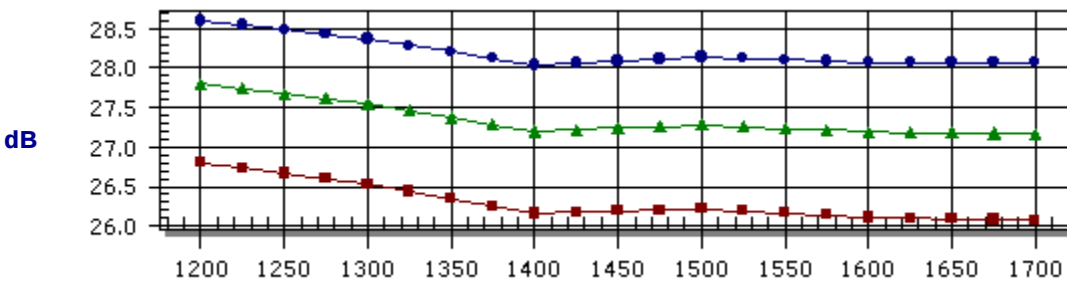
## Performance Data

| | |
|---|---|
| **Frequency** | 1200.0 - 1700.0 MHz |
| **Gain** | 27.0 dB Typical<br>25.0 dB Min |
| **Noise Figure** | 1.0 dB Typical<br>1.8 dB Max |
| **$P_{1dB}$** | 15.0 dBm Typical<br>14.0 dBm Min |
| **3rd Order Intercept** | 26.0 dBm Typical |
| **2nd Order Intercept** | 40.0 dBm Typical |
| **VSWR** | 1.8/2.0 Input Typ/Max<br>1.8/2.0 Output Typ/Max |
| **Reverse Isolation** | -38.0 dB Typical<br>-36.0 dB Min |
| **Power Supply** | 15.0 Volts<br>60.0 mA |
| **Operating Temperature** | -55.0 - 85.0 °C |

## Package Drawing

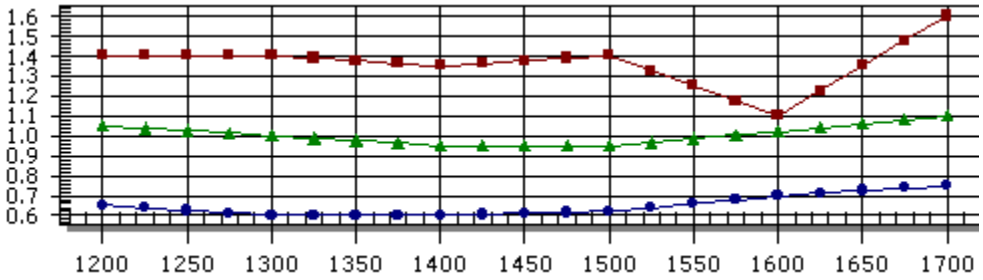



## Gain



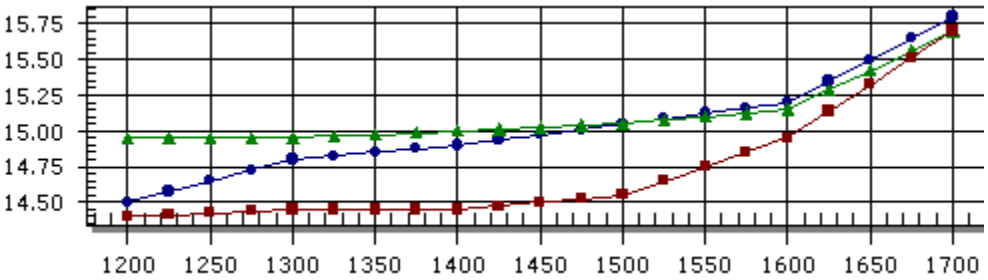

## Noise Figure

dB



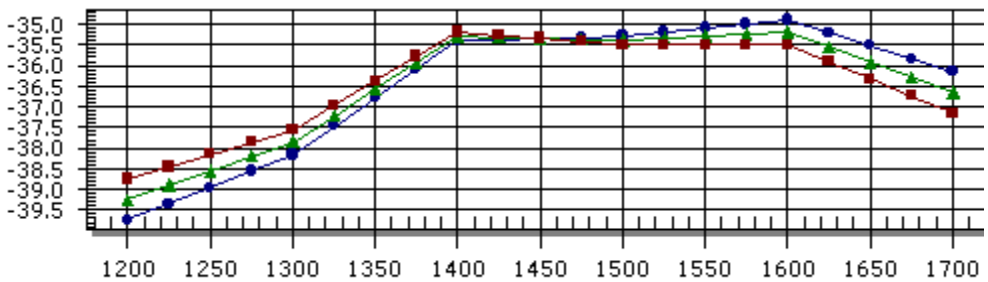

## $P_{1dB}$ Compression Point

dBm

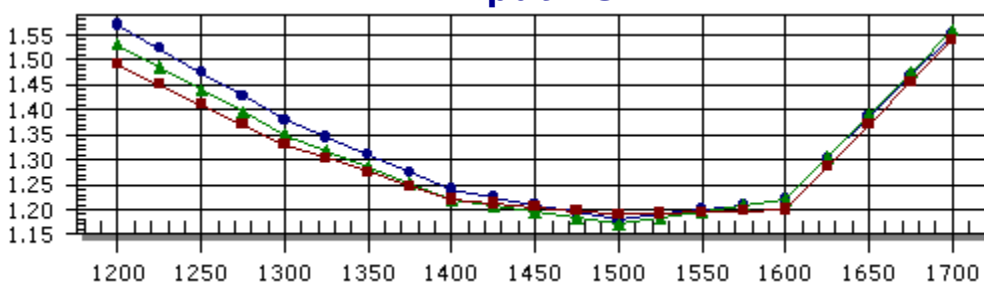



## Reverse Isolation

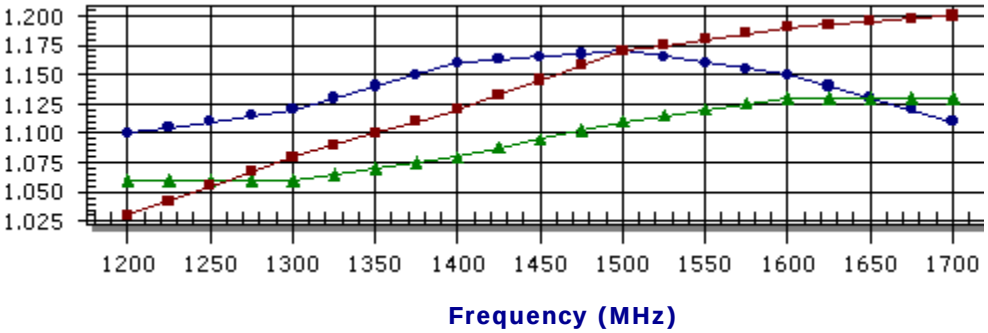
dB




## Input VSWR




## Output VSWR




## S-Parameters

| Frequency | S11 Mag | S11 Ang | S21 Mag | S21 Ang | S12 Mag | S12 Ang | S22 Ma |
|---|---|---|---|---|---|---|---|
| 1200.0 | 0.210 | 57.00 | 24.560 | -163.00 | 0.011 | 118.00 | 0.030 |
| 1300.0 | 0.150 | 52.00 | 23.860 | 171.00 | 0.013 | 96.00 | 0.030 |
| 1400.0 | 0.100 | 51.00 | 22.900 | 146.00 | 0.017 | 79.00 | 0.040 |
| 1500.0 | 0.080 | 36.00 | 23.130 | 121.00 | 0.017 | 54.00 | 0.050 |
| 1600.0 | 0.100 | 11.00 | 22.890 | 93.00 | 0.017 | 32.00 | 0.060 |
| 1700.0 | 0.220 | -28.00 | 22.820 | 61.00 | 0.015 | -5.00 | 0.060 |

## Absolute Maximum Conditions

| | | | |
|---|---|---|---|
| **Maximum Operating Temperature** | -55.0 - 100.0 °C | **Maximum Storage Temperature** | -6 |
| **Maximum Case Temperature** | 125.0 °C | **Maximum Supply Voltage** | 18 |
| **Continuous RF Input Power** | 13.0 dBm | **Short Term RF Input Power (1 minute max)** | 20 |
| **Maximum Peak Power (3 µsec max)** | 0.5 W | | |

**Amplifonix | 2707 Black Lake Place | Philadelphia, PA 19154**
**Tel: 215.464.4000 | FAX: 215.464.4001 | Email: info@amplifonix.com**

i2 Technologies US, Inc.
15445 Innovation Drive
San Diego, CA 92128

# i2 Technologies US, Inc.

**HTML Pages converted to PDF Document**

This document contain component information from the manufacturer's website which are not available in a revision controlled document from the manufacturer. To facilitate the addition of these parts into the Electronics Database, we are converting the HTML pages related to that part, from the manufacturer's website into Adobe PDF format. The contents of this document is based on the information provided on the manufacturer's website, therefore the information may have been changed by the manufacturer since this was created.