

# IQ2040NP4 IQ Mixer

2.0 to 4.0 GHz operation



| Features                         |
|----------------------------------|
| Broadband Frequency Operation    |
| Excellent Conversion Loss        |
| High port-to-port isolation      |
| Frequency Converter Applications |

| Maximum Ratings              |               |
|------------------------------|---------------|
| Operating Temperature        | -55 to +125°C |
| Storage Temperature          | -65 to +150°C |
| Peak I/P Power For Any Port  | +23 dBm Peak  |
| Peak I/P Power For All Ports | +26 dBm Peak  |
| Peak I/P Current @ +25°C     | 100mA         |

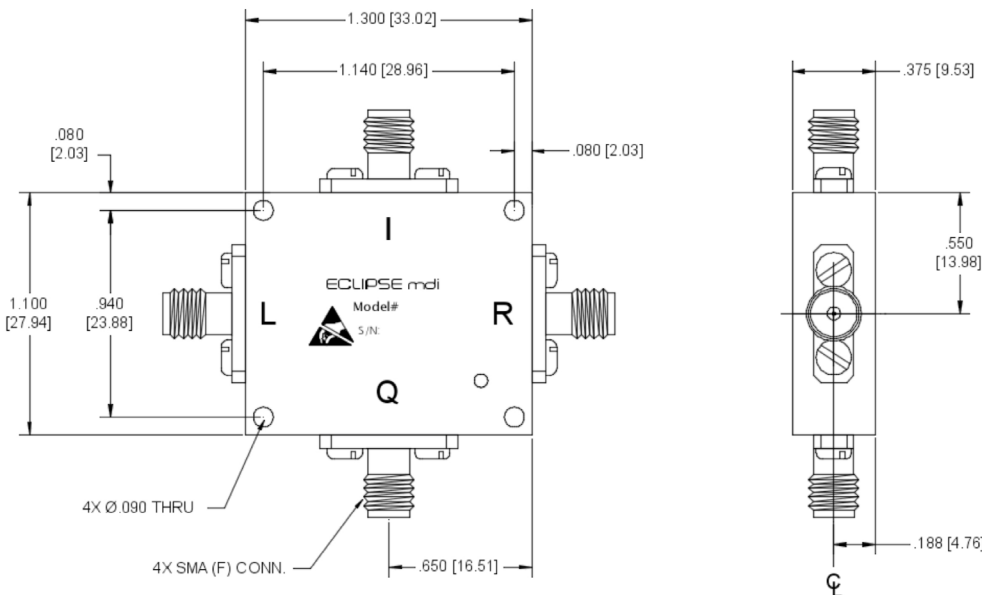
| Product Export Classification             |
|---|
| ECCN: EAR 99 (unless otherwise specified) |
| HTS: 8541.10.0000                         |

| Parameters             | Freq. (GHz) | Minimum (dB) | Typical (dB) | Maximum (dB) | Units | Conditions |
|------------------------|-------------|--------------|--------------|--------------|-------|------------|
| <b>Conversion Loss</b> |             |              |              |              |       |            |
| RF Input               | 2.0 to 4.0  |              | 5.5          | 7.0          | dB    | IF=100 MHz |
| LO Input               | 2.0 to 4.0  |              |              |              |       |            |
| IF Output              | DC-0.5      |              |              |              |       |            |
| VSWR                   | LO&IF<br>RF |              |              | 2.5:1        |       |            |
| <b>Isolation</b>       |             |              |              |              |       |            |
| L-R Isolation          |             | 30.0         | 40.0         |              | dB    |            |
| L-IQ Isolation         |             | 25.0         | 30.0         |              | dB    |            |
| RF-I/Q                 |             |              | 30.0         |              | dB    |            |
| Spurious (In-band) 4IF |             |              |              |              |       |            |
| Input IP3              |             |              |              |              |       |            |
| 1dB Compression Point  |             |              | +1.0         |              | dBm   |            |
| LO Drive               |             |              | +13.0        |              | dBm   |            |
| Image Rejection        |             | 19.0         | 28.0         |              | dB    |            |
| Amplitude Match        |             |              | 0.2          |              | dB    |            |
| Phase Match            |             |              | 2.0          |              | °     |            |

**NOTES:**

1. Typical values are measured at +25°C and are not guaranteed.

Package Outline: P4



DISCLAIMER: Subject to change without notice. Rev(-) 09/5/19