

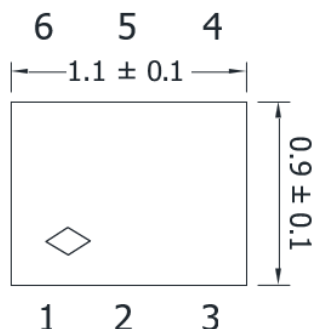
#### Electrical Specification

@ -30 ~ +85 °C

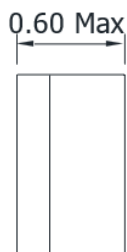
|                                | Parameters                  |                             | Value                       | Unit      |    |
|--------------------------------|-----------------------------|-----------------------------|-----------------------------|-----------|----|
| GPS L1                         | Center Frequency            |                             | 1582.470                    | MHz       |    |
|                                | Insertion Loss, typ/max     | 1559.050 MHz ~ 1563.150 MHz | 1.8 / 2.4                   | dB        |    |
|                                |                             | 1574.390 MHz ~ 1576.450 MHz | 1.4 / 1.9                   | dB        |    |
|                                |                             | 1597.550 MHz ~ 1605.890 MHz | 1.9 / 2.3                   | dB        |    |
|                                | Pass Band Ripple, typ/max   |                             | 1559.050 MHz ~ 1605.890 MHz | 0.5 / 1.0 | dB |
|                                | Group Delay Ripple, typ/max |                             | 1559.050 MHz ~ 1605.890 MHz | 10 / 16   | ns |
|                                | VSWR, typ/max               | Input                       | 1559.050 MHz ~ 1605.890 MHz | 1.5 / 2.0 | -  |
|                                |                             | Output                      |                             |           |    |
|                                | Attenuation, min/typ        | 777.000 MHz ~ 798.000 MHz   |                             | 36 / 45   | dB |
|                                |                             | 814.000 MHz ~ 915.000 MHz   |                             | 36 / 43   | dB |
|                                |                             | 50.000 MHz ~ 925.000 MHz    |                             | 35 / 42   | dB |
|                                |                             | 925.000 MHz ~ 960.000 MHz   |                             | 35 / 41   | dB |
|                                |                             | 1427.000 MHz ~ 1463.000 MHz |                             | 34 / 43   | dB |
|                                |                             | 1710.000 MHz ~ 1785.000 MHz |                             | 38 / 43   | dB |
|                                |                             | 1786.000 MHz ~ 1797.000 MHz |                             | 38 / 43   | dB |
|                                |                             | 1850.000 MHz ~ 1910.000 MHz |                             | 38 / 43   | dB |
|                                |                             | 1910.000 MHz ~ 1980.000 MHz |                             | 39 / 46   | dB |
|                                |                             | 2010.000 MHz ~ 2025.000 MHz |                             | 40 / 47   | dB |
|                                |                             | 2305.000 MHz ~ 2315.000 MHz |                             | 40 / 46   | dB |
|                                |                             | 2401.000 MHz ~ 2483.000 MHz |                             | 35 / 43   | dB |
|                                |                             | 2500.000 MHz ~ 2570.000 MHz |                             | 35 / 43   | dB |
|                                |                             | 5160.000 MHz ~ 5885.000 MHz |                             | 20 / 32   | dB |
| GPS L5                         | Center Frequency            |                             | 1176.500                    | MHz       |    |
|                                | Insertion Loss, typ/max     | 1166.220 MHz ~ 1186.680 MHz | 1.0 / 1.5                   | dB        |    |
|                                |                             |                             |                             |           |    |
|                                | Pass Band Ripple, typ/max   |                             | 1166.220 MHz ~ 1186.680 MHz | 0.2 / 0.4 | dB |
|                                | Group Delay Ripple, typ/max |                             | 1166.220 MHz ~ 1186.680 MHz | 4 / 10    | ns |
|                                | VSWR, typ/max               | Input                       | 1166.220 MHz ~ 1186.680 MHz | 1.5 / 2.0 | -  |
|                                |                             | Output                      |                             |           |    |
|                                | Attenuation, min/typ        | 638.000 MHz ~ 748.000 MHz   |                             | 35 / 42   | dB |
|                                |                             | 777.000 MHz ~ 798.000 MHz   |                             | 34 / 40   | dB |
|                                |                             | 807.000 MHz ~ 915.000 MHz   |                             | 32 / 37   | dB |
|                                |                             | 925.000 MHz ~ 960.000 MHz   |                             | 28 / 35   | dB |
|                                |                             | 1427.000 MHz ~ 1463.000 MHz |                             | 31 / 37   | dB |
|                                |                             | 1626.500 MHz ~ 1660.500 MHz |                             | 20 / 28   | dB |
|                                |                             | 1695.000 MHz ~ 1785.000 MHz |                             | 30 / 39   | dB |
|                                |                             | 1850.000 MHz ~ 2025.000 MHz |                             | 35 / 41   | dB |
|                                |                             | 2300.000 MHz ~ 2400.000 MHz |                             | 40 / 48   | dB |
|                                |                             | 2400.000 MHz ~ 2483.000 MHz |                             | 42 / 50   | dB |
|                                |                             | 2596.000 MHz ~ 2690.000 MHz |                             | 42 / 51   | dB |
|                                |                             | 3400.000 MHz ~ 3800.000 MHz |                             | 31 / 41   | dB |
|                                |                             | 4400.000 MHz ~ 4900.000 MHz |                             | 29 / 38   | dB |
| 5150.000 MHz ~ 5925.000 MHz    |                             | 27 / 36                     | dB                          |           |    |
| Input Power, max (5000h), 55°C |                             |                             | 15                          | dBm       |    |
| Operating Temperature Range    |                             |                             | -40 ~ +85                   | °C        |    |
| Storage Temperature Range      |                             |                             | -40 ~ +85                   | °C        |    |

#### Dimension

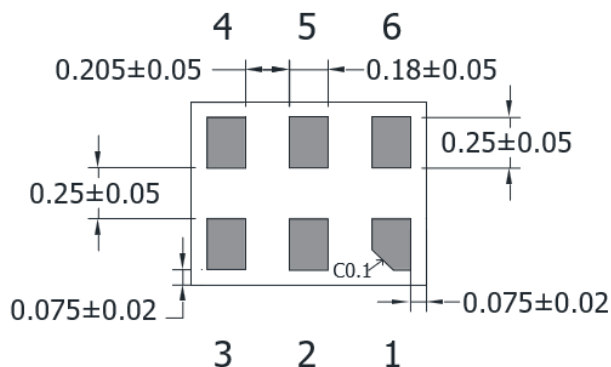
Top View



Side View



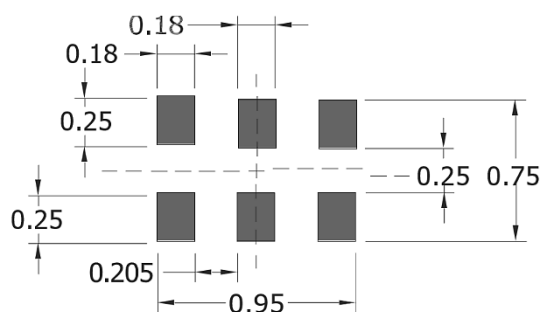
Bottom View



Pin Descriptions

| Pin | Description | Pin | Description   |
|-----|-------------|-----|---------------|
| [1] | GND         | [4] | GPS L5 Output |
| [2] | ANT         | [5] | GND           |
| [3] | GND         | [6] | GPS L1 Output |

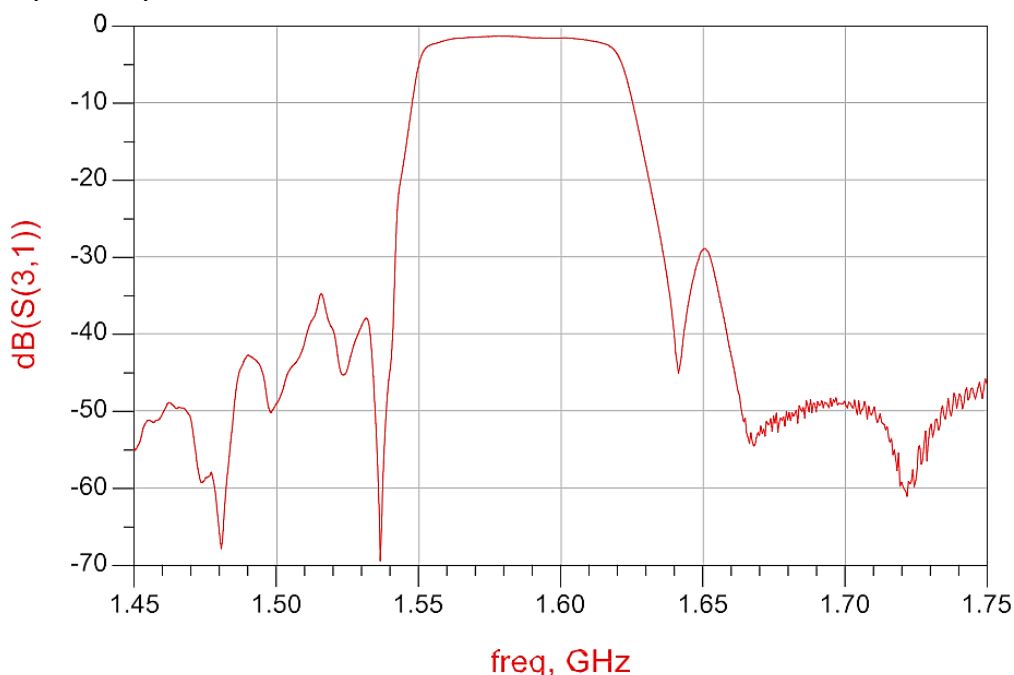
Land Pattern



Unit: mm

#### Frequency Characteristics

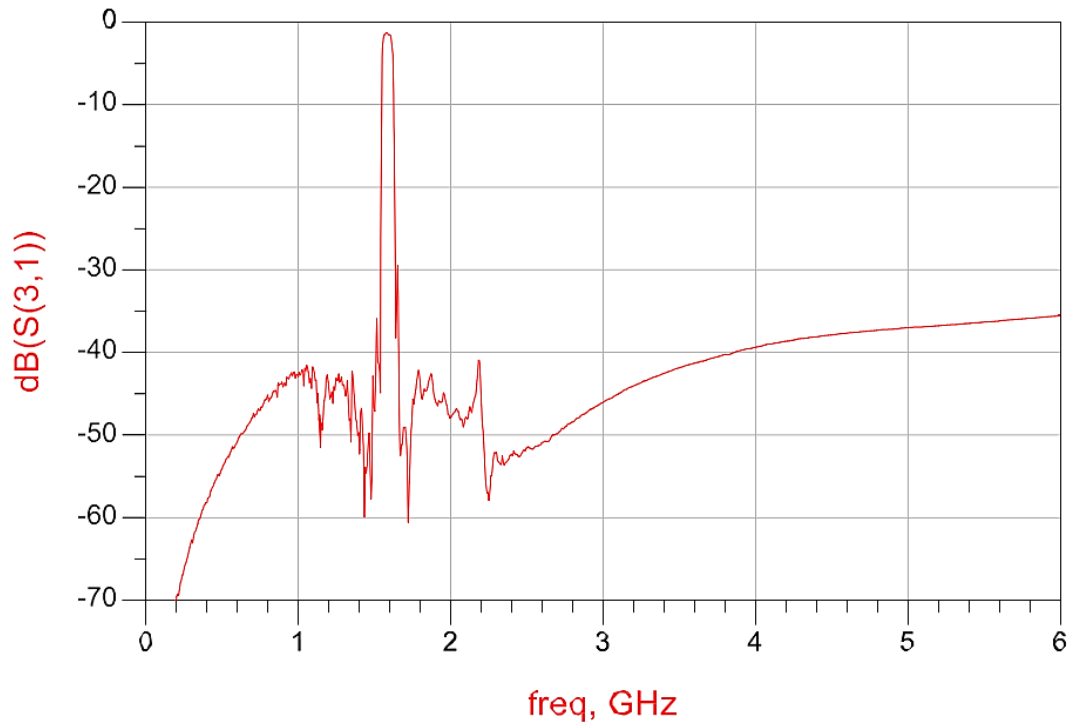
Insertion Loss (GPS L1)



Attenuation, 1450 – 1750 MHz

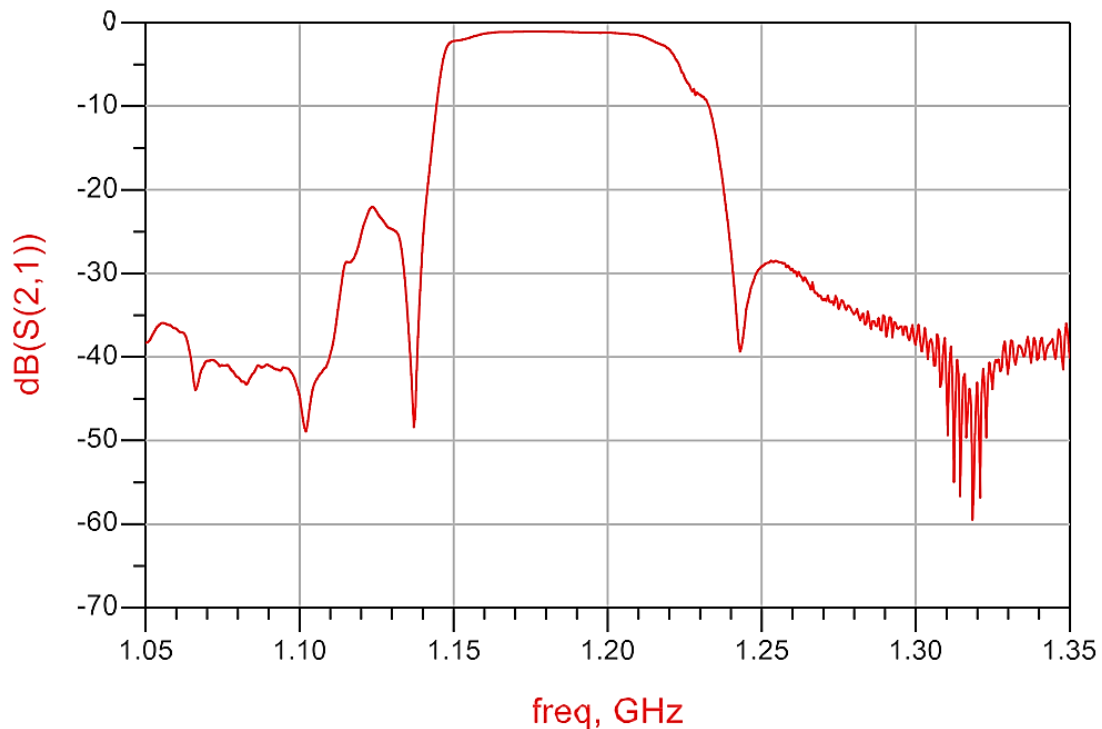
### RSD-1176.500-1582.470-1109-W-TR

#### Attenuation (GPS L1)



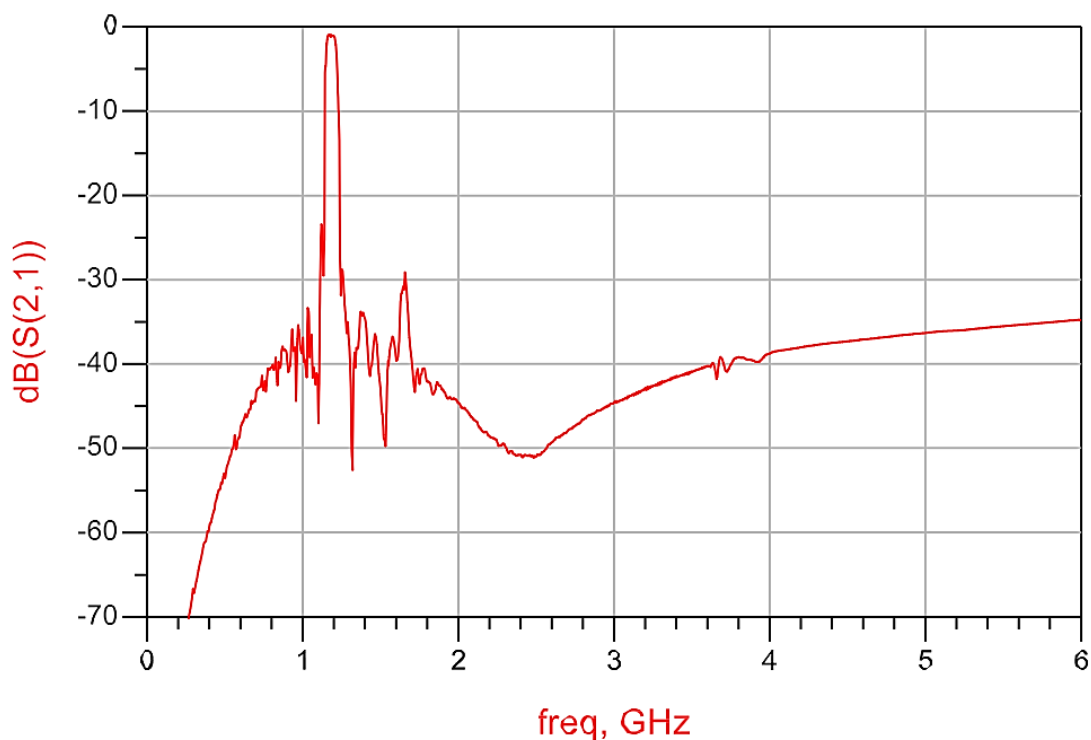
Attenuation, 10 – 6000 MHz

#### Insertion Loss (GPS L5)



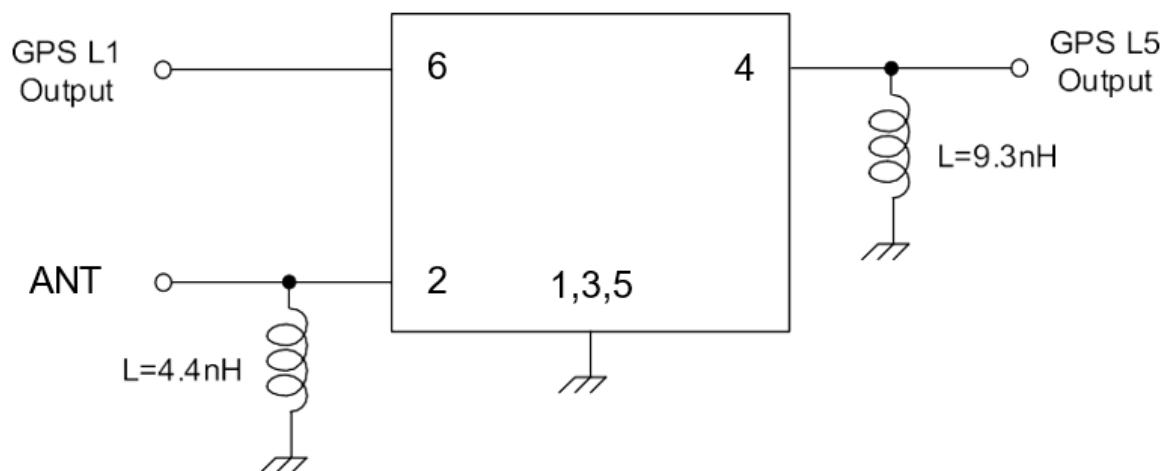
Attenuation, 1050 – 1350 MHz

#### Attenuation (GPS L5)



Attenuation, 10 – 6000 MHz

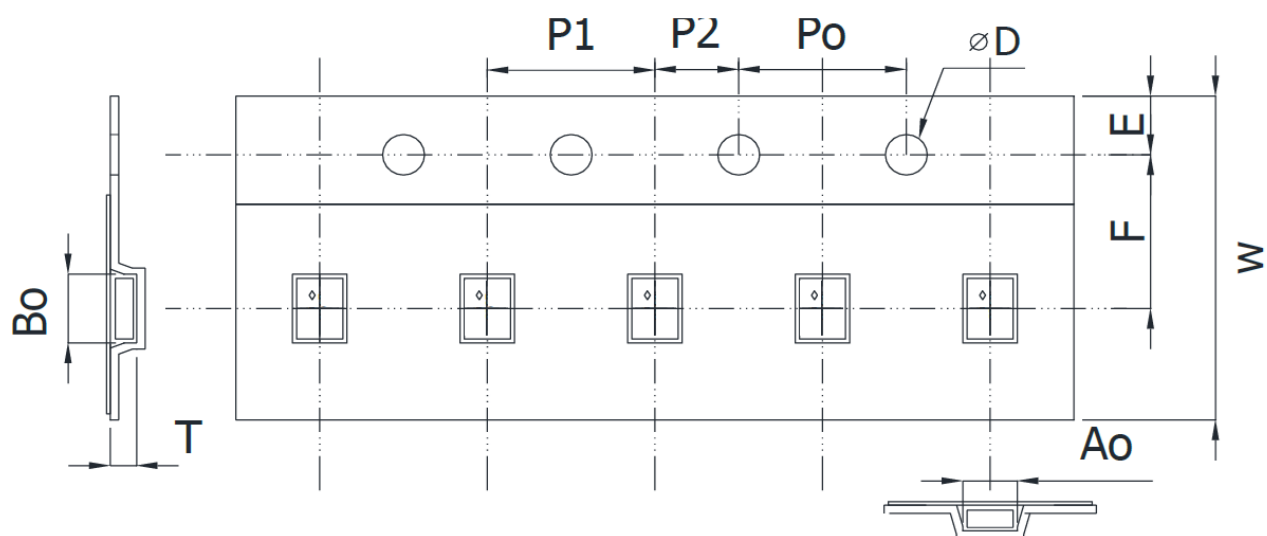
#### Test Circuit



#### Environmental

| PARAMETER                  | VALUE     |
|----------------------------|-----------|
| MOISTURE SENSITIVITY LEVEL | 3         |
| REACH – SVHC               | Compliant |
| RoHS                       | Compliant |

#### Tape Dimension



#### Plastic Tape specifications

| Index          | Ao        | Bo        | ΦD        | T         | W               |
|----------------|-----------|-----------|-----------|-----------|-----------------|
| Dimension (mm) | 1.05±0.05 | 1.25±0.05 | 1.55±0.05 | 0.70±0.05 | 8.00+0.30/-0.10 |
| Index          | E         | F         | Po        | P1        | P2              |
| Dimension (mm) | 1.75±0.10 | 3.50±0.05 | 4.00±0.10 | 2.00±0.10 | 2.00±0.05       |

5000 pcs per reel

#### ● APPROVAL

|             |                    |
|-------------|--------------------|
| DRAWN BY    | EV, June 3, 2026   |
| APPROVED BY | AR, June 3, 2026   |
| REVISION    | A, Initial Release |

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