

## Features

- Surface Mount
- 2 way 0 degree
- 260°C Reflow Compatible
- RoHS\* Compliant, lead free
- Available on Tape and Reel.

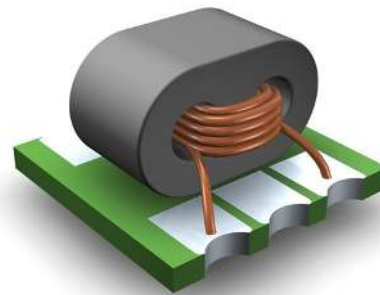
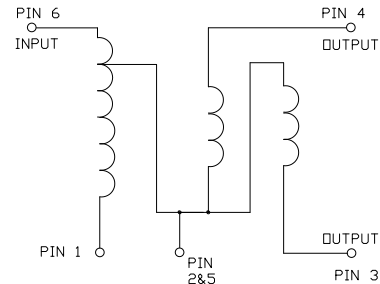
## Ordering Information

| Part Number    | Description               |
|----------------|---------------------------|
| MAPD-011002    | Tape & Reel               |
| MAPD-011002-TB | Customer Evaluation Board |

## Tape & Reel Information

| Parameter  | Units | Value |
|--|-------|-------|
| Qty per reel                                       | -     | 2000  |
| Reel Size  | mm    | 330   |
| Tape Width   | mm    | 12.00 |
| Pitch  | mm    | 8.00  |
| Ao   | mm    | 4.60  |
| Bo   | mm    | 4.60  |
| Ko   | mm    | 3.30  |
| Orientation  | -     | F18   |
| Reference Application Note ANI-019 for orientation |       |       |

## Functional Schematic



## Pin Configuration<sup>3</sup>

|   | Function                 |
|---|--------------------------|
| 1 | Ground                   |
| 2 | External 0.5pF Capacitor |
| 3 | Output 2                 |
| 4 | Output 1                 |
| 5 | External 0.5pF Capacitor |
| 6 | Input                    |

\* Restrictions on Hazardous Substances, European Union Directive 2011/65/EU.

**Electrical Specifications:**  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$

| Parameter                         | Conditions      | Units | Min | Typ | Max       |
|-----------------------------------|-----------------|-------|-----|-----|-----------|
| Insertion Loss 1<br>(pin6-pin4)   | 5 - 500 MHz     | dB    | -   | 0.3 | 0.5       |
|                                   | 500 - 1600 MHz  | dB    | -   | 1.2 | 1.7       |
| Insertion Loss 2<br>(pin6-pin3)   | 5 - 500 MHz     | dB    | -   | 0.5 | 0.7       |
|                                   | 500 - 1200 MHz  | dB    | -   | 1.1 | 1.4       |
|                                   | 1200 - 1600 MHz | dB    | -   | 2.0 | 2.7       |
| Amplitude Balance                 | 5 - 500 MHz     | dB    | -   | 0.2 | $\pm 0.3$ |
|                                   | 500 - 1200 MHz  | dB    | -   | 0.3 | $\pm 0.6$ |
|                                   | 1200 - 1600 MHz | dB    | -   | 0.7 | $\pm 1.3$ |
| Phase Balance                     | 5 - 870 MHz     | °     | -   | 0.7 | $\pm 1.0$ |
|                                   | 870 - 1600 MHz  | °     | -   | 2.3 | $\pm 5.5$ |
| Input Return Loss<br>(pin6)       | 5 - 500 MHz     | dB    | 20  | 26  | -         |
|                                   | 500 - 1000 MHz  | dB    | 15  | 17  | -         |
|                                   | 1000 - 1600 MHz | dB    | 9   | 12  | -         |
| Output Return Loss 1<br>(pin4)    | 5 - 870 MHz     | dB    | 20  | 24  | -         |
|                                   | 870 - 1600 MHz  | dB    | 12  | 16  | -         |
| Output Return Loss<br>2<br>(pin3) | 5 - 500 MHz     | dB    | 20  | 25  | -         |
|                                   | 500 - 1000 MHz  | dB    | 15  | 19  | -         |
|                                   | 1000 - 1600 MHz | dB    | 11  | 13  | -         |
| Isolation<br>(pin4-pin3)          | 5 - 300 MHz     | dB    | 30  | 34  | -         |
|                                   | 300 - 1200MHz   | dB    | 23  | 30  | -         |
|                                   | 1200 - 1600 MHz | dB    | 20  | 27  | -         |

| Parameter                   | Units | Min | Max   |
|-----------------------------|-------|-----|-------|
| Input Power                 | W     |     | 1     |
| Internal Load Dissipation   | W     |     | 0.125 |
| Operating Temperature Range | °C    | -40 | +85   |

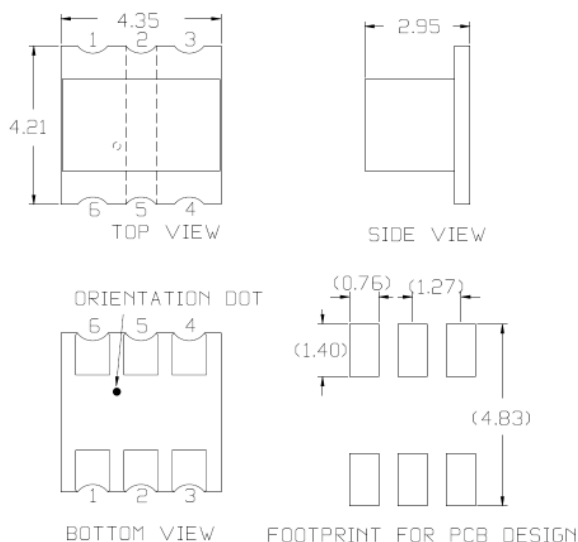
## Handling Procedures

Please observe the following precautions to avoid damage:

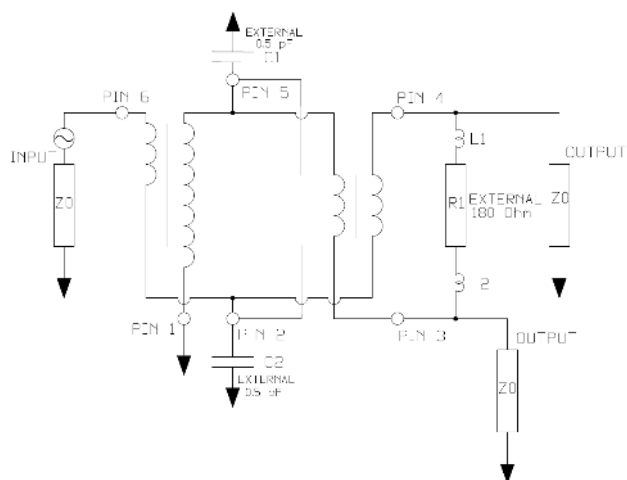
## Static Sensitivity

These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.

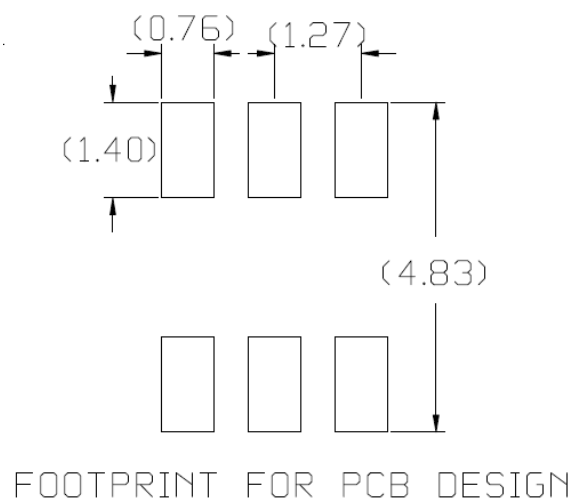
## Outline Drawing



## Application Circuit



## Recommended Footprint



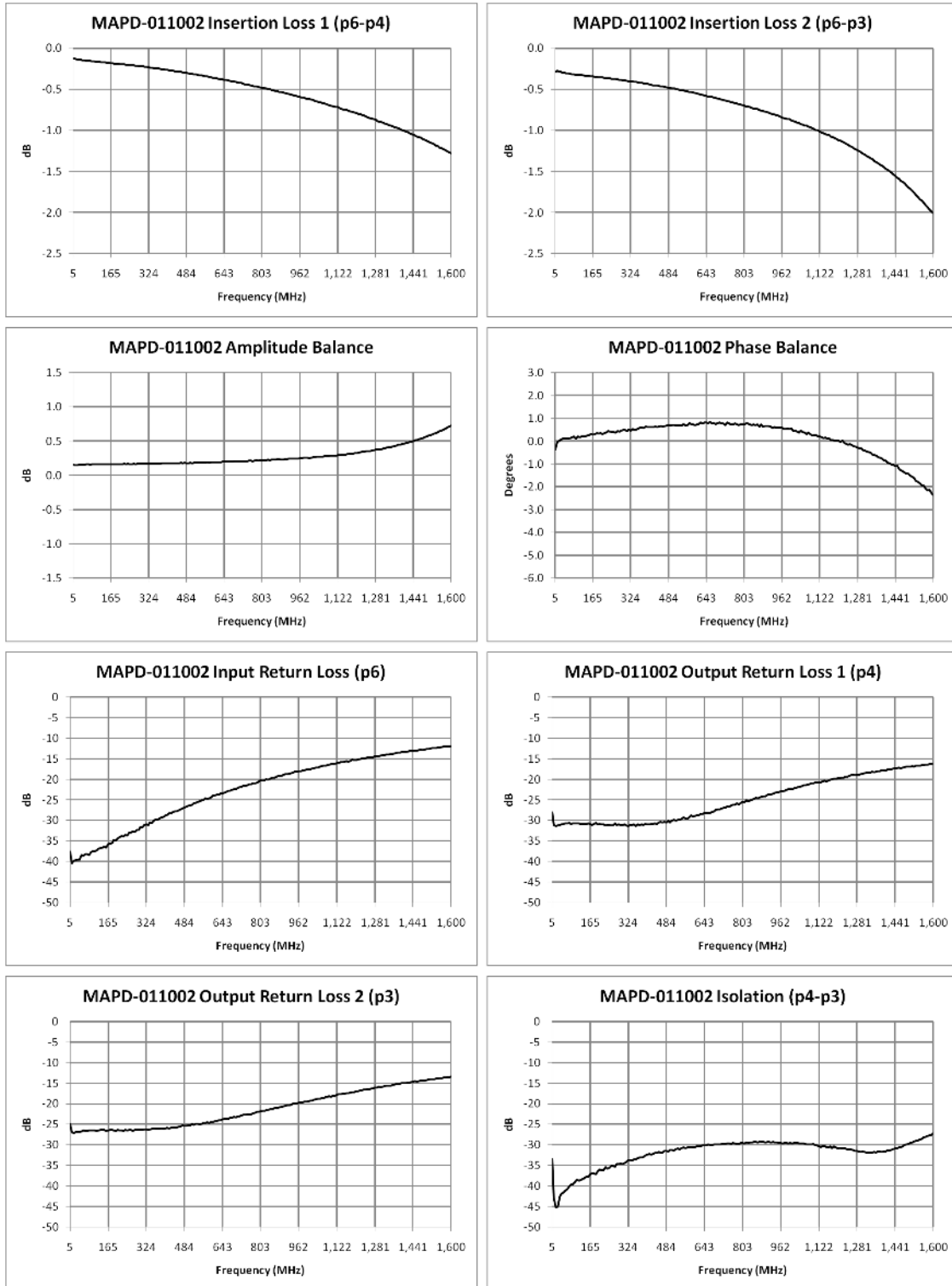
# MAPD-011002



2 Way 0° Power Divider  
5 - 1600 MHz

Rev. V3

Electrical Specifications:  $Z_0 = 75\Omega$ ,  $T_A = 25^\circ\text{C}$ ,  $P_{in} = 0\text{dBm}$



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