

MAPD-011002

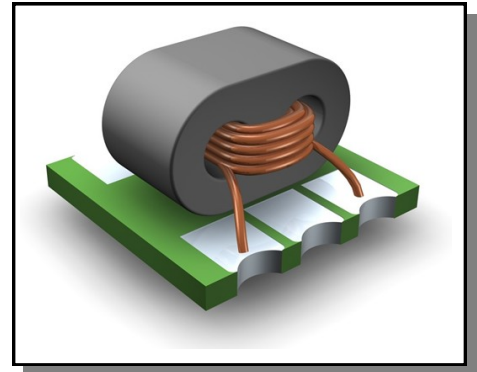


2 Way 0° Power Divider
5 - 1600 MHz

Rev. V2

Features

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



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 (pin6-pin4)	5 - 500 MHz	dB	-	0.3	0.5
	500 - 1600 MHz	dB	-	1.2	1.7
Insertion Loss 2 (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	± 0.3
	500 - 1200 MHz	dB	-	0.3	± 0.6
	1200 - 1600 MHz	dB	-	0.7	± 1.3
Phase Balance	5 - 870 MHz	°	-	0.7	± 1.0
	870 - 1600 MHz	°	-	2.3	± 5.5
Input Return Loss (pin6)	5 - 500 MHz	dB	20	26	-
	500 - 1000 MHz	dB	15	17	-
	1000 - 1600 MHz	dB	9	12	-
Output Return Loss 1 (pin4)	5 - 870 MHz	dB	20	24	-
	870 - 1600 MHz	dB	12	16	-
Output Return Loss 2 (pin3)	5 - 500 MHz	dB	20	25	-
	500 - 1000 MHz	dB	15	19	-
	1000 - 1600 MHz	dB	11	13	-
Isolation (pin4-pin3)	5 - 300 MHz	dB	30	34	-
	300 - 1200MHz	dB	23	30	-
	1200 - 1600 MHz	dB	20	27	-

The image may not be representative of the final product

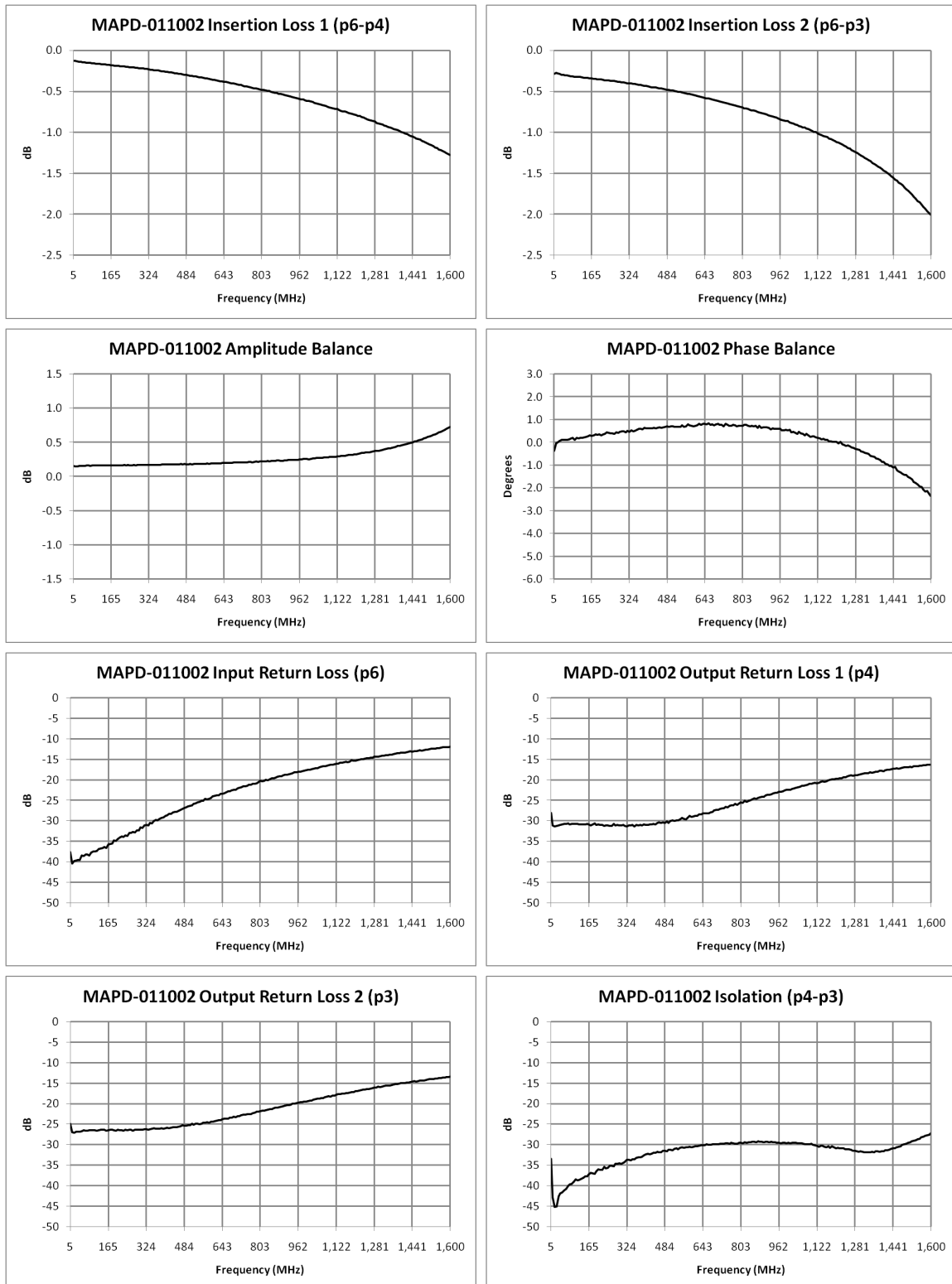
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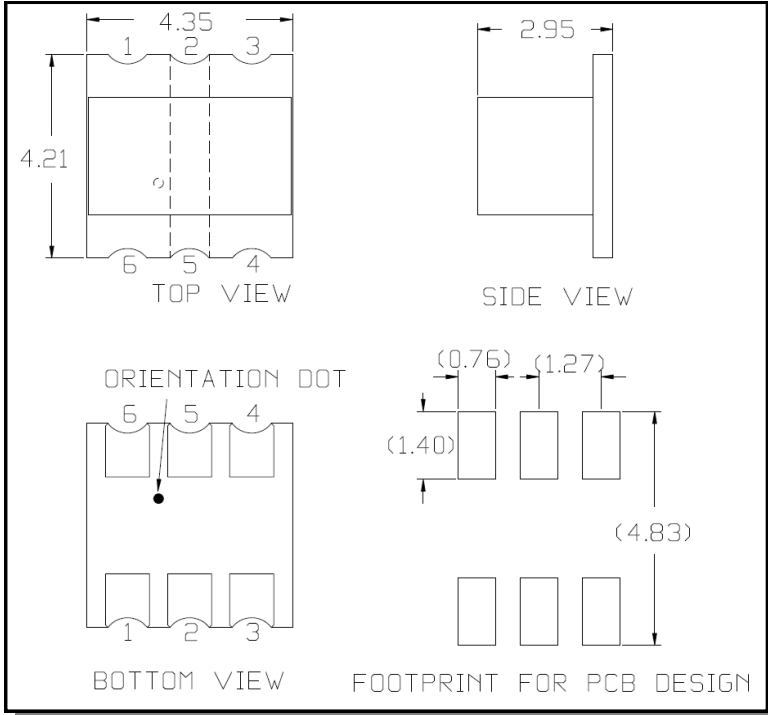
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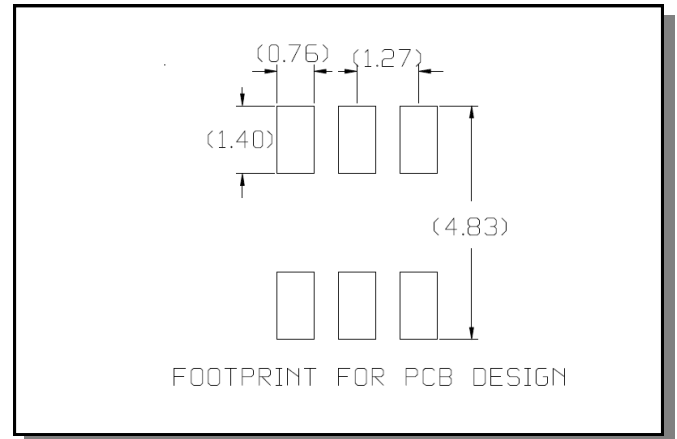
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Outline Drawing

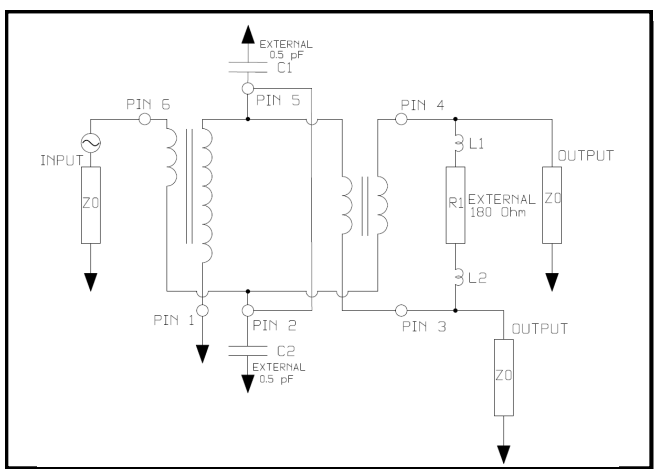


Recommended Footprint



Dimensions in mm Tolerance: .xx ± .1, .xxx ± .010, unless otherwise stated

Application Circuit



Component Bill of Materials:

Reference	Manufacturer & p/n	Value
R1	Yageo RC0402FR-07180RL	180Ω
L1	Cal-Chip Electronics GHF1005 82NJ-T	8.2nH
L2	Cal-Chip Electronics GHF1005 82NJ-T	8.2nH
C1	AVX 04025A0R5JAT4A	0.5pF
C2	AVX 04025A0R5JAT4A	0.5pF

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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

Ordering Information

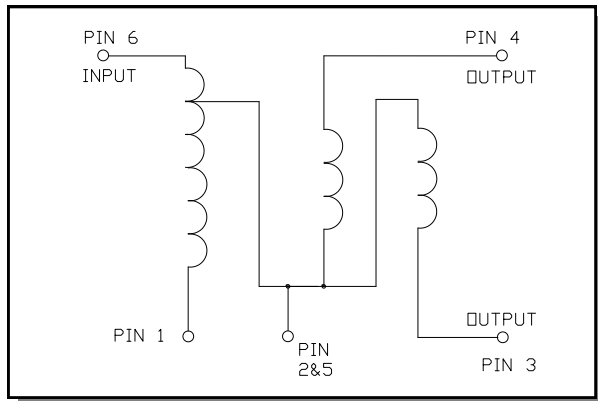
Part Number	Description
MAPD-011002	Tape & Reel
MAPD-011002-TB	Customer Evaluation Board

Recommended Maximum Ratings

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

Full temperature plots available on request

Schematic



Pin Configuration

Pin No.	Function
1	Ground
2	External 0.5pF Capacitor
3	Output 2
4	Output 1
5	External 0.5pF Capacitor
6	Input

CO History

Rev	Date	Description	ECN NO.
V1	20-Jul-2011	Created datasheet	CO-001901
V2	22/12/11	Update tape and reel orientation	CO-002999

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