

MAPD-011003

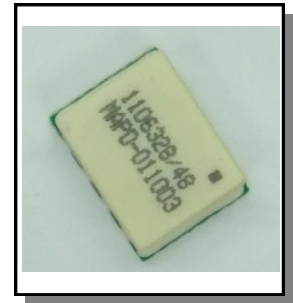


3 Way 0° Power Divider
30 - 1200 MHz

Rev. V3

Features

- Surface Mount
- 3 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* (pin8-pin1) Ref value -4.77	30 - 46 MHz	dB	-	0.4	0.8
	46 - 870 MHz	dB	-	0.8	1.5
	870 - 1002 MHz	dB	-	1.2	1.8
	1002 - 1200 MHz	dB	-	1.7	-
Insertion Loss 2* (pin8-pin4) Ref value -4.77	30 - 46 MHz	dB	-	0.4	0.8
	46 - 870 MHz	dB	-	0.6	1.3
	870 - 1002 MHz	dB	-	0.8	1.5
	1002 - 1200 MHz	dB	-	1.3	-
Insertion Loss 3* (pin8-pin5) Ref value -4.77	30 - 46 MHz	dB	-	0.4	0.8
	46 - 870 MHz	dB	-	0.8	1.8
	870 - 1002 MHz	dB	-	1.2	2.2
	1002 - 1200 MHz	dB	-	1.8	-
Input Return Loss * (pin8)	30 - 46 MHz	dB	28	35	-
	46 - 405 MHz	dB	20	26	-
	405 - 1002 MHz	dB	17.5	25	-
	1002 - 1200 MHz	dB	-	17	-
Output Return Loss 1 & 2* (pin1&4)	30 - 46 MHz	dB	17	21	-
	46 - 1002 MHz	dB	20	32	-
	1002 - 1200 MHz	dB	-	24	-
Output Return Loss 3 (pin5) *	30 - 46 MHz	dB	17	21	-
	46 - 740 MHz	dB	20	23	-
	740 - 1002 MHz	dB	17	22	-
	1002 - 1200 MHz	dB	-	21	-
Isolation	30 - 46 MHz	dB	20	27	-
	46 - 870 MHz	dB	20	25	-
	870 - 1002 MHz	dB	18	35	-
	1002 - 1200 MHz	dB	-	22	-
Amplitude Balance	30 - 46 MHz	dB	-	0.0	±0.2
	46 - 500 MHz	dB	-	0.1	±0.5
	500 - 1002 MHz	dB	-	0.4	±1.0
	1002 - 1200 MHz	dB	-	0.5	-
Phase Balance	30 - 50 MHz	°	-	0.4	±1.0
	50 - 500 MHz	°	-	1.0	±4.0
	500 - 1002 MHz	°	-	2.7	±6.0
	1002 - 1200 MHz	°	-	2.8	-

* Parameters screened in manufacturing

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ADVANCED: Data Sheets contain information regarding a product M/A-COM Technology Solutions is considering for development. Performance is based on target specifications, simulated results, and/or prototype measurements. Commitment to develop is not guaranteed.

PRELIMINARY: Data Sheets contain information regarding a product M/A-COM Technology Solutions has under development. Performance is based on engineering tests. Specifications are typical. Mechanical outline has been fixed. Engineering samples and/or test data may be available. Commitment to produce in volume is not guaranteed.

• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400

• **India** Tel: +91.80.43537383

• **China** Tel: +86.21.2407.1588

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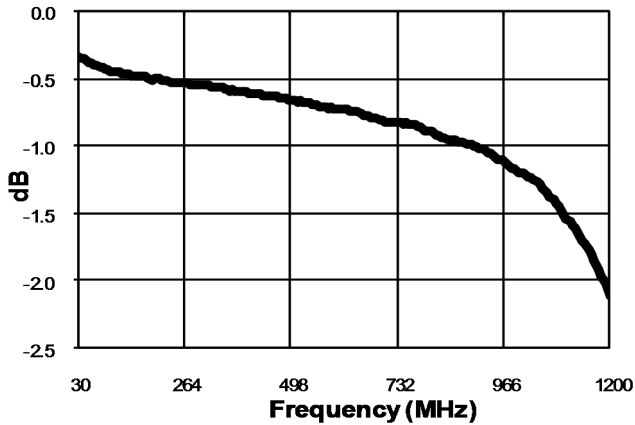


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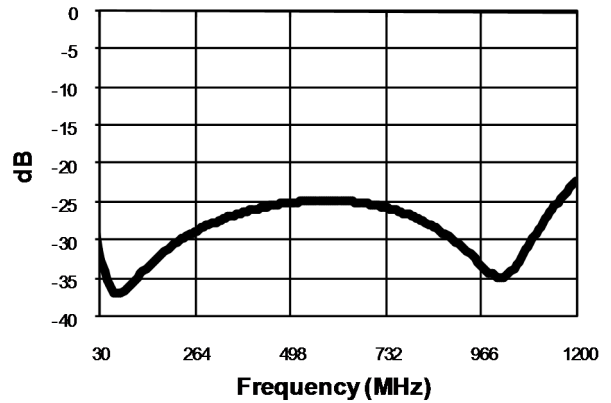
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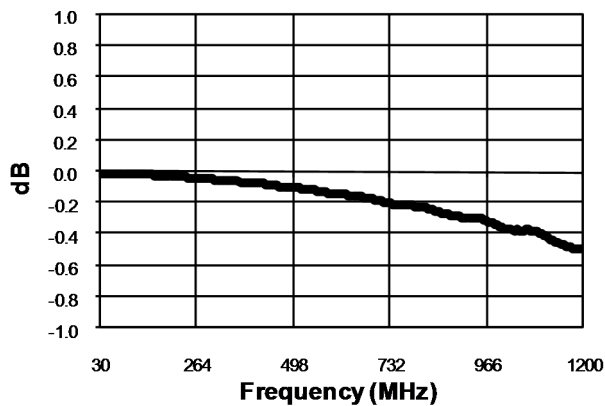
Insertion Loss



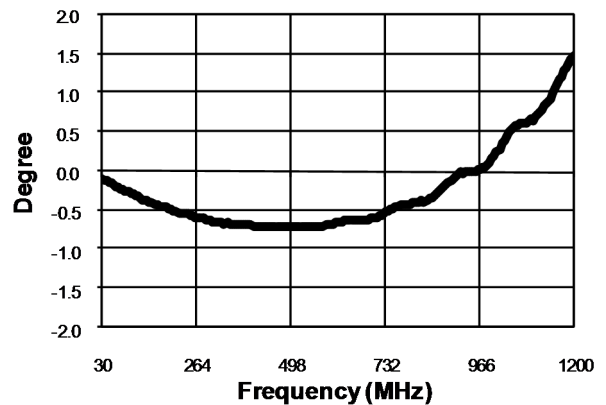
Isolation



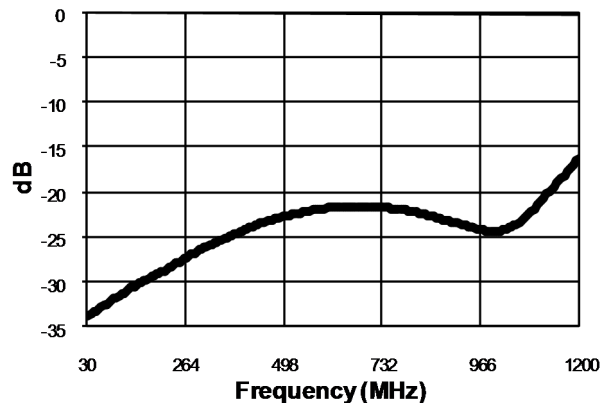
Amplitude Balance



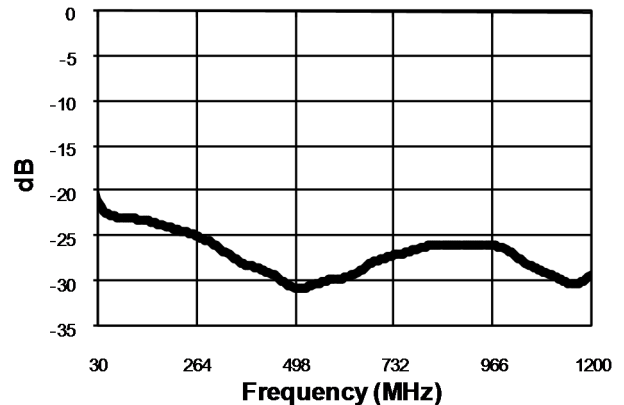
Phase Balance



Return Loss: Input



Return Loss: Output



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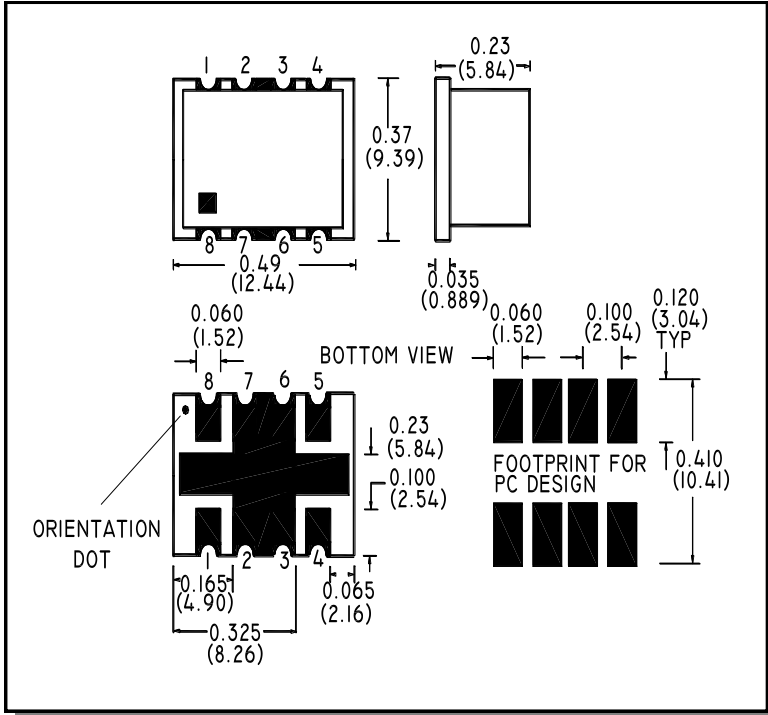
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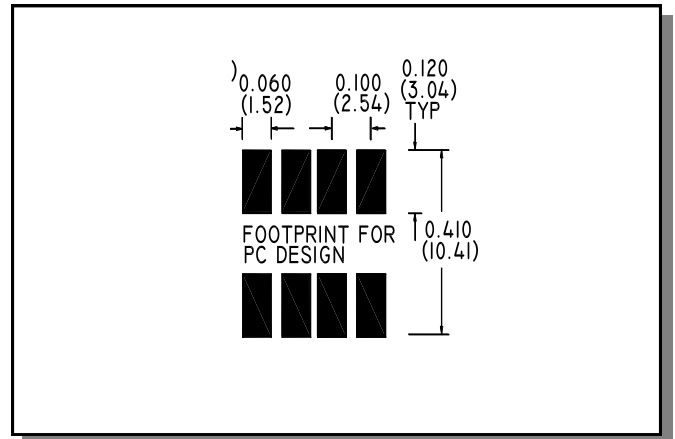
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Outline Drawing

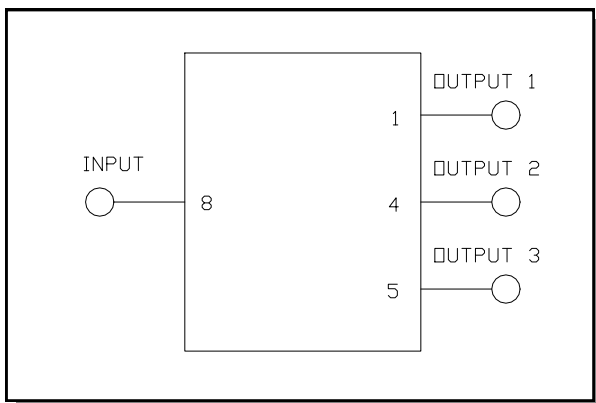


Recommended Footprint



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

Schematic



Pin Configuration

Pin No.	Function
1	Output 1
2,3,6,7	Ground
4	Output 2
5	Output 3
8	Input

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Tape & Reel Information

Item	Dimension
Ao	10.26mm +/-0.1mm
Bo	13.46mm +/-0.1mm
Ko	6.10mm +/-0.1mm
W	24.00mm +/-0.3mm
P1	16.00mm +/-0.1mm
Orientation	F47
Reference Application Note ANI-019 for Orientation	

Ordering Information

Part Number	Description
MAPD-011003	Tape & Reel
MAPD-011003-TB	Customer Evaluation Board

Recommended Maximum Ratings

Parameter	Units	Min	Max
RF Power	W		250mW
DC Current	A		30mA
Operating Temperature Range	°C	-40	+85