MAPDCT0010

2 Way 0º Reverse Path Power Divider
5 to 100 MHz

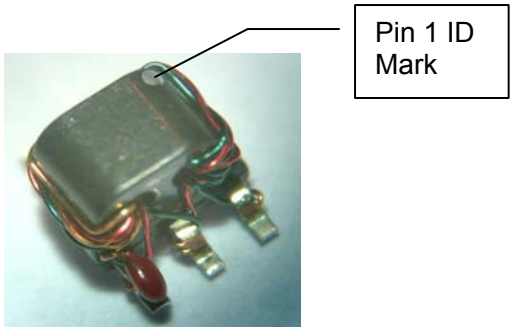
M/A-COM Products
Released, Rev. V3

Features

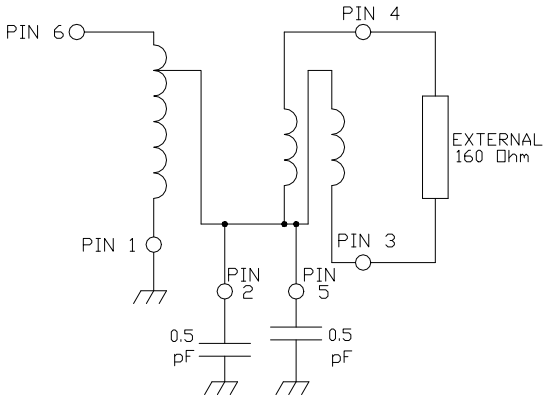
- Surface mount
- 2 Way 0 degree.
- 260°C reflow compatible
- RoHS* compliant
- Available on tape and reel.

Description

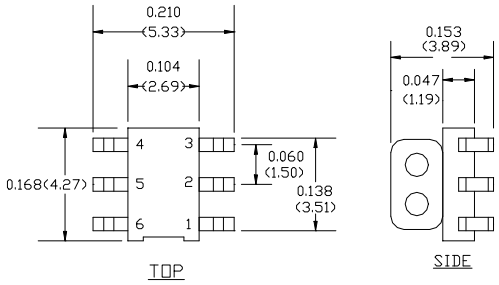
M/A Com's MAPDCT0010 is a 2 way 0 degree reverse path power divider in a low cost, surface mount package. Ideally suited for high volume CATV & VSAT applications. Two 0603 1pF capacitors and one 160Ω resistor are required with this part.

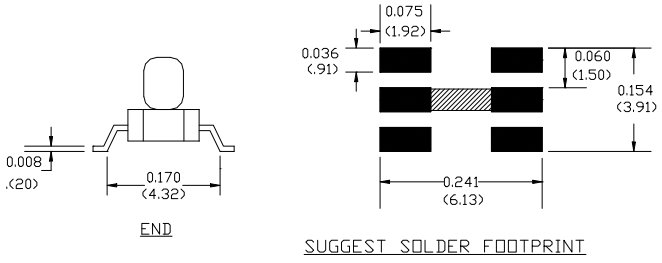


Schematic with off-chip components



Case style: SM-150





Unless otherwise stated dimensions are in inches [mm]
Tolerance: .xx ± .02, .xxx ± .010

Note: Pin's 2 and 5 need to be connected together on the PCB as shown above.

Pin configuration

Pin no.	Function
1	Output 2
2	External 1pF Capacitor to ground
3	Ground
4	Input
5	External 1pF Capacitor to ground
6	Output 1

Ordering information

Part number	Description
MAPDCT0010TR	Reel quantity 1000

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

Note: Reference Application Note **M513** for reel size information.

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: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

Downloaded from Elcodis.com electronic components distributor

Electrical specifications: T_A = 25°C, Z_0 = 75Ω

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss	5 - 100 MHz	dB	-	0.3	0.6
Amplitude Unbalance	5 - 20 MHz 20 - 100 MHz	dB dB	- -	±0.25 ±0.15	±0.40 ±0.25
Phase Unbalance	5 - 20 MHz 20 - 100 MHz	º º	- -	±2.5 ±0.5	±6.0 ±2.0
Isolation	5 - 100 MHz	dB	28	32	-
Input Return Loss	5 - 20 MHz 20 - 100 MHz	dB dB	16 22	22 27	- -
Output Return Loss 1 (pin6)	5 - 20 MHz 20 - 100 MHz	dB dB	16 25	22 29	- -
Output Return Loss 2 (pin1)	5 - 20 MHz 20 - 100 MHz	dB dB	13 22	16 27	- -

Absolute maximum ratings[1] [2]

Parameter	Absolute maximum
Max input power	1W
Internal Load Dissipation	0.125W
Operating temperature	-40°C to +80°C
Storage temperature	-40°C to +85°C

1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM does not recommend sustained operation near these survivability limits.

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.

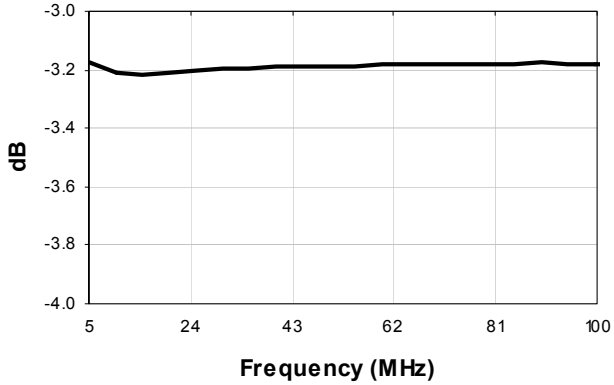
• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

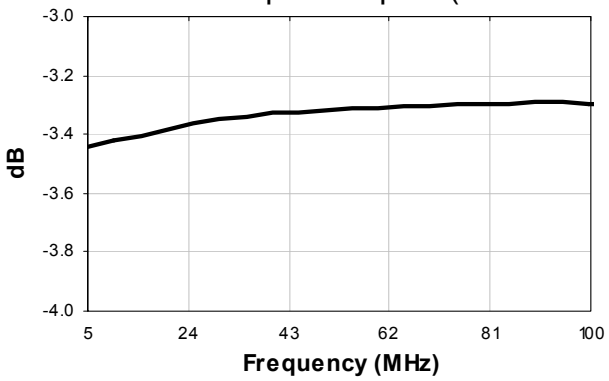
Downloaded from Elcodis.com electronic components distributor

Typical performance curves: T_A = 25°C, Z_0 = 75Ω

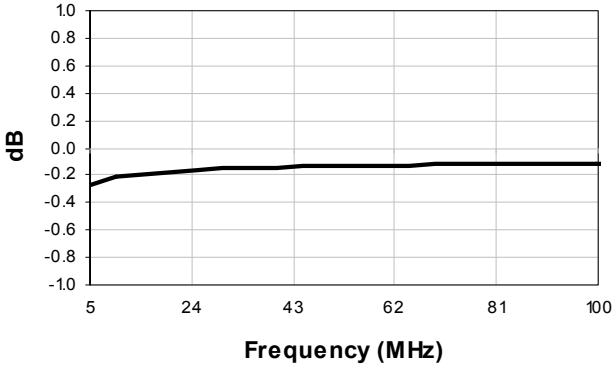
Insertion loss 1: pin 4 to pin 6 (ref value -3dB)



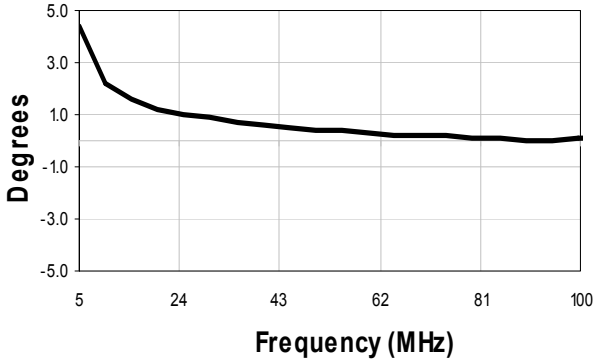
Insertion loss 2: pin 4 to pin 1(ref value -3dB)



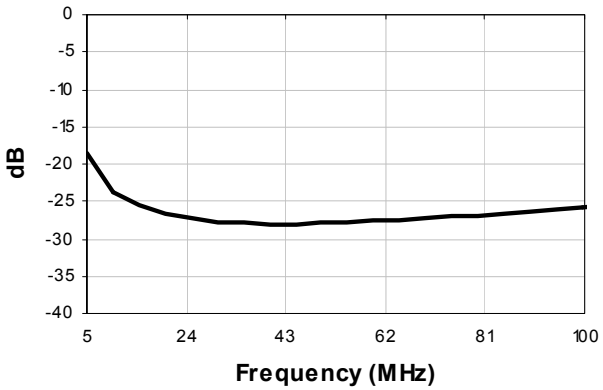
Amplitude balance



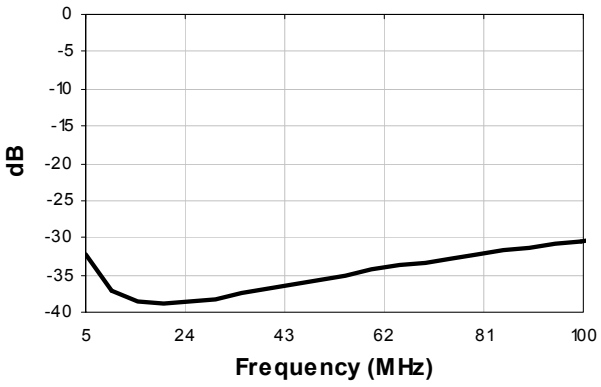
Phase balance



Return loss: Input



Isolation



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: +91.80.4155721 • **China** Tel: +86.21.2407.1588
Visit www.macomtech.com for additional data sheets and product information.

M/A-COM Technology Solutions Inc. and its affiliates reserve the right to make changes to the product(s) or information contained herein without notice.

Downloaded from Elcodis.com electronic components distributor