

MAPDCT0028 V₂P

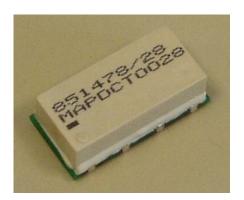
4 Way 0° Power divider 5-1000MHz

Features

- Surface Mount
- 4 Way 0 degree
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of ESJ-4-2-75
- Available on Tape and Reel. Reel quantity 300

Description

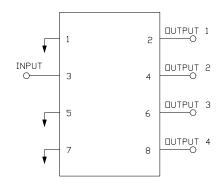
M/A-COM's MAPDCT0028 is a 4 way, high performance 0 degree, RF power divider in a low cost, surface mount package. Ideally suited for high volume CATV/Broadband applications.



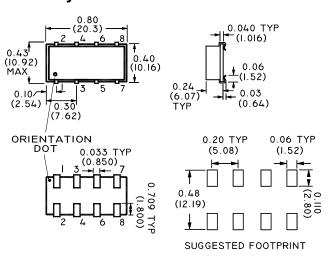
Pin Configuration

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

Functional Block Diagram



Case Style: SM-46



Dimensions in inches [mm].

Tolerance where not specified: $.xx \pm .02$, $.xxx \pm .010$

Ordering Information

Part Number	Package			
MAPDCT0028TR	300 piece reel			

Note: Reference Application Note M513 for reel size information.

- India Tel: +91.80.4155721
- China Tel: +86.21.2407.1588

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





4 Way 0° Power divider 5-1000MHz

MAPDCT0028 V2P

Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{1}$

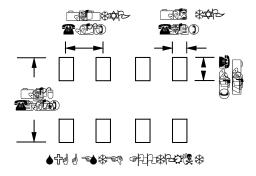
Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss	-	5 - 80 MHz 80 - 870 MHz 870 - 1000 MHz	dB dB dB	- - -	0.6 0.7 1.1	0.7 1.2 1.4
Isolation (between outputs 1&2 and outputs 3&4)	-	5-10 MHz	dB	17	25	-
Isolation (between all outputs)	-	5 - 800 MHz 800 - 1000 MHz	dB dB	20 18	40 21	-
Amplitude Unbalance (Nominal 0dB)		5 - 80 MHz 80 - 1000 MHz	dB dB	-	0.0 0.3	±0.1 ± 0.5
Phase Unbalance (Nominal 0º)	-	5 - 80 MHz 80 - 500 MHz 500 - 870 MHz 870 - 1000 MHz	0 0 0	- - -	0.1 0.5 1.0 1.0	± 1.0 ± 3.0 ± 6.0 ± 8.0
Return Loss: Input	-	5 - 80 MHz 80 - 870 MHz 870 - 1000 MHz	dB dB dB	21 17 15	25 21 17	- - -
Return Loss: Output	-	5 - 10 MHz 10 - 1000 MHz	dB dB	13 16	18 19	-

Absolute Maximum Ratings ^{1,2}

Parameter	Absolute Maximum		
Max Input Power	1W		
DC current	240mA		
Operating Temperature	-40°C to +85°C		
Storage Temperature	-55°C to +100°C		

Exceeding any one or combination of these limits may cause permanent damage to this device.

Recommended PCB Configuration



- 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.

^{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 quaranteed.

RoHS Compliant



4 Way 0° Power divider 5-1000MHz

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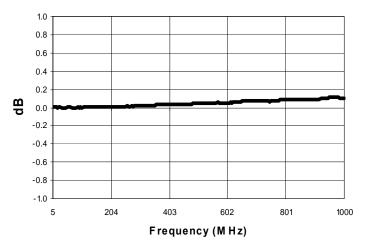
Typical Performance Curves $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$

Insertion Loss -0.2 -0.4 -0.6 -0.8 - 1.0 -1.2 -1.4 -1.6 - 1.8 -2.0 204 403 602 1000 Frequency (MHz)

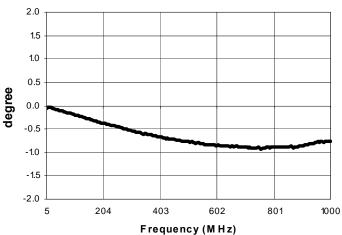
Bolation 0 -5 -10 -15 -20 -30 -35 -40 -45 -50 5 204 403 602 801 1000

Frequency (MHz)

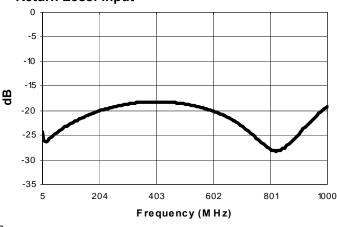
Amplitude Unbalance



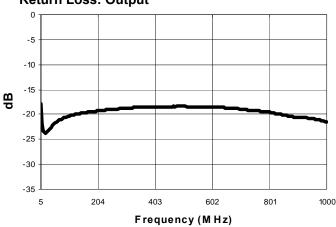
Phase Unbalance



Return Loss: Input



Return Loss: Output



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- and/or prototype measurements. Commitment to develop is not guaranteed.

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 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.
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