MAPDCT0027

2 Way 0° Power Divider 5-1000MHz



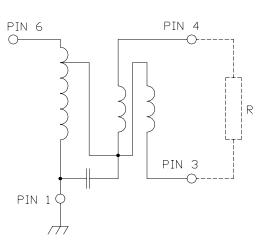
Rev. V3

Features

- SMT unit
- 2 Way 0 degree
- 260°C Reflow Compatible .
- **RoHS*** Compliant
- **RoHS version of MACPES0007**
- Available on Tape and Reel.

Description

M/A-COM Technology Solutions MAPDCT0027 is 2 way 0 degree RF power divider in a low cost, surface mount package. An external 180 Ohm resistor is required between the two outputs ports. Ideally suited for high volume CATV/Broadband applications.





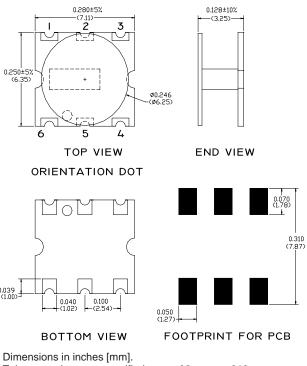
Pin Configuration

1

Pin No.	Function	
1	Ground	
2	Not connected (ground)	
3	Output 2	
4	Output 1	
5	Not connected (ground)	
6	Input	

Component Dimensions:

Schematic



Tolerance where not specified: .xx ± .02, .xxx ± .010

0.039

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

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

Parameter	Test Conditions	Frequency	Units	Min	Тур	Max
Insertion Loss	-	5 - 500 MHz 500 - 1000 MHz	dB dB	-	0.4 0.7	0.7 1.0
Amplitude Unbalance (Nominal 0dB)	-	5 - 500 MHz 500 - 1000 MHz	dB dB	-	0.28 0.32	± 0.4 ± 0.6
Phase Unbalance (Nominal 180º)	-	5 - 1000 MHz	0	-	1.00	± 3.0
Return Loss: Input	-	5 - 700 MHz 700 - 870 MHz 870 - 1000 MHz	dB dB dB	25 22 18	33 30 26	
Return Loss: Output	-	5 - 40 MHz 40 - 1000 MHz	dB dB	15 19	24 25	-
Isolation (between outputs)	-	5 - 500 MHz 500 - 1000 MHz	dB dB	20 15	27 20	

Recommended Maximum Ratings ^{1,2}

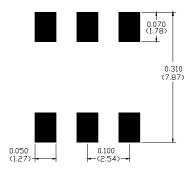
Parameter	Value
Max Input Power	1W
DC current	240mA
Operating Temperature	-40°C to +85°C
Storage Temperature	-55°C to +100°C

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

 M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

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Recommended PCB Configuration



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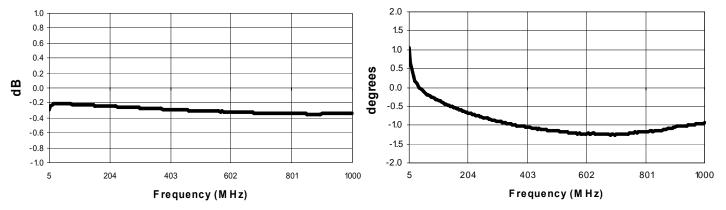
1000

Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{-1}$ Insertion Loss Isolation 0.0 0 -0.1 -5 -0.2 -10 -0.3 -15 -0.4 B -0.5 -20 -0.6 -25 -0.7 -30 -0.8 -35 -0.9 -40 -1.0 204 403 602 801 1000 5 204 403 602 801 5 Frequency (MHz) Frequency (MHz)

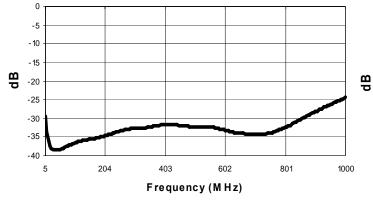
Amplitude Unbalance

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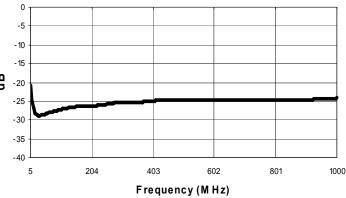








Return Loss: Output



3

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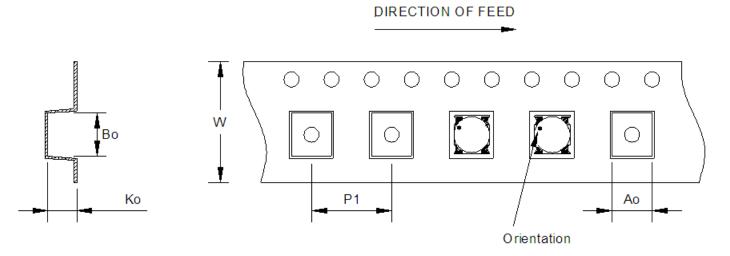
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Item	Dimension
Ao	6.70mm +/-0.1mm
Во	7.50mm +/-0.1mm
Ko	3.60mm +/-0.1mm
W	16.00mm +/-0.3mm
P1	12.00mm +/-0.1mm

Ordering Information

Part Number	Package		
MAPDCT0027TR	900 piece reel		

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