

2 Way 0° Power Divider 5 - 1200 MHz

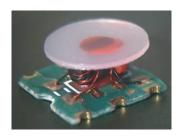
Rev. V4

Features

- Surface Mount
- 2 Way
- 0°
- RoHS* Compliant
- 260°C reflow compliant

Description

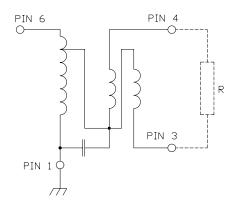
M/A-COM Technology Solutions MAPDCT0024 is a 2 Way 0^0 Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV applications. An external 160Ω Chip resistor is required with this part.



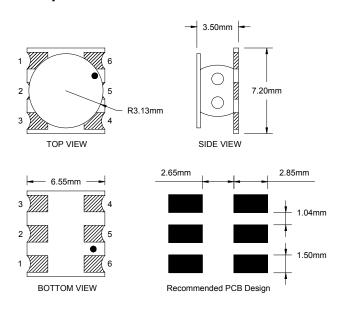
Pin Configuration

Pin No.	Function
Input	6
Ground	1
Not Connected	2, 5
Port 1	4
Port 2	3

Schematic with external resistor



Component Dimensions:



Dimensions in mm. Tolerance: \pm 0.20, unless otherwise stated. Drawing not to scale.

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Electrical Specifications: $T_A = 25$ °C, $Z_0 = 75\Omega$

Parameter	Test Conditions	Units	Min.	Тур.	Max.
Insertion Loss (Ref. Level –3dB)	5 – 500MHz 500 – 870MHz 870 – 1002Mhz 1002 – 1200MHz	dB dB dB dB	- - -	3.50 3.85 3.97 4.29	3.80 4.30 4.51 5.10
Amplitude Unbalance	5 – 40MHz	dB	-	0.2	±0.6
	40 – 400MHz	dB	-	0.22	±0.4
	400 – 1200MHz	dB	-	0.27	±0.6
Phase Unbalance	5 – 500MHz 500 – 1200MHz	0	_ _	1.3 2.1	±4.0 ±6.0
Output Return Loss	5 – 40MHz	dB	17	21.0	-
	40 – 1002MHz	dB	18	26.0	-
	1002 – 1200MHz	dB	16	23.5	-
Input Return Loss	5 – 40MHz	dB	18	36.0	_
	40 – 1002MHz	dB	18	32.8	_
	1002 – 1200MHz	dB	18	22.6	_

Recommended Maximum Ratings

Parameter	Recommended Max.
RF Power	+30dBm (1W)
DC Current	30 mA
Internal Load Dissipation	0.125W
Operating/Storage Temperature	-40° C to +125° C

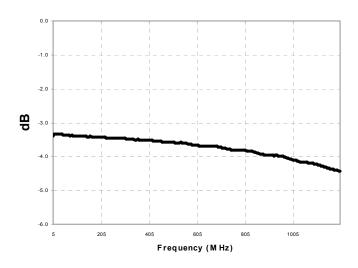


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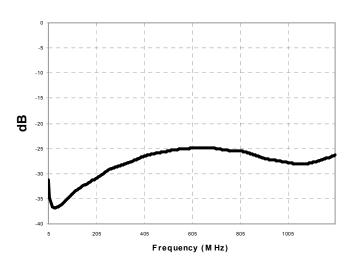
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Typical Performance Curves: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$

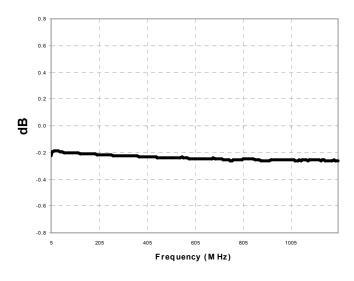
Insertion Loss



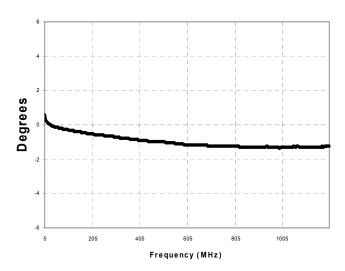
Input Return Loss



Amplitude Unbalance



Phase Unbalance



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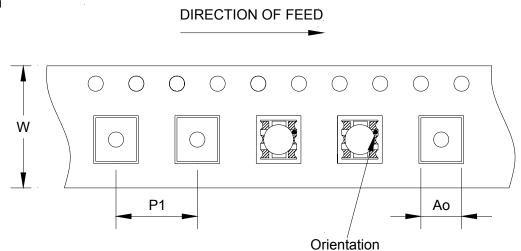
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Tape & Reel Information

Во

Κo



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
MAPDCT0024TR	900 piece reel
1000024116	Sample Test Board

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