MAPDCT0024

2 Way 0º Power Divider
5 - 1200 MHz

Rev. V4

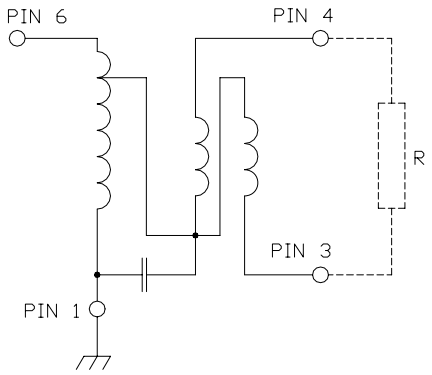
Features

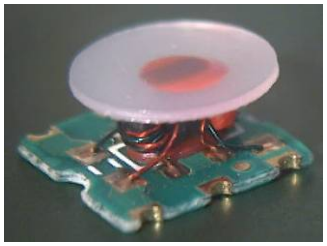
- Surface Mount
- 2 Way
- 0º
- RoHS* Compliant
- 260ºC reflow compliant

Description

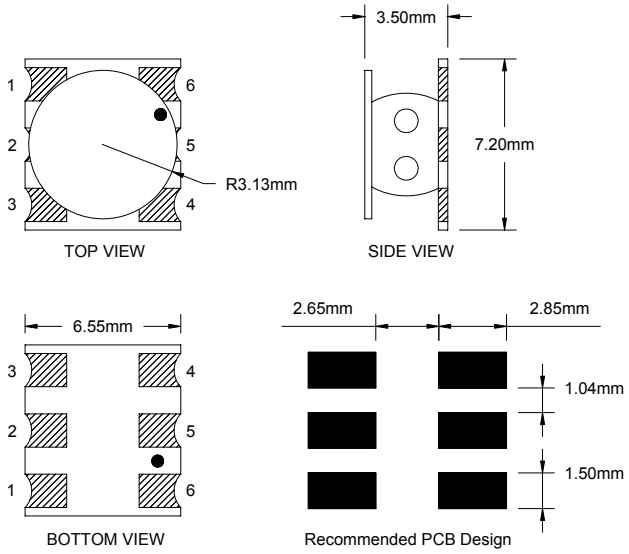
M/A-COM Technology Solutions MAPDCT0024 is a 2 Way 0^0 Power Divider in a low cost, surface mount package. Ideally suited for high volume CATV applications. An external 160Ω Chip resistor is required with this part.

Schematic with external resistor





Component Dimensions:



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

Pin Configuration

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

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

Parameter	Test Conditions	Units	Min.	Typ.	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 40 – 400MHz 400 – 1200MHz	dB dB dB	– – –	0.2 0.22 0.27	±0.6 ±0.4 ±0.6
Phase Unbalance	5 – 500MHz 500 – 1200MHz	º º	– –	1.3 2.1	±4.0 ±6.0
Output Return Loss	5 – 40MHz 40 – 1002MHz 1002 – 1200MHz	dB dB dB	17 18 16	21.0 26.0 23.5	– – –
Input Return Loss	5 – 40MHz 40 – 1002MHz 1002 – 1200MHz	dB dB dB	18 18 18	36.0 32.8 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

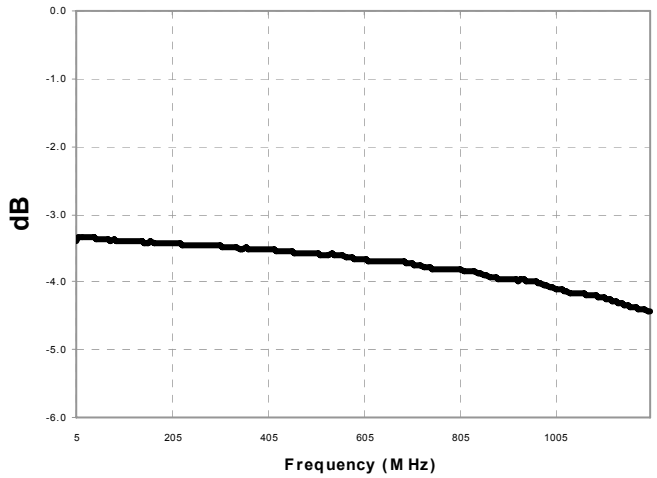
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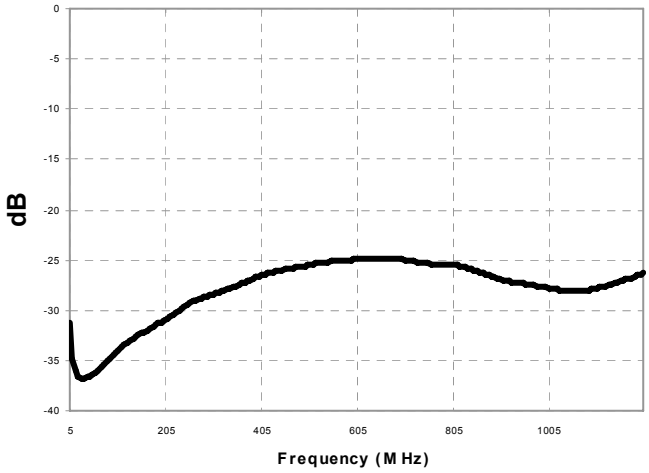
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Typical Performance Curves: T_A = 25°C, Z_0 = 75Ω

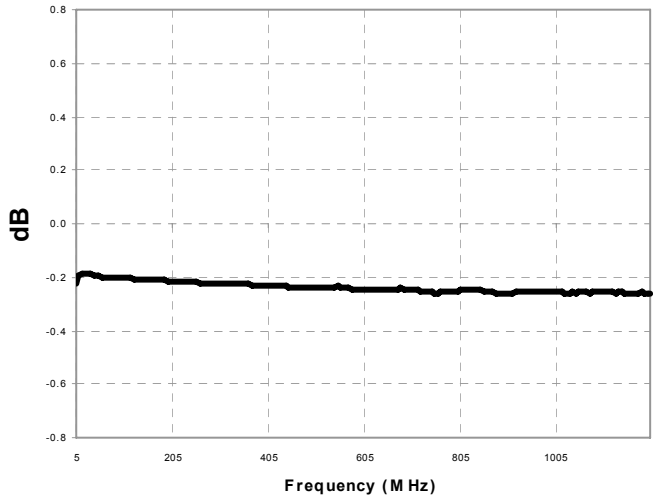
Insertion Loss



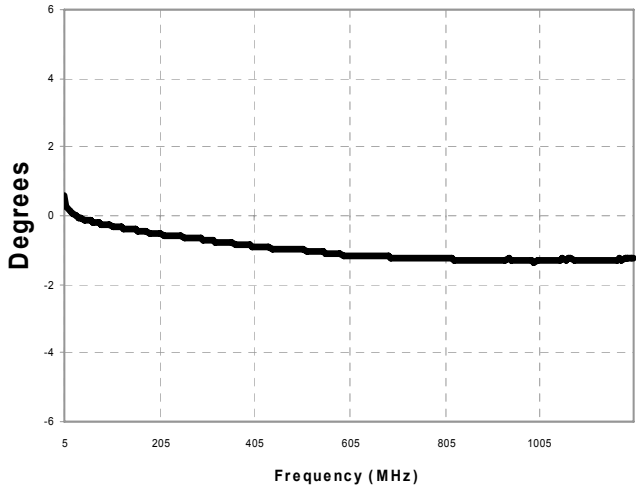
Input Return Loss



Amplitude Unbalance



Phase Unbalance

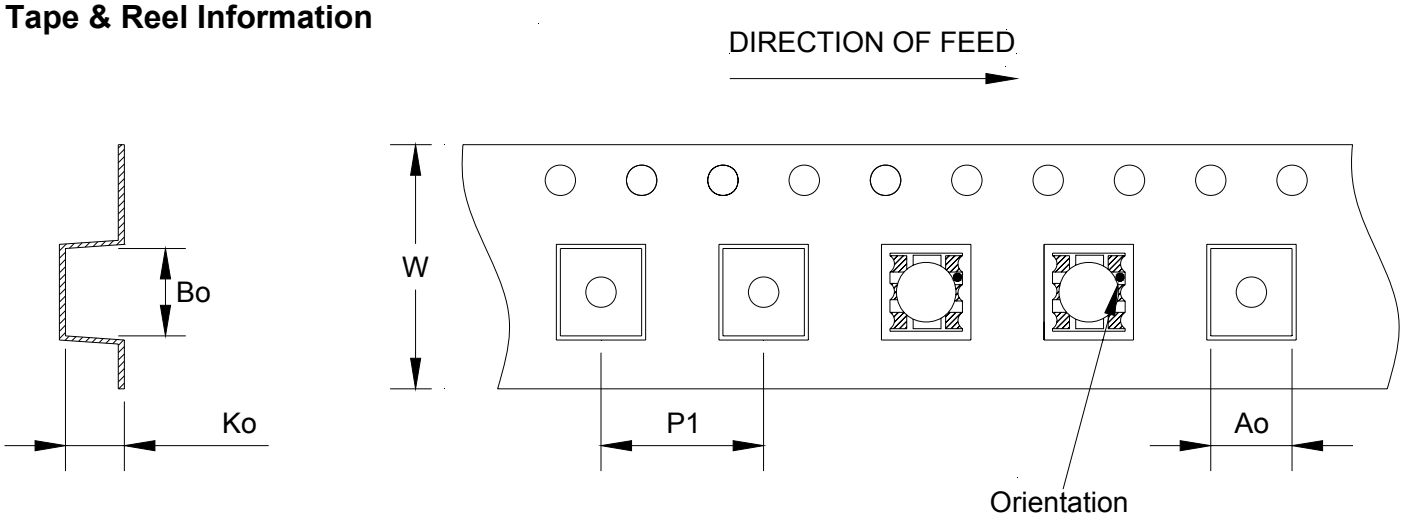


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Tape & Reel Information



Item	Dimension
Ao	6.70mm +/- 0.1mm
Bo	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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