MAPDCT0030

2 Way 0⁰ Power Divider
5 to 1000MHz

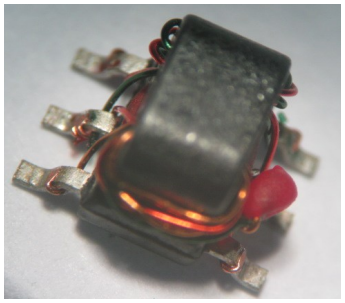
Rev. V8

Features

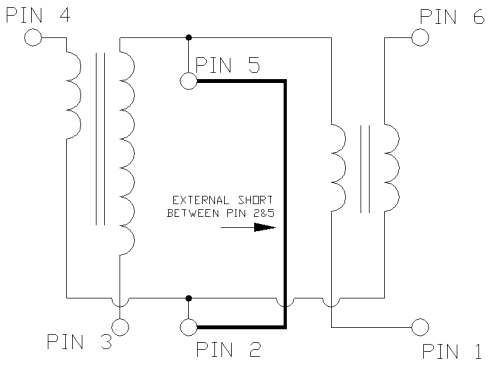
- Surface mount
- 2 Way 0 degree.
- 260°C reflow compatible
- RoHS compliant and Pb free.
- Available on tape and reel.
- Available in Weld & Soldered versions*

Description

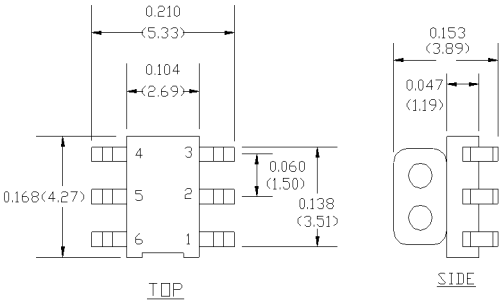
MAPDCT0030 is a 2 way 0 degree RF power divider in a low cost, surface mount package. Ideally suited for high volume CATV & VSAT applications. Two 0603 1pF capacitors and one 200Ω resistor are required with this part.

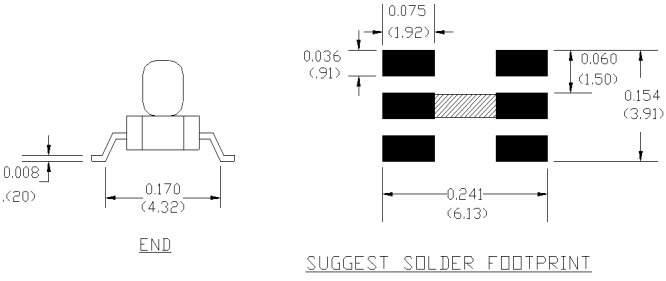


Functional Schematic



Case style:





Pin Configuration

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

Ordering Information

Part number	Description
MAPDCT0030	Reel quantity 2000
MAPD-007985-CT30TB	Customer Test Board

* M/A-Com Technology Solutions reserve the right to supply parts with weld or solder wire attach.

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2 Way 0⁰ Power Divider
5 to 1000MHz

Rev. V8

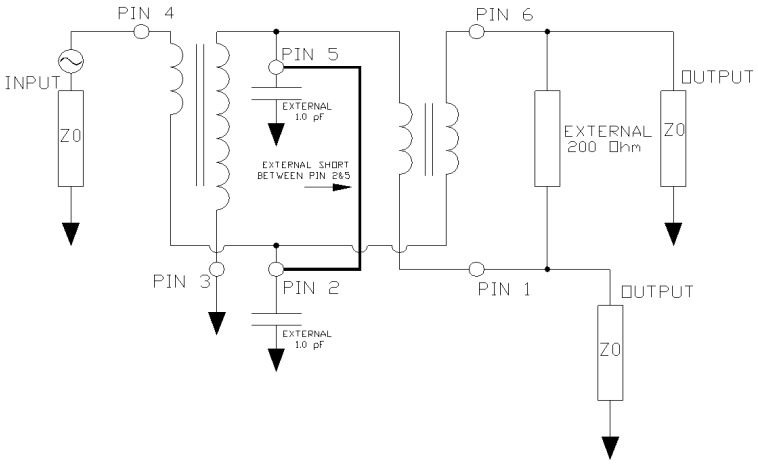
Electrical specifications: T_A = 25°C, Z_0 = 75Ω, P_{in} = 0dBm

Parameter	Frequency	Units	Min	Typ	Max
Insertion Loss (Above 3dB)	5 - 400 MHz 400 - 820 MHz 820 - 1000 MHz	dB dB dB	- - -	0.3 0.5 1.1	0.5 1.1 2.2
Amplitude Unbalance	5 - 400 MHz 400 - 820 MHz 820 - 1000 MHz	dB dB dB	- - -	0.2 0.2 0.4	± 0.5 ± 0.3 ± 0.9
Phase Unbalance	5 - 400 MHz 400 - 820 MHz 820 - 1000 MHz	° ° °	- - -	0.5 1.0 1.5	± 4 ± 4 ± 6
Return Loss: Input	5 - 400 MHz 400 - 820 MHz 820 - 1000 MHz	dB dB dB	23 16 17	35 22 24	- - -
Isolation (between outputs)	5 - 400 MHz 400 - 820 MHz 820 - 1000 MHz	dB dB dB	18 20 14	35 32 20	- - -

Recommended Maximum Ratings

Parameter	Value
Input power	1W
Internal Load Dissipation	0.125W
Operating Temperature	-40°C to +85°C
Storage Temperature	-40°C to +85°C

Application Circuit

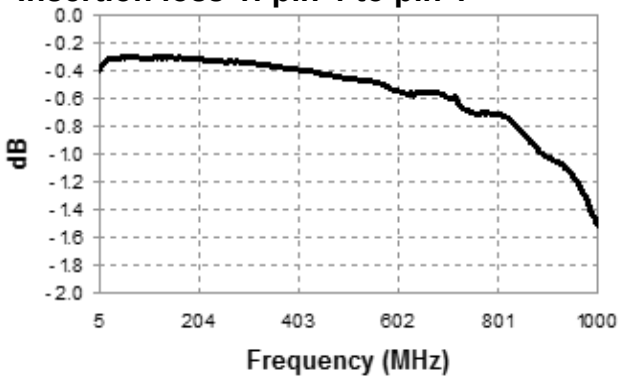


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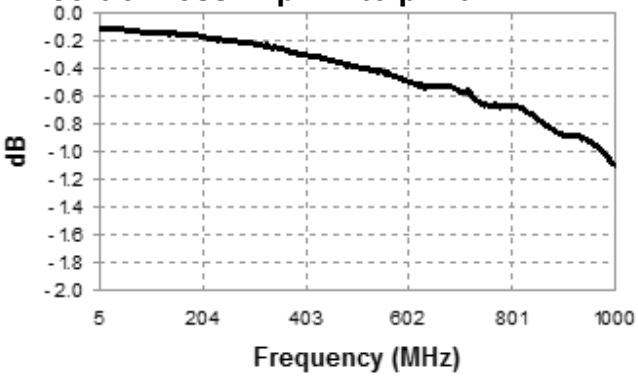
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Typical Performance Curves

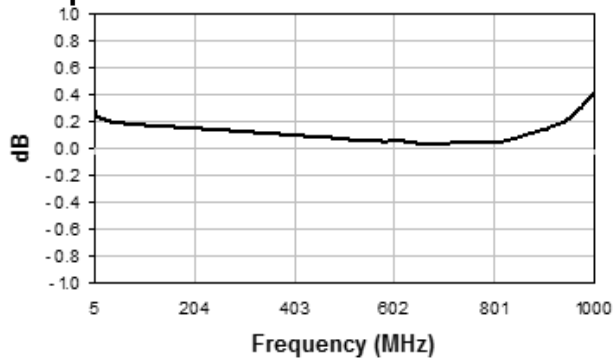
Insertion loss 1: pin 4 to pin 1



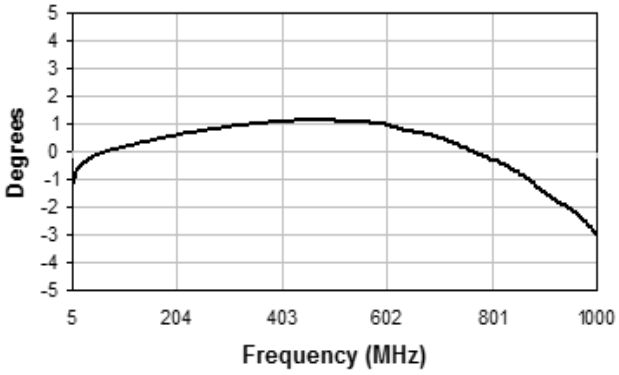
Insertion loss 2: pin 4 to pin 6



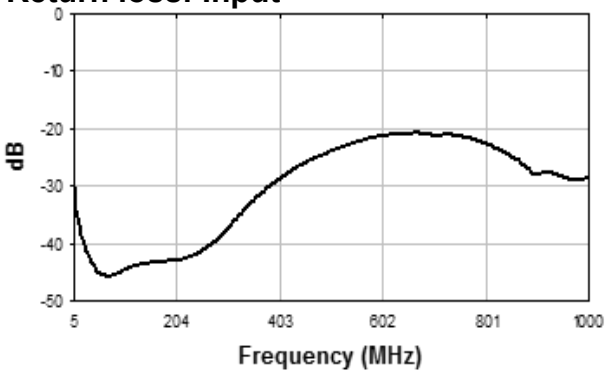
Amplitude balance



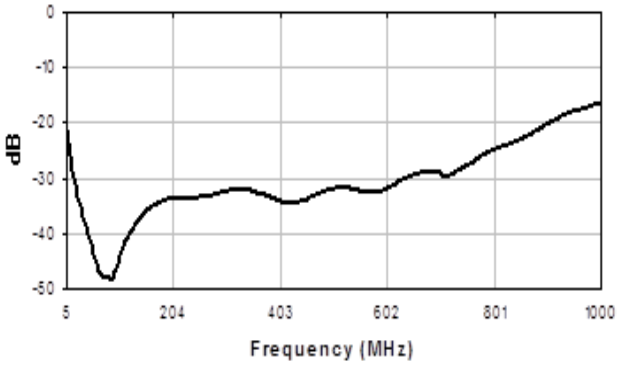
Phase balance



Return loss: Input



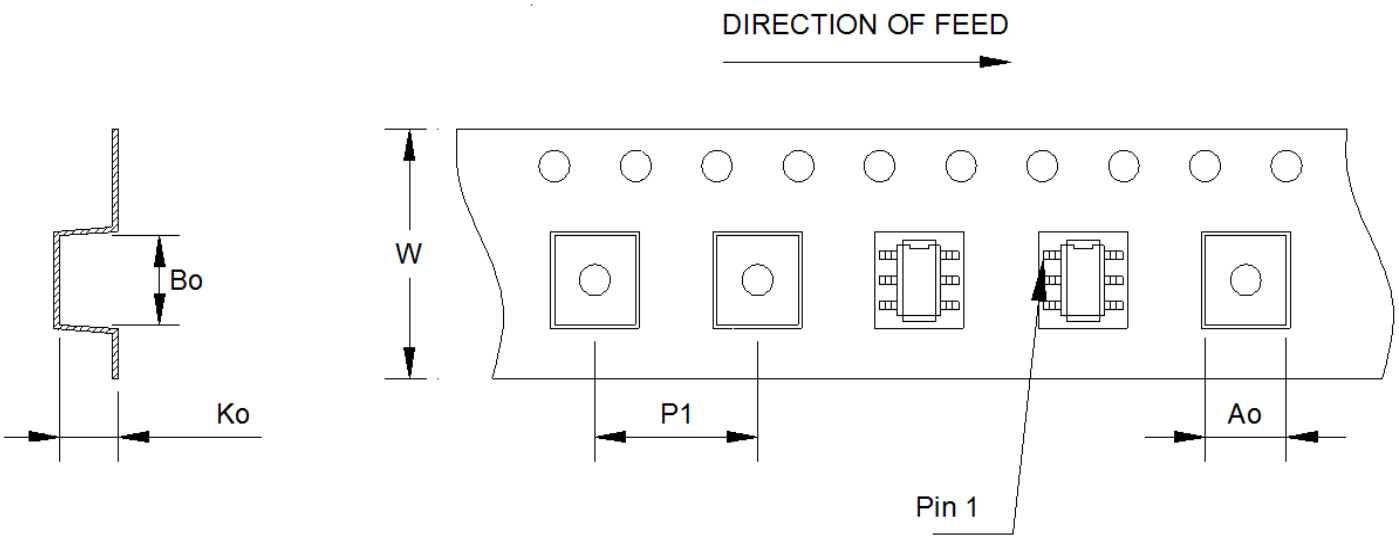
Isolation



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Tape & Reel Information



Item	Dimension
Ao	5.60mm +/- 0.1mm
Bo	4.90mm +/- 0.1mm
Ko	3.90mm +/- 0.1mm
W	12.00mm +/- 0.3mm
P1	8.00mm +/- 0.1mm

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