

## 2 Way Zero Degree Power Divider 5 - 1200 MHz

Rev. V6

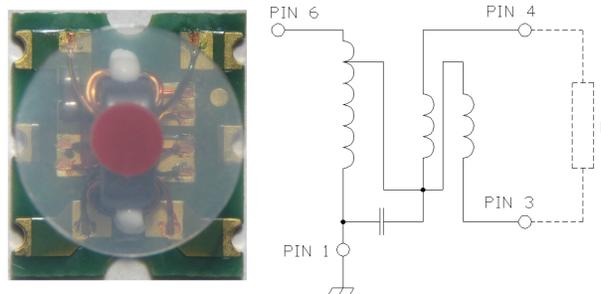
### Features

- 2 Way Power Divider
- Surface Mount
- Available on Tape and Reel
- RoHS Compliant and Pb Free
- 260°C Reflow Compatible
- Suitable for all CATV, Broadband and FTTX applications

### Description

The MAPDCT0024 is a 2 way power divider in a low cost surface mount package.

### Functional Schematic



### Pin Configuration

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

### Electrical Specifications: Freq. = 5 - 1200 MHz, T<sub>A</sub> = 25°C, Z<sub>0</sub> = 75 Ω, P<sub>IN</sub> = 0 dBm

Parameter	Conditions (Freq. = MHz)	Units	Min.	Typ.	Max.
Insertion Loss (Ref. level -3 dB)	5 - 500	dB	-	3.50	3.80
	500 - 870			3.85	4.30
	870 - 1002			3.97	4.51
	1002 - 1200			4.29	5.10
Amplitude Balance	5 - 40	dB	-	0.2	±0.6
	40 - 400			0.22	±0.4
	400 - 1200			0.27	±0.6
Phase Balance (Ref. value 0°)	5 - 500	°	-	1.3	±4.0
	500 - 1200			2.1	±6.0
Return Loss Input (Pin 6)	5 - 40	dB	18	36.0	-
	40 - 1002		18	32.8	
	1002 - 1200		18	22.6	
Return Loss Output (Pin 4 & 3)	5 - 40	dB	17	21.0	-
	40 - 1002		18	26.0	
	1002 - 1200		16	23.5	

### Ordering Information

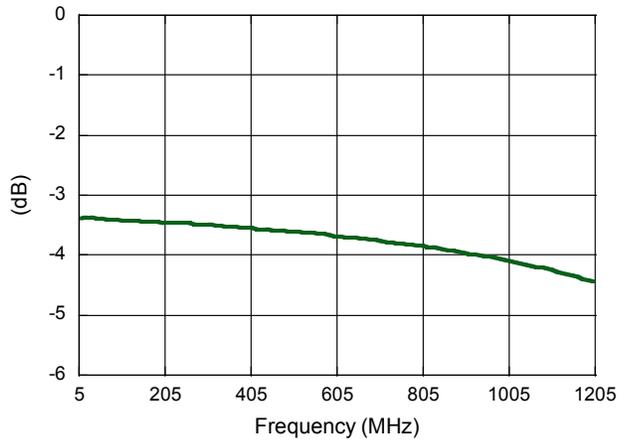
Part Number	Description
MAPDCT0024	900 piece reel

### Recommended Maximum Ratings

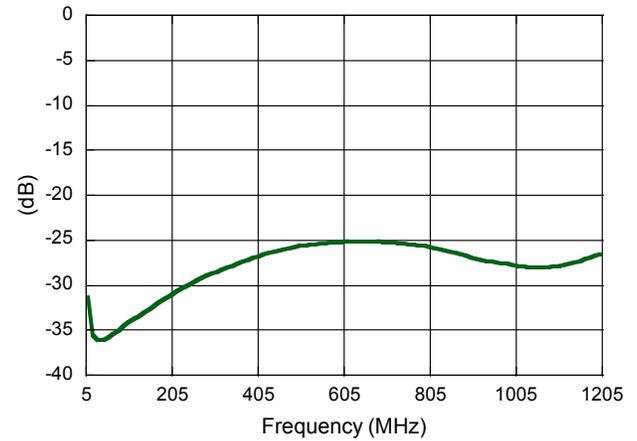
Parameter	Units
Input RF Power	30 mW
DC Current	30 mA
Internal Load Dissipation	0.125 W
Operating Temperature	-40°C to +125°C

**Typical Performance Curves:  $T_A = 25^\circ\text{C}$ ,  $Z_0 = 75 \Omega$ ,  $P_{IN} = 0 \text{ dBm}$**

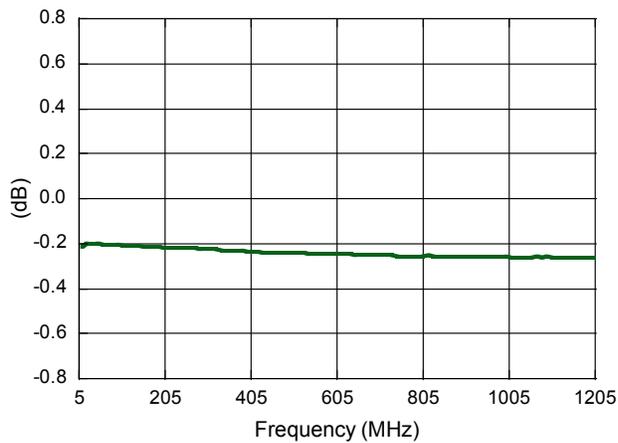
**Insertion Loss**



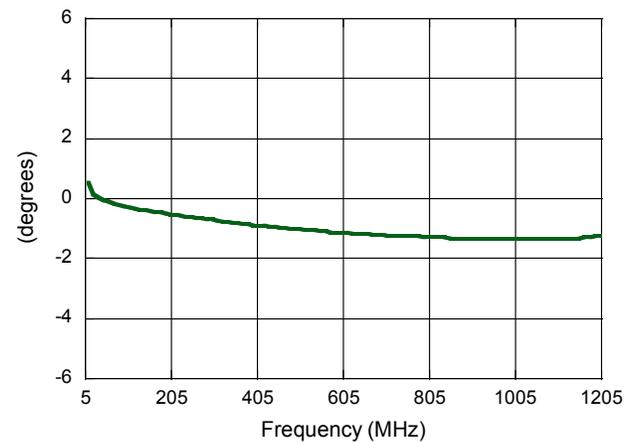
**Input Return Loss**



**Amplitude Unbalance**

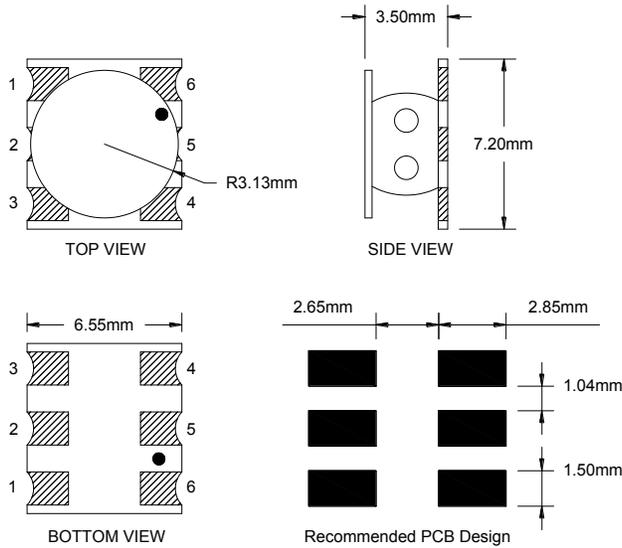


**Phase Unbalance**



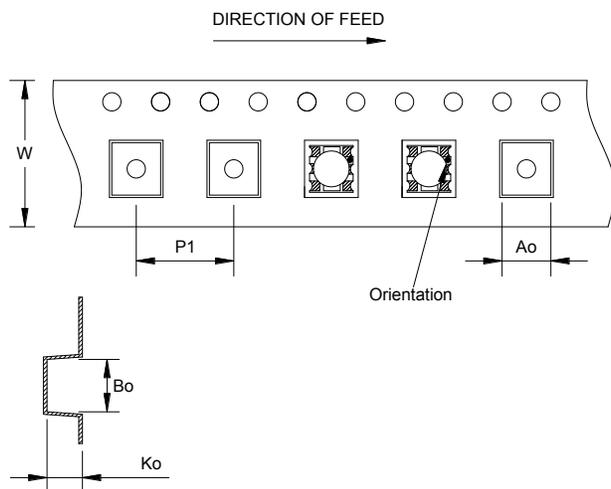
Full temperature plots available on request

## Outline Drawing



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

## Carrier Tape Orientation



## Tape & Reel Information

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

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