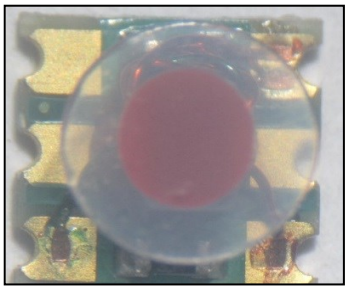
MAPDCT0026

2 Way 0° Power Divider
5 - 2400 MHz

Rev. V3

Features

- Surface Mount
- 2 Way 0 degree
- 260°C Reflow Compatible
- RoHS Compliant and Pb free
- RoHS version of MAPDCT0012
- Available on Tape and Reel

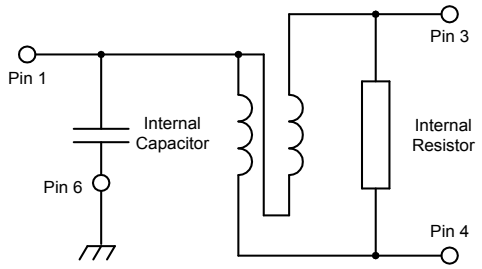


Description

The MAPDCT0026 is 2 way 0 degree RF power divider in a low cost, surface mount package.

Ideally suited for high volume CATV & VSAT applications.

Functional Schematic



Ordering Information[1,2]

Part Number	Package
MAPDCT0026TR	2000 piece reel
MAPD-007996-CT26TB	Customer Test Board

1. Reference Application Note M513 for reel size information.
2. All sample boards include x loose parts.

Pin Configuration

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

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

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	5 - 870 MHz 870 - 1000 MHz 1000 - 2150 MHz 2150 - 2400 MHz	dB	—	0.7 0.9 1.2 2.8	1.0 1.1 2.5 3.9
Amplitude Unbalance (Nominal 0 dB)	5 - 1000 MHz 1000 - 2150 MHz 2150 - 2400 MHz	dB	—	0.2 0.8 1.3	±0.7 ±1.5 ±1.8
Phase Unbalance (Nominal 180°)	5 - 1000 MHz 1000 - 2150 MHz 2150 - 2400 MHz	°	—	2 2 4	±5 ±10 ±12
Input Return Loss	5 - 2150 MHz 2150 - 2400 MHz	dB	9 6	10 9	—
Output Return Loss	5 - 1000 MHz 1000 - 2400 MHz	dB	10 6	15 9	—
Isolation (between outputs)	5 - 2400 MHz	dB	10	18	—

Absolute Maximum Ratings[3,4]

Parameter	Absolute Maximum
Input Power	1 W
DC current	240 mA
Operating Temperature	-40°C to +80°C
Storage Temperature	-40°C to +85°C

3. Exceeding any one or combination of these limits may cause permanent damage to this device.
4. MACOM does not recommend sustained operation near these survivability limits.

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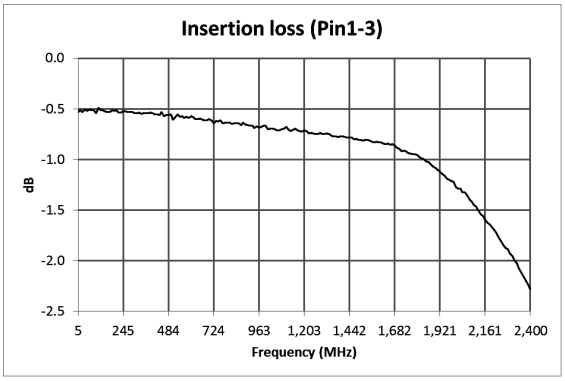
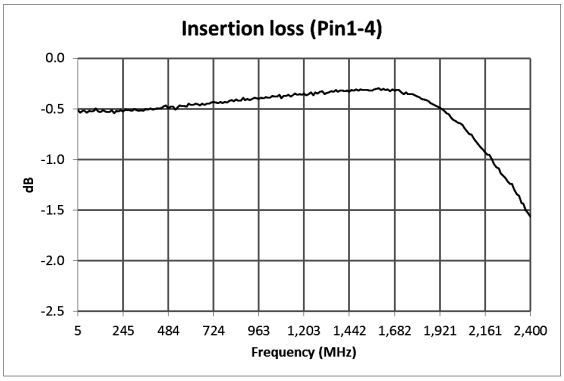
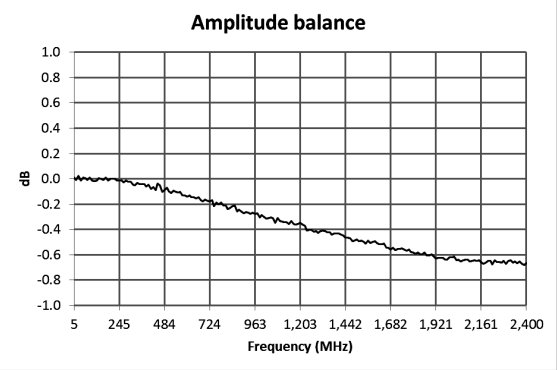
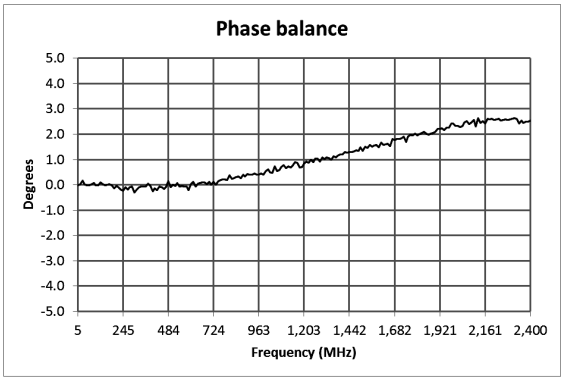
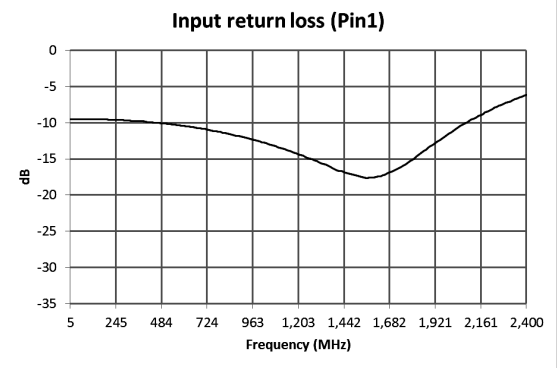
Typical Performance Curves: T_A = +25°C, Z_0 = 75 Ω

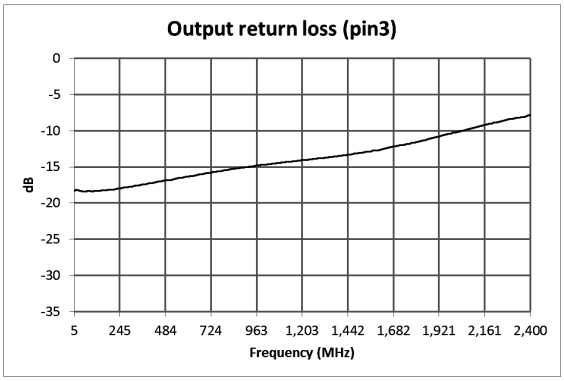


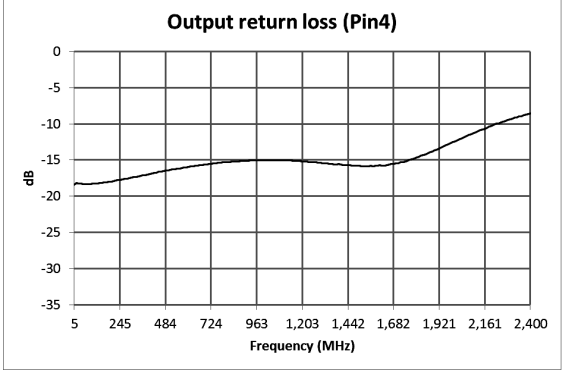


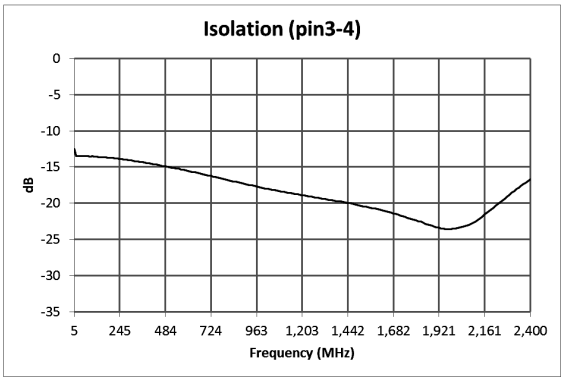




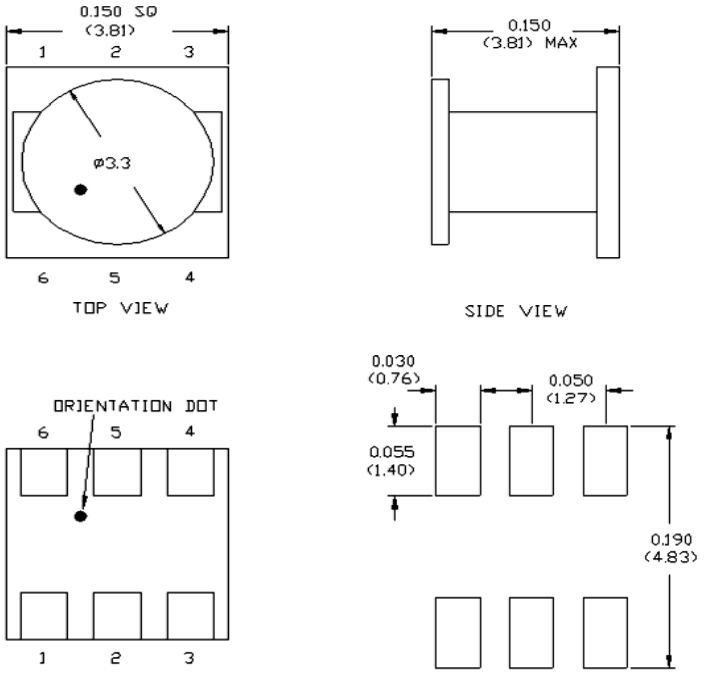








Outline



Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010