RoHS Compliant

2 Way 0° Power Divider 5-2400MHz



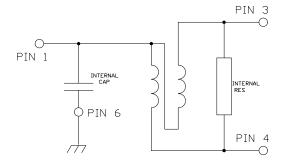
MAPDCT0026 V1P

Features

- Surface Mount
- 2 Way 0 degree
- 260°C Reflow Compatible
- RoHS* Compliant
- RoHS version of MAPDCT0012.
- Available on Tape and Reel. Reel quantity 2000

Description

Schematic





Pin Configuration

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

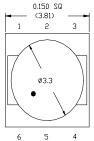
Ordering Information

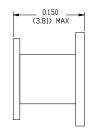
| Part Number | Package | | |
|--------------------|---------------------|--|--|
| MAPDCT0026TR | 2000 piece reel | | |
| MAPD-007996-CT26TB | Customer Test Board | | |

Note: Reference Application Note M513 for reel size information.

* Restrictions on Hazardous Substances, European Union Directive 2002/95/EC.

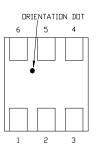
Case Style: SM-156

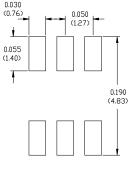












Dimensions in inches [mm] Tolerance: .xx ± .02, .xxx ± .010

1

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- North America Tel: 800.366.2266 Europe Tel: +353.21.244.6400
- India Tel: +91.80.4155721 China Tel: +86.21.2407.1588
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V1P

MAPDCT0026

2 Way 0° Power Divider 5-2400MHz

Electrical Specifications: $T_A = 25^{\circ}C$, $Z_0 = 75\Omega^{-1}$

| Parameter | Test Conditions | Frequency | Units | Min | Тур | Max |
|--------------------------------------|--------------------|---|----------------------|---------|--------------------------|--------------------------|
| Insertion Loss | - | 5 - 870 MHz 870 - 1000 MHz 1000 - 2150 MHz 2150 - 2400 MHz | dB dB dB dB | | 0.7 0.9 1.2 2.8 | 1.0 1.1 2.5 3.9 |
| Amplitude Unbalance (Nominal 0dB) | - | 5 - 1000 MHz 1000 - 2150 MHz 2150 - 2400 MHz | dB dB 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 | 0 0 0 | | 2 2 4 | ±5 ±10 ±12 |
| Return Loss: Input | - | 5 - 2150 MHz 2150 - 2400 MHz | dB dB | 9 6 | 10 9 | - |
| Return Loss: Output | - | 5 - 1000 MHz 1000 - 2400 MHz | dB dB | 10 6 | 15 9 | - |
| Isolation (between outputs) | - | 5 - 2400 MHz | dB | 10 | 18 | - |

Absolute Maximum Ratings ^{1,2}

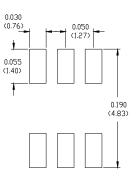
| Parameter | Absolute Maximum | | | |
|-----------------------|------------------|--|--|--|
| Max Input Power | 1W | | | |
| DC current | 240mA | | | |
| Operating Temperature | -40°C to +80°C | | | |
| Storage Temperature | -40°C to +85°C | | | |

1. Exceeding any one or combination of these limits may cause permanent damage to this device.

2. M/A-COM does not recommend sustained operation near these survivability limits.

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Recommended PCB Configuration



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²

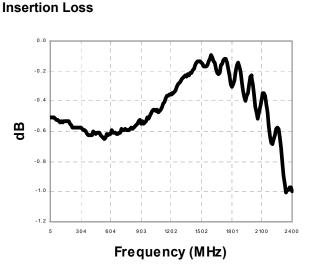


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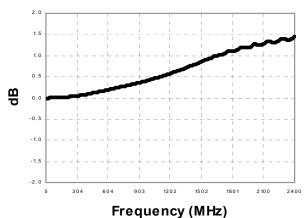


MAPDCT0026 V1P

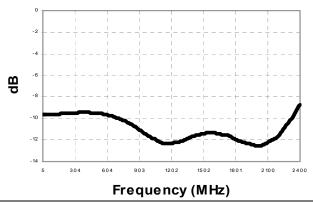
Typical Performance Curves $T_A = 25^{\circ}C$, $Z_0 = 75\Omega$



Amplitude Unbalance

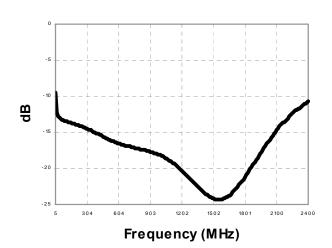






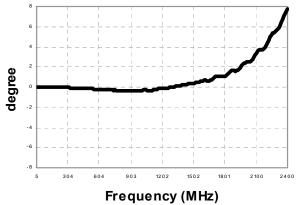
3

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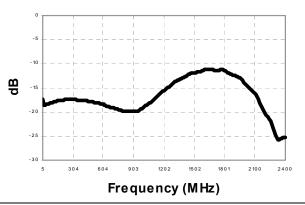


Phase Unbalance

Isolation



Return Loss: Output



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