

MAPD-010281-C2W024



**2 Way 0° Power Divider
5 - 1200 MHz**

Rev. V2

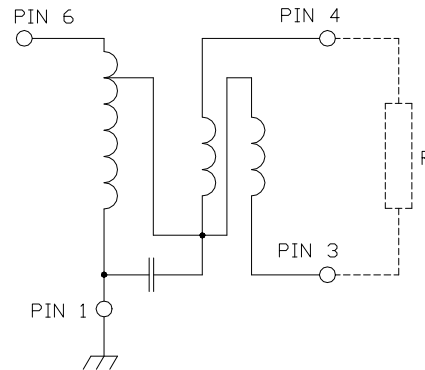
Features

- Surface Mount
- 2 Way
- 0°
- RoHS* Compliant
- Pb free.
- 260°C reflow compliant

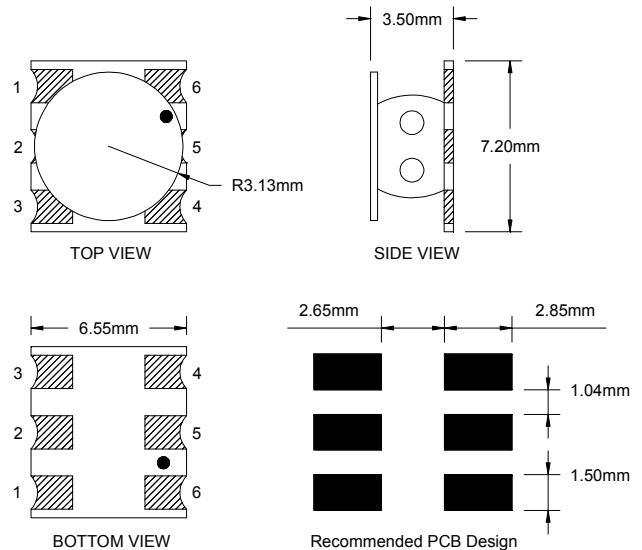
Description

M/A-COM Technology Solutions MAPD-010281-C2W024 is a 2 Way 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:



Pin Configuration

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

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

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

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• **North America** Tel: 800.366.2266 • **Europe** Tel: +353.21.244.6400
• **India** Tel: +91.80.43537383 • **China** Tel: +86.21.2407.1588
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Electrical Specifications: $T_A = 25^\circ\text{C}$, $Z_0 = 75\Omega$

| Parameter | Test Conditions | Units | Min. | Typ. | Max. |
|-------------------------------------|-----------------|-------|------|------|------|
| Insertion Loss (Ref. Level -3dB) | 5 – 500MHz | dB | – | 3.50 | 3.90 |
| | 500 – 870MHz | dB | – | 3.85 | 4.30 |
| | 870 – 1002MHz | dB | – | 3.97 | 4.51 |
| | 1002 – 1200MHz | dB | – | 4.29 | 5.10 |
| Amplitude Unbalance | 5 – 40MHz | dB | – | 0.2 | ±0.6 |
| | 40 – 400MHz | dB | – | 0.22 | ±0.4 |
| | 400 – 1200MHz | dB | – | 0.27 | ±0.6 |
| Phase Unbalance | 5 – 500MHz | ° | – | 1.3 | ±4.0 |
| | 500 – 1200MHz | ° | – | 2.1 | ±6.0 |
| Output Return Loss | 5 – 40MHz | dB | 17 | 21.0 | – |
| | 40 – 1002MHz | dB | 18 | 26.0 | – |
| | 1002 – 1200MHz | dB | 16 | 23.5 | – |
| Input Return Loss | 5 – 40MHz | dB | 18 | 36.0 | – |
| | 40 – 1002MHz | dB | 18 | 32.8 | – |
| | 1002 – 1200MHz | dB | 18 | 22.6 | – |

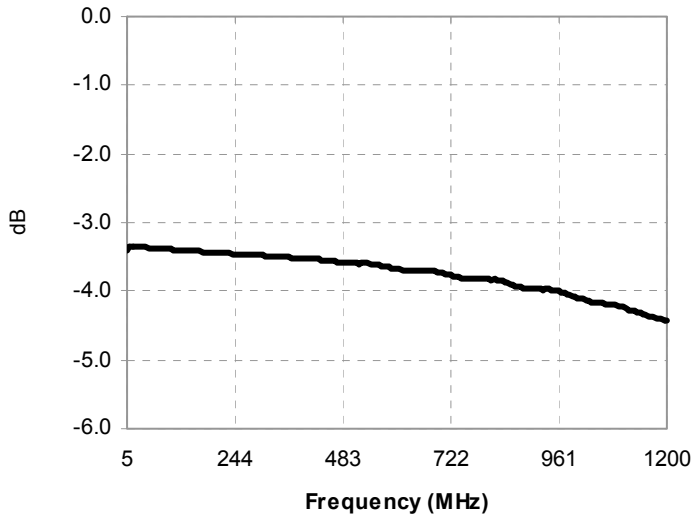
Recommended Ratings^{1,2}

| Parameter | Value |
|-------------------------------|-------------------|
| RF Power | +30dBm (1W) |
| DC Current | 30 mA |
| Internal Load Dissipation | 0.125W |
| Operating/Storage Temperature | -40° C to +125° C |

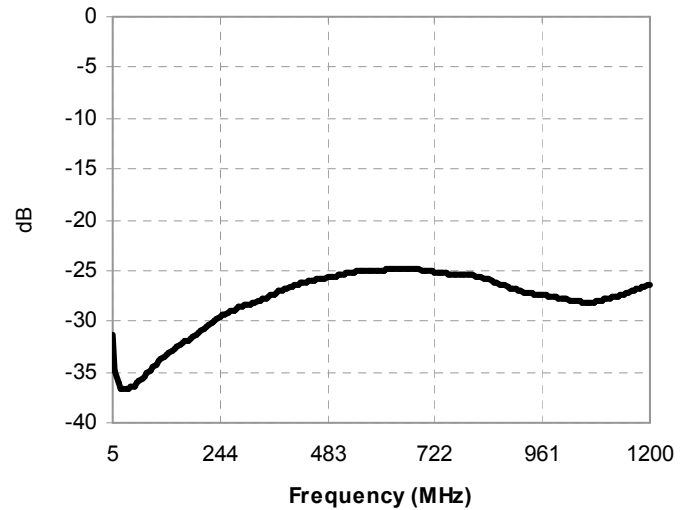
1. Exceeding any one or combination of these limits may cause permanent damage to this device.
2. M/A-COM Technology Solutions does not recommend sustained operation near these survivability limits.

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

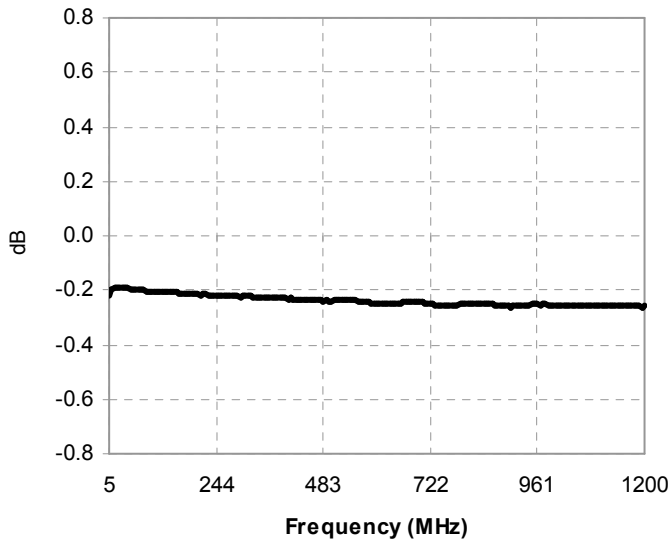
Insertion Loss



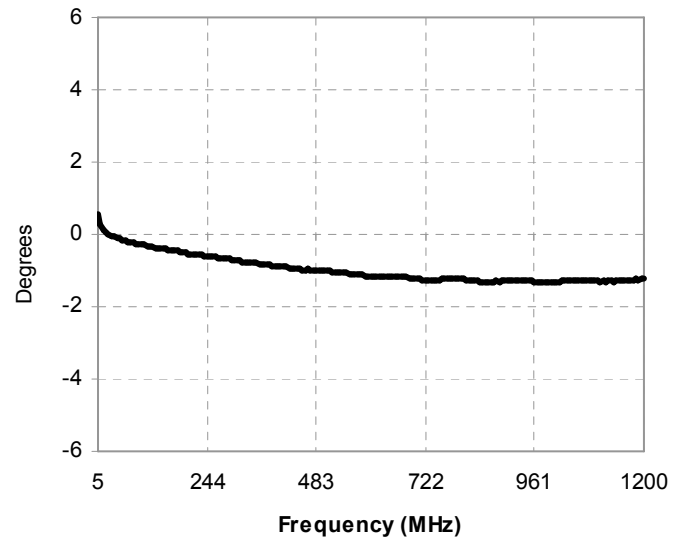
Input Return Loss



Amplitude Unbalance



Phase Unbalance



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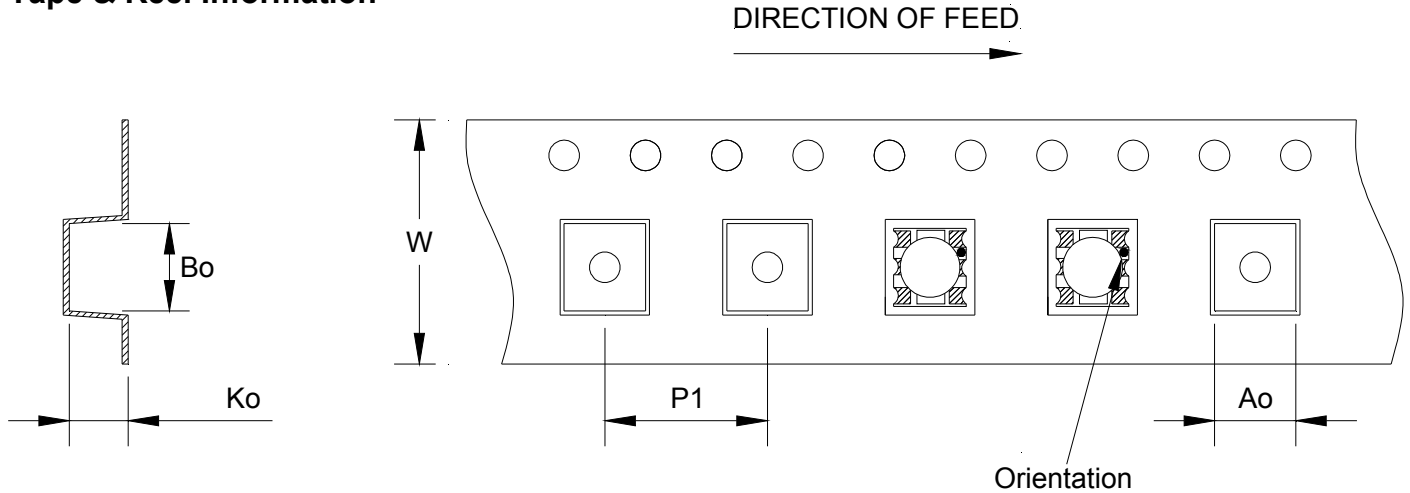
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Tape & Reel Information



| Item | Dimension |
|------|-------------------|
| Ao | 6.70mm +/- 0.1mm |
| Bo | 7.50mm +/- 0.1mm |
| Ko | 3.80mm +/- 0.1mm |
| W | 16.00mm +/- 0.3mm |
| P1 | 12.00mm +/- 0.1mm |

Ordering Information

| Part Number | Package |
|--------------------|-------------------|
| MAPD-010281-C2W024 | 900 piece reel |
| 1000024116 | Sample Test Board |