## Features

- 2 way, 0 degree
- Surface mount
- Available on tape and reel
- $260^{\circ} \mathrm{C}$ reflow compatible
- RoHS Compliant and Pb free
- Excellent temperature stability


Electrical Specifications: $Z_{0}=75 \Omega, T_{A}=25^{\circ} \mathrm{C}, P_{\text {in }}=0 \mathrm{dBm}$

| Parameter | Conditions | Units | Min | Typ | Max |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Frequency Range |  | MHz | 5 |  | 1000 |
| Impedance |  | $\Omega$ |  | 75 |  |
| Power split |  | dB |  | 3 |  |
| Insertion Loss | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-400 \mathrm{MHz} \\ 400-500 \mathrm{MHz} \\ 500-1000 \mathrm{MHz} \end{gathered}$ | dB <br> dB <br> dB <br> dB |  | $\begin{aligned} & 0.2 \\ & 0.3 \\ & 0.4 \\ & 0.7 \end{aligned}$ | $\begin{aligned} & 1.0 \\ & 0.7 \\ & 0.7 \\ & 1.2 \end{aligned}$ |
| Amplitude Balance | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-400 \mathrm{MHz} \\ 400-500 \mathrm{MHz} \\ 500-1000 \mathrm{MHz} \end{gathered}$ | dB <br> dB <br> dB <br> dB |  |  | $\begin{aligned} & \pm 0.6 \\ & \pm 0.4 \\ & \pm 0.6 \\ & \pm 0.7 \end{aligned}$ |
| Phase Balance | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-400 \mathrm{MHz} \\ 400-500 \mathrm{MHz} \\ 500-1000 \mathrm{MHz} \end{gathered}$ | Degree <br> Degree <br> Degree <br> Degree |  |  | $\begin{aligned} & \pm 3.0 \\ & \pm 3.0 \\ & \pm 3.0 \\ & \pm 5.0 \end{aligned}$ |
| Input Return Loss | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-870 \mathrm{MHz} \\ 870-1000 \mathrm{MHz} \end{gathered}$ | dB <br> dB <br> dB | $\begin{aligned} & 15 \\ & 17 \\ & 16 \end{aligned}$ | $\begin{aligned} & 38 \\ & 25 \\ & 19 \end{aligned}$ |  |
| Output Return Loss | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-870 \mathrm{MHz} \\ 870-1000 \mathrm{MHz} \end{gathered}$ | dB <br> dB <br> dB | $\begin{aligned} & 14 \\ & 15 \\ & 13 \end{aligned}$ | $\begin{aligned} & 29 \\ & 21 \\ & 15 \end{aligned}$ |  |
| Isolation | $\begin{gathered} 5-40 \mathrm{MHz} \\ 40-400 \mathrm{MHz} \\ 400-500 \mathrm{MHz} \\ 500-1000 \mathrm{MHz} \end{gathered}$ | dB <br> dB <br> dB <br> dB | $\begin{aligned} & 19 \\ & 19 \\ & 16 \\ & 10 \end{aligned}$ | $\begin{aligned} & 36 \\ & 30 \\ & 29 \\ & 25 \end{aligned}$ |  |

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- India Tel: +91.80.43537383 - China Tel: +86.21.2407.1588

Visit www.macomtech.com for additional data sheets and product information.

## Insertion Loss : Pin6—Pin4



## Amplitude Balance:



Input Return Loss:


Electrical Specifications: $Z_{0}=75 \Omega, T_{A}=25^{\circ} \mathrm{C}, P_{\text {in }}=0 \mathrm{dBm}$

## Isolation:



## Phase Balance :



## Output Return loss:



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Power divider, 2 way, 0 degree

Outline Drawing


1. Dimensions in mm.
2. Tolerance: $\pm 0.2 \mathrm{~mm}$ unless otherwise noted.
3. Model number and lot code are printed on the reel.
4. Finish: Electreless nickel immersion gold

## Pin Configuration

| Pin No. | Function |
| :---: | :---: |
| 1 | Ground |
| 2 | Not connected |
| 3 | Output port 2 |
| 4 | Output port 1 |
| 5 | Not connected |
| 6 | Input |

Recommend PCB Layout


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Tape \& Reel Information

| Parameter | Units | Value |
| :---: | :---: | :---: |
| Qty per reel | - | 2000 |
| Reel Size | mm | 330 |
| Tape Width | mm | 12.00 |
| Pitch | mm | 8.00 |
| Ao | mm | 5.30 |
| Bo | mm | 5.30 |
| Ko | mm | 2.70 |
| Orientation | - | F2 |
| Reference Application Note ANI-019 for orientation |  |  |

## Application Circuit



## Ordering Information

| Part Number | Description |
| :---: | :---: |
| MAPD-010362-C20FA0 | Tape \& Reel |
| MAPD-010362-C20FTB | Customer Evaluation Board |

## Recommended Maximum Ratings

| Parameter | Units | Min | Max |
| :---: | :---: | :---: | :---: |
| Input Power | mW |  | 250 |
| DC Current | mA |  | 200 |
| Operating Temperature Range | ${ }^{\circ} \mathrm{C}$ | -40 | +85 |
| Storage Temperature Range | ${ }^{\circ} \mathrm{C}$ | -55 | +125 |

Full temperature plots available on request

## Schematic



## ECO History



