2 Way 0° Power Divider
5 - 1600 MHz

Features
- Surface Mount
- 2 way 0 degree
- 260°C Reflow Compatible
- RoHS* Compliant, lead free
- Available on Tape and Reel.

Ordering Information

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
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</thead>
<tbody>
<tr>
<td>MAPD-011002</td>
<td>Tape &amp; Reel</td>
</tr>
<tr>
<td>MAPD-011002-TB</td>
<td>Customer Evaluation Board</td>
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</table>

Tape & Reel Information

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Units</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qty per reel</td>
<td></td>
<td>2000</td>
</tr>
<tr>
<td>Reel Size</td>
<td>mm</td>
<td>330</td>
</tr>
<tr>
<td>Tape Width</td>
<td>mm</td>
<td>12.00</td>
</tr>
<tr>
<td>Pitch</td>
<td>mm</td>
<td>8.00</td>
</tr>
<tr>
<td>Ao</td>
<td>mm</td>
<td>4.60</td>
</tr>
<tr>
<td>Bo</td>
<td>mm</td>
<td>4.60</td>
</tr>
<tr>
<td>Ko</td>
<td>mm</td>
<td>3.30</td>
</tr>
<tr>
<td>Orientation</td>
<td></td>
<td>F18</td>
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</table>

Reference Application Note ANI-019 for orientation

Function

<table>
<thead>
<tr>
<th>Function</th>
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<tbody>
<tr>
<td>1 Ground</td>
</tr>
<tr>
<td>2 External 0.5pF Capacitor</td>
</tr>
<tr>
<td>3 Output 2</td>
</tr>
<tr>
<td>4 Output 1</td>
</tr>
<tr>
<td>5 External 0.5pF Capacitor</td>
</tr>
<tr>
<td>6 Input</td>
</tr>
</tbody>
</table>

Electrical Specifications: $Z_0 = 75\Omega$, $T_A = 25^\circ\text{C}$, $P_{in} = 0\text{dBm}$

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Conditions</th>
<th>Units</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
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<tbody>
<tr>
<td>Insertion Loss 1 (pin6-pin4)</td>
<td>5 - 500 MHz</td>
<td>dB</td>
<td>-0.3</td>
<td>1.2</td>
<td>1.7</td>
</tr>
<tr>
<td></td>
<td>500 - 1600 MHz</td>
<td>dB</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insertion Loss 2 (pin6-pin3)</td>
<td>5 - 500 MHz</td>
<td>dB</td>
<td>-0.5</td>
<td>1.1</td>
<td>1.4</td>
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<tr>
<td></td>
<td>500 - 1200 MHz</td>
<td>dB</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200 - 1600 MHz</td>
<td>dB</td>
<td>-2.0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amplitude Balance</td>
<td>5 - 500 MHz</td>
<td>dB</td>
<td>-0.2</td>
<td>0.3</td>
<td>±0.6</td>
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<tr>
<td></td>
<td>500 - 1200 MHz</td>
<td>dB</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1200 - 1600 MHz</td>
<td>dB</td>
<td>-0.7</td>
<td></td>
<td>±1.3</td>
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<tr>
<td>Phase Balance</td>
<td>5 - 870 MHz</td>
<td>°</td>
<td>-0.7</td>
<td></td>
<td>±1.0</td>
</tr>
<tr>
<td></td>
<td>870 - 1600 MHz</td>
<td>°</td>
<td>-2.3</td>
<td></td>
<td>±5.5</td>
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<tr>
<td>Input Return Loss (pin6)</td>
<td>5 - 500 MHz</td>
<td>dB</td>
<td>20</td>
<td>26</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>500 - 1000 MHz</td>
<td>dB</td>
<td>15</td>
<td>17</td>
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</tr>
<tr>
<td></td>
<td>1000 - 1600 MHz</td>
<td>dB</td>
<td>9</td>
<td>12</td>
<td>-</td>
</tr>
<tr>
<td>Output Return Loss 1 (pin4)</td>
<td>5 - 870 MHz</td>
<td>dB</td>
<td>20</td>
<td>24</td>
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<td></td>
<td>870 - 1600 MHz</td>
<td>dB</td>
<td>12</td>
<td>16</td>
<td>-</td>
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<td>Output Return Loss 2 (pin3)</td>
<td>5 - 500 MHz</td>
<td>dB</td>
<td>20</td>
<td>25</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>500 - 1000 MHz</td>
<td>dB</td>
<td>15</td>
<td>19</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1000 - 1600 MHz</td>
<td>dB</td>
<td>11</td>
<td>13</td>
<td>-</td>
</tr>
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<td>Isolation (pin4-pin3)</td>
<td>5 - 300 MHz</td>
<td>dB</td>
<td>30</td>
<td>34</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>300 - 1200MHz</td>
<td>dB</td>
<td>23</td>
<td>30</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>1200 - 1600 MHz</td>
<td>dB</td>
<td>20</td>
<td>27</td>
<td>-</td>
</tr>
</tbody>
</table>

Handling Procedures
Please observe the following precautions to avoid damage:

Static Sensitivity
These electronic devices are sensitive to electrostatic discharge (ESD) and can be damaged by static electricity. Proper ESD control techniques should be used when handling these devices.
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Outline Drawing

Application Circuit

Recommended Footprint

MAPD-011002

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