Surface Mount
Directional Couplers

DBTC-17-5+  DBTC-17-5L+

50Ω, 17dB coupling, 50 to 2000 MHz

Maximum Ratings
- Operating Temperature: -40°C to 85°C
- Storage Temperature: -55°C to 100°C

Notes
- Performance and quality attributes and conditions not expressly stated in this specification document are intended to be excluded and do not form a part of this specification document.

Pin Connections
- INPUT
- OUTPUT
- COUPLED
- GROUND
- ISOLATE (DO NOT USE)

Outline Drawing / Dimensions

Electrical Specifications

<table>
<thead>
<tr>
<th>FREQUENCY RANGE (MHz)</th>
<th>COUPLING (dB)</th>
<th>MAINLINE LOSS* (dB)</th>
<th>DIRECTIVITY (dB)</th>
<th>VSWR** (:1)</th>
<th>POWER INPUT (W)</th>
</tr>
</thead>
<tbody>
<tr>
<td>50-1000</td>
<td>17.5±0.1</td>
<td>0.9 ± 0.4</td>
<td>20</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td>1000-1500</td>
<td>17.2±0.9</td>
<td>1.0 ± 1.5</td>
<td>20</td>
<td>1.2</td>
<td>2.0</td>
</tr>
<tr>
<td>1500-2000</td>
<td>17.5±0.1</td>
<td>1.1 ± 1.6</td>
<td>14</td>
<td>1.2</td>
<td>2.0</td>
</tr>
</tbody>
</table>

** For coupled port VSWR above 500 MHz, 1.6:1 typ.
* Includes theoretical coupled power loss of 0.07 dB at 17 dB coupling

Applications
- Cellular
- PCS
- DECT/PHS
- GSM

Features
- Very flat coupling
- Broadband, multi octave
- Temperature stable, LTCC base
- All welded construction
- Leads attached for better solderability
- Micro miniature coupler
- Aqueous washable

Protection
- Protected by US Patents 6,140,887 & 6,784,521
- For RoHS Compliance methodologies and qualifications

Electrical Schematic

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