FEATURES:
- Frequency coverage: 18 to 110GHz
- Waveguide or split block styles
- Three or four port configurations
- Various coupling levels
- Low insertion loss and moderate directivity
- Instrumentation grade

APPLICATIONS:
- Test labs
- Instrumentations
- Sub-assemblies

DESCRIPTION:

**CCCB series** waveguide crossguide block couplers are offered for power sampling where certain directivity is a concern. Compared to multi-hole directional couplers, the crossguide block couplers feature lower insertion loss and a more compact size. These couplers are offered in both waveguide and split block versions in seven waveguide bands to cover the frequency range from 18 to 110GHz. While the waveguide version offers the advantage of light weight and ease flange connections from both directions, the block version possesses the advantage of more compact size and shorter insertion length. Although both versions can be offered in three and four port configurations, only four port configurations are offered as catalog models. Contact factory for three port configurations.

SPECIFICATIONS:

<table>
<thead>
<tr>
<th>Waveguide Band</th>
<th>K</th>
<th>Ka</th>
<th>Q</th>
<th>U</th>
<th>V</th>
<th>E</th>
<th>W</th>
</tr>
</thead>
<tbody>
<tr>
<td>Waveguide Size</td>
<td>WR-42</td>
<td>WR-28</td>
<td>WR-22</td>
<td>WR-19</td>
<td>WR-15</td>
<td>WR-12</td>
<td>WR-10</td>
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<tr>
<td>RF Frequency Range (GHz)</td>
<td>18.0 to 26.5</td>
<td>26.5 to 40.0</td>
<td>33.0 to 50.0</td>
<td>40.0 to 60.0</td>
<td>50.0 to 75.0</td>
<td>60.0 to 90.0</td>
<td>75.0 to 110</td>
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<tr>
<td>Band Width (GHz)</td>
<td>4.0</td>
<td>6.0</td>
<td>7.0</td>
<td>8.0</td>
<td>10.0</td>
<td>10.0</td>
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<tr>
<td>Coupling (dB)1</td>
<td>20, 30, 40</td>
<td>20, 30, 40</td>
<td>20, 30, 40</td>
<td>20, 30, 40</td>
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<td>20, 30, 40</td>
<td>20, 30, 40</td>
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<tr>
<td>Insertion Loss (dB)</td>
<td>0.50</td>
<td>0.50</td>
<td>0.60</td>
<td>0.60</td>
<td>0.70</td>
<td>0.70</td>
<td>0.80</td>
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<tr>
<td>Directivity (dB)2</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>15</td>
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<td>VSWR</td>
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<td>1.1:1</td>
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<td>1.1:1</td>
<td>1.1:1</td>
<td>1.1:1</td>
<td>1.1:1</td>
</tr>
</tbody>
</table>

1. INSERTION LOSS IS THE POWER LOSS ON TOP OF THE COUPLING LOSS.
2. DIRECTIVITY IS LOAD DEPENDENT FOR FOUR PORT COUPLERS.
   CONTACT THE FACTORY FOR SPECIAL REQUIREMENTS.
   OTHER FREQUENCIES ARE ALSO AVAILABLE UPON REQUEST.
Waveguide Crossguide Block Couplers

HOW TO ORDER:
Specify Model Number

![Diagram of model number breakdown]

Example: To order a WR42 18 to 26.5 GHz Waveguide Crossguide Block Coupler with frequency band of 18 to 26.5 GHz, 20dB coupling level, a 15dB directivity, specify CCCB18262015-XX.

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