CMD007B - PRELIMINARY
Band 7 CMD Series Duplexer

Features
- Close-in rejection for CEPT19 and OFCOM compliance
- Low Loss with High Rejection
- Superior power handling and reliability
- Part of the CMD family of Metro-cell duplexers
- Available for either PCB mounting or with various connectors including SMA, SMP-Max, and other options.

Applications
- Wireless Infrastructure applications
- High-performance carrier-grade active antennas and outdoor Metro-cells for 4-10W at the antenna port.
- Wide-band DAS, Repeaters, or small-cells requiring multi-channel or carrier aggregation

Description
Ceramic waveguide duplexer based on ClearPlex technology supports FDD frequency bands. Provides superior rejection, insertion loss, reliability, as well as both peak and average power handling compared to other duplexer technologies. Performance is comparable to compact Air Cavity in dramatically smaller size.

Electrical Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Typical at 25°C</th>
<th>Spec. at 25°C</th>
<th>Spec. over -40°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nominal Impedance</td>
<td>-</td>
<td>50 ohms</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Average Input Power</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>20.0 Watt max</td>
</tr>
<tr>
<td>Peak Input Power</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>200 Watt max</td>
</tr>
<tr>
<td>Passive Intermodulation (2x 5W)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-110 dBm</td>
</tr>
<tr>
<td>Lightning Surge Handling at Ant port</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>&gt; 10 kA (TBC)</td>
</tr>
</tbody>
</table>

Antenna to UL Response
- Passband Insertion Loss (10 MHz avg): 2500 - 2570 MHz ± 1.5 dB
  - 1.9 dB max
- Passband Return Loss: 2500 - 2570 MHz
  - 16 dB min
- Attenuation: 2620 - 2690 MHz
  - 96 dB min est TBC

DL to Antenna Response
- Passband Insertion Loss (10 MHz avg): 2620 - 2690 MHz ± 1.5 dB
  - 1.9 dB max
- Passband Return Loss: 2620 - 2690 MHz
  - 16 dB min
- Attenuation: 2500 - 2570 MHz
  - 100 dB min est TBC

DL to UL Response
- Attenuation for UL band: 2500 - 2570 MHz
  - 100 dB min est TBC
- Attenuation for Transition band: 2570 - 2620 MHz
  - 70 dB min
- Attenuation for DL band: 2620 - 2690 MHz
  - 96 dB min est TBC

Specifications:
- Insertion Loss: 0.1 dB
- Return Loss: 1.0 dB
- Attenuation: 1.0 dB

Part Dimensions: ESTIMATE <140 × <50 × <14.5 mm • <325 g
Materials: Ag plated ceramic block

Note: CTS tests each unit to the critical specifications above. Subsequent audits may deviate due to repeatability among different test systems which shall not exceed these allowances.
**Packaging and Marking**

Product is shipped in Pre-formed foam trays

The trays have xx slots each with one filter per slot. Boxes are packed with 12 Trays per box for a total of xx filters per box.
### Electrical Specifications – Supplemental Spectrum Specifications

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Frequency (MHz)</th>
<th>Typical at 25°C</th>
<th>Spec. at 25°C</th>
<th>Spec. over -40°C to +85°C</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Antenna to UL Response</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attenuation:</td>
<td>1 - 2400</td>
<td>85 dB</td>
<td></td>
<td>80 dB min</td>
</tr>
<tr>
<td></td>
<td>2400 - 2472</td>
<td>37 dB</td>
<td></td>
<td>30 dB min</td>
</tr>
<tr>
<td></td>
<td>2575 - 2620</td>
<td>32 dB</td>
<td></td>
<td>25 dB min</td>
</tr>
<tr>
<td></td>
<td>2690-3550(?)</td>
<td></td>
<td></td>
<td>70 dB min(?)</td>
</tr>
<tr>
<td><strong>DL to Antenna Response</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attenuation:</td>
<td>1 - 2500</td>
<td></td>
<td></td>
<td>&gt;80 dB min</td>
</tr>
<tr>
<td></td>
<td>2570-2615</td>
<td>32 dB</td>
<td></td>
<td>27 dB min</td>
</tr>
<tr>
<td></td>
<td>2700 - 2720</td>
<td>40dB</td>
<td></td>
<td>15 dB min</td>
</tr>
<tr>
<td></td>
<td>2720 - 2800</td>
<td>50dB</td>
<td></td>
<td>35 dB min</td>
</tr>
<tr>
<td></td>
<td>2800-3550(?)</td>
<td></td>
<td></td>
<td>70 dB min(?)</td>
</tr>
</tbody>
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