Microlab Model BK-20 series is a Diplexer which allows combination and separation of the signals in 694 - 960 MHz and the 1710 - 2170 MHz bands. To minimize band inter-reaction, the inputs are well isolated and have minimal insertion loss over their respective frequency bands. Attention to mechanical design ensures low passive intermodulation.

The Diplexer has been designed using passive, proprietary techniques which minimizes cost and size. At the same time it ensures minimal loss and very high reliability at input powers up to 250W per input.

DC Blocks may be added and through holes are provided for mounting to a surface. Spacers are available for single and also dual unit mounting for up and down link applications (see below).

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**Model Numbers**

<table>
<thead>
<tr>
<th>Indoor</th>
<th>Outdoor</th>
<th>Connectors (female)</th>
<th>Wt. nom. lb (kg)</th>
</tr>
</thead>
<tbody>
<tr>
<td>BK-20D</td>
<td>BK-20DP</td>
<td>7-16</td>
<td>3.8 (1.71)</td>
</tr>
<tr>
<td>BK-20N</td>
<td>BK-20NP</td>
<td>N</td>
<td>3.5 (1.58)</td>
</tr>
<tr>
<td>BK-20E</td>
<td>BK-20EP</td>
<td>4.3-10</td>
<td>3.6 (1.62)</td>
</tr>
</tbody>
</table>

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**Frequency Bands:**

- Port 1 - Port 3: 694 to 960 MHz
- Port 2 - Port 3: 1,710 to 2,170 MHz
- P1:P2 Isolation: >50 dB in band
- Return Loss: >19 dB, all ports (for >25 dB, see BK-40 ser.)
- DC Continuity: All ports, 1A max.
- DC Blocks on either path optional
- Passband Loss: <0.15 dB (694 - 960 MHz)
- <0.25 dB (1710 - 2170 MHz)
- Input Power Rating: 250W/input avg., 3 kW peak
- Impedance: 50Ω nominal
- Intermod. (PIM): -161 dBc with 2 x +43dBm (20W) tones
- Environment: -35 to +55°C, IP67
- Finish: Connectors: Silver plated or Triplate
- Housing: Passivated Al. (Outdoor painted)

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Note: Specifications are subject to change without prior notification.