

PCS/AWS-WCS-BRS Diplexer, BK-2040

1850-1995/1695-1780 & 2110-2700 MHz NEX10®, 2.2-5 Rev. B

- Combines PCS with AWS-WCS-2.5/BRS
- ◆ Small Form Factor in Twin Units ◆ Guaranteed Low PIM
- Minimal RF Insertion Loss
- ♦ NEX10® Connectors
- ♦ IP67 Rated
- ♦ RoHS compliant

Model No.	Connector Type	Туре	Weight Ibs (kg)	Dimensions inches [mm]
BK-2040T	NEX10®	Dual	2.2 (1.0)	4.17 x 2.68 x 2.17 [106 x 68 x 55]
BK-2040G	2.2-5*	Dual	2.2 (1.0)	4.17 x 2.68 x 2.17 [106 x 68 x 55]

*In Development

Microlab BK-2040 series is a diplexer that enables the combining or splitting of PCS with AWS, WCS, or 2.5/BRS for 5G carrier aggregation in DAS & small cells in a 2x2 MIMO format. The second port allows for adding AWS, WCS, or 2.5/BRS signal into existing or new networks along with PCS. The inputs are well isolated and have minimal insertion loss over their respective frequency bands to minimize band inter-reaction. Attention to mechanical design guarantees low Passive Intermodulation (PIM) for a prolonged period, and the connectors are spaced to be compatible with common protective boots for enhanced weatherproofing, as well as allowing for easy and precise installation with a torque wrench. The units are Dual mounted single diplexers allowing for 2x2 MIMO applications, in both NEX10® and 2.2-5.



Frequency Bands:

Port 1: 1850 - 1995 MHz
Port 2: 1695 - 1780 MHz
2110 - 2700 MHz

Power: 80 W avg., 1kW pk

Insertion Loss: 0.25 dB typ., 0.35 dB max.

Return Loss: 20 dB min. Isolation: 35 dB min.

PIM: -158 dBc (-115 dBm) typ. -155 dBc (-112 dBm) min.

(Test 2x +43dBm tones @ ambient)

Group Delay:

Port 1: 4.4 nS
Port 2: 8.3 nS
DC Pass: All Ports

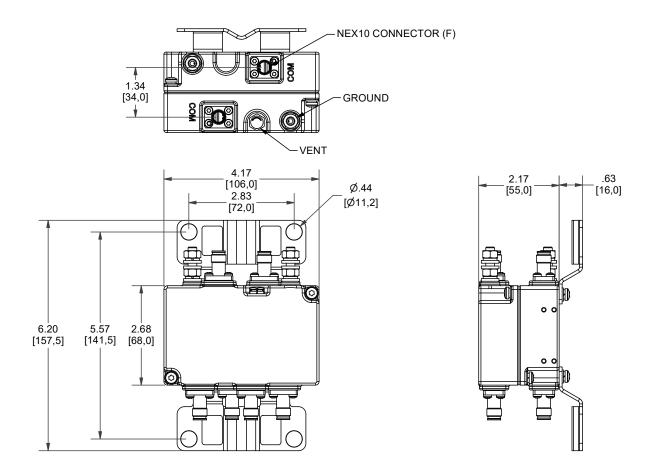
Lightning Protection: +/- 5kA; 8/20 μs waveform

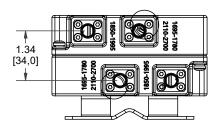
Impedance: 50Ω nom.

Environment: -40° to +65°C, IP67 Connectors: NEX10® (f) or 2.2-5(f) Housing Finish: Gray Powder Coated



BK-2040T Outline

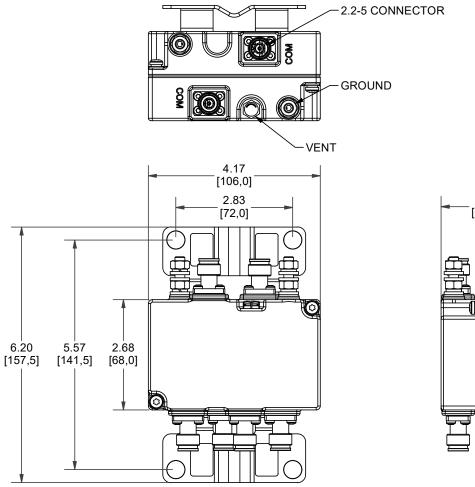


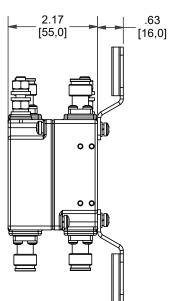


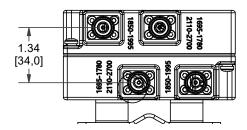
Dimensions in inches [mm]



BK-2040G Outline







Dimensions in inches [mm]

Note: Specifications are subject to change without prior notification.