

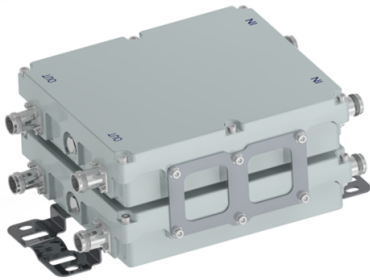


# Filters & Combiners

DATA SHEET

## 850 MHz RX Bandpass Test Filter

BPO-081479-xxx



- The range of the pass band is 814-879 MHz with very low insertion loss 0.3 dB typical and 3.0 dB max at the band edge
- 100W filter with an RX band pass of 65 MHz in the 850 MHz RX Band
- Minimum 30 dB of attenuation at frequencies  $\geq$  880.1 MHz
- DC/AISG pass-through from Input to Output on all ports
- High reliability of >500K Hours MTBF
- Available in a twin or quad configuration with wall or pole mounting bracket included

### Overview

Communication Components, Inc. Dual bandpass filter allows a 65 MHz pass band of 814-879 MHz, with very low insertion loss of 0.3 dB typical and 3.0 MHz maximum at the band edge. The filter provides a minimum of 30 dB of rejection at frequencies of 880.1 MHz or greater.

The CCI Bandpass filter provides optimal performance for the passband with low insertion loss, low Intermodulation, and high power handling. Excellent return loss delivers the best match to the antennas and base station, saving precious transmit power. The Bandpass filter is the ideal solution for providing additional rejection at the band edge. The CCI Bandpass filter enables full Remote Electrical Tilt (RET) and Tower Mount Amplifiers TMA) control capability by providing DC and AISG 2.0 compliant pass-through on all ports.

### Technical Description:

The bandpass filter consists of multiple cavity resonators to achieve 30 dB of rejection within 1.1 MHz of the pass band. Extensive temperature compensation is employed to insure frequency stability over the specified temperature range.



# Filters & Combiners

## SPECIFICATIONS

### 850 MHz RX Bandpass Test Filter

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#### Electrical

RF Parameters	Ports	Frequency(MHz)	Specification
Return Loss	Input TX/RX	814-879	18 dB minimum
	Output TX/RX	814-879	18 dB minimum
Insertion Loss	Input to Output	814-879	0.3 dB typical, 3.0 dB max at band edge
Stop Band Attenuation	Input to Output	880.1-915	30 dB minimum

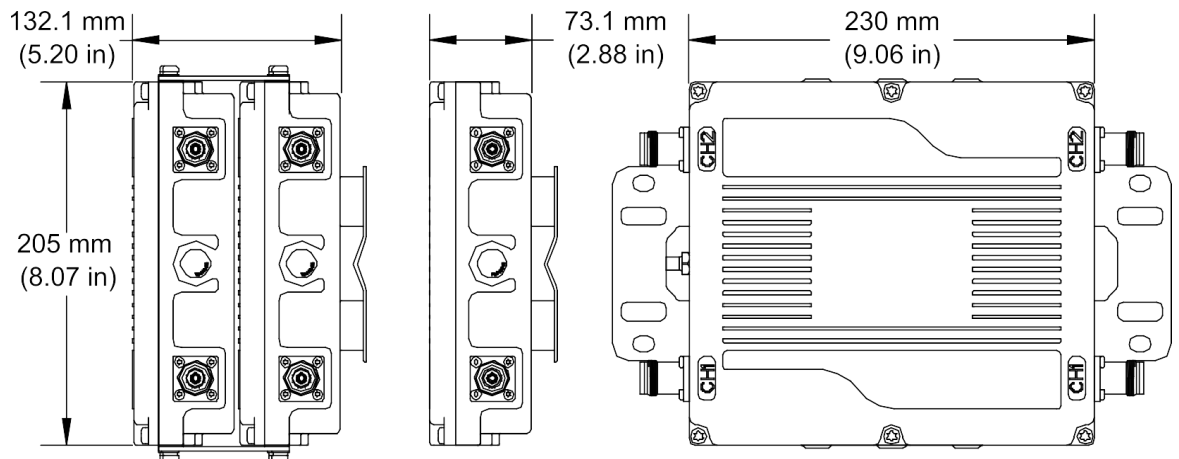
General Characteristics	
Impedance	50 ohms
Continuous Average Power	100 W max.
Peak Power	1.0 kW Max.
Intermodulation Performance	-112 dBm (-155 dBc) at 2 x +43 dBm tones
DC Pass Current/AISG Pass	-3A/AISG signal (2.176 MHz) per AISG 2.0 from Input to Output

#### Environmental

Operating Temperature	-40 °C to +65 °C
Ingress Protection	IP67 (Outdoor)
MTBF	>500,000 hours
Lightning Protection	8/20 us, ±10 KA max, 10 strikes per IEC61000-4-5

#### Mechanical

Model	Twin	Quad
Connectors	4 x 4.3-10 (or optional 7-16) female	8 x 4.3-10 (or optional 7-16) female
Housing Dimensions (HxWxD)	205.0 x 230.0 x 73.1mm (8.07 x 9.06 x 2.88 in.)	205.0 x 230.0 x 132.1 mm (8.07 x 9.06 x 5.20 in.)
Weight (est)	2.8 kg (6.2 lbs)	5.6 kg (12.3 lbs)
Mounting	Pole/Wall Mounting Bracket included	



Indoor Passband Filter Outline Drawing BPO-081479-A-T2 and BPO-081479-A-Q2

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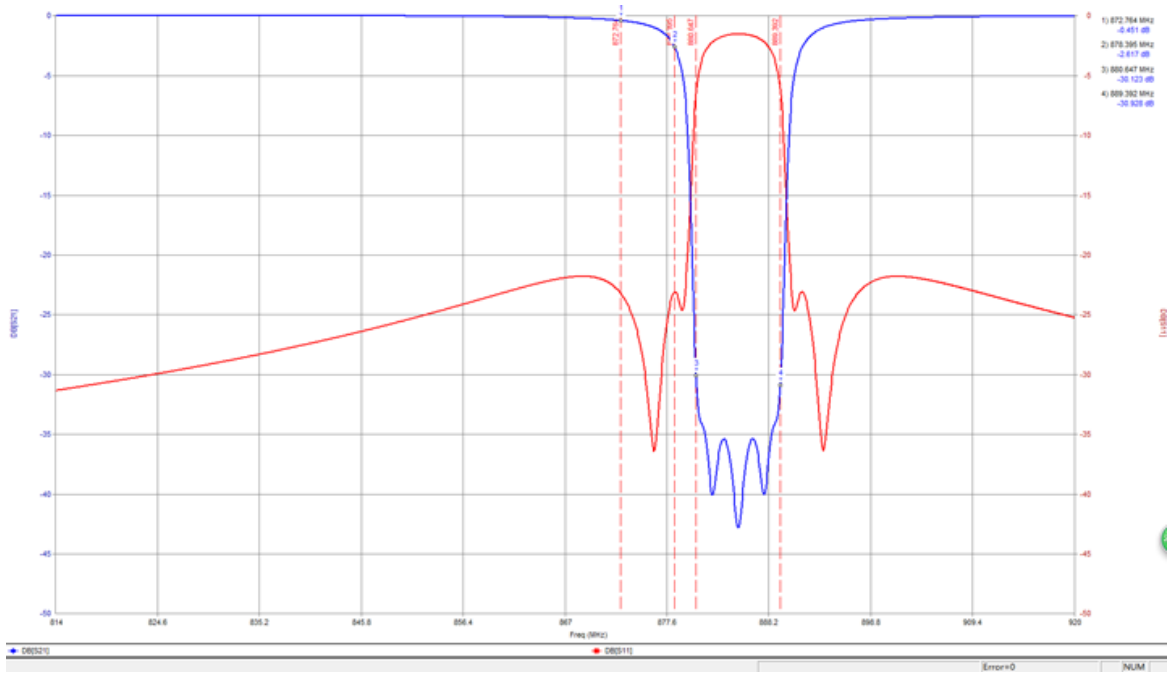
# Filters & Combiners

SPECIFICATIONS

850 MHz RX Bandpass Test Filter

BPO-081479-xxx

Filter Characteristics



BPT-081479-A-T2 RX Filter Characteristics



# Filters & Combiners

## STANDARDS & CERTIFICATIONS

### 850 MHz RX Bandpass Test Filter

BPO-081479-xxx

#### Parts & Accessories

- BPO-081479-A-T1** Twin Outdoor Bandpass filter, 814-879 MHz with DC/AISG Pass-through on all ports and 7-16 female connectors

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- BPO-081479-A-T2** Twin Outdoor Bandpass filter, 814-879 MHz with DC/AISG Pass-through on all ports and 4.3-10 female connectors

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- BPO-081479-A-Q1** Quad Outdoor Bandpass filter, 814-879 MHz with DC/AISG Pass-through on all ports and 7-16 female connectors

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- BPO-081479-A-Q2** Quad Outdoor Bandpass filter, 814-879 MHz with DC/AISG Pass-through on all ports and 4.3-10 female connectors

#### Standards & Compliance

- Safety** EN 60950-1, UL 60950-1

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- Emission** EN 55022

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- Immunity** EN 55024

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- Environmental** IEC 60068-2-1, IEC 60068-2-2, IEC 60068-2-5, IEC 60068-2-6, IEC-60068-2-11, IEC 60068-2-14, IEC 60068-2-18, IEC 60068-2-27, IEC 60068-2-29, IEC 60068-02-30, IEC 60068-2-52, IEC 60068-2-64, IEC61000-4-5, GR-63-CORE 4.3.1, EN 60529 IP67, IP68

#### Certifications

Antenna Interface Standards Group (AISG), Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001



# CCI Communication Components Inc.

EXTENDING WIRELESS PERFORMANCE