

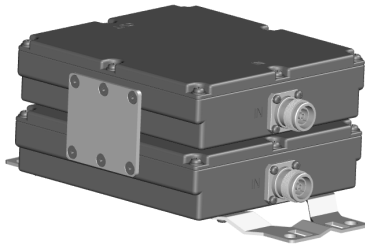


Filters & Combiners

DATA SHEET

850 MHz Dual Bandpass Filter

BPD-0869877-A-T1



- High power 250W dual duplexed band pass filter with a Downlink (TX) pass band of 869-877 MHz and an Uplink (RX) pass band of 824-832 MHz.
- Provides 50 dB of rejection at 880 MHz and 60 dB of rejection at 881-915 MHz.
- Available as a single or twin unit
- Low Intermodulation $\leq -153\text{dBc}$ at $2 \times 20\text{W}$
- High reliability of $>500\text{K}$ Hours MTBF
- Pole or wall mountable

Overview

Communication Components, Inc. BPD-0869877-xxx is a dual duplexer dual band bandpass filter with a Downlink (TX) pass band of 869-877 MHz and an Uplink (RX) pass band of 824-832 MHz. The Bandpass filter provides a minimum of 50 dB of rejection at 880 MHz and a minimum of 60 dB of rejection at 881-915 MHz.

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.

Technical Description:

The bandpass filter consists of multiple cavity resonators to achieve the desired rejection. Extensive temperature compensation is employed to insure frequency stability over the specified temperature range.



Filters & Combiners

SPECIFICATIONS

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Electrical

RF Parameters	Ports	Frequency(MHz)	Specification
Return Loss	BTS TX/RX	869-877/824-832	18 dB minimum
	ANT TX/RX	869-877/824-832	18 dB minimum
Insertion Loss	BTS to ANT	869-877	1.1 dB maximum
	ANT to BTS	824-832	0.5 dB maximum
Rejection	Input to Output	880	50 dB minimum
	Input to Output	881-915	60 dB minimum

General Characteristics	
Impedance	50 ohms
Continuous Average Power	250 W max.
Peak Envelope Power	1.1 KW max.
DC Pass Current/ AISG Pass (Input Port to Output Port)	3A/ AISG signal (2.176 MHz) per AISG 2.0
Intermodulation Performance	<-110 dBm (-153 dBc) typical (2 x +43 dBm tones) all bands

Environmental

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

Mechanical

Model	Twin
Connectors	4 x 7-16 DIN or 4.3-10 female
Housing Dimensions (estimated)	378 x 142 x 60 mm
Twin Dimensions with Brackets (estimated)	468 x 142 x 130 mm
Weight estimated	11.2 kg
Mounting	Pole/Wall mounting bracket

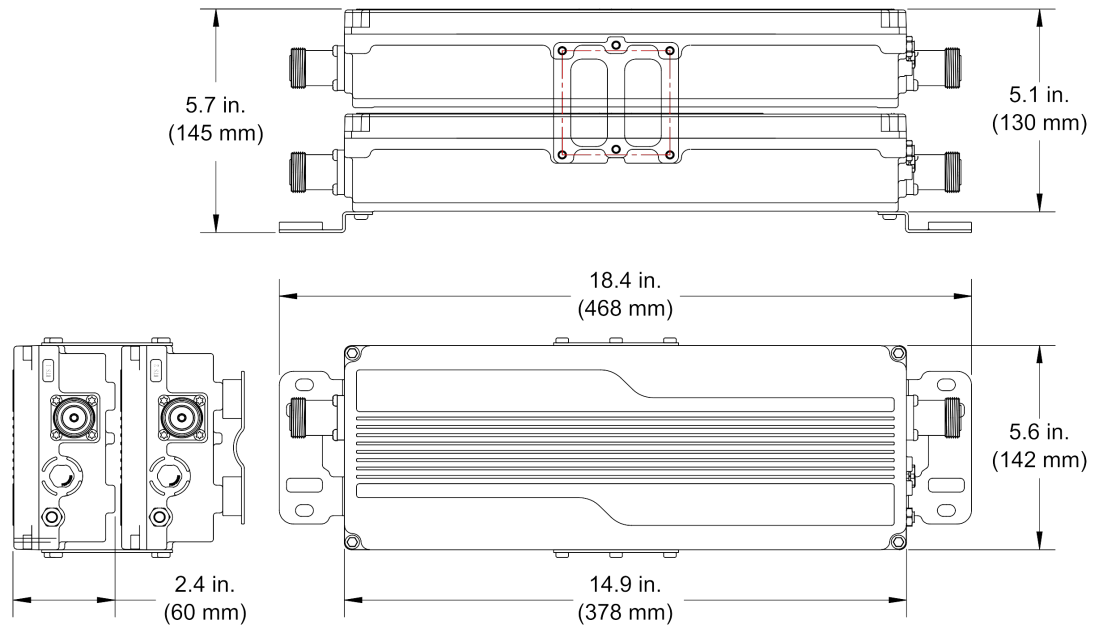


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SPECIFICATIONS

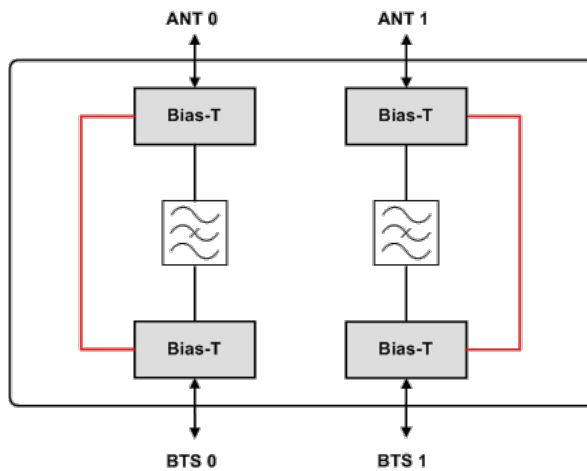
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Passband Filter Outline Drawing BPD-0869877-A-T1

Block Diagram



Indoor Passband Filter Block Diagram



Filters & Combiners

STANDARDS & CERTIFICATIONS

850 MHz Dual Bandpass Filter

BPD-0869877-A-T1

Parts & Accessories

- BPD-0869877-A-T1** Twin Outdoor Dual Bandpass filter pass band of 869-877/824-832 MHz with 7-16 DIN connectors and DC/AISG Pass-thru on all ports
- BPD-0869877-A-T2** Twin Outdoor Dual Bandpass filter pass band of 869-877/824-832 MHz with 4.3-10 connectors and DC/AISG Pass-thru on all ports

Standards & Compliance

- Safety** EN 60950-1, UL 60950-1
- Emission** EN 55022
- Immunity** EN 55024
- 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

Federal Communication Commission (FCC) Part 15 Class B, CE, CSA US, ISO 9001

