

# Filters & Combiners

**DATA SHEET** 

# 700 MHz RX Bandpass Test Filter

BPT-0703748-0-S3



- 1W filter with an RX band pass of 45 MHz in the 700 MHz RX Band
- Excellent rejection of ≥ 20 dB within 10 MHz of the pass band
- High reliability of >500K Hours MTBF

#### Overview

Communication Components, Inc. Dual bandpass filter allows a 45 MHz pass band in the RX portion of the 700 MHz Band, while rejecting signals within 10 MHz of the passband.

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 20 dB of rejection within 10 MHz of the pass band. Extensive temperature compensation is employed to insure frequency stability over the specified temperature range.



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### SPECIFICATIONS

# 700 MHz RX Bandpass Test Filter

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RF Parameters	Ports	Frequency(MHz)	Specification
Return Loss	Input TX/RX	703-748	15 dB minimum
	Output TX/RX	703-748	15 dB minimum
Insertion Loss	Input to Output	703-748	1.2 dB maximum
Rejection	Input to Output	693	20 dB minimum
		758	20 dB minimum

General Characteristics

Impedance 50 ohms

Continuous Average Power 1 W max.

Peak Power 10 W Max.

### Environmental

Operating Temperature -20 °C to +70 °C Ingress Protection | IP20 (Indoor)

MTBF >500,000 hours

#### Mechanical

Model	Single
Connectors	2 × N-female
Housing Dimensions (HxWxD)	80.0 x 54.0 x 50.0 mm (3.15 × 2.13 × 1.97 in.)
Dimensions w/Connectors (HxWxD)	118.0 x 54.0 x 50.6 mm (4.65 × 2.13 × 1.99 in.)
Weight	0.5 kg (1.1 lbs)
Mounting	Optional mounting bracket available

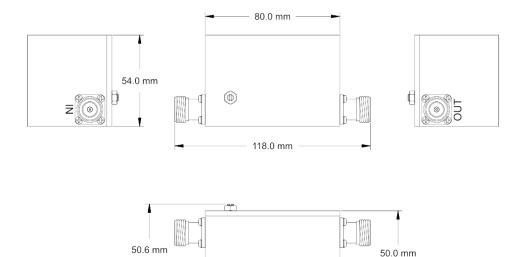


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**SPECIFICATIONS** 

700 MHz RX Bandpass Test Filter

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Indoor Passband Filter Outline Drawing BPT-0703748-0-S3

#### Filter Characteristics



BPT-0703748-0-S3 RX Filter Characteristics



STANDARDS & **CERTIFICATIONS**  700 MHz RX Bandpass Test Filter

BPT-0703748-0-S3

### Parts & Accessories

BPT-0703748-0-S3 Single 45 MHz Outdoor Bandpass filter pass band of 703-748 MHz with N-female connectors and No DC/AISG Pass-thru

### 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 9001:2008







