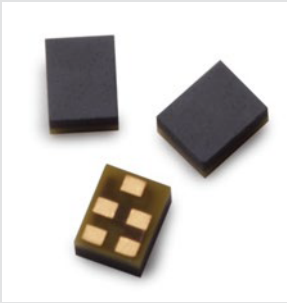


## Product Brief



### Key Features

- 50 $\Omega$  input/output
- No external matching required
- Low insertion loss
- High interference rejection
- Enables concurrent use with other 2.5-GHz bands
- Subminiature Size
  - 0.9 mm x 1.1 mm footprint
  - 0.700 mm maximum height
- High power rating
  - +27 dBm maximum power rating (LTE modulation, average)
- Environmental
  - RoHS 6 compliant
  - Halogen free
  - TBBPA free

### Specifications

- Performance guaranteed -30°C to +85°C
- Wi-Fi Band Insertion Loss
  - Absolute: 0.8 dB (typ.), +25°C
  - Ch Average: 0.7 dB (typ.), +25°C

# ACPF-7B24

## 2.4 GHz Wi-Fi Bandpass Filter for Coexistence with LTE Bands 7, 38, 40, and 41

### Overview

The Broadcom® ACPF-7B24 is a miniaturized bandpass filter designed for use in mobile Wi-Fi/Bluetooth applications (2401 MHz to 2481.5 MHz), which require high attenuation of adjacent spectrum (for example, LTE Bands 7, 38, 40, and 41) to meet coexistence requirements.

The ACPF-7B24 is designed with the Broadcom Film Bulk Acoustic Resonator (FBAR) technology, which makes possible ultra-small, high-Q filters at a fraction of their usual size.

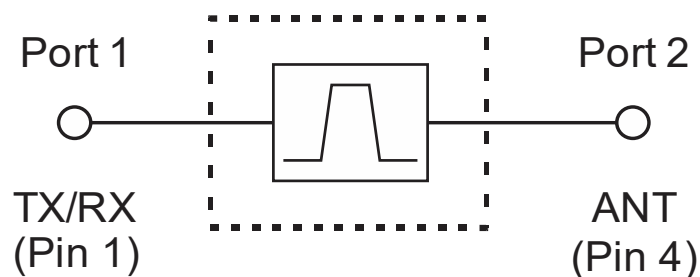
The ACPF-7B24 also utilizes Broadcom's advanced Microcap bonded-wafer technology. This chip scale miniaturization process results in a package size of only 0.9 mm x 1.1 mm, with a maximum height of 0.7 mm.

The ACPF-7B24 is compatible with high volume, lead-free SMT soldering processes and can be direct-surface mounted to a PCB or a transfer molded module.

### Applications

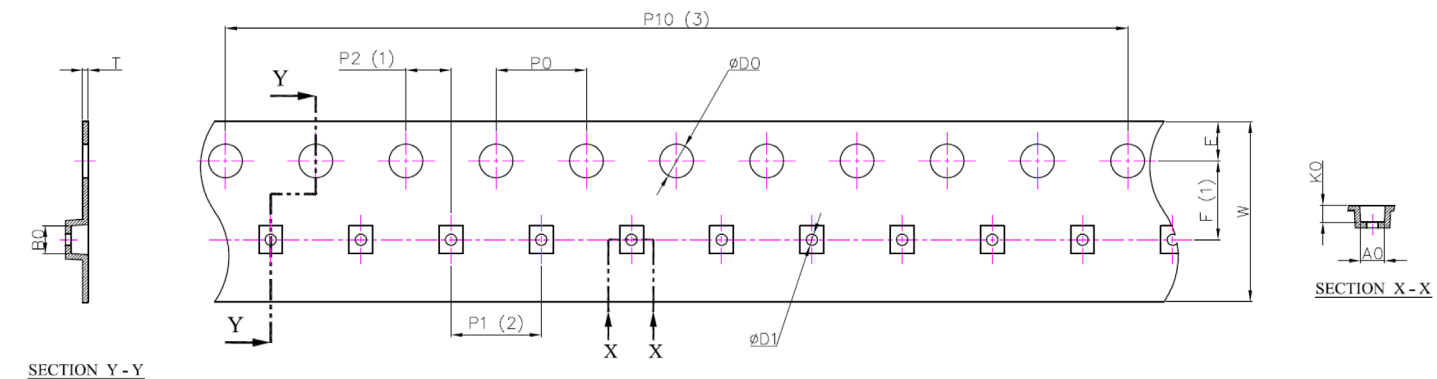
Wi-Fi/Bluetooth enabled mobile communications devices operating concurrently with other wireless standards.

### Functional Block Diagram





SMT Tape Drawing

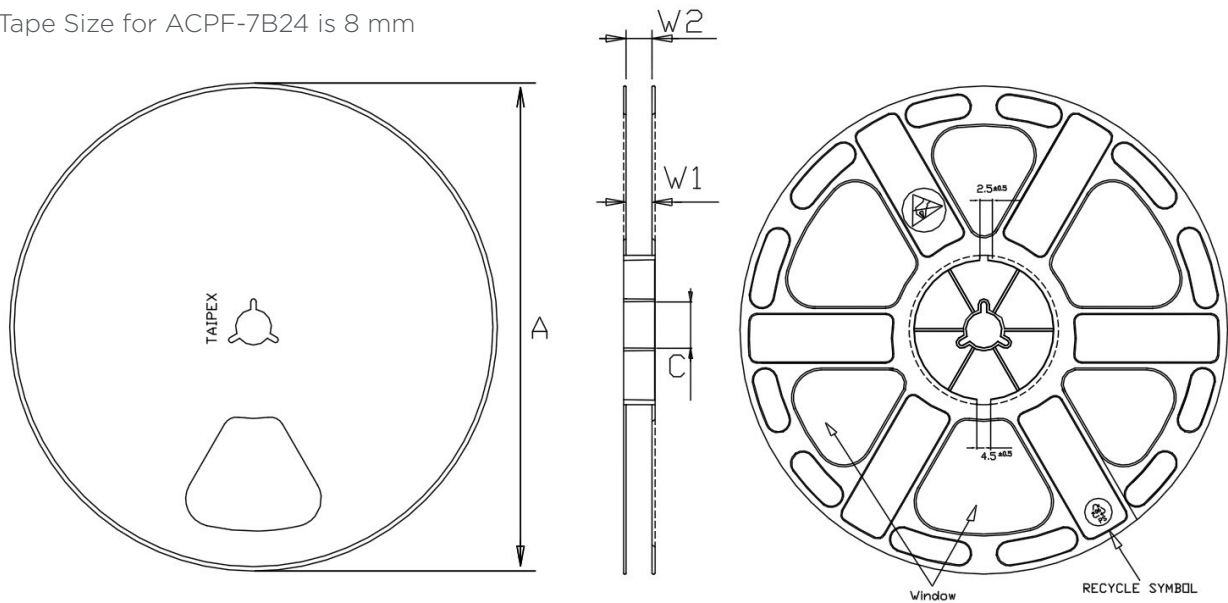


Dimension List			
Annote	Millimeter	Annote	Millimeter
A0	1.05±0.05	P2	2.00±0.05
B0	1.25±0.05	P10	40.00±0.20
K0	0.75±0.05	E	1.75±0.10
D0	1.50+0.10 -0.00	F	3.50±0.05
D1	0.50±0.05	T	0.25±0.05
P0	4.00±0.10	W	8.00±0.20
P1	4.00±0.10	—	—

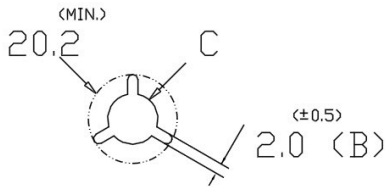
- Notes:
1. Measure from centerline of sprocket hole to centerline of pocket.
  2. Measure from centerline of pocket to centerline of pocket.
  3. Pitch tolerance for sprocket hole, 10 pitch cumulative tolerance is  $\pm 0.2$  mm.
  4. Allowable camber to be 1 mm per 250 mm in length for single winding and 2 mm per 250 mm in length for cross winding.

SMT Reel Drawing

Tape Size for ACPF-7B24 is 8 mm



Tape Size (mm)	A	B	C	W1	W2	(CCC) Color
8 mm	178+0.0 -0.5	1.5 min. 2.5 max	12.8 min. 13.5 max.	8.4 min. 9.9 max.	10.9+0.0 -3.0	(DBL) Dark Blue
12 mm	178+0.0 -0.5	1.5 min. 2.5 max	12.8 min. 13.5 max.	12.4 min. 14.4 max.	15.4+0.0 -3.5	(LBL) Light Blue
16 mm	178+0.0 -0.5	1.5 min. 2.5 max	12.8 min. 13.5 max.	16.4 min. 18.4 max.	19.4+0.0 -3.5	(NAT) Natural White



**Package Moisture Sensitivity**

Feature	Test Method	Performance
Moisture Sensitivity Level (MSL) at 260°C	JESD22-A113D	Level 3

**Ordering Information**

Part Number	Number of Devices	Container
ACPF-7B24-BLK	100	Tape strip or gel-pack
ACPF-7B24-TR1	3000	178 mm (7-inch) reel