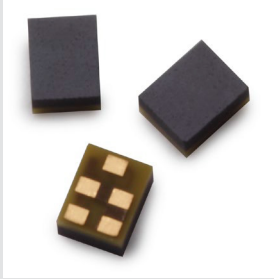


Product Brief

ACPF-8241

Bandpass Filter for Band 41



Key Features

- 50Ω input/output
- No external matching required
- Low insertion loss
 - Minimizes PA output
 - Minimizes current consumption
- Subminiature Size
 - 1.1 mm x 1.4 mm footprint
 - 0.7 mm maximum height
- High power rating
 - Designed for HPUE:
 - +32 dBm average, +37 dBm peak (LTE modulation)
 - High rejection in ISM band and low harmonics
 - Enables coexistence with 2.4-GHz and 5-GHz Wi-Fi
- Environmental
 - RoHS 6 compliant
 - Halogen free
 - TBBPA free

Overview

The Broadcom® ACPF-8241 is a miniature LTE Band 41 (2496 MHz to 2690 MHz) Tx/Rx bandpass filter designed for use in High Power User Equipment (HPUE) applications.

The ACPF-8241 supports +32 dBm (LTE modulation) power requirements for HPUE applications. Low insertion loss in Band 41 reduces power amplifier output and minimizes current consumption, which is important for HPUE applications.

The ACPF-8241 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-8241 also utilizes the Broadcom advanced Microcap bonded-wafer technology. This miniaturization process results in a package size of only 1.1 mm x 1.4 mm, with a maximum height of 0.7 mm.

The ACPF-8241 is compatible with high volume, lead-free SMT soldering processes.

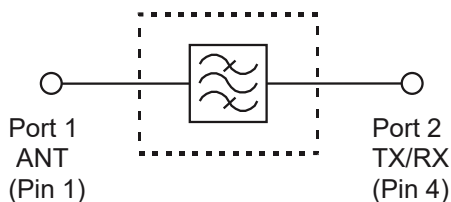
Specifications

- Performance guaranteed -20°C to +85°C
- Band 41 Insertion Loss ≤ 1.9 dB (typ., 25°C)
- IEEE 802.11 b/g/n, Ch. 1-12 Rejection ≥ 49 dB (typ., 25°C)

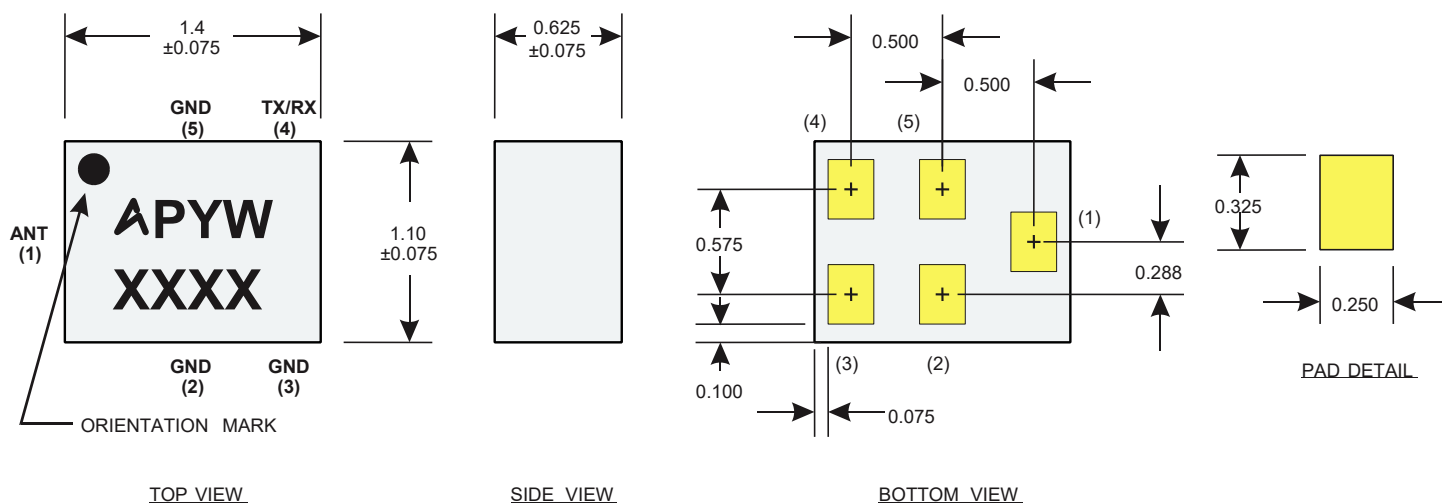
Applications

High Power User Equipment (HPUE) wireless applications operating in Band 41 applications such as: smart phones, tablets, and other mobile/portable communications devices.

Functional Block Diagram



Package Outline Drawing



Notes unless otherwise specified:

- Dimensions in millimeters
- Tolerance:
 - $X.XX \pm 0.05$ mm
 - $X.XXX \pm 0.025$ mm
- Dimensions are nominal
- Contact areas are gold plated

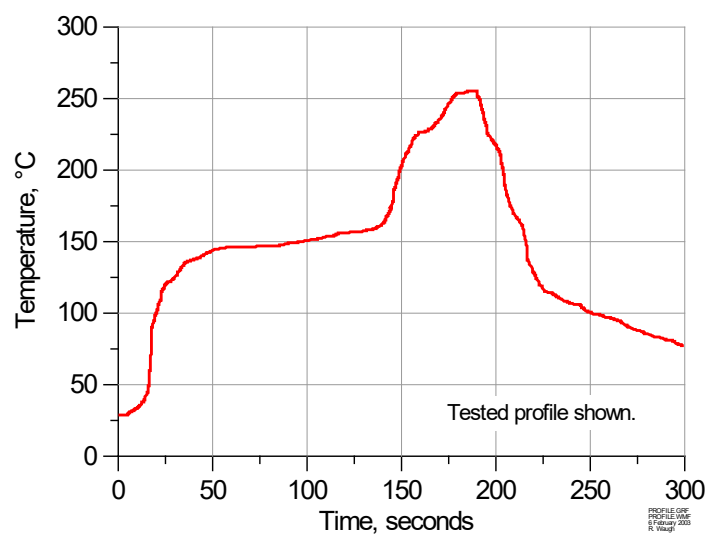
Marking:

- "A" = Avago Logo
- P = ACPF-8241
- Y = Year (last digit)
- W = Work week
- XXXX = Lot number

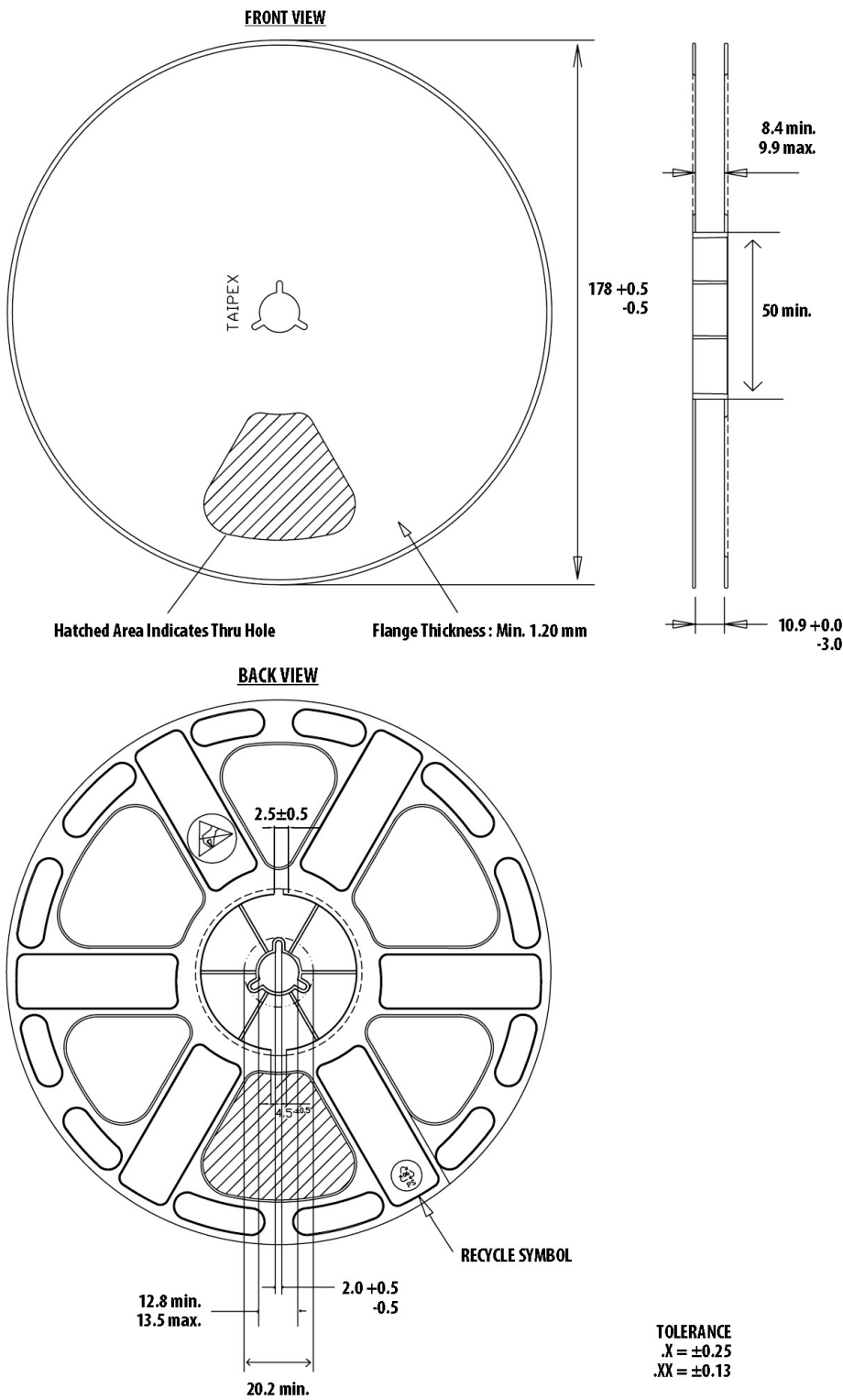
Pin connections:

- 1 = Port 1 ANT
- 2, 3, 5 = GND
- 4 = Port 2 Tx/Rx

Verified SMT Solder Profile



SMT Reel Drawing



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-8241-BLK	100	Tape strip or gel-pack
ACPF-8241-TR1	3000	178 mm (7-inch) reel