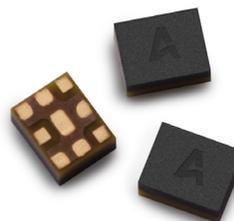


ACMD-6102

Band 2 Duplexer



Product Brief



Description

The Avago ACMD-6102 is a highly miniaturized duplexer designed for use in Band 2 (1850 – 1909 MHz UL, 1930 – 1989 MHz DL) handsets and mobile data terminals.

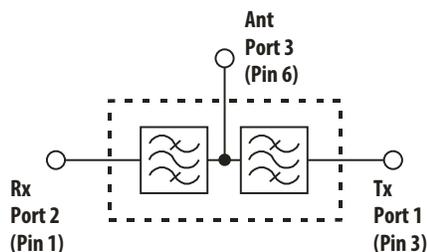
Low Insertion Loss in the Tx channel minimizes current drain from the power amplifier, while low Rx channel Insertion Loss improves receiver sensitivity.

The ACMD-6102 enhances the sensitivity and dynamic range of handset receivers by providing high isolation of the transmitted signal from the receiver input and high rejection of transmit-generated noise in the receive band.

The ACMD-6102 is designed with Avago Technologies' innovative Film Bulk Acoustic Resonator (FBAR) technology, which makes possible ultra-small, high-Q filters at a fraction of their usual size. The excellent power handling capability of FBAR bulk-mode resonators supports the high output power levels used in mobile communications applications, while adding virtually no distortion.

The ACMD-6102 also utilizes Avago Technologies' advanced Microcap bonded-wafer, chip scale packaging technology. This process allows the filters to be assembled into a molded chip-on-board module with an overall size of only 1.6 x 2.0 mm and height of 0.9 mm. The ACMD-6102 is compatible with standard 1.6 x 2.0 mm duplexer PCB footprints.

Functional Block Diagram



Features

- Miniature Size
 - 1.6 x 2.0 mm size
 - 0.9 mm height
 - Standard 1.6 x 2.0 mm PCB footprint
- High Isolation
- High Power Rating
 - +33 dBm Abs Max Tx Power
- Environmental
 - RoHS Compliant
 - Halogen free
 - TBBPA Free

Specifications, -20 to +85°

- Rx Band Performance
 - Insertion Loss: 3.0 dB Max
 - Rx Noise Blocking: 50 dB Min
- Tx Band Performance
 - Insertion Loss: 2.5 dB Max
 - Tx Interferer Blocking: 55 dB Min

Applications

Smartphones, tablets, data terminals, and other mobile/portable communication devices operating in the Band 2 frequency range.

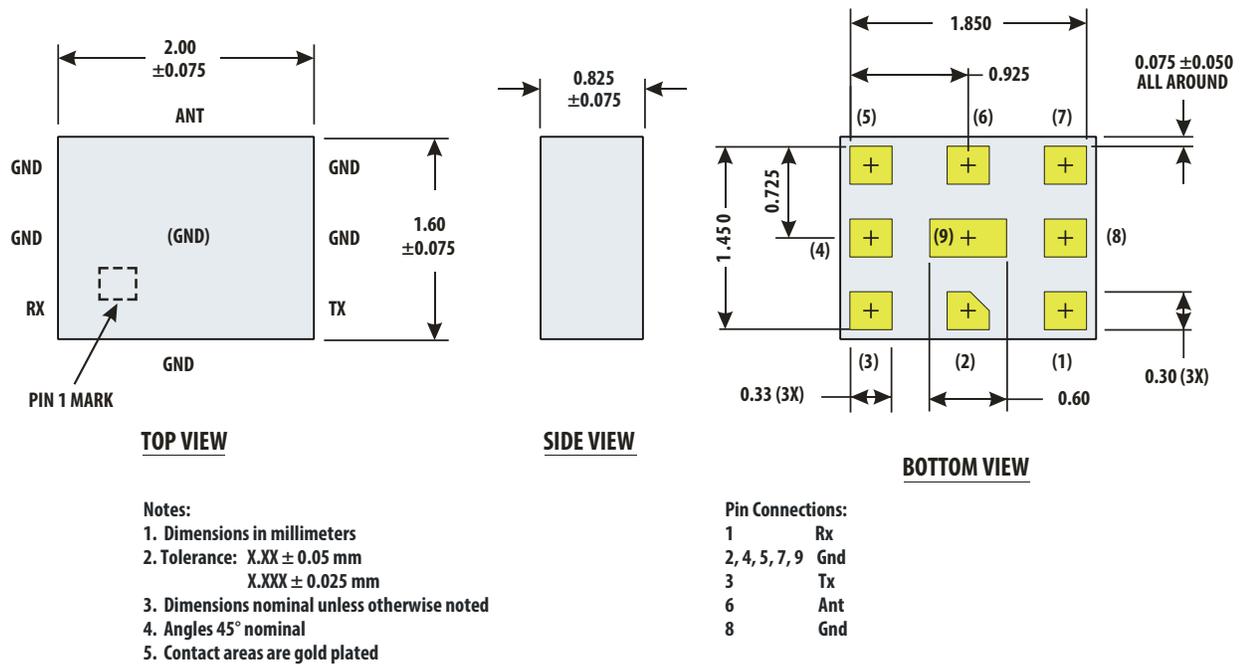


Figure 1. Package Outline Drawing

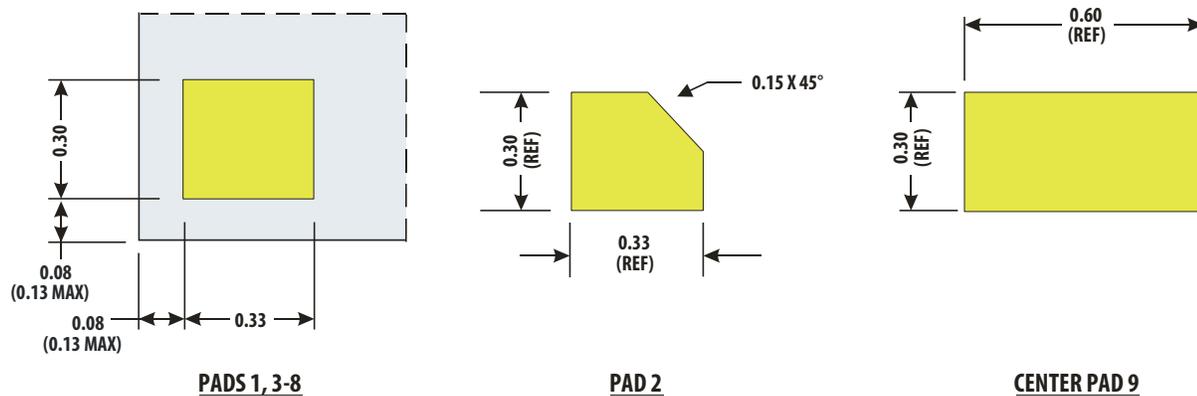


Figure 2. Pad Detail

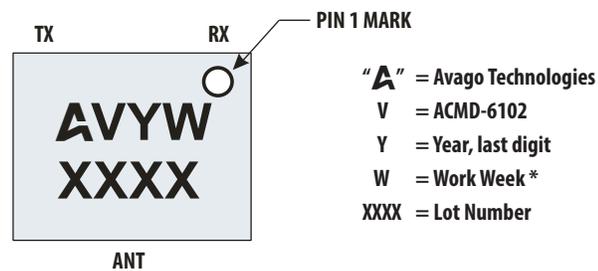


Figure 3. Product Marking and Pin Orientation

Package Moisture Sensitivity

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

Ordering Information

Part Number	Quantity	Container
ACMD-6102-BLK	100	Tape Strip or Anti-static Bag
ACMD-6102-TR1	3000	178 mm (7-inch) Reel

For product information and a complete list of distributors, please go to our web site: www.avagotech.com

Avago, Avago Technologies, and the A logo are trademarks of Avago Technologies in the United States and other countries. Data subject to change. Copyright © 2005-2013 Avago Technologies. All rights reserved. AV02-4091EN - May 7, 2013

