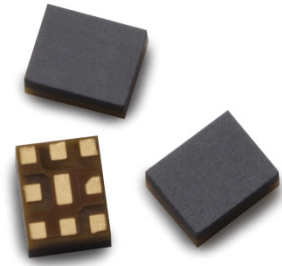


ACMD-7411

UMTS Band 2 Duplexer with Balanced Rx Port

Product Brief



Description

The Avago ACMD-7411 is a highly miniaturized duplexer designed for use in UMTS Band 2 (1850 MHz to 1909 MHz UL, 1930 MHz to 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 Rx port is balanced to preserve CMR and simplify the interface to baseband chipsets.

The ACMD-7411 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-7411 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-7411 also uses 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 mm × 2.0 mm and height of 0.9 mm. The ACMD-7411 is compatible with standard 1.6 mm × 2.0 mm duplexer PCB footprints.

Features

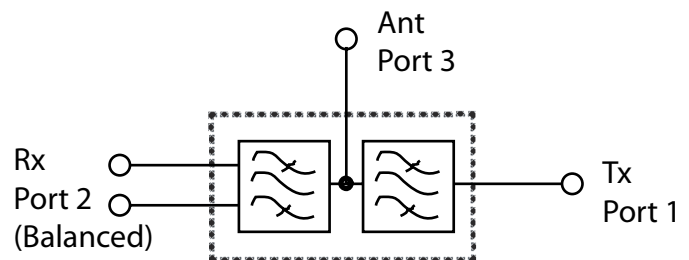
- Miniature size
 - 1.6 mm × 2.0 mm size
 - 0.9 mm height
 - Standard 1.6 × 2.0 PCB footprint

- Balanced Rx port, 100 Ω
- No external matching required
- High isolation enables elimination of interstage filter
- High power rating
 - 33 dBm absolute maximum Tx power
- Environmental
 - RoHS 6 compliant
 - Halogen free
 - TBBPA free

Applications

Handsets or data terminals operating in the UMTS Band 2 frequency range.

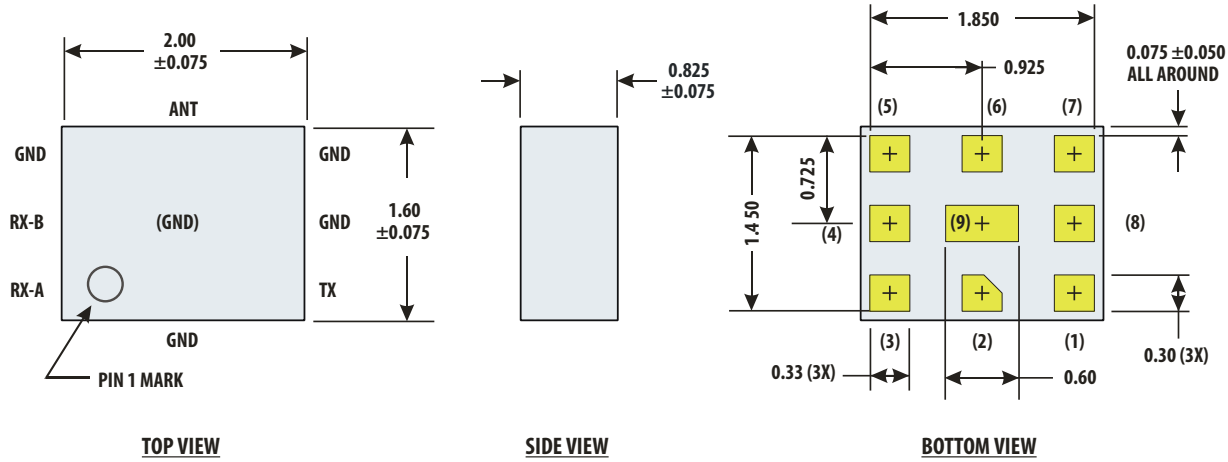
Functional Block Diagram



Ordering Information

Part Number	Number of Devices	Container
ACMD-7411-BLK	100	Tape strip or anti-static bag
ACMD-7411-TR1	3000	178 mm (7-inch) reel

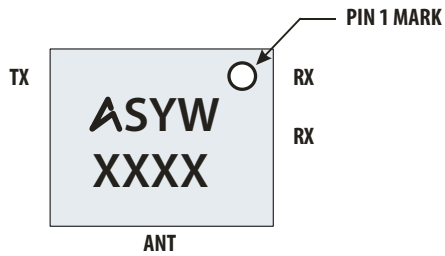
Package Dimensions



Notes:

1. Dimensions in millimeters
2. Tolerance, unless otherwise noted:
 $X.XX \pm 0.05 \text{ mm}$
 $X.XXX \pm 0.025 \text{ mm}$
3. Dimensions nominal unless otherwise noted
4. Angles 45° nominal
5. Contact areas are gold plated

Marking Specification



"A" = Avago Technologies
S = ACMD-7411
Y = Year, last digit
W = Work Week *
XXXX = Lot Number
 *Refer to Appendix A

Pin Description

Pin	Connection
1	Rx-A
2, 4, 5, 7, 9	GND
3	Tx
6	Ant
8	Rx-B

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

www.avagotech.com

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