

ACMD-6025

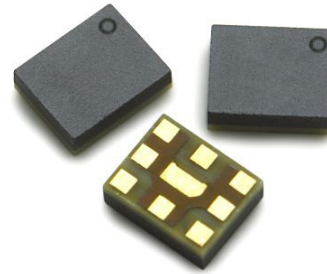
Duplexer for LTE Band 25



Product Brief



Lead (Pb) Free
RoHS 6 fully
compliant



Description

The Avago ACMD-6025 is a highly miniaturized duplexer designed for use in LTE Band 25 (1850 – 1915 MHz UL, 1930 – 1995 MHz DL) handsets and mobile data terminals.

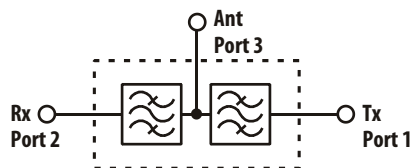
Low Insertion Loss in the Tx channel minimizes current drain from the power amplifier, while low Rx channel Insertion Loss improves receiver sensitivity.

The ACMD-6025 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-6025 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-6025 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 2.0 x 2.5 mm and maximum height of 0.95 mm. The ACMD-6025 is compatible with standard 2.0 x 2.5 mm duplexer PCB footprints.

Functional Block Diagram



Features

- High Isolation
- Miniature Size
 - 2.0 x 2.5 mm Max Size
 - 0.95 mm Max Height
 - Standard 2 x 2.5 mm PCB footprint
- High Power Rating
 - 33 dBm Abs Max Tx Power
- Environmental
 - RoHS 6 Compliant
 - Halogen free
 - TBBPA Free

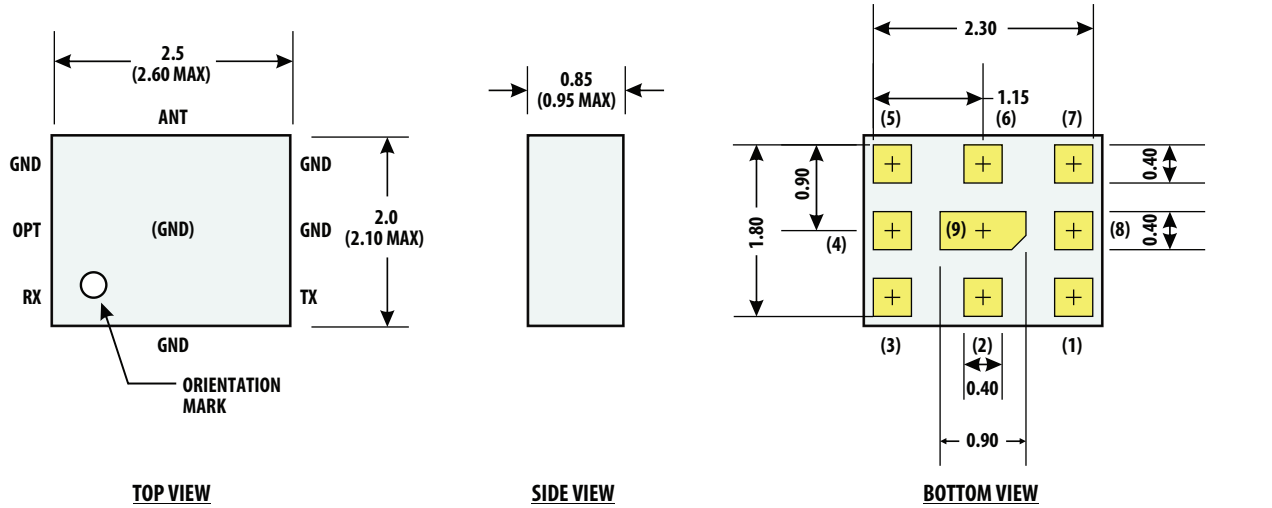
Specifications

- Rx Band Performance, -10 to +85° C
 - Insertion Loss: 3.8 dB Max
 - Rx Noise Blocking: 45 dB Min
- Tx Band Performance, -10 to +85° C
 - Insertion Loss: 4.0 dB Max
 - Tx Interferer Blocking: 50 dB Min

Applications

Handsets or data terminals operating in the LTE Band 25 frequency range.

Package Dimensions

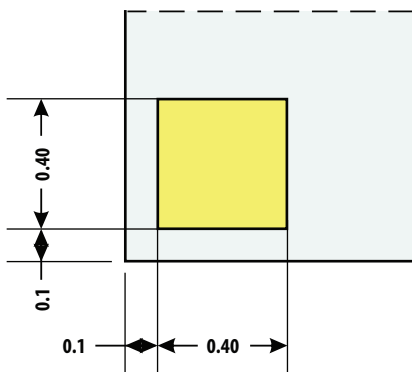


Notes:

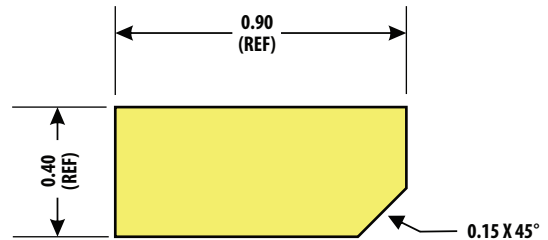
- Dimensions in millimeters
Tolerance: X.X ± 0.1 mm
X.XX ± 0.05 mm
- Dimensions nominal unless otherwise noted
- Angles 45° nominal
- I/O Pads (3 ea)
Size: 0.40 X 0.40 mm
Spacing to ground metal: 0.30 mm
- Contact areas are gold plated

Pin Connections:

- | | |
|---------------|----------------------------|
| 1 | Rx |
| 2, 4, 5, 7, 9 | Gnd |
| 3 | Tx |
| 6 | Ant |
| 8 | Optional: Gnd, NC or Rx(-) |



I/O PADS (8X)



CENTER GROUND PAD

Figure 1. Package Outline Drawing.

Ordering Information

Part Number	No. of Devices	Container
ACMD-6025-BLK	100	Tape Strip or Anti-static Bag
ACMD-6025-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

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