ADMV2239

37.0 GHz to 43.5 GHz Antenna On Board

FEATURES

- RF range: 37.0 GHz to 43.5 GHz
- Surface-mount, single element antenna
- Supports dual and single polarization
- Antenna gain: 5 dBi
- Return loss: 10 dB
- 2.25 mm × 2.25 mm, 12-terminal land grid array (LGA) package

APPLICATIONS

- 5G mmWave applications
- Broadband communication

GENERAL DESCRIPTION

The ADMV2239 is a dual-polarized, surface-mount, single-element antenna on board. The ADMV2239 operates between 37.0 GHz and 43.5 GHz and is capable of operating in the 5G New Radio (NR) N260 and N259 frequency bands. The ADMV2239 simplifies antenna array board design by providing the entire element antenna stackup in a surface-mount component that enables the design and assembly of small or large arrays based on the application.

For more information please contact ADI at mmWave5G@analog.com

The ADMV2239 has symmetric feeds and radiation patterns for both polarizations, allowing for rotation of the device on the board depending on the feeding scheme.

The ADMV2239 can operate as a single-polarized antenna by leaving the unused polarity pin floating or grounded. Alternatively, it can be assembled at 45°, with respect to the horizontal plane, to be a dual-polarized antenna with slant (±45°) polarization.

For circular polarization, apply a 90° phase shift (introduced by a delay line or any similar mechanism) to the antenna feed ports.

The ADMV2239 comes in a compact, 2.25 mm × 2.25 mm land grid array [LGA] package and operates from a −55°C to +135°C operating T_C range.

Rev. PrB

DOCUMENT FEEDBACK
TECHNICAL SUPPORT

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OUTLINE DIMENSIONS

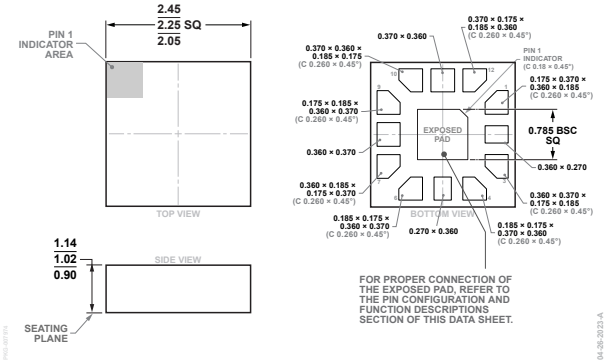


Figure 1. 12-Terminal Land Grid Array [LGA]
(CC-12-9)
Dimensions shown in millimeters

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