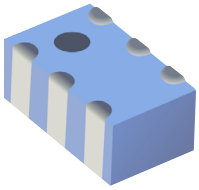
BOURNS®

NEW PRODUCT RELEASE

MAGNETICS



Bourns Releases LTCC Diplexer

Model FDP2009N122157H4

Riverside, California - July 23, 2026 – The Model FDP2009N122157H4 is a monolithic LTCC (low-temperature co-fired ceramic) diplexer designed for RF front-end integration in multi-band GNSS L-band applications (L1, L2, L5). By integrating distributed inductive and capacitive elements into a single multilayer structure, it eliminates the interconnect parasitics of discrete passives. This improves RF performance consistency, mechanical robustness, and thermal cycling reliability.

This model operates across two frequency bands (1164 to 1285 MHz and 1539 to 1606 MHz). The device provides clean signal separation, high cross-band isolation, and low insertion loss to preserve receiver sensitivity in low-power designs. This compact architecture reduces overall component count, PCB routing complexity, and layout sensitivity. Rated for temperatures from -40 °C to +105 °C, its stable dielectric properties ensure minimal performance drift, making it ideal for high-reliability industrial, and space-constrained navigation systems.

Characteristics:

Model	Size (mm)	Frequency Range (MHz)	Max. Insertion Loss @25 °C Max. (dB)	Operating Temperature (°C)
FDP2009N122157H4	2 x 1.25 x 0.9	1164 - 1285 1539 - 1606	1.0	-40 to +105

Please visit the Bourns website at www.bourns.com for additional product details and contact Bourns Customer Service/Inside Sales if you have any questions.

Features

- Low-temperature co-fired ceramic (LTCC) construction
- Compact size: 2.0 x 1.25 x 0.9 mm
- Frequency range: 1164–1285 MHz / 1539–1606 MHz
- RoHS compliant*

Applications

- GPS for multi-frequency precision tracking

Additional Information

DATA SHEET | PRODUCT SELECTOR | TECHNICAL LIBRARY | INVENTORY | SAMPLES | CONTACT

** RoHS Directive 2015/863, Mar 31, 2015 and Annex.*

IC26105

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