

Rosenberger

Delivering Efficient Connectivity in a 5G World

New Rosenberger EBC[®]

COMMUNICATION





EBC® – Board-to-Board Connector Evolution

EBC® Advantages

Rosenberger's new EBC® series is the ideal 5G board-to-board and board-to-module RF interconnect solution for sub 6 GHz massive MIMO active antennas and radios.



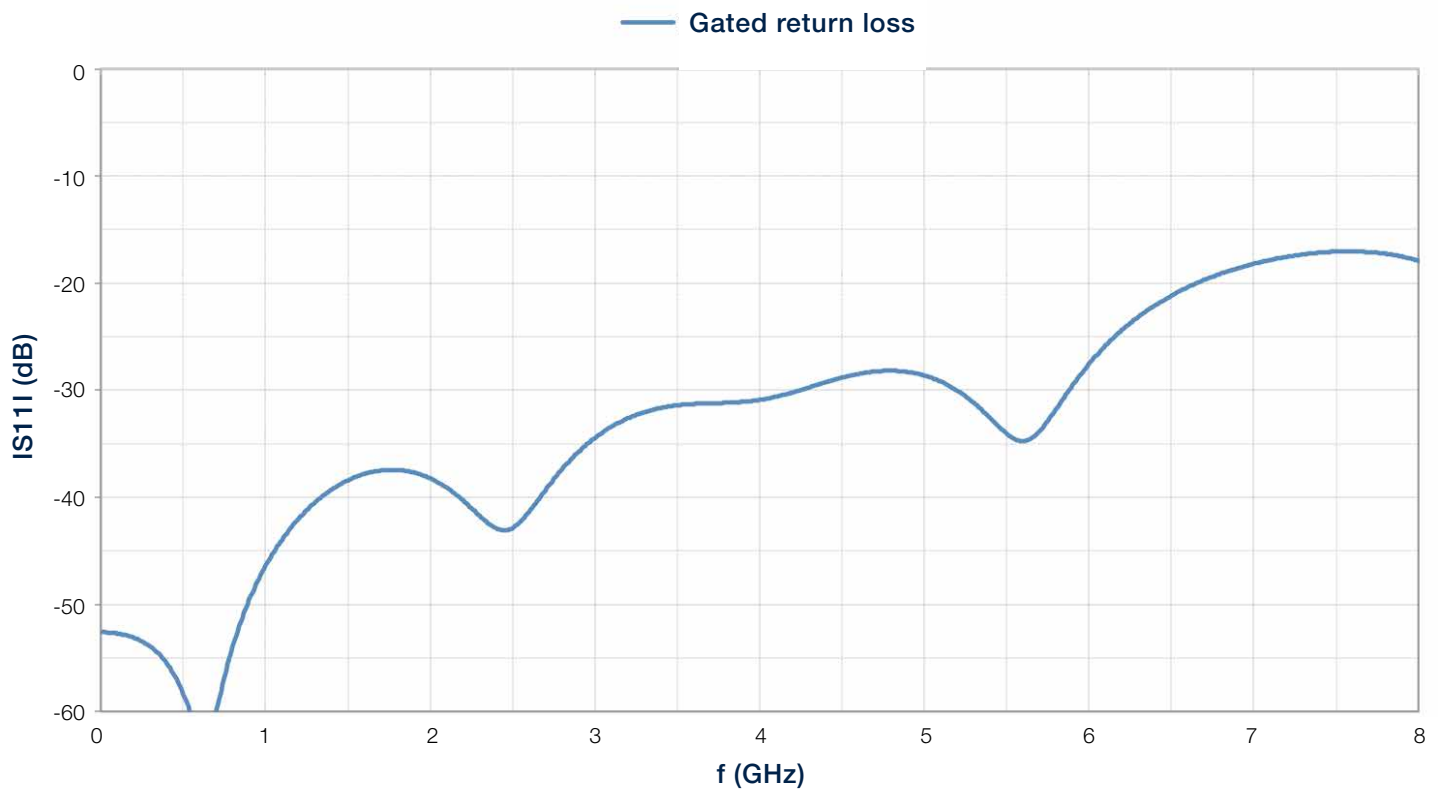
Its outstanding performance and rigorous design to cost make this solution the ideal choice for 5G radio interconnections.

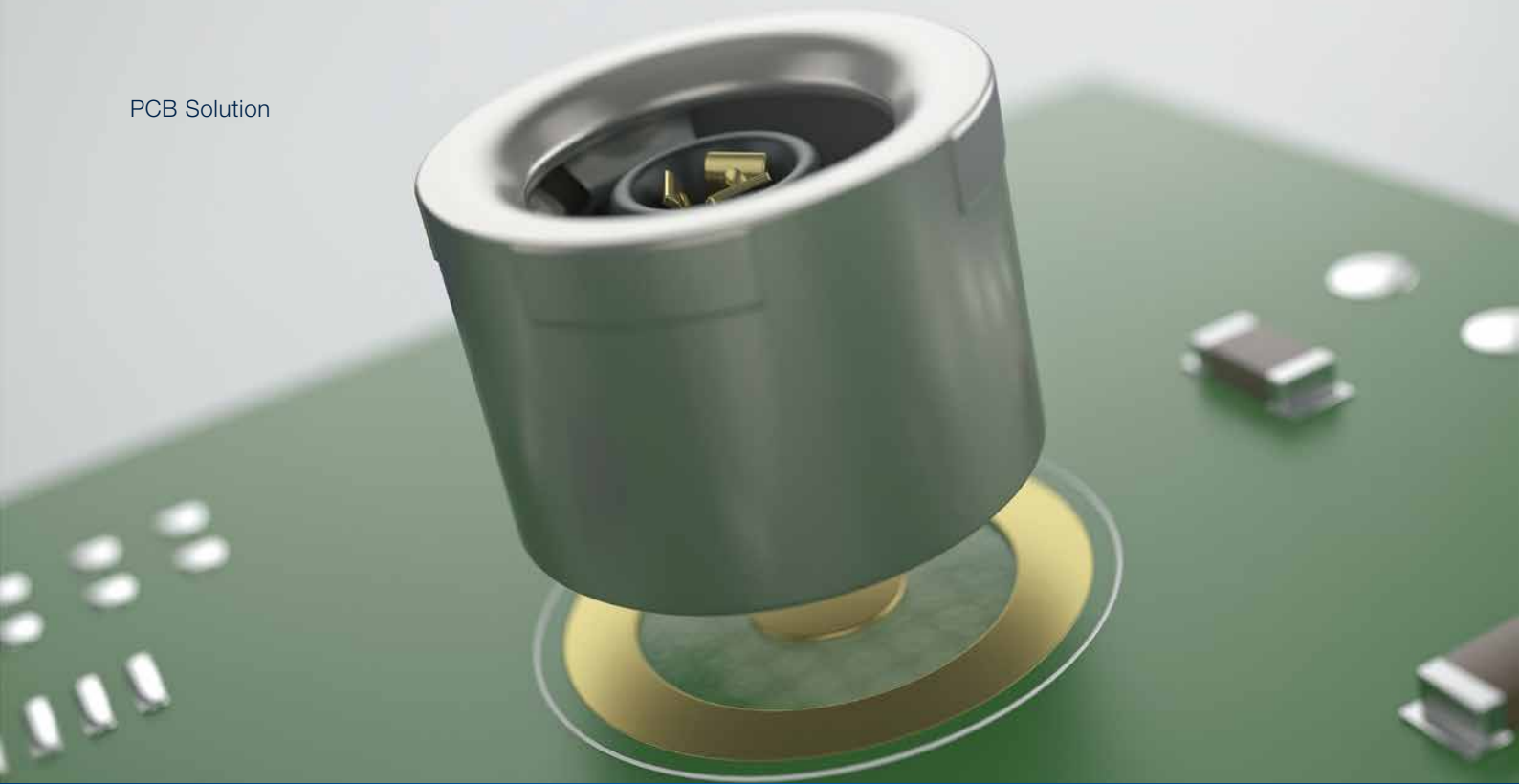
- Preloaded outer contacts for contact optimization
- One design for many applications
- Self-centering / self-alignment – blind mateability
- Optimized for PCB and filters
- Simple filter connection
- Excellent signal integrity (SI)
- Excellent shielding required for MIMO applications (EMI)
- Designed for mass-volume production
- 100% design to cost; lowest TCO on the market
- Only one PCB coupler design – consistent footprint
- Detent type on the bullet (limited detent – smooth bore)
- Small outline
- Best-in-class axial and radial compensation



RF Performance up to 8 GHz

The test setup includes the complete EBC® board-to-board connection.





EBC® – Performance Overview

Electrical Performance

- Frequency range: DC to 8 GHz
- Power: 100 W
- Return loss: ≥ 20 dB (typ.) depending on axial misalignment
- Screening attenuation: ≥ 50 dB @ DC to 4 GHz
- RF-leakage: ≥ 60 dB @ DC to 4 GHz

Mechanical Performance

- Minimum board-to-board distance: 12 mm
- Pitch: > 6.8 mm
- Axial tolerance: ± 0.8 mm
- Radial tolerance: max. 4°

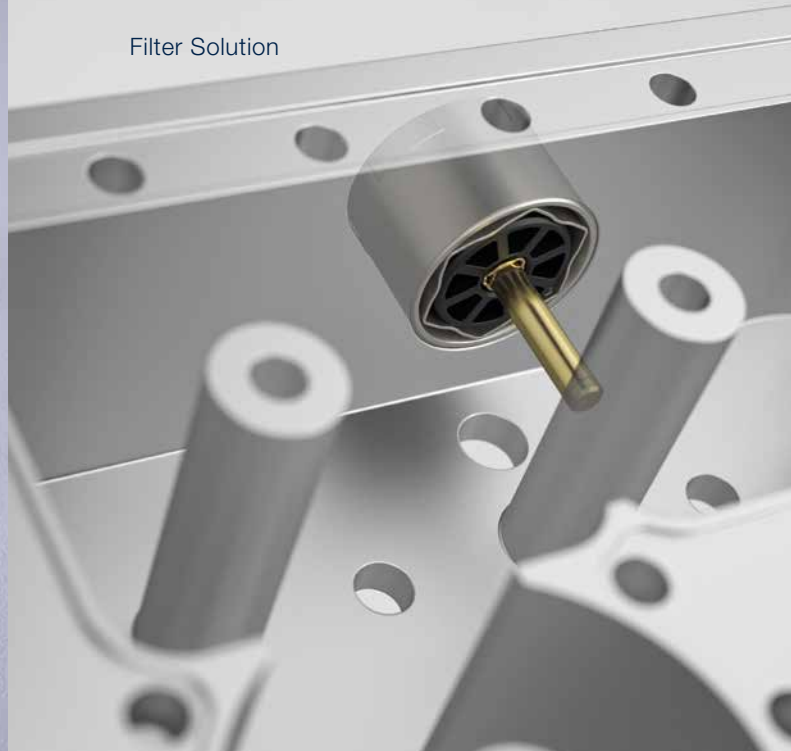
Materials

- Center contact: spring bronze – Aurodur® / silver
- Outer contact: spring bronze – white bronze (e.g. Optalloy®) / flash white bronze over silver (e.g. Optargen®)
- Dielectric: LCP – PTFE / FEP

EBC® Filter Bar



Filter Solution



EBC® Filter – Filtering of Desired Frequency Spectra

For effective and precise press-fitting of the EBC® PCB connectors into filters, Rosenberg provides press-in tools.

Characteristics

Performance and design of the EBC® filter are identical to the PCB connector.

Rosenberger recommends mounting EBC® filter connectors exclusively with these tools.



EBCW004-000



EBCW005-000



EBCW006-000



Website

For more information refer to our website:
www.rosenberger.com/communication

Rosenberger

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