PCB Connectors
Solutions for Board to Board Connection
PCB Connectors - Exploring the New Generation

Rosenberger – as a global and innovative leader in RF technology – has developed a wide range of RF coaxial connectors for future PCB applications; solder versions and also surface-mount connectors are available. The spectrum includes straight and right angle connectors in innovative coaxial series such as SMP, Longwipe-SMP, P-SMP, Mini-SMP, FMC, Micro-RF or multiport connectors, but also in standard series SMA, QMA, SMB, Mini-Coax or MCX.

Rosenberger surface mount PCB connectors use patented SMCC* technology where the coax to planar transition is made internally in the connector. This feature, along with Rosenberger’s optimized footprint, significantly reduces the designer’s time in developing new PCB layouts.

PCB connectors from Rosenberger combine many additional advantages:
- Very small sizes
- Minimum board-to-board distances
- Radial and axial misalignment using bullets
- Excellent transmission quality due to surface mount technology

Innovative connector series open up new application opportunities and customer benefits – exploring the new generation of PCB connectors.

* SMCC = Surface Mount Coaxial Connector
SMP – for multifunctional board-to-board connections
- Frequency range up to 40 GHz
- Minimum board-to-board distance: 9.05 mm
- Axial and radial tolerance equalization by using bullets
- Bullets in different lengths
- Automatic and cost-effective assembly with tape and reel packaging options

Mini-SMP – currently the smallest connector design available
- Frequency range up to 65 GHz
- Minimum board-to-board distance: 7.95 mm
- Extremely small dimensions
- Misalignments possible, bullets in different lengths
- Ideally suited for high-speed interconnect applications, e.g. at 40 Gbit/s
- Automatic and cost-effective assembly with tape and reel packaging options

Longwipe-SMP
- Frequency range up to 6 GHz
- Minimum board-to-board distance: 9.31 mm
- Axial and radial tolerance equalization - axial ± 0.7 mm
- Bullets in various lengths available

P-SMP – minimum board-to-board spaces – maximum performance
- Frequency range up to 10 GHz
- Axial misalignment ± 1 mm
- Minimum board-to-board distance: 12.6 mm
- Designed for high power loads – even at high frequencies
- For a variety of applications up to 200 W @ 2.2 GHz

Multiport Mini-Coax connectors
- Frequency range up to 20 GHz
- Low space requirements (0.12” / 3 mm pitch)
- Designed for semiconductor test applications
- PCB connectors with 2, 4, 6, and 8 channels available

FMC – repeatable electrical characteristics over the whole length of the connection
- Frequency range up to 11 GHz
- Minimum board-to-board distance: 6.05 mm
- Designed for PCB applications on tightest spaces
Micro-RF PCB connectors
- For applications up to 6 GHz
- Very small dimensions
  (1.8 mm x 1.9 mm, height 1.5 mm)
- Ideally used in any kind of small wireless devices
- Micro-RF test switch: for RF performance verification of antenna / circuit in any kind of small wireless devices

RF cable clamp
- Ultra small size – 3.6 mm x 5.0 mm and < 2 mm high
- Excellent performance from DC to 8 GHz
- Mating cable connector is spring-loaded for positive lock

RF coaxial standard connectors
Needless to mention that Rosenberger also offers PCB connectors in many common RF coaxial standard connector series – SMA and QMA, MCX, Mini-Coax and also SMB. PCB connectors for automotive or test & measurement applications as well as a broad range of accessories are also available.

Customized Footprints
The performance of surface mount RF connectors is dependent on a variety of parameters, e.g. substrate thickness, board-stack-up etc. As a free service in case of following orders, we provide customized footprints optimized for specific applications and the Rosenberger connector of your choice.