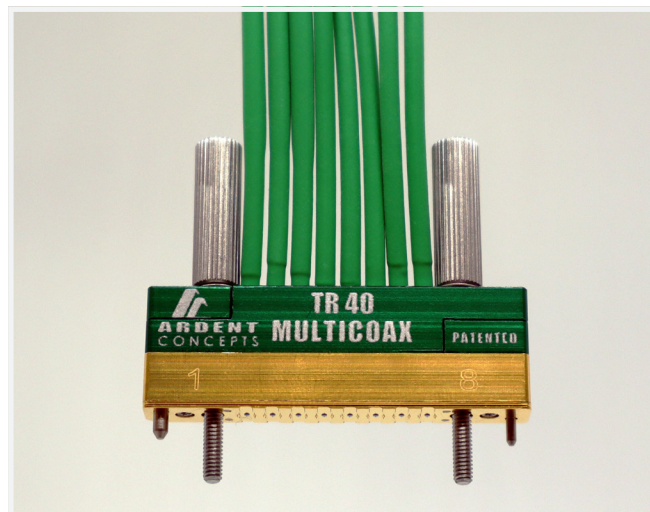


TR Multicoax™ Series Connectors

TR40™ MULTICOAX CONNECTOR

The TR40 Multicoax Connector by Ardent Concepts is engineered for high-performance applications requiring exceptional signal integrity. With a compact design and robust construction, the TR40 ensures minimal signal loss and reliable performance across a wide frequency range. It's ideal for high-density test and measurement environments where precision and durability are critical. The TR40 offers quick and secure connections, making it a preferred choice for engineers and technicians who demand efficiency without compromising on quality.

In contrast to traditional solder-down coaxial connectors, the TR Multicoax minimizes PCB space usage by 80%. Its ease of reusability allows flexible movement across PCB positions without requiring additional surface mount components. The TR40 Multicoax offers a streamlined solution for engineers developing cutting-edge systems.



TARGET MARKETS



FEATURES

- Reliable, high-speed compression mount technology
- Completely solderless system
- Competitively dense form factors available
- Reusable across programs

BENEFITS

- Superior signal integrity up to 40 GHz
- Better long term repeatability of connector performance
- Eliminates signal distortion for clean signal integrity
- Quick connection of multiple signals to PCB
- No more failing of snap-in connectors
- 80% space savings over SMPs
- Promotes exponential cost savings

PERFORMANCE

Mechanical Specifications¹	
Coax-to-Coax Pitch	2.54mm and 4mm (within a row)
Channels	Standard: 4, 8, 12, 16, 24
Cabling	.047" diameter low-loss flexible coax
Cable Length	6"/152mm, 12"/304mm, 24"/ 608mm
Board-Mount Insertion Life	1,000 mating cycles
PCB Footprint	Compression Mount, Non-SMT, Noble Plated
InterfAce (Cable end to Equipment)	Female or Male – SMK (2.92mm)

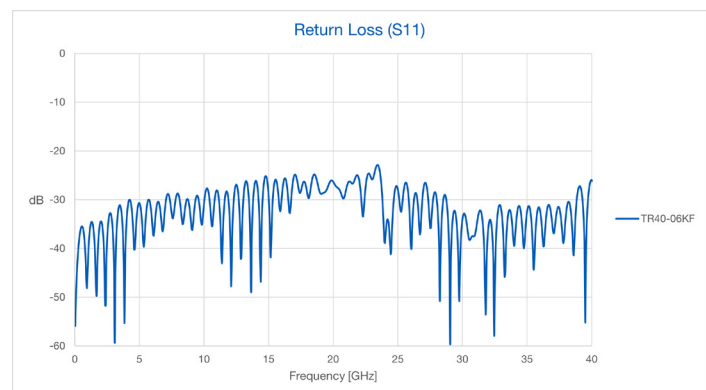
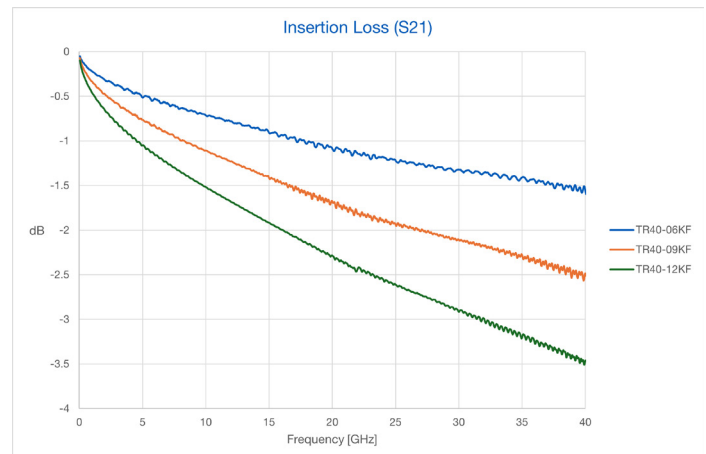
¹Mechanical specifications vary; contact factory for options

Electrical Specifications	
Frequency Range	DC to 40 GHz
Return Loss ¹	Refer to Return Loss (S11) for nominal value
Insertion Loss ²	Refer to Insertion Loss (S21) for nominal value
Crosstalk	Crosstalk is largely a function of PCB footprint design. Please consult factory for more information
Impedance	50Ω Nominal
Phase Matching ³	Cable Length ≤ 9" [229mm] = ± 2ps for all cables in an assembly

¹Gated measurements include TR40 cable, interface, and PCB footprint transition

²De-embedded measurements include TR Multicoax assembly only

³Phase tolerance is heavily based on cable length. Consult factory for phase matching specification of assemblies > 9 [229mm]



NOTE: Return loss and Insertion Loss data shown is representative of nominal performance. This data is provided for reference only and does not constitute a production-validated specification.

SAMPLE DRAWING

