

QUICKLINK™ Coaxial Connector

Description

QUICKLINK is a single ended or differential compression mount coaxial connector delivering superior signal integrity DC to 70 GHz+, designed with Ardent's patented compression mount technology. QUICKLINK combines connector and receptacle, enabling engineers to replace costly surface mount connectors, like SMAs, SMPs, and GPPOs. The twist-to-lock footprint requires only two thru holes and a gold pad which reduces PCB costs by avoiding costly solder-down components that can't be recovered. QUICKLINK footprints can be placed anywhere on your board to allow easy access to any channels from your device. Utilizing Ardent's patented contacts, QUICKLINK customers can expect the superior level of AC performance they've come to expect from Ardent's TR Multicoax Series.

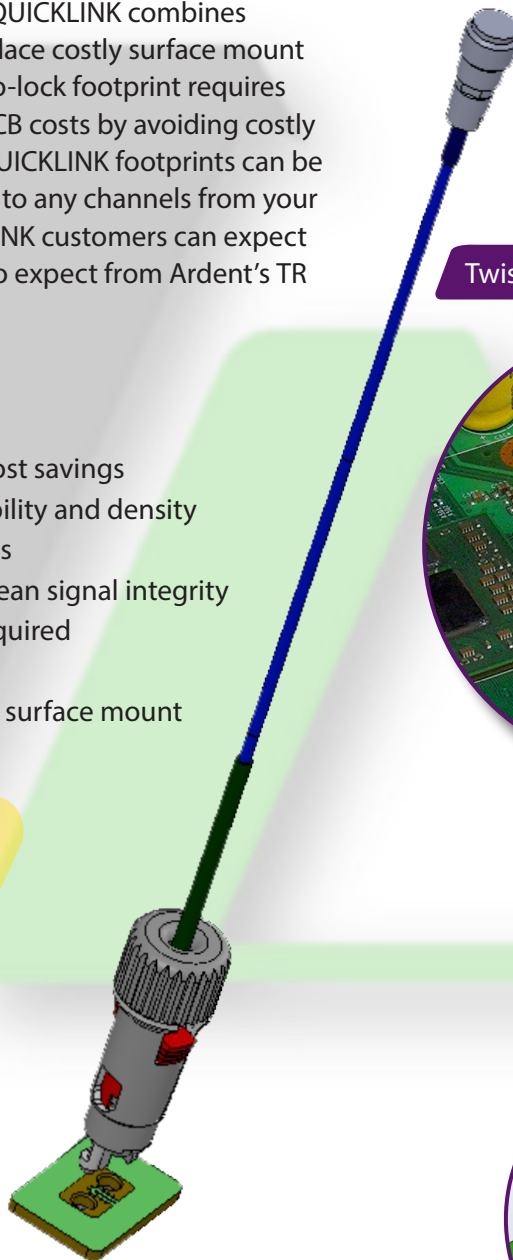
Key Benefits

- Superior signal integrity DC to 70 GHz+
- Reusable across programs promotes exponential cost savings
- Board component reduction while increasing reliability and density
- Electrical repeatability through 1000+ mating cycles
- Solderless system eliminates signal distortion for clean signal integrity
- Rapid connection to PCB - No threading or tools required
- No more failing of snap-in connectors
- Access multiple transmission lines with no need for surface mount receptacle

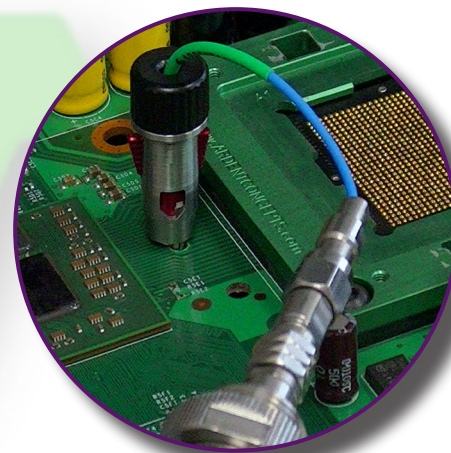
Applications

QUICKLINK connectors are ideal for use in:

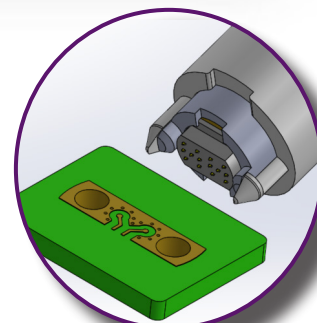
- › Semiconductor Design & Test
 - (e.g. PCIe, PAM4, High Speed SerDes)
- › Mid-Bus Probing – Signal "Sniffing" Between Devices
- › High-Speed Signaling - Board to Board
- › 10 Gbps+ Serial Data Path
- › Ka & Ku Band RF Transmission Line
- › RF Applications Requiring Uniform Trace Lengths
- › Customer Evaluation Boards
- › Defense/Aerospace
- › Server/Data

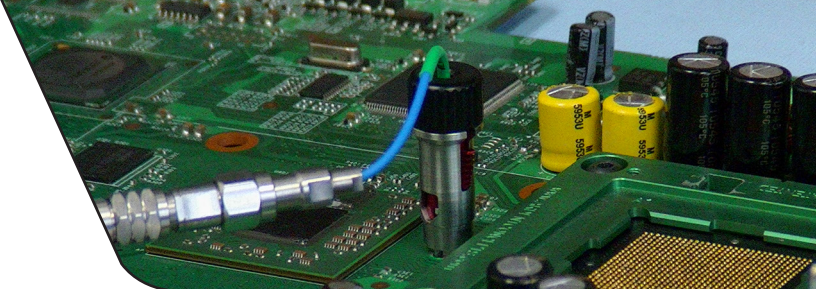


Twist Lock - Compression Mount



Differential Pair Option





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Specifications

Electrical Specifications

Frequency Range	DC to 70 GHz
Return Loss	-18 dB through 70 GHz
Insertion Loss	-1.5 dB through 40 GHz, -3 dB through 70 GHz
Crosstalk	-70 dB through 70 GHz
Impedance	50 Ω +/- 2.5 Ω
Phase Matching	+/- 2 ps standard (+/- 1 ps available, consult factory)

Mechanical Specifications

Cables	.047" diameter cables
Connectors	SMA, SMK (2.92 mm), or V (1.85 mm)
Cable Length	3"/76 mm
Insertion Life	1,000+ mating cycles
Footprint	Microstrip & Stripline compatible

Utilizing Patented Contacts

QUICKLINK uses Ardent patented contacts that are used in high volume OEM and test applications worldwide.

Spring Probe™



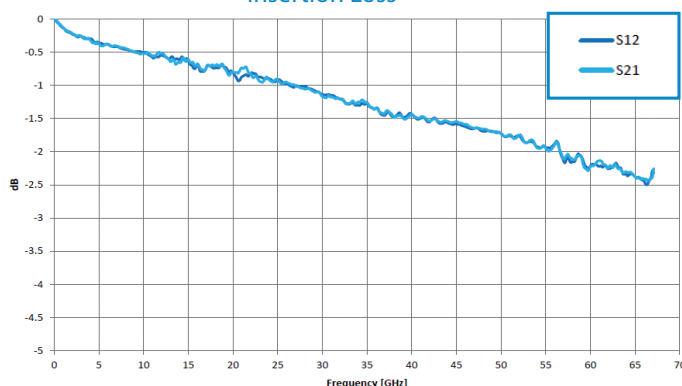
The patented "wipe action" of our Spring Probe coils behave like an electrical contact instead of behaving like an inductor, shorting the wire-form so it acts like a solid element. This concept allows us to achieve optimal signal integrity out to 70 GHz+.

Connect-R™



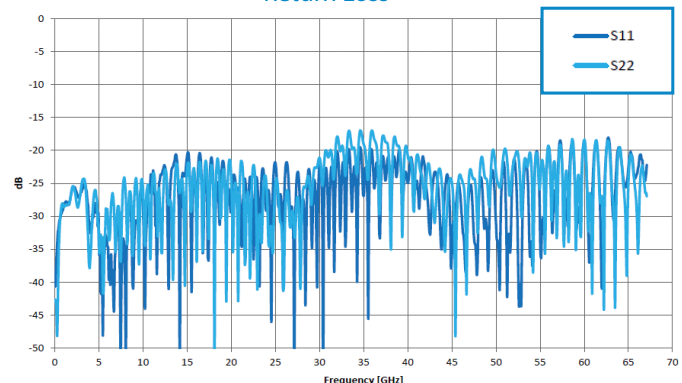
Cost effective high performance stamped compliant contact for applications at lower bandwidths. Connect-R's lateral twist provides a critical scrub at the pad surface, allowing for good penetration of oxides and ensuring consistent DC resistance.

Insertion Loss



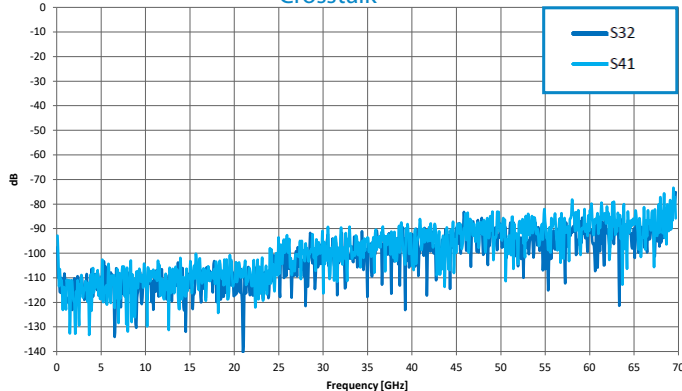
❖ Measurement of QUICKLINK with 3" of cable and 1.85 mm connectors

Return Loss

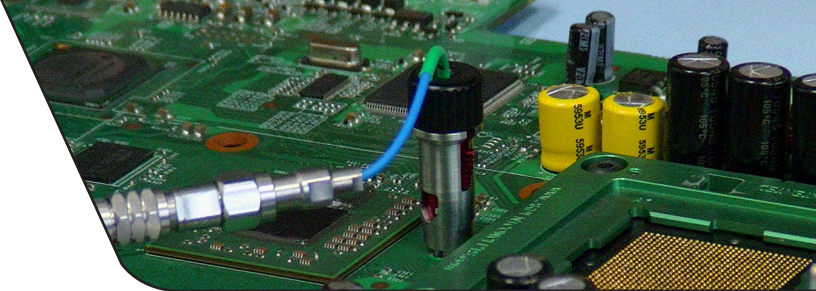


❖ Measurement of QUICKLINK with 3" of cable and 1.85 mm connectors

Crosstalk

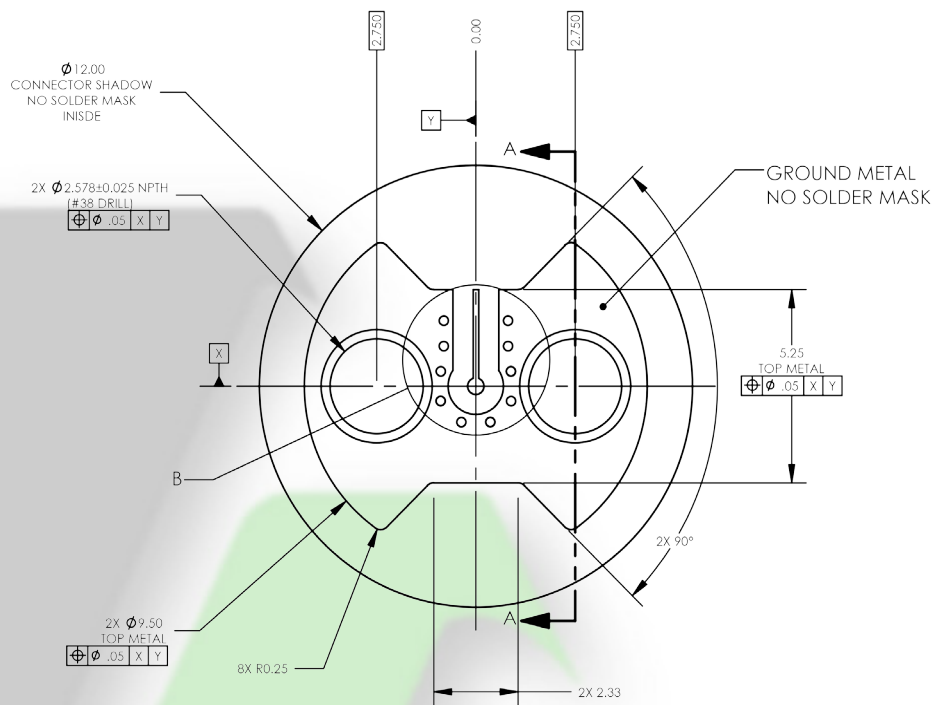
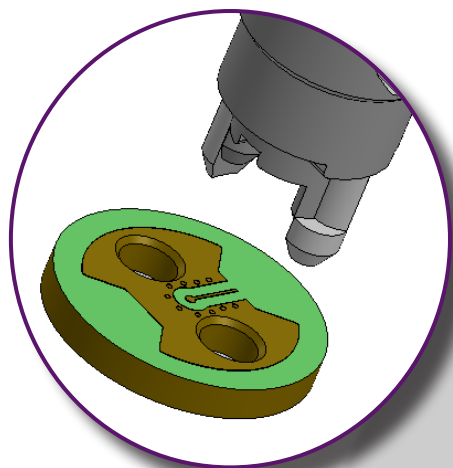


❖ Crosstalk measurement between two channels spaced 100 mils apart.

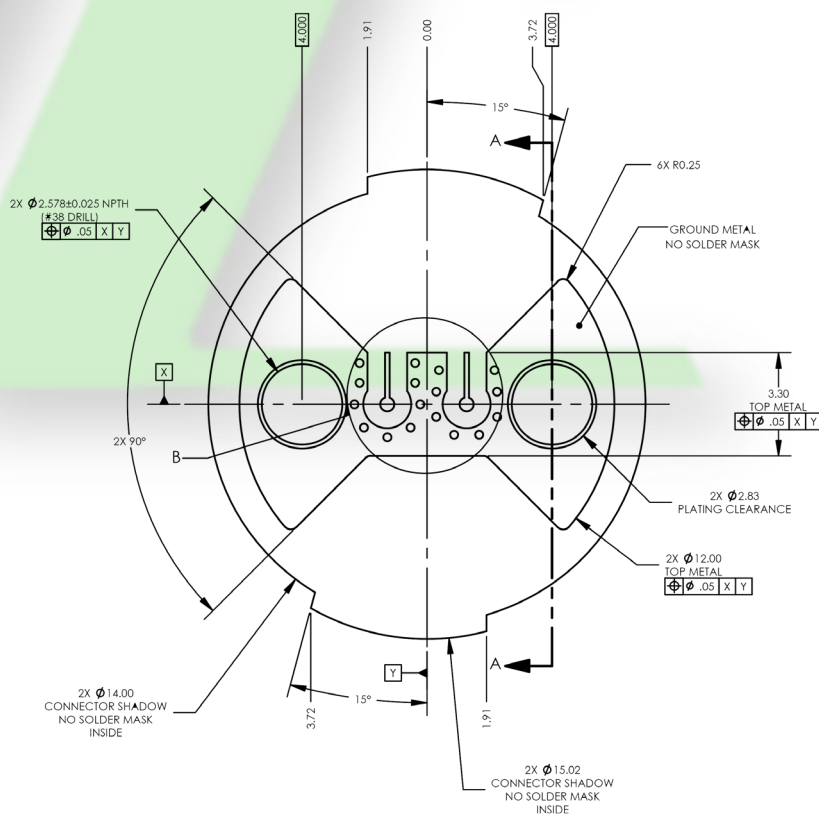
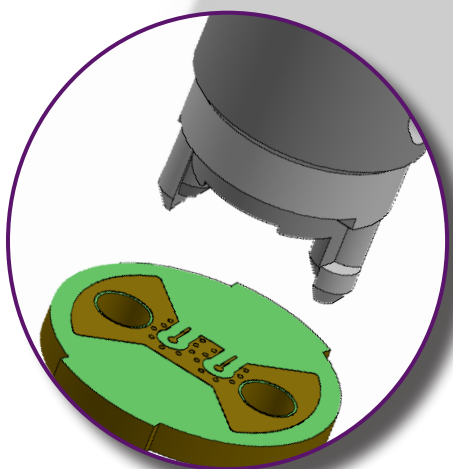


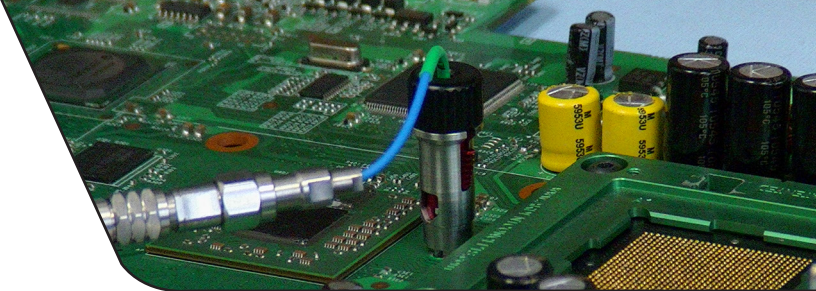
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Single Mode



Differential





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Ordering Information

QUICKLINK 20 GHz	Cable Length & Connector Type
QLINK20	3" SMA Female (03AF)
QUICKLINK 40 GHz	Cable Length & Connector Type
QLINK40	3" 2.92 mm Female (03KF)
QUICKLINK 70 GHz	Cable Length & Connector Type
QLINK70	3" 1.85 mm Female (03VF)
QUICKLINK Differential 20 GHz	Cable Length & Connector Type
QLINK20D	3" SMA Female (03AF)
QUICKLINK Differential 40 GHz	Cable Length & Connector Type
QLINK40D	3" 2.92 mm Female (03KF)
QUICKLINK Differential 70 GHz	Cable Length & Connector Type
QLINK70D	3" 1.85 mm Female (03VF)

For custom applications please consult factory

Specifications subject to change without notice

www.ardentconcepts.com

Example Part Number:

QLINK40-03KF

Related Products

TR Multicoax Series™

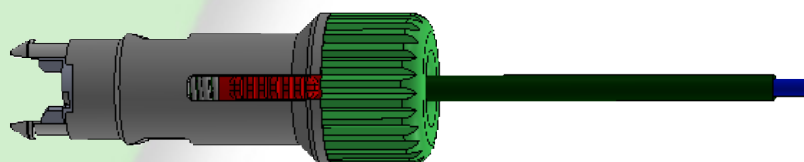
TR Multicoax delivers superior signal integrity from multiple high speed analog or digital channels with a choice of 20 GHz, 40 GHz, or 70 GHz configurations. TR is the highest density high speed multicoax connector on the market. The interface is compression mount which drives lower total cost of testing by avoiding costly solder-down components that can't be recovered, and encouraging reuse across programs.

SK Series™

More scalable and better performing socket option for high speed characterization and IC bring up. A thermal management ready, solderless, compression mount solution, SK sockets are custom tailored to your IC for optimal performance at multi-GHz speeds.

CA Series™

Offering Exceptional AC performance up to and beyond 40 GHz/32 Gbps and infinitely scalability in height, pitch and force, our CA series connectors let you go from prototype to production easily and effectively. With true vertical design no offset is required, ensuring a quick and precise design for your application.



More Information

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