



Micro Quadrax and Twinax Connectors

Micro Quadrax Connectors

Micro quadrax connectors are designed for differential pair matched impedance applications utilizing quadrax cable consisting of four wires where the diagonal pair of conductors forms a differential twinax pair. These connectors have a low impedance ground shield and are ideal for Ethernet (100 and 1000 Base-T), IEEE 1394 Firewire, USB, DVI and Infiniband applications with 100 Ohm differential impedance.

The micro quadrax connectors maintain the signal to shield impedance throughout the mated connector pair (quad configuration applications exceeding 1 Gbit/sec) and are available in threaded versions including straight and right angle cable mount and PCB mount configurations.

Micro Twinax Connectors

The Micro Twinax line features matched impedance miniaturized connectors that provide the user with controlled impedance and tightly spaced PCB footprint spacing. These connectors are available in true differential twinax packages with NDL, SMA, and Micro D size constraints.

The NDL Micro Twinax Series is offered in threaded and quick disconnect styles and are 25% smaller in diameter than SMA coaxial connectors. The quick disconnect version has a diameter of .250" max and the threaded version has .250" Hex coupling nut. These connectors replace the standard NDL Triax series for higher speed balanced Twinax applications.

These connectors are applicable for High-Speed Ethernet (100 and 1000 Base-T), Fibre Channel (>1 GBit/sec), IEEE 1394 Firewire, USB, DVI and Infiniband applications with 100 or 150 Ohm differential pair impedance.

Mechanical & Environmental Specifications	
Temperature Rating	-55°C to + 125°C
Corrosion	MIL-STD-202 Method 101 Test Condition B
Shock	MIL-STD-202 Method 213 Test Condition B
Vibration	MIL-STD-202 Method 204 Test Condition B
Thermal Shock	MIL-STD-202 Method 107 Test Condition B
Durability	500 Mate/Unmate cycles min.
Coupling Nut Torque (threaded) Recommended	2.3 in-lbs min.
Mating Torque (threaded)	2.5 in-lbs
Engagement/Disengagement Force (Quick Disconnect)	3 lbs max/3 to 5 lbs
Electrical Specifications	
Dielectric Withstanding Voltage	250 VDC max
Insulation Resistance	5,000 Mega-Ohms min. @ 100 VDC
Contact Current Rating	3.0 Amps max.
Data Rates	>1 Gbits/sec
Differential Pair Cable Impedance	150 Ohm ± 15 Ohm 100 Ohm ± 10 Ohms
Signal to Shield Cable Impedance	75 Ohm ± 10 Ohm 50 Ohm ± 7 Ohms
Material & Finishes	
Shell & Inner Contacts	Brass per ASTM-B16, alloy UNS C36000 or BeCu per ASTM-B196, alloy UNS C17200, C17300 303 CRES per ASTM-A582 Gold plate per MIL-DTL-45204, Type II, Class 1
Insulators	PTFE per ASTM-D1710 or ULTERM 1000
Gasket/Seal	Silicone Rubber per A-A-59588

All specifications subject to change without notice.



Micro Quadrax



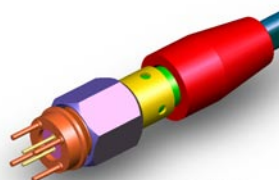
Twinax Micro-D Size



Twinax NDL Threaded and Quick Disconnect



Micro Twinax NDL Quick Disconnect



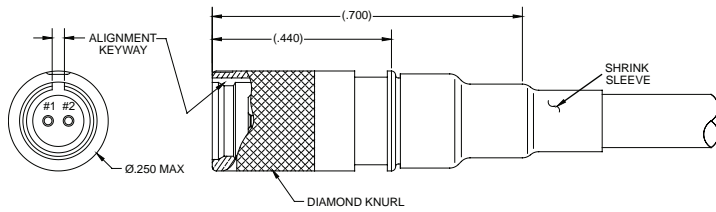
Micro Twinax NDL Threaded



Micro Twinax Connectors

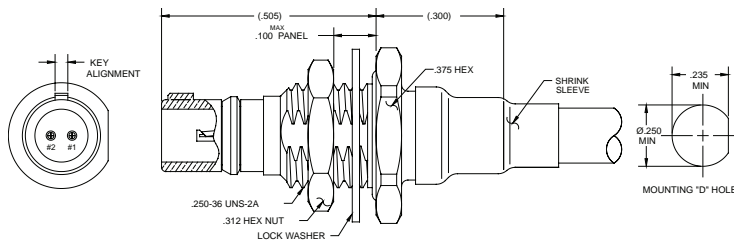
Quick Disconnect NDL Size Package

Quick Disconnect Micro Twinax NDL Plug 100 and 150 Ohm



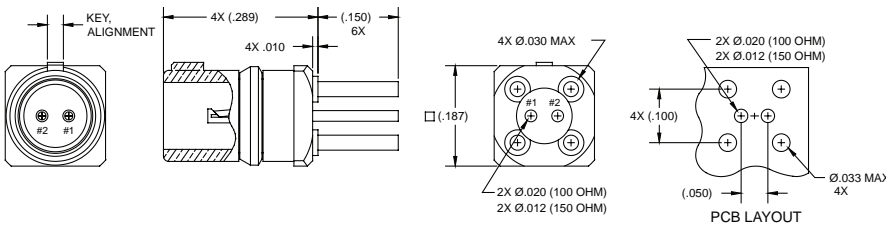
Part Number	Ohms	Cable Type	Cable
014034-2049	100	Differential Twinax	540-1153-000
014034-2050	100	Flexible Twinax	540-1161-000
014034-2051	100	Differential Twinax	540-1167-000
014034-2052	150	Differential Twinax	540-1099-000

Quick Disconnect Micro Twinax NDL Bulkhead Mount Jack 100 and 150 Ohm



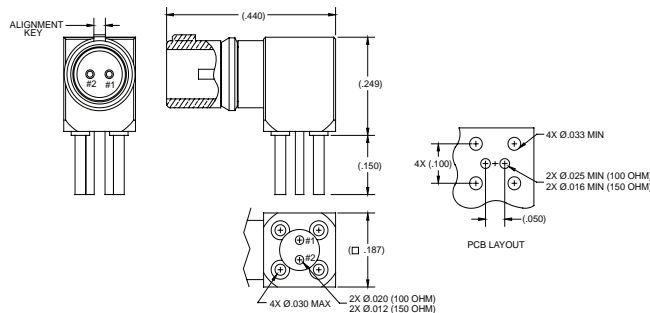
Part Number	Ohms	Cable Type	Cable
014134-5023	100	Differential Twinax	540-1153-000
014134-5024	100	Flexible Twinax	540-1161-000
014134-5025	100	Differential Twinax	540-1167-000
014134-5026	150	Differential Twinax	540-1099-000

Quick Disconnect Micro Twinax NDL Jack Straight PCB Mount 100 and 150 Ohm



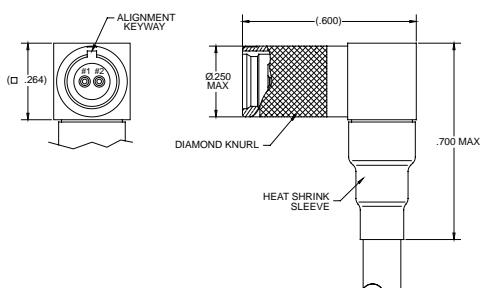
Part Number	Impedance
014117-2023	100 Ohms
014117-2024	150 Ohms

Quick Disconnect Micro Twinax NDL Right Angle PCB Mount 100 and 150 Ohm



Part Number	Impedance
014117-1037	100 Ohms
014117-1038	150 Ohms

Quick Disconnect Micro Twinax NDL Right Angle Plug 100 and 150 Ohm



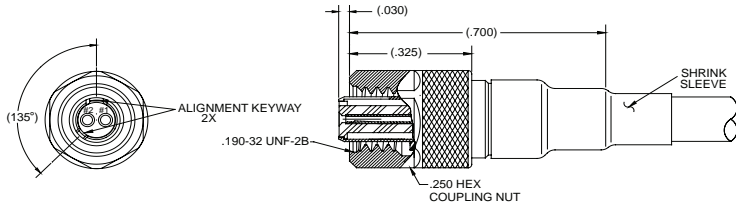
Part Number	Ohms	Cable Type	Cable
014034-1027	100	Differential Twinax	540-1153-000
014034-1028	100	Flexible Twinax	540-1161-000
014034-1029	100	Differential Twinax	540-1167-000
014034-1030	159	Differential Twinax	540-1099-000



Micro Twinax Connectors

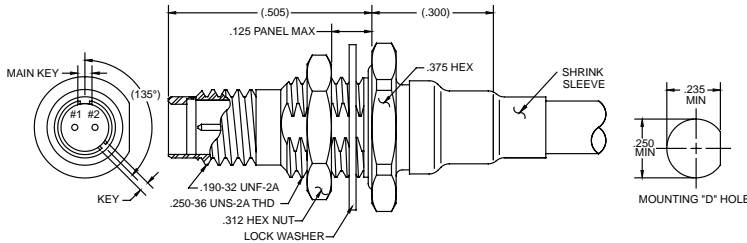
Threaded NDL Size Package

Threaded Micro Twinax NDL Straight Cable Plug 100 and 150 Ohm



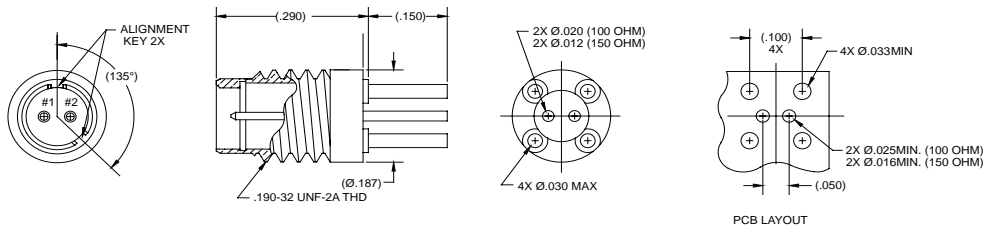
Part Number	Ohms	Cable Type	Cable
014034-2045	100	Differential Twinax	540-1153-000
014034-2046	100	Flexible Twinax	540-1161-000
014034-2047	100	Differential Twinax	540-1167-000
014034-2048	150	Differential Twinax	540-1099-000

Threaded Micro Twinax NDL Bulkhead Mount Jack 100 and 150 Ohm



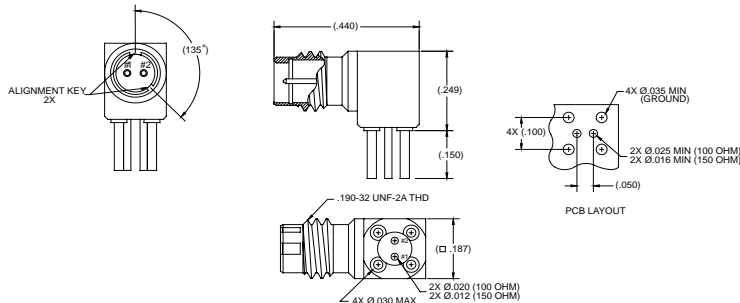
Part Number	Ohms	Cable Type	Cable
014134-5018	100	Differential Twinax	540-1153-000
014134-5019	100	Flexible Twinax	540-1161-000
014134-5020	100	Differential Twinax	540-1167-000
014134-5021	150	Differential Twinax	540-1099-000

Threaded Micro Twinax NDL Straight Jack 100 and 150 Ohm PCB Mount



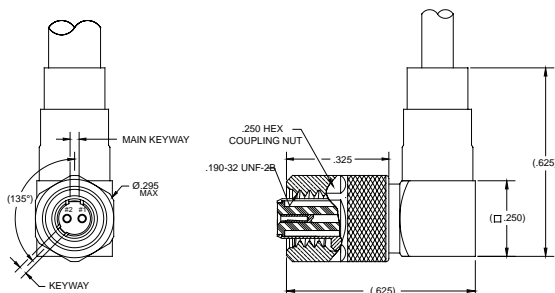
Part Number	Impedance
014117-2020	100 Ohms
014117-2021	150 Ohms

Threaded Micro Twinax NDL Right Angle Jack 100 and 150 Ohm PCB Mount



Part Number	Impedance
014117-1030	100 Ohms
014117-1031	150 Ohms

Threaded Micro Twinax NDL Right Angle Plug 100 and 150 Ohm



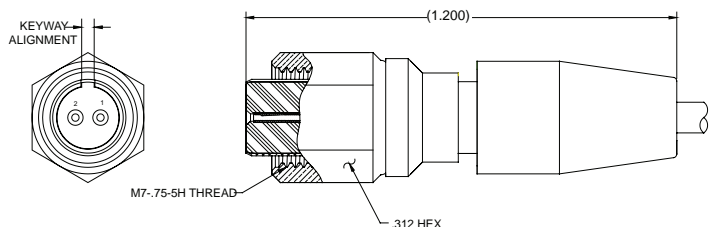
Part Number	Ohms	Cable Type	Cable
014034-1020	100	Differential Twinax	540-1153-000
014034-1021	100	Flexible Twinax	540-1161-000
014034-1022	100	Differential Twinax	540-1167-000
014034-1023	150	Differential Twinax	540-1099-000



Micro Twinax Connectors

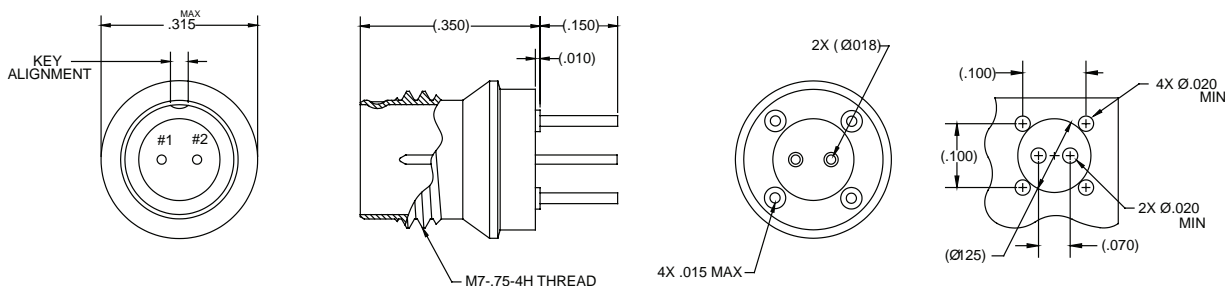
SMA Size Twinax Connectors 100 and 150 Ohm

Micro Twinax SMA Size Plug 100 or 150 Ohm Matched Impedance



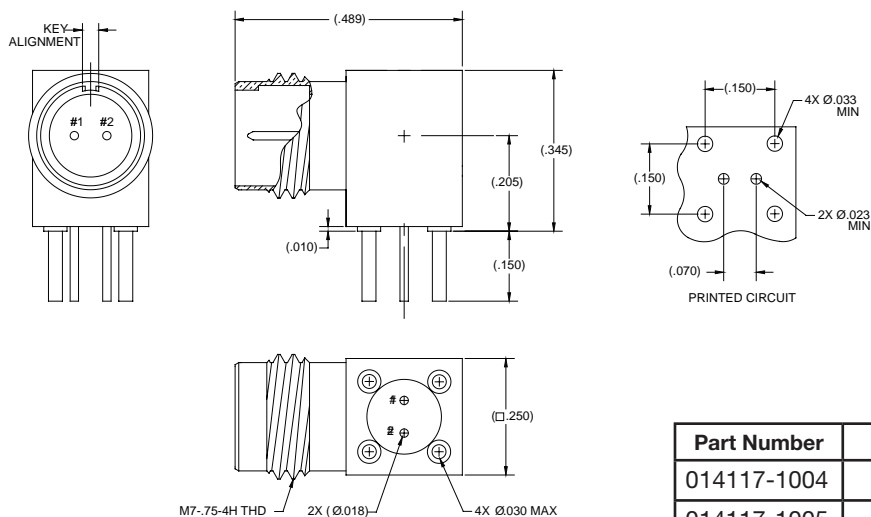
Part Number	Ohms	Cable Type	Cable
014034-2004	100	Differential Twinax	540-1153-000
014034-2010	100	Flexible Twinax	540-1161-000
014034-2015	100	Flexible Twinax	540-1086-000
014034-2003	150	Differential Twinax	540-1099-000
014034-2009	150	Differential Twinax	540-1114-000

Micro Twinax SMA Size Straight Jack 100 or 150 Ohm Matched Impedance



Part Number	Impedance
014117-2003	100 Ohms
014117-2002	150 Ohms

Micro Twinax SMA Right Angle Jack Straight PCB Mount 100 or 150 Ohm Matched Impedance



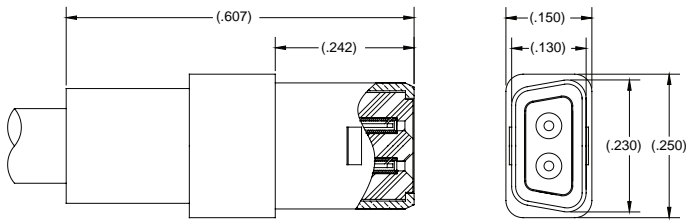
Part Number	Impedance
014117-1004	100 Ohms
014117-1005	150 Ohms



Micro Twinax Connectors

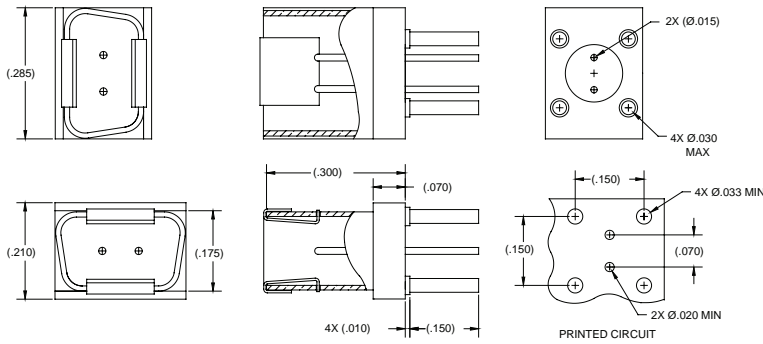
Micro-D Size Twinax Connectors 100 and 150 Ohm

Micro-D Twinax Straight Plug 100 or 150 Ohm Matched Impedance



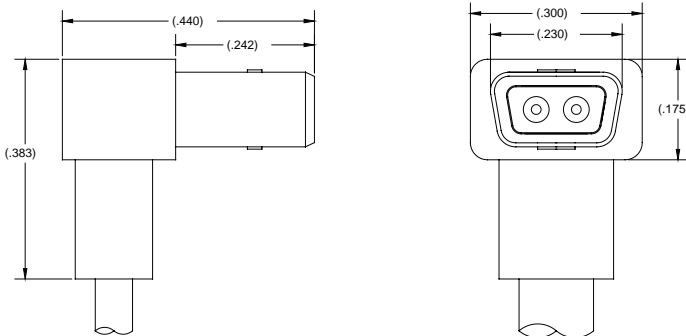
Part Number	Ohms	Cable Type	Cable
014034-2006	100	Differential Twinax	540-1153-000
014034-2005	150	Differential Twinax	540-1099-000

Micro-D Twinax Straight Jack PCB 100 or 150 Ohm Matched Impedance



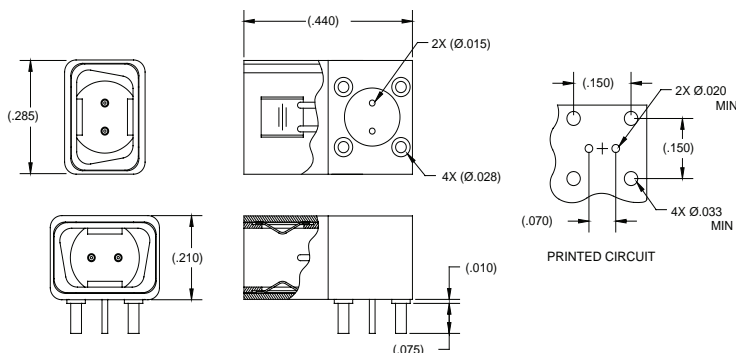
Part Number	Impedance
014117-2005	100 Ohms
014117-2004	150 Ohms

Micro-D Twinax Right Angle Plug 100 or 150 Ohm Matched Impedance



Part Number	Ohms	Cable Type	Cable
014034-1002	100	Differential Twinax	540-1153-000
014034-1001	150	Differential Twinax	540-1099-000

Micro-D Twinax Right Angle Jack PCB Mount 100 or 150 Ohm Matched Impedance



Part Number	Impedance
014117-1003	100 Ohms
014117-1002	150 Ohms