

RF, Microwave and Datalink Contacts

for MIL-DTL-38999, SuperNine®, Mighty Mouse and Micro-Crimp® Connectors



Ultra-Twinax Contacts

Size #12 Ultra-Fast Differential Twinax Contacts for DC – 10 GHz Frequency Range



Glenair Ultra-Twinax differential twinax contacts are suited for multi-gigabit data rate applications such as CML, LVDS and other advanced digital communications protocols. Size #12 100 ohm contacts feature DC – 10 GHz frequency range. Use with high-speed #30 AWG twisted pair cable 963-102-30. These contacts are compatible with Glenair Series 80 Mighty Mouse connectors with size #12 cavities. Snap-in, rear release. Solder termination. Supplied as kit with body, front insulator-solder contact subassembly, and rear insulator. Gold-plated copper alloy, glass-filled PTFE insulator.

Features

- DC – 10 GHz frequency range
- 100 ohm impedance
- Aerospace-grade construction
- Low insertion loss

Applications

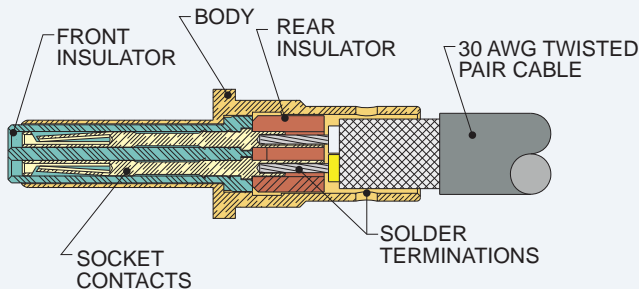
- LVDS
- SATA 3.0
- DisplayPort
- CML

Size #12 Ultra-Twinax Contacts					
Cable	Wire Size (AWG)	Impedance (ohms)	Pin Contact	Socket Contact	Assembly Instruction Sheet
963-102-30 (Glenair)	30	100	853-016-01	853-015-01	AI85051

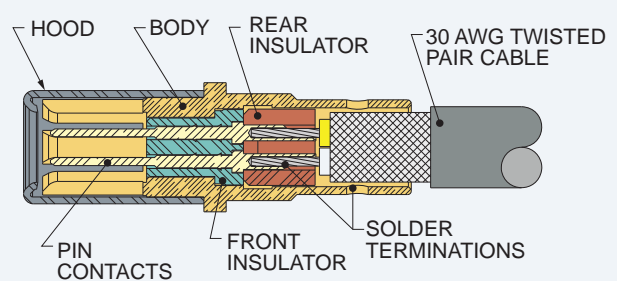
Technical Data

Specifications	Construction	Connector Compatibility
Operating temperature: -65°C. to +105°C. Operating frequency: 0 – 10 GHz Impedance: 100 ohms VSWR: 1.1 + (.03 X Freq GHz) Insertion loss : (.33 X Freq GHz) Dielectric withstanding voltage: 500 Vrms Insulation resistance: 5000 megohms min. Durability: 500 mating cycles	Inner contacts, outer body: copper alloy, 50 microinches gold over nickel plating Insulator: glass-filled PTFE Rear insulator: PPS Socket hood: stainless steel, passivated	Glenair Series 80 Mighty Mouse. <i>All standard Mighty Mouse connectors with size #12 contact accommodation have keyed contact cavities for proper alignment of ultra-twinax contacts.</i>

Pin Contact Design Features



Socket Contact Design Features



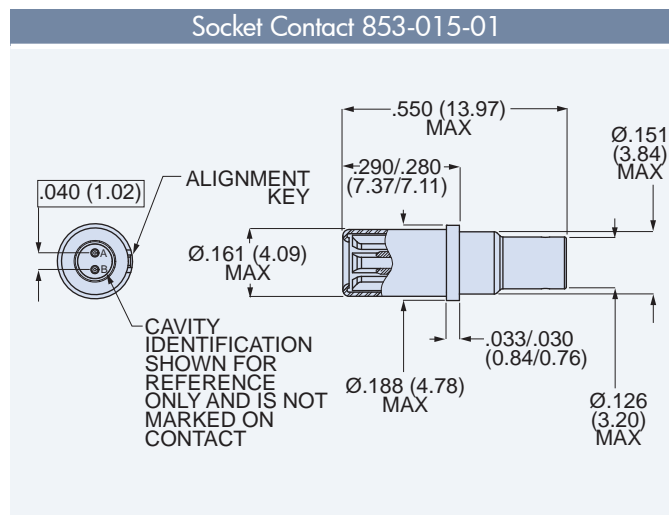
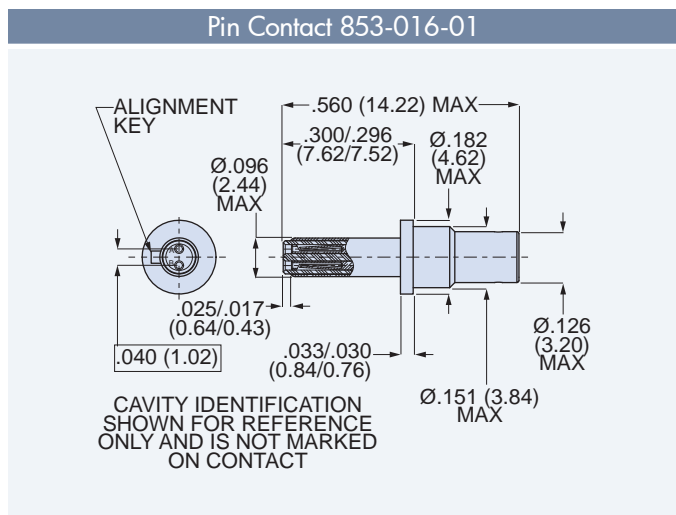
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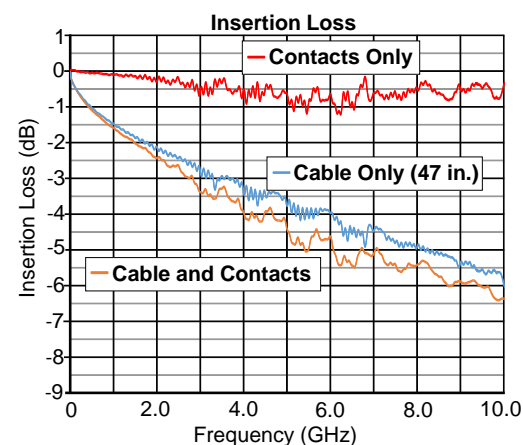
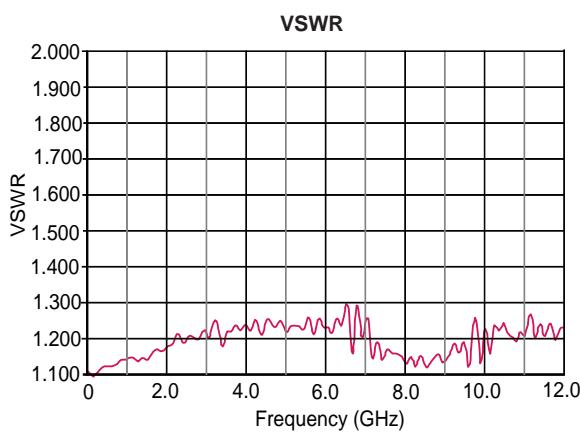


Twinax Contacts

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Performance Data



963-102-30 100 Ohm Twisted Pair Cable Specifications

Conductors	30 AWG silver-coated high strength copper alloy, 19/42 strand
Insulation	PFA, white and yellow, .032 dia.
Inner shield	.0015" aluminum/polyester tape
Outer shield	Silver-coated 40 AWG braid, 90% minimum coverage
Jacket	PFA, black
Temperature Rating	-65° to +105° C
Impedance	100 ± 10 ohms
Capacitance	15.0 pF/ft (cond-cond)
DC resistance	98.55 ohms/1000 ft. maximum
Attenuation (nominal)	40 dB @ 500 MHz, 56dB @ 1 GHz
Velocity of Propagation	80%

