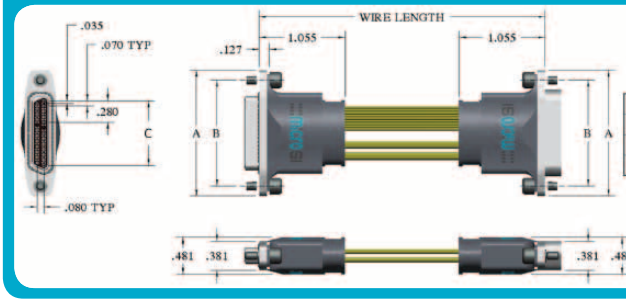
microSI™

MJSI – Cable Assembly

MJSI cable assemblies are used in jumper applications where signal integrity is desired. They have a wide range of styles, wiring options, and hardware options. All cable assemblies are available in custom lengths.

GENERAL DIMENSIONS



SIZE	A	B	C
1X	1.636	1.377	0.840
4X	2.266	2.007	1.470
8X	3.106	2.847	2.310

Sample Part Number Format: MJSI-01L-24B0-018-2810

MJSI - [ ] - [ ][ ][ ] - [ ] - [ ] [ ]

SERIES
Cable Assembly
1.78 mm

SIZE & INTERFACE POLARIZATION*
01L – 1X Left (23 pins, 4 DP +9SB)
01R – 1X Right (23 pins, 4 DP +9SB)
04L – 4X Left (41 pins, 10 DP +9SB)
04R – 4X Right (41 pins, 10 DP +9SB)
08L – 8X Left (65 pins, 18 DP +9SB)
08R – 8X Right (65 pins, 18 DP +9SB)

STYLE
11 – Male-to-Male, Twinax 100Ω 24 AWG
14 – Male-to-Male, Twinax 100Ω 30 AWG
21 – Male-to-Female, Twinax 100Ω 24 AWG
24 – Male-to-Female, Twinax 100Ω 30 AWG
31 – Female-to-Female, Twinax 100Ω 24 AWG
34 – Female-to-Female 100Ω 30 AWG

SIDEBAND WIRES (color code per MIL-STD-681)
A – 22759/11-24
B – 22759/11-26
C – 22759/11-28
D – 22759/33-24 ☒
E – 22759/33-26 ☒
F – 22759/33-28 ☒
G – 22759/33-30 ☒
H – NEMA HP3-EXBEB 24 AWG
J – NEMA HP3-EXBDB 26 AWG
K – NEMA HP3-EXBCB 28 AWG
L – NEMA HP3-EXBBB 30 AWG

OVERALL**
0 – None
1 – Silver-plated braid
2 – Tin-plated braid
3 – Silver-plated braid, Halar® sleeving
4 – Tin-plated braid, Halar® sleeving
5 – Halar® sleeving (no braid)

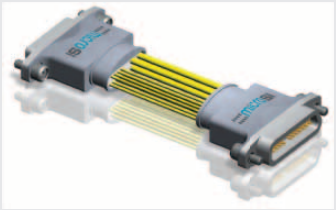
WIRE LENGTH[1]
Inches, 3 digits
Ex. 018 = 18 inches

BODY PLATING, INTERNAL SOLDER
1 – Electroless nickel, SAC305
2 – Electroless nickel, Sn/Pb ☒
5 – Gold, SAC305
6 – Gold, Sn/Pb ☒

HARDWARE
620 – Fixed jacknut
810 – Turning jackscrews, captivated**
860 – Fixed jacknut & turning jackscrews, captivated**
870 – Fixed jacknut on male & turning jackscrews, captivated** on female (styles 21 & 24, only)
NXX – Keying jacknuts***
JXX – Keying jackscrews***
AXX – Keying jacknuts & keying jackscrews*** (for styles 21 & 24, jacknuts on female)
BXX – Keying jacknuts on male & keying jack-screws on female*** (styles 21 & 24, only)

High-Reliability Contact

MIL-DTL-83513



PLEASE CONSULT THE AIRBORN WEBSITE FOR THE LATEST REVISION OF THIS DOCUMENT PRIOR TO BEGINNING ANY DESIGN WORK.

NOTES

1. All microSI females have fluorosilicone interfacial seals installed.
2. Overall braid and/or Halar® will be 1.0 ± 0.5 inches shorter than specified wire length. Minimum length without overall braid or Halar® is 3 inches. If overall braid or Halar® is specified the minimum length is 6 inches.
3. Hardware is the same for both connectors unless otherwise noted.

☒ Option not RoHS-compliant

* Left or right polarization is determined by looking at the male interface with the LONG SIDE downward. Polarization matches the angled side. Sidebands are on the non-angled side.

** Captivated hardware is factory-installed and non-removable.

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**** Refer to "Keying Hardware Options" on page 61.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

1	Diff. Impedance, filtered to 79 ps (20-80%)	100 ohm
2	Diff. Insertion Loss	10 GHz @ -3 dB
3	Diff. Return Loss	7.5 GHz @ -10 dB
4	Intra-Pair	< 2 ps

MATERIALS and FINISHES

Socket Contact: . . . . . Brass
Pin Contacts: . . . . . BeCu alloy strip
Contact Finish: . . . . . Gold plate, 50 µ" minimum
Shells: . . . . . Aluminum alloy 6061-T6
Shell Finishes: . . . . . Electroless nickel or Gold
Molded Insulators: . . . . . Glass-filled liquid crystal polymer (LCP)
Embedment: . . . . . Frey Eng. Co. compound CF3003-80 & L-II-49
Hardware: . . . . . Corrosion-resistant steel
Interfacial Seal Gaskets: . . . . . Fluorosilicone
EMI Gaskets: . . . . . Corrosion-resistant steel

NOTE: AirBorn can manufacture special configurations to your exact specifications.

PERFORMANCE

Contact Rating: . . . . . 3 amperes maximum
Operating Temperature: . . . . . -55° C to 125° C
Maximum Working Voltage: . . . . . 200V, RMS, 60Hz
Insulation Resistance . . . . . 5,000 megohms minimum @ 500 VDC
Durability: . . . . . 500 connector mating cycles
Contact Engaging Force: . . . . . 6.0 ounces maximum/contact
Contact Separating Force: . . . . . 0.5 ounces minimum/contact
Mating and Unmating Force: . . . . . 10 ounces maximum/contact

NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.