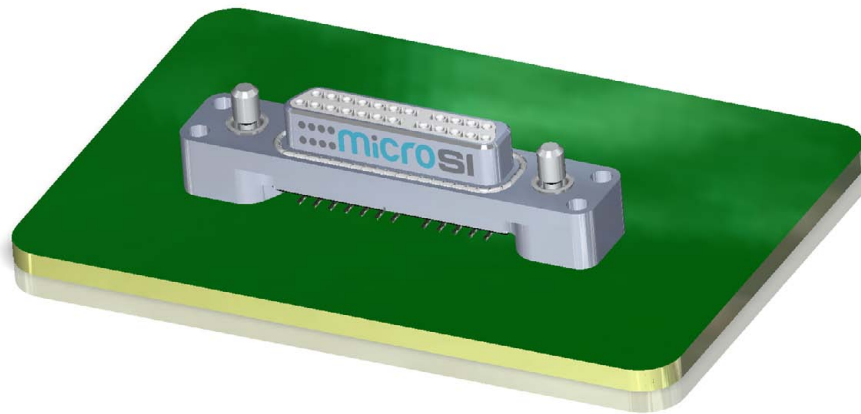


microSI™

The AirBorn microSI product line is designed to meet requirements for high-speed/signal integrity applications while still delivering the reliability customers have come to expect from AirBorn. MicroSI delivers flexibility by design, offering vertical board-mount, right angle board-mount, and cable I/O configurations supporting 1X, 4X, and 8X 100 Ω and 85 Ω differential serial buses. Its balanced design limits skew within pairs. The MIL-DTL-83513 (Micro-D) qualified contact system and metal shells ensure ruggedness and durability.



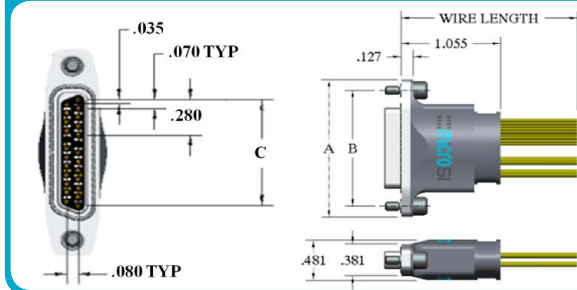


microSI™

MMSI – Cable I/O (Male)

MMSI cable connectors are used in cable applications where signal integrity is desired. The connector interface controls the polarization of the twinax contact style. Comes with a variety of wiring and hardware options. All cable connectors 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

ORDER FORM

Sample Part Number Format: MMSI-XXX-XXXX-XXX-XXXX

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	
MMSI							
SERIES Cable I/O (Male) 1.78 mm		STYLE 11 – Male, Twinax 100Ω 24 AWG 14 – Male, Twinax 100Ω 30 AWG		OVERALL**** 0 – None 1 – Silver-Plated Braid 2 – Tin-Plated Braid 3 – Silver-Plated Braid, Halar® Sleaving 4 – Tin-Plated Braid, Halar® Sleaving 5 – Halar® Sleaving (no braid)		WIRE LENGTH* Inches, 3 digits Ex. 018 = 18 inches	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***
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)		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				BODY PLATING, INTERNAL SOLDER 1 – Electroless Nickel, SAC305 2 – Electroless Nickel, Sn/Pb ☒ 5 – Gold, SAC305 6 – Gold, Sn/Pb ☒	

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

- 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.
- ☒ 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.
- *** Factory-installed and non-removable.
- **** Halar is a registered trademark of Ausimont.

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.

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

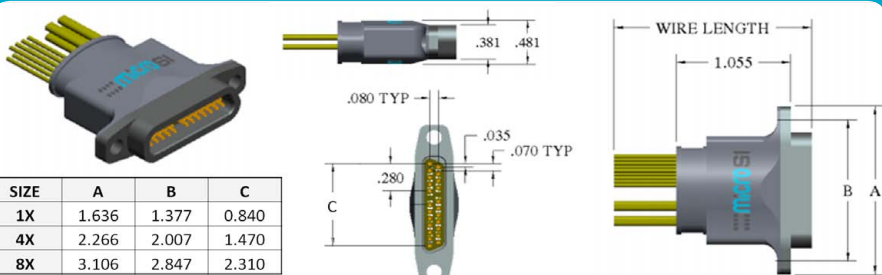


microSI™

MMSI – Cable I/O (Female)

MMSI cable connectors are used in cable applications where signal integrity is desired. The connector interface controls the polarization of the twinax contact style. Comes with a variety of wiring and hardware options. All cable connectors 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

ORDER FORM

Sample Part Number Format: **MMSI-XXX-XXXX-XXX-XXXX**

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	
MMSI							
SERIES Cable I/O (Female) 1.78 mm		STYLE 21 – Female, Twinax 100Ω 24 AWG 24 – Female, Twinax 100Ω 30 AWG		OVERALL**** 0 – None 1 – Silver-Plated Braid 2 – Tin-Plated Braid 3 – Silver-Plated Braid, Halar® Sleaving 4 – Tin-Plated Braid, Halar® Sleaving 5 – Halar® Sleaving (no braid)		WIRE LENGTH* Inches, 3 digits Ex. 018 = 18 inches	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***
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)		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		BODY PLATING, INTERNAL SOLDER 1 – Electroless Nickel, SAC305 2 – Electroless Nickel, Sn/Pb ☒ 5 – Gold, SAC305 6 – Gold, Sn/Pb ☒			

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

- 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.
- All microSI females have fluorosilicone interfacial seals installed.
 - ☒ 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.
- *** Factory-installed and non-removable.
- **** Halar is a registered trademark of Ausimont.

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.

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

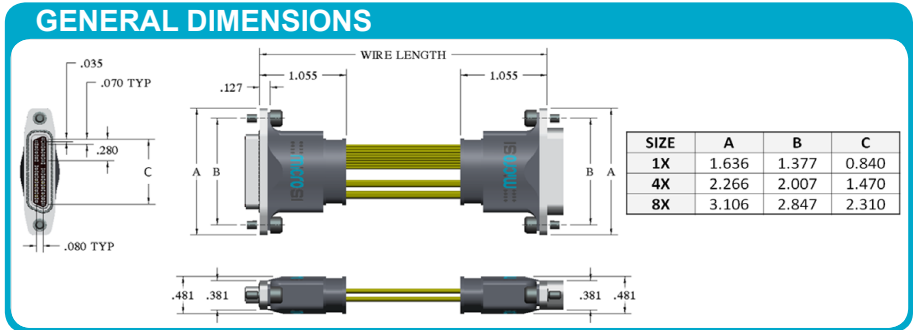


microSI™

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

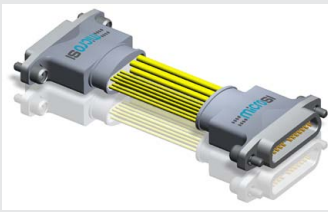


SIZE	A	B	C
1X	1.636	1.377	0.840
4X	2.266	2.007	1.470
8X	3.106	2.847	2.310

ORDER FORM

Sample Part Number Format: MJSI-XXX-XXXX-XXX-XXXX

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
MJSI						
SERIES Cable Assembly 1.78 mm	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	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 LENGTH¹ 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 Jacknuts 810 – Turning Jackscrews Captivated** 860 – Fixed Jacknuts & Turning Jackscrews Captivated** 870 – Fixed Jacknuts on Male & Turing 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 Jackscrews on Female*** (styles 21 & 24, only)	
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)	SIDE BAND 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					



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

NOTES

- All microSI females have fluorosilicone interfacial seals installed.
 - 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.
 - 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.
 - *** Factory-installed and non-removable.
 - **** Halar is a registered trademark of Ausimont.

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.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

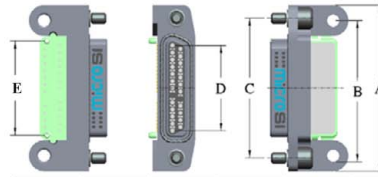
1	Diff. Impedance, filtered to 79 ps (20-80%)	100 ohm
2	Diff. Insertion Loss	10 GHz @ -3 dB
3	Diff. Return Loss	7.5 GHz @ -10 dB
4	Intra-Pair	< 2 ps



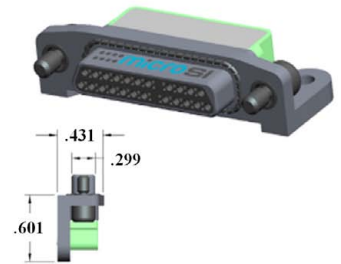

MKSI – Right Angle (Male)

MKSI right angle board surface mount connectors are used in applications where signal integrity is desired. The connector interface controls the polarization of the connector. Comes with a variety of hardware options.

GENERAL DIMENSIONS



SIZE	A	B	C	D	E
1X	1.636	1.330	1.377	0.840	0.930
4X	2.266	1.960	2.007	1.470	1.560
8X	3.106	2.800	2.847	2.310	2.400



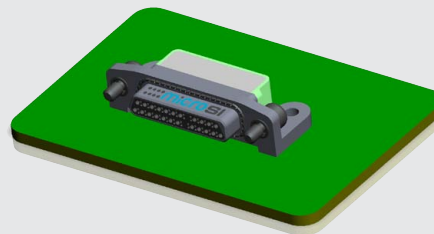
ORDER FORM

Sample Part Number Format: MKSI-XXX-XXXX-XXX-XXXX

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
MKSI					
SERIES Right Angle (Male) 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 1000 – Male	PIN TERMINATION (50 μ" Au Contact) 175 – Sn/Pb alloy ☒ 178 – SAC305	BODY PLATING 2 – Electroless Nickel 6 – Gold	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***

High-Reliability Contact

MIL-DTL-83513



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

NOTES

- ☒ 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.
- *** Factory-installed and non-removable. Refer to Keying Options page.

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.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

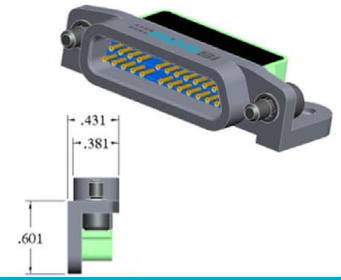
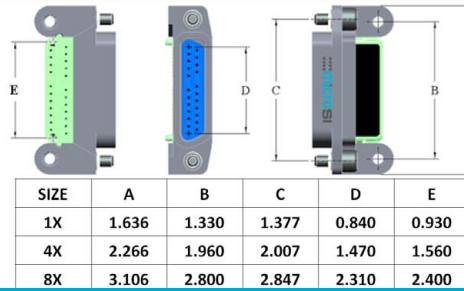
1	Diff. Impedance, filtered to 79 ps (20-80%)	100 ohm
2	Diff. Insertion Loss	10 GHz @ -3 dB
3	Diff. Return Loss	7.5 GHz @ -10 dB
4	Intra-Pair	< 2 ps




MKSI – Right Angle (Female)

MKSI right angle board surface mount connectors are used in applications where signal integrity is desired. The connector interface controls the polarization of the connector. Comes with a variety of hardware options.

GENERAL DIMENSIONS



ORDER FORM

Sample Part Number Format: MKSI-XXX-XXXX-XXX-XXXX

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
MKSI					
SERIES Right Angle (Female) 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 2000 – Female	SOCKET TERMINATION (50 μ" Au Contact) 275 – Sn/Pb alloy ☒ 278 – SAC305	BODY PLATING 2 – Electroless Nickel 6 – Gold	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***

High-Reliability Contact

MIL-DTL-83513



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

NOTES

- All microSI females have fluorosilicone interfacial seals installed.
- 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.
- *** Factory-installed and non-removable. Refer to Keying Options page.

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.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

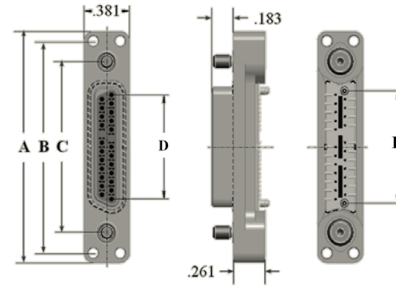
1	Diff. Impedance, filtered to 79 ps (20-80%)	100 ohm
2	Diff. Insertion Loss	10 GHz @ -3 dB
3	Diff. Return Loss	7.5 GHz @ -10 dB
4	Intra-Pair	< 2 ps




MLSI – Vertical (Male)

MLSI vertical board surface mount connectors are used in applications where signal integrity is desired. The connector interface controls the polarization of the connector. Comes with a variety of hardware options.

GENERAL DIMENSIONS



SIZE	A	B	C	D	E
1X	1.863	1.708	1.377	0.840	0.906
4X	2.493	2.338	2.007	1.470	1.536
8X	3.333	3.178	2.847	2.310	2.376

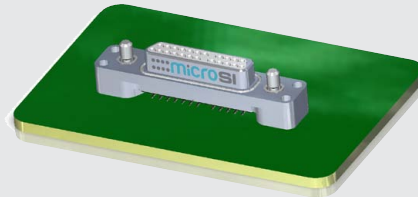
ORDER FORM

Sample Part Number Format: **MLSI-XXX-XXXX-XXX-XXXX**

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
MLSI					
SERIES Vertical (Male) 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 1000 – Male	PIN TERMINATION (50 μm Au Contact) 375 – Sn/Pb alloy ☒ 378 – SAC305	BODY PLATING 2 – Electroless Nickel 6 – Gold	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***

High-Reliability Contact

MIL-DTL-83513



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

NOTES

- ☒ 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.
- *** Factory-installed and non-removable. Refer to Keying Options page.

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.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

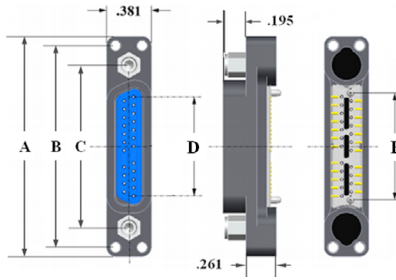
1	Diff. Impedance, filtered to 79 ps (20-80%)	100 ohm
2	Diff. Insertion Loss	10 GHz @ -3 dB
3	Diff. Return Loss	7.5 GHz @ -10 dB
4	Intra-Pair	< 2 ps




MLSI – Vertical (Female)

MLSI vertical board surface mount connectors are used in applications where signal integrity is desired. The connector interface controls the polarization of the connector. Comes with a variety of hardware options.

GENERAL DIMENSIONS



SIZE	A	B	C	D	E
1X	1.863	1.708	1.377	0.840	0.906
4X	2.493	2.338	2.007	1.470	1.536
8X	3.333	3.178	2.847	2.310	2.376

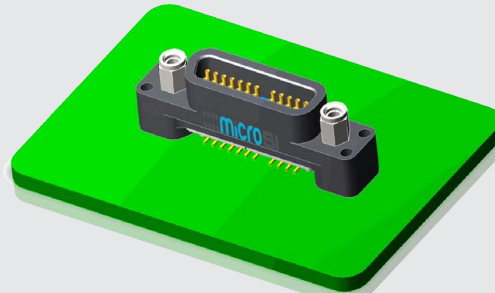
ORDER FORM

Sample Part Number Format: **MLSI-XXX-XXXX-XXX-XXXX**

MLSI	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
SERIES Vertical (Female) 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 2000 – Female	SOCKET TERMINATION (50 μm Au Contact) 475 – Sn/Pb alloy ☒ 478 – SAC305	BODY PLATING 2 – Electroless Nickel 6 – Gold	HARDWARE 620 – Fixed Jacknuts 810 – Turning Jackscrews Captivated** NXX – Keying Jacknuts*** JXX – Keying Jackscrews***

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

- All microSI females have fluorosilicone interfacial seals installed.
- ☒ 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.
- *** Factory-installed and non-removable. Refer to Keying Options page.

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.

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