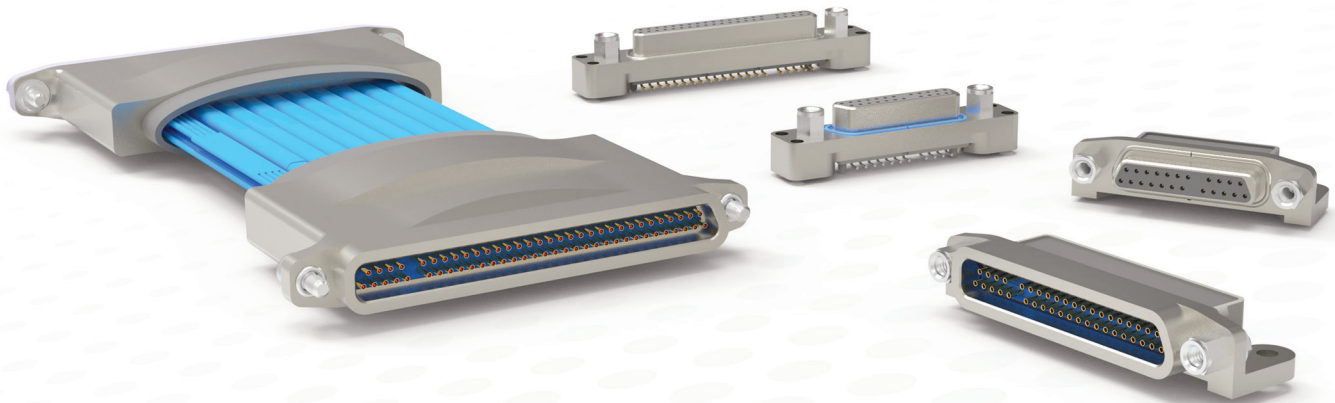


molex



AirBorn microSI

High-Speed Micro-D Connectors

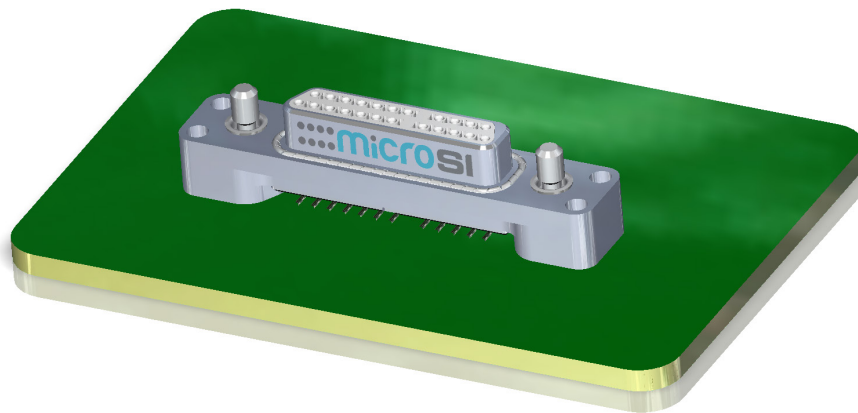


AirBorn microSI

Overview

Molex AirBorn MicroSI High-Speed Micro-D Connectors feature a rugged and compact design, meeting requirements for high-speed, high-signal-integrity applications. Ideal for use in next-generation aerospace, satellite, military and naval systems, these connectors support 1X, 4X and 8X 100-Ohm differential serial buses with up to 10Gbps data rates.

They utilize a MIL-DTL-83513-qualified four-point contact system and rugged metal shells with electromagnetic interference (EMI) shielding to ensure superior reliability in harsh conditions. Various mounting and robust cable options are available to fit a diverse array of challenging design requirements.

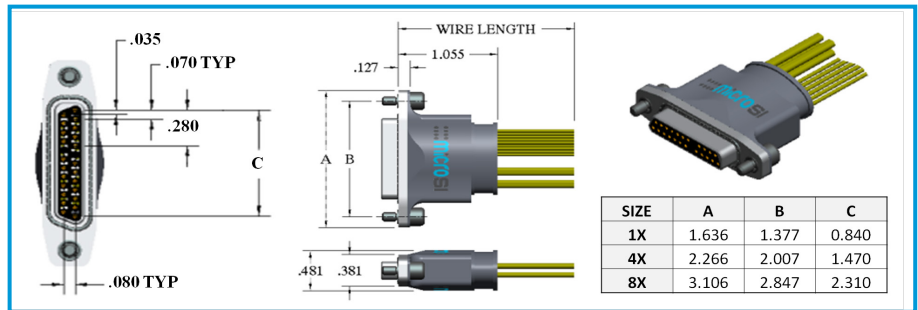




AirBorn microSI MMSI – Cable I/O (Male)

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

DIMENSIONS



Sample Part Number Format: MMSI-01L-14B0-006-2810

MMSI - **SIZE and INTERFACE POLARIZATION*** - **STYLE** - **OVERALL****** - **WIRE LENGTH'** - **BODY PLATING, INTERNAL SOLDER** - **HARDWARE**

SERIES
AirBorn microSI
Cable I/O (Male)
1.78mm

SIZE and 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, 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® sleeving
4 - Tin-plated braid, Halar® sleeving
5 - Halar® sleeving (no braid)

WIRE LENGTH'
Inches, three 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**
NXX - Keying
jacknuts***
JXX - Keying
jackscrews***

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

High-Reliability Contact
MIL-DTL-83513

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

NOTES

1. 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.

****Refer to "Keying Hardware Options" on page 48-49.

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 and L-II-49
Hardware: Corrosion-resistant steel
Interfacial Seal Gaskets: Fluorosilicone
EMI Gaskets: Corrosion-resistant steel

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

PERFORMANCE

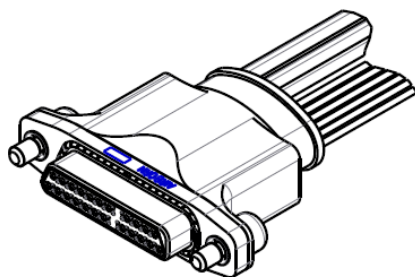
Contact Rating: 3 amperes maximum
Operating Temperature: -55° C to 125° C
Maximum Working Voltage: 200V, RMS, 60 Hz
Insulation Resistance: 5,000 megohms minimum at 500 VDC
Durability: 500 connector mating cycles
Contact Engaging Force:6.0oz. maximum/contact
Contact Separating Force: 0.5oz. minimum/contact
Mating and Unmating Force: 10.00oz. maximum/contact

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

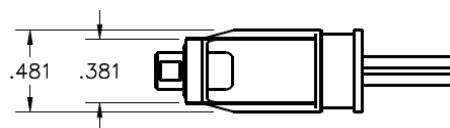
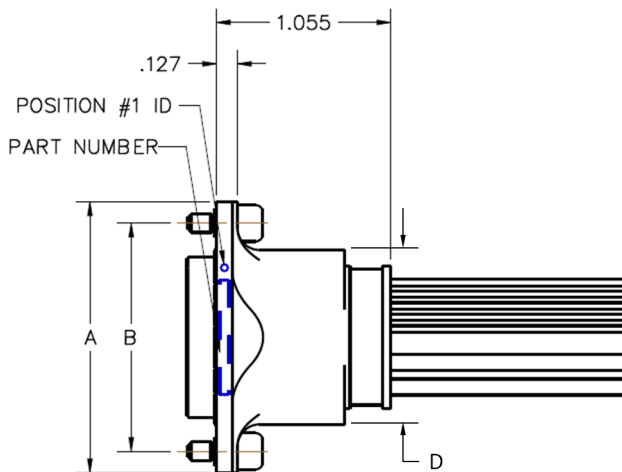
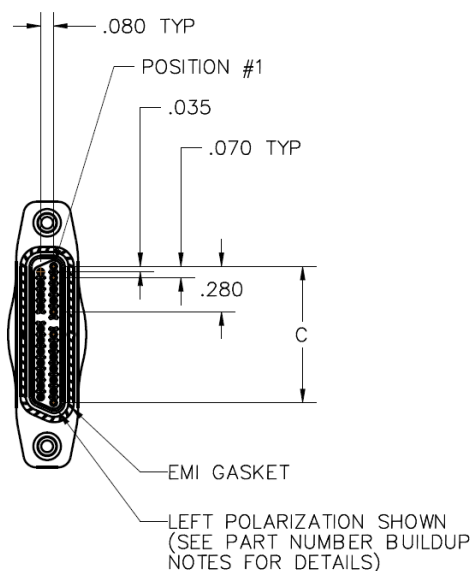
SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

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

AIRBORN MICROSI - MMSI DIMENSIONS (PLUG)



ISOMETRIC VIEW
MMSI-01L-14B0-006-2810
FOR REFERENCE ONLY



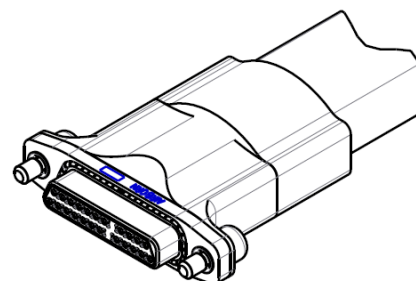
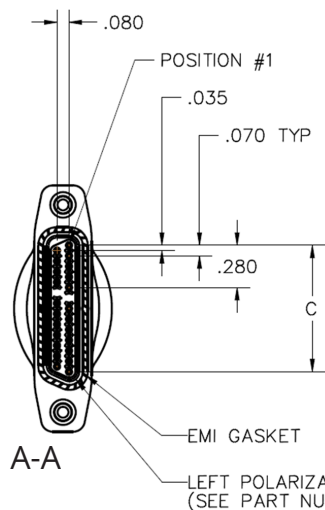
SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523

NOTES:

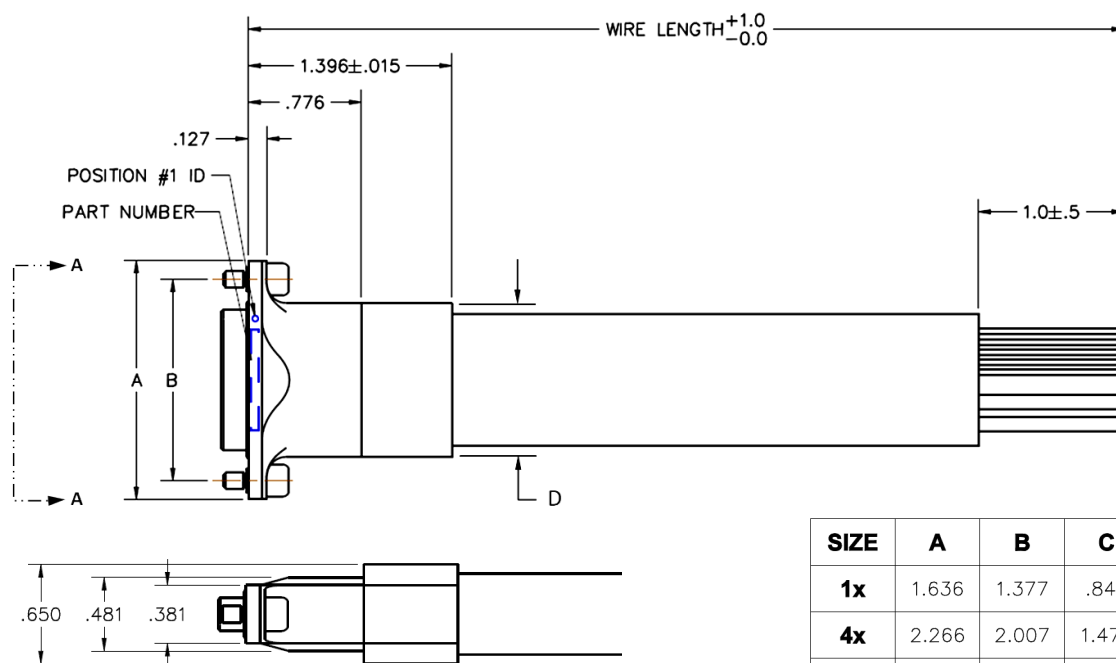
1. See next page for cable with braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

MMSIM-DIM-1
ESG6058-R0-P1Hus; et vis

AIRBORN MICROSI - MMSI DIMENSIONS with HALAR SLEEVE (PLUG)



ISOMETRIC VIEW OF PLUG END
MMSI-01L-14B3-006-2810
FOR REFERENCE ONLY



SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523

NOTES:

1. See previous page for cable without braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

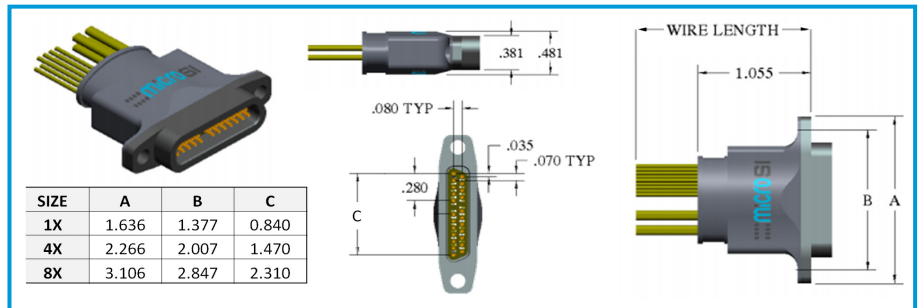
MMSIM-DIM-2
ESG6058-R0-P2



AirBorn 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. It comes with a variety of wiring and hardware options. All cable connectors are available in custom lengths.

DIMENSIONS



Sample Part Number Format: MMSI-01L-24B0-006-2810

MMSI

SERIES
AirBorn microSI
Cable I/O
(Female)
1.78mm

SIZE and 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
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® sleeving
4 – Tin-plated braid, Halar® sleeving
5 – Halar® sleeving (no braid)

WIRE LENGTH*
Inches, three digits
Ex. 018 = 18 inches

HARDWARE
620 – Fixed jacknut
810 – Turning jackscrews;
captivated**
NXX – Keying jacknuts***
JXX – Keying jackscrews***

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

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

High-Reliability Contact
MIL-DTL-83513

PLEASE CONSULT THE MOLEX 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 three inches. If overall braid or Halar® is specified the minimum length is six 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.

****Refer to "Keying Hardware Options" on pae 48-49.

MATERIALS and FINISHES

Socket Contact: Brass
Pin Contacts: BeCu alloy strip
Contact Finish: Gold plate, 50 µin 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 and L-II-49
Hardware: Corrosion-resistant steel
Interfacial Seal Gaskets: Fluorosilicone
EMI Gaskets: Corrosion-resistant steel

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

PERFORMANCE

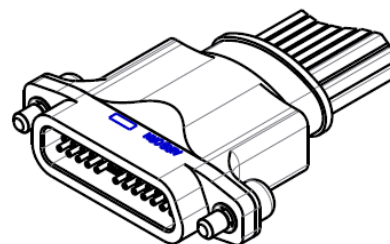
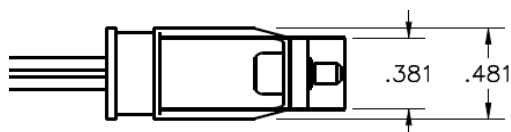
Contact Rating: 3 amperes maximum
Operating Temperature: -55° C to 125° C
Maximum Working Voltage: 200V, RMS, 60Hz
Insulation Resistance: 5,000 megohms minimum at 500 VDC
Durability: 500 connector mating cycles
Contact Engaging Force:60oz. maximum/contact
Contact Separating Force: 0.5oz. minimum/contact
Mating and Unmating Force: 1.0oz. maximum/contact

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

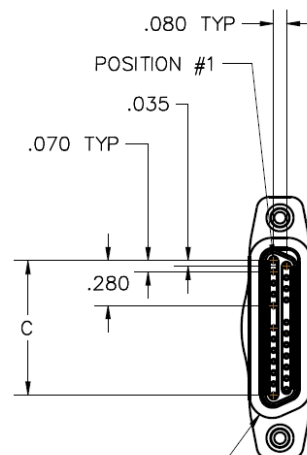
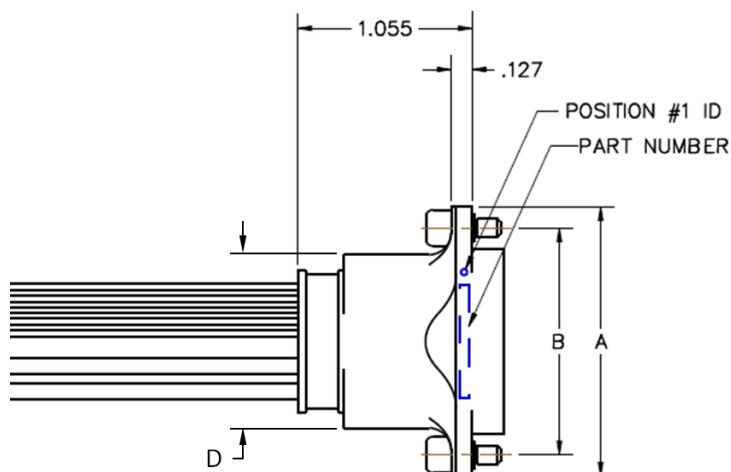
SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

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

AIRBORN MICROSI - MMSI DIMENSIONS (RECEPTACLE)



ISOMETRIC VIEW
MMSI-01L-24B0-006-2810
FOR REFERENCE ONLY



LEFT POLARIZATION SHOWN
(SEE PART NUMBER BUILDUP
NOTES FOR DETAILS)

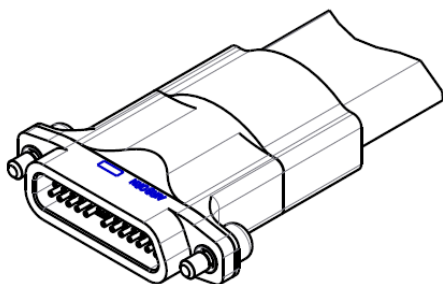
SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523

NOTES:

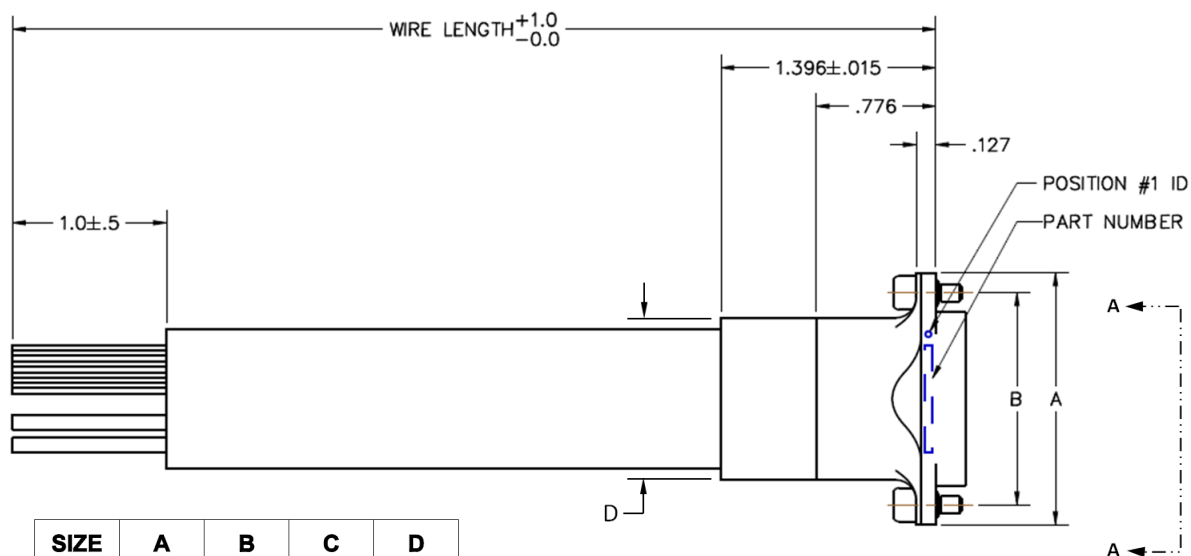
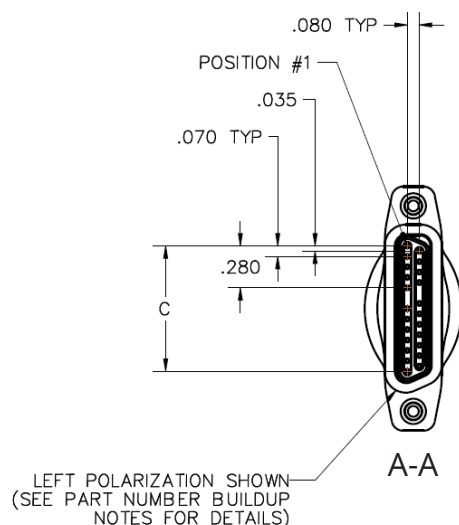
1. See next page for cable with braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

MMSIF-DIM-1
ESG6059-R0-P1

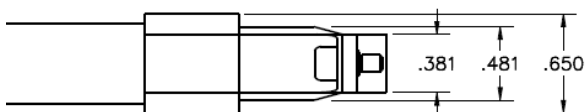
AIRBORN MICROSI - MMSI DIMENSIONS with HALAR SLEEVE (RECEPTACLE)



ISOMETRIC VIEW OF RCPT END
MMSI-01L-24B3-006-2810
FOR REFERENCE ONLY



SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523



NOTES:

1. See previous page for cable without braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

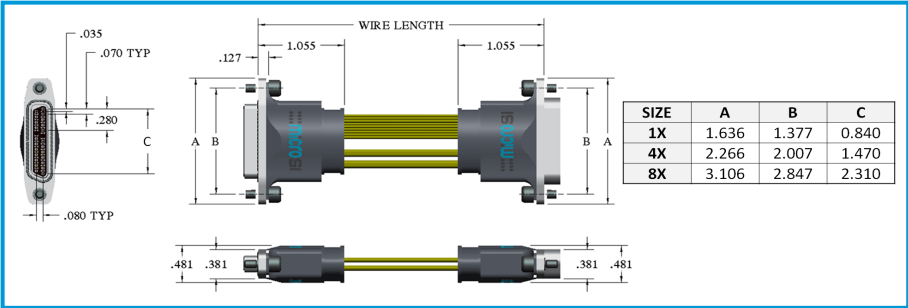
MMSIF-DIM-2
ESG6059-R0-P2



AirBorn 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.

DIMENSIONS



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

MJSI

SERIES
AirBorn microSI Cable Assembly
1.78mm

SIZE and 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

WIRE LENGTH¹
Inches, three digits
Ex. 018 = 18 inches

HARDWARE

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

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)

BODY PLATING, INTERNAL SOLDER

1 – Electroless nickel, SAC305
2 – Electroless nickel, Sn/Pb ☒
5 – Gold, SAC305
6 – Gold, Sn/Pb ☒

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

High-Reliability Contact
MIL-DTL-83513

PLEASE CONSULT THE MOLEX 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 three inches. If overall braid or Halar® is specified the minimum length is six 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.

*** Factory-installed and non-removable.

****Refer to "Keying Hardware Options" on page 48-49.

MATERIALS and FINISHES

Socket Contact:	Brass
Pin Contacts:	BeCu alloy strip
Contact Finish:	Gold plate, 50 µin 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 and L-II-49
Hardware:	Corrosion-resistant steel
Interfacial Seal Gaskets:	Fluorosilicone
EMI Gaskets:	Corrosion-resistant steel

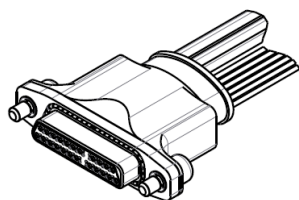
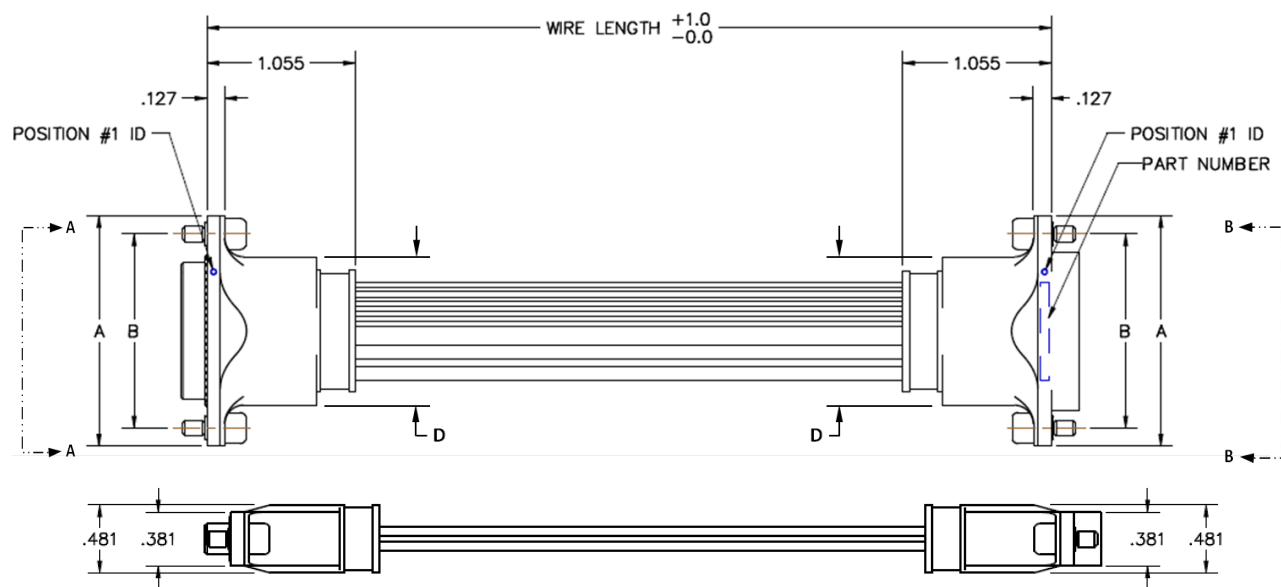
NOTE: Molex can manufacture special configurations to your exact specifications.

PERFORMANCE

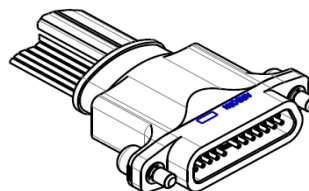
Contact Rating:	3 amperes maximum
Operating Temperature:	-55° C to 125° C
Maximum Working Voltage:	200V, RMS, 60 Hz
Insulation Resistance:	5,000 megohms minimum at 500 VDC
Durability:	500 connector mating cycles
Contact Engaging Force:	6.0oz maximum/contact
Contact Separating Force:	0.5oz minimum/contact
Mating and Unmating Force:	10.0oz maximum/contact

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

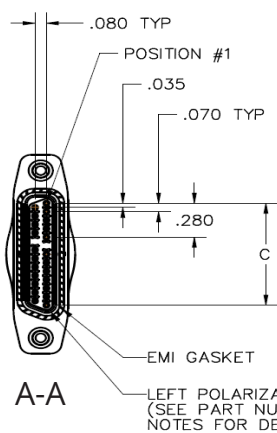
AIRBORN MICROSI - MJSI DIMENSIONS



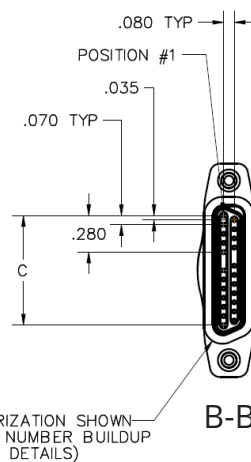
ISOMETRIC VIEW OF PLUG END
MJSI-01L-24B0-006-2810
FOR REFERENCE ONLY



ISOMETRIC VIEW OF RCPT END
MJSI-01L-24B0-006-2810
FOR REFERENCE ONLY



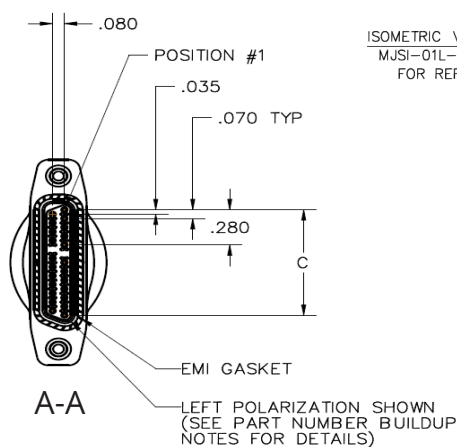
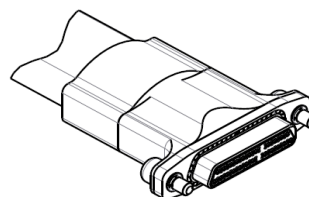
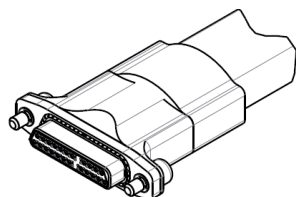
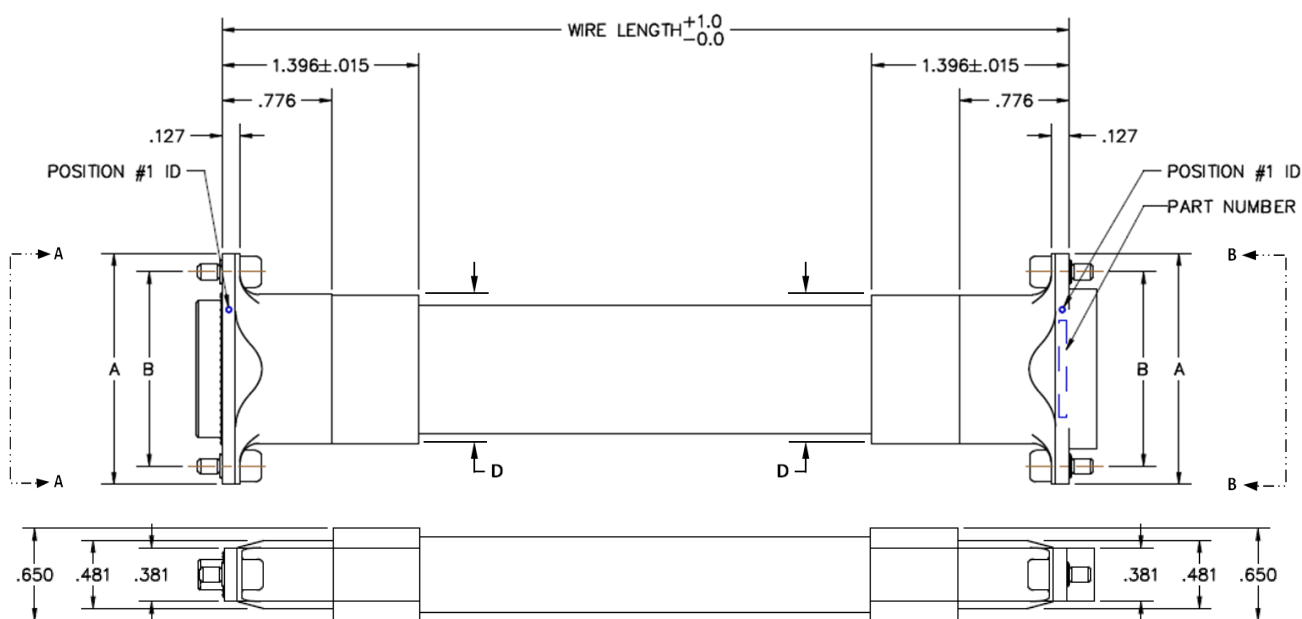
SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523



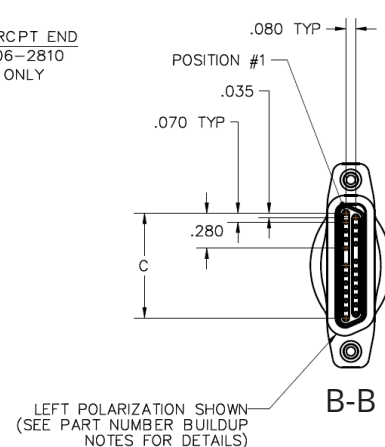
NOTES:

1. See next page for cable with braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

MJSI-DIM-1
ESG6060-R0-P1



SIZE	A	B	C	D
1x	1.636	1.377	.840	1.053
4x	2.266	2.007	1.470	1.683
8x	3.106	2.847	2.310	2.523



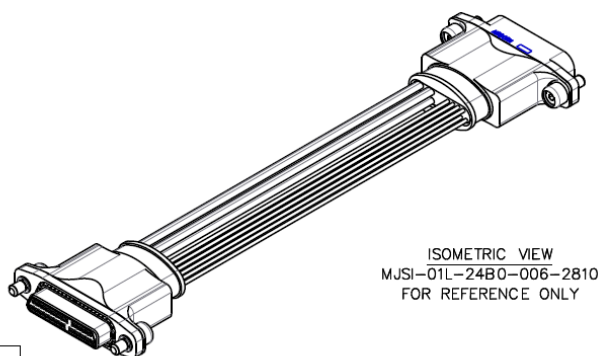
NOTES:

1. See previous page for cable without braid or Halar®
2. Plug to receptacle jumper shown. See Part Number Buildup for available options.
3. See "Polarized Interface Pinouts" on page 46-47
4. See "Keying Hardware Options" on page 48-49

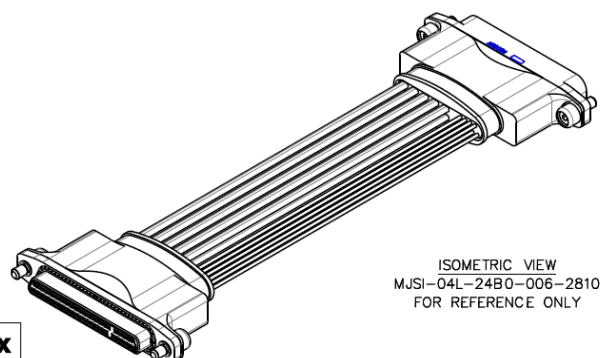
MJSI-DIM-2
ESG6060-R0-P2

AIRBORN MICROSI - MJSI MATING FACE ORIENTATION

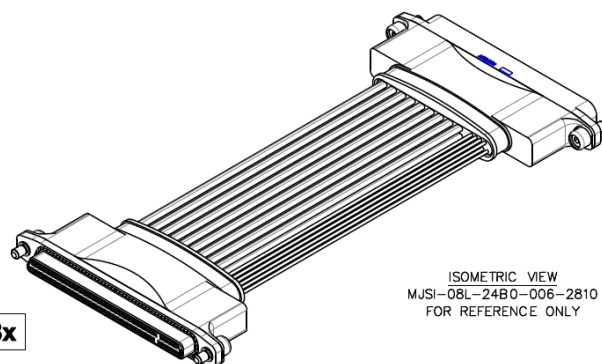
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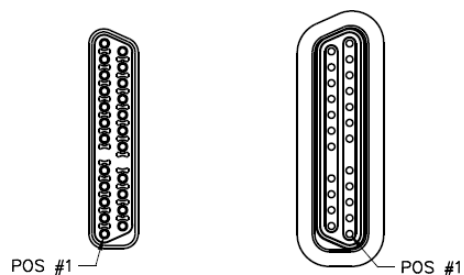
4x



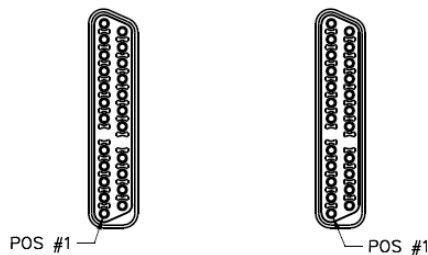
8x



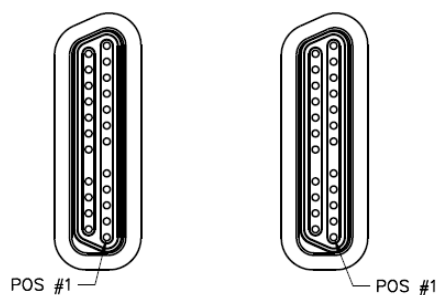
MATING FACE ORIENTATION



PLUG TO RECEPTACLE



PLUG TO PLUG



RECEPTACLE TO RECEPTACLE

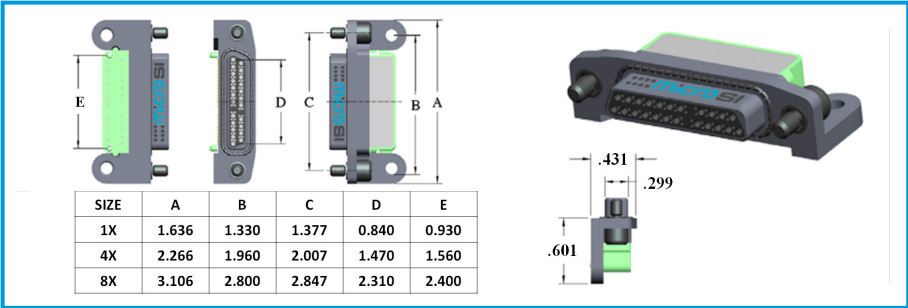
LEFT POLARIZATION SHOWN
(SEE PART NUMBER BUILDUP NOTES FOR DETAILS)



AirBorn microSI
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.

DIMENSIONS



Sample Part Number Format: MKSI-01R-1000-175-2810

MKSI

SERIES
AirBorn microSI
Right-Angle Male)
1.78mm

SIZE and 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 inches Au Contact)
175 – Sn/Pb alloy ☒
178 – SAC305

BODY PLATING
2 – Electroless nickel
6 – Gold

HARDWARE
620 – Fixed jacknut
810 – Turning jackscrews, captivated**
NXX – Keying jacknuts***
JXX – Keying jackscrews***

High-Reliability Contact
MIL-DTL-83513

PLEASE CONSULT THE MOLEX 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 Hardware Options" on page 48-49.

MATERIALS and FINISHES

- Socket Contact: Brass
- Pin Contacts: BeCu alloy strip
- Contact Finish: Gold plate, 50 μin 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 and L-II-49
- Hardware: Corrosion-resistant steel
- Interfacial Seal Gaskets: Fluorosilicone
- EMI Gaskets: Corrosion-resistant steel

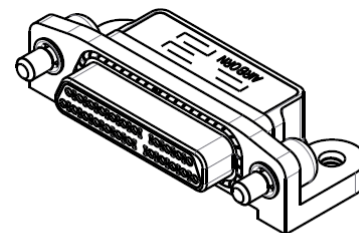
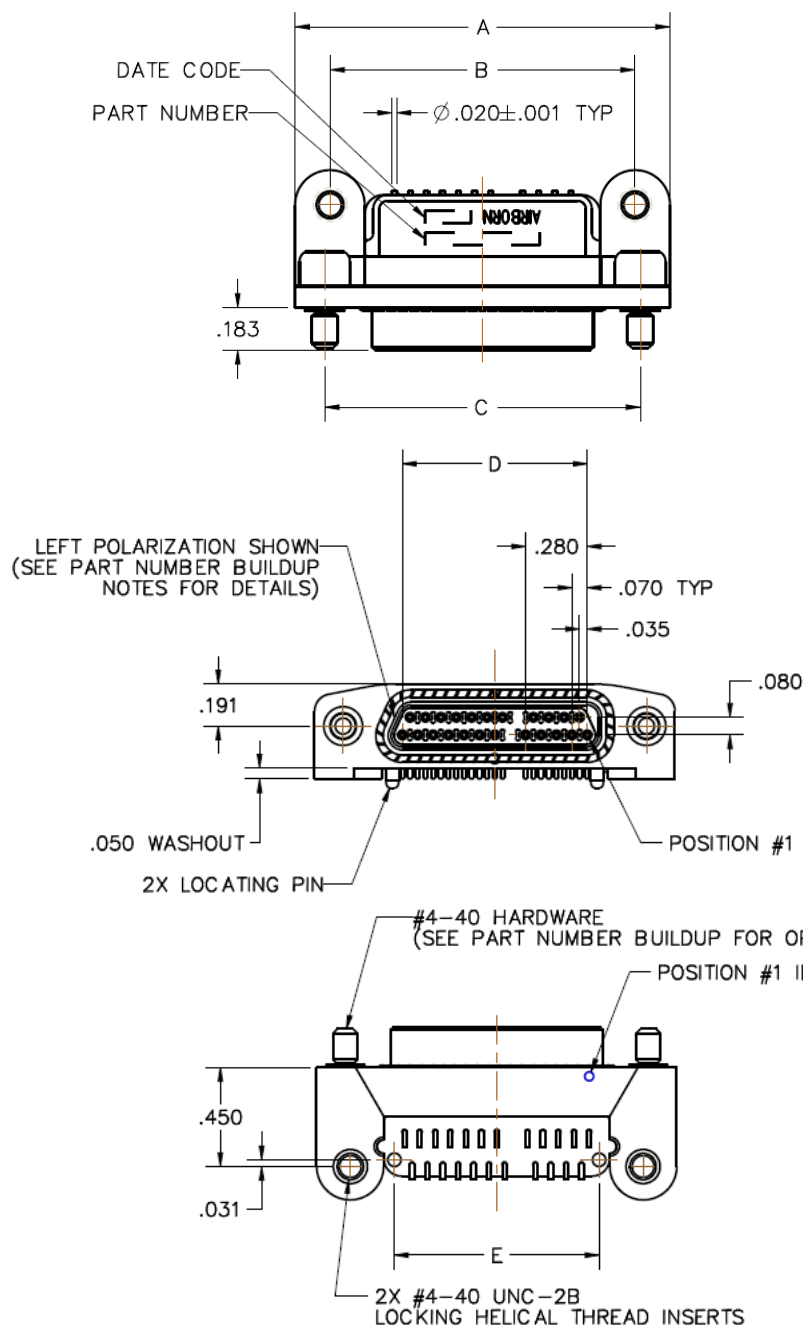
NOTE: Molex can manufacture special configurations to your exact specifications.

PERFORMANCE

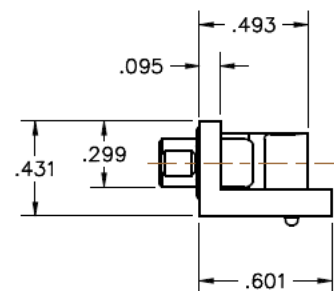
- Contact Rating: 3 amperes maximum
 - Operating Temperature: -55° C to 125° C
 - Maximum Working Voltage: 200V, RMS, 60 Hz
 - Insulation Resistance: 5,000 megohms minimum at 500 VDC
 - Durability: 500 connector mating cycles
 - Contact Engaging Force:60oz. maximum/contact
 - Contact Separating Force:05oz. minimum/contact
 - Mating and Unmating Force: 10oz. 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 Ω
2	Diff. Insertion Loss	10 GHz at -3 dB
3	Diff. Return Loss	7.5 GHz at -10 dB
4	Intra-Pair	< 2 ps

AIRBORN MICROSI - MKSI DIMENSIONS (PLUG)



ISOMETRIC VIEW
MKSI-01L-1000-175-2810
FOR REFERENCE ONLY



SIZE	A	B	C	D	E
1x	1.636	1.330	1.377	.840	.930
4x	2.266	1.960	2.007	1.470	1.560
8x	3.106	2.800	2.847	2.310	2.400

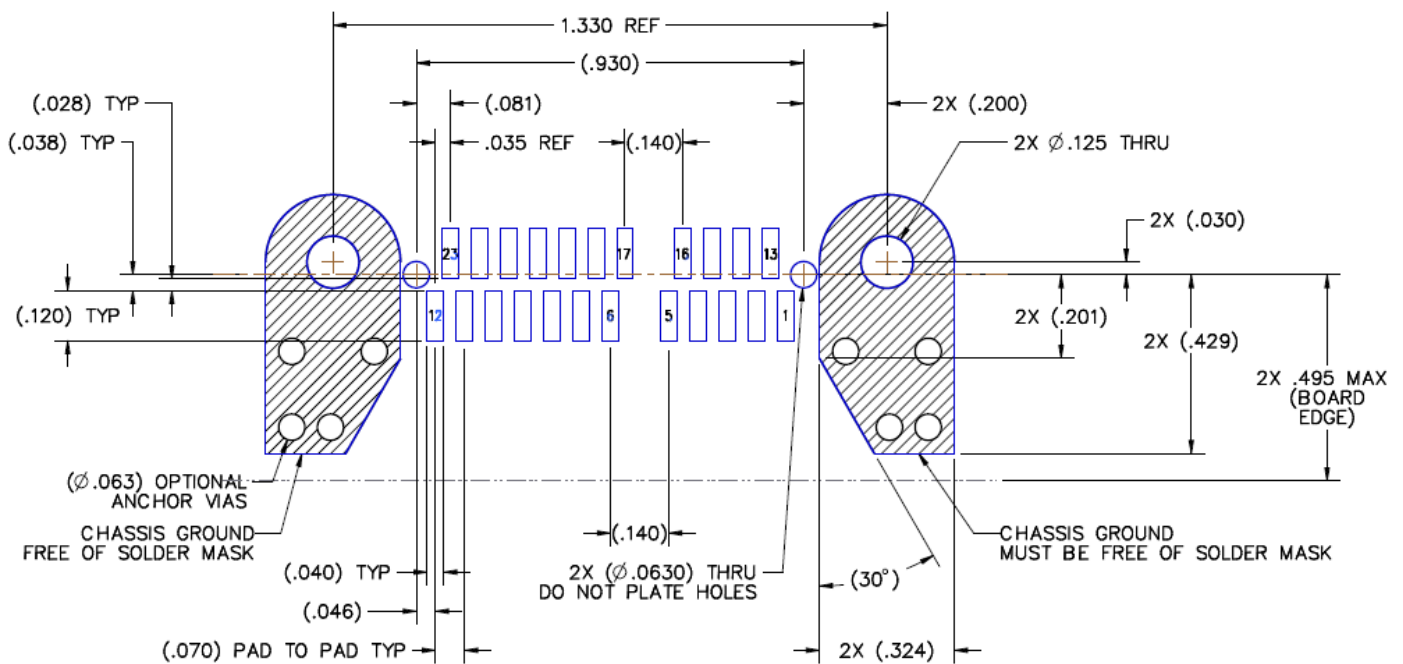
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIM-DIM-1
ESG6056-R0-P1

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

1X Sample with Left Polarization



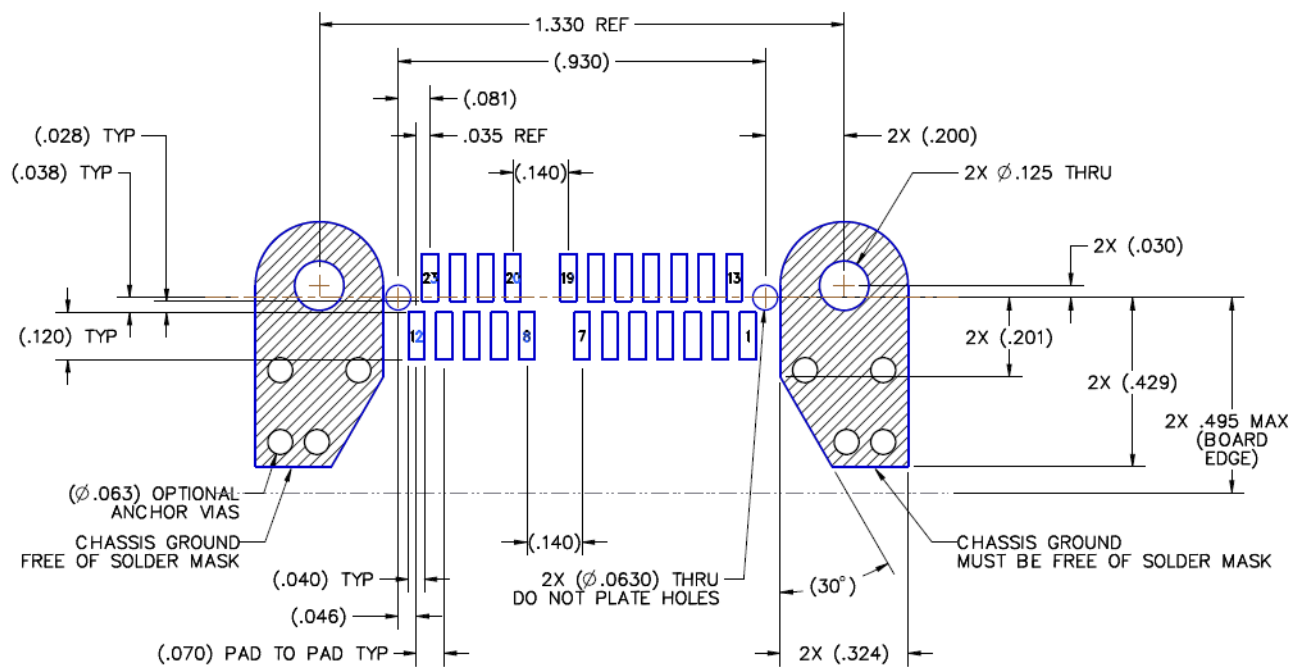
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIM-PCB-1
ESG6056-R0-P4

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

1X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

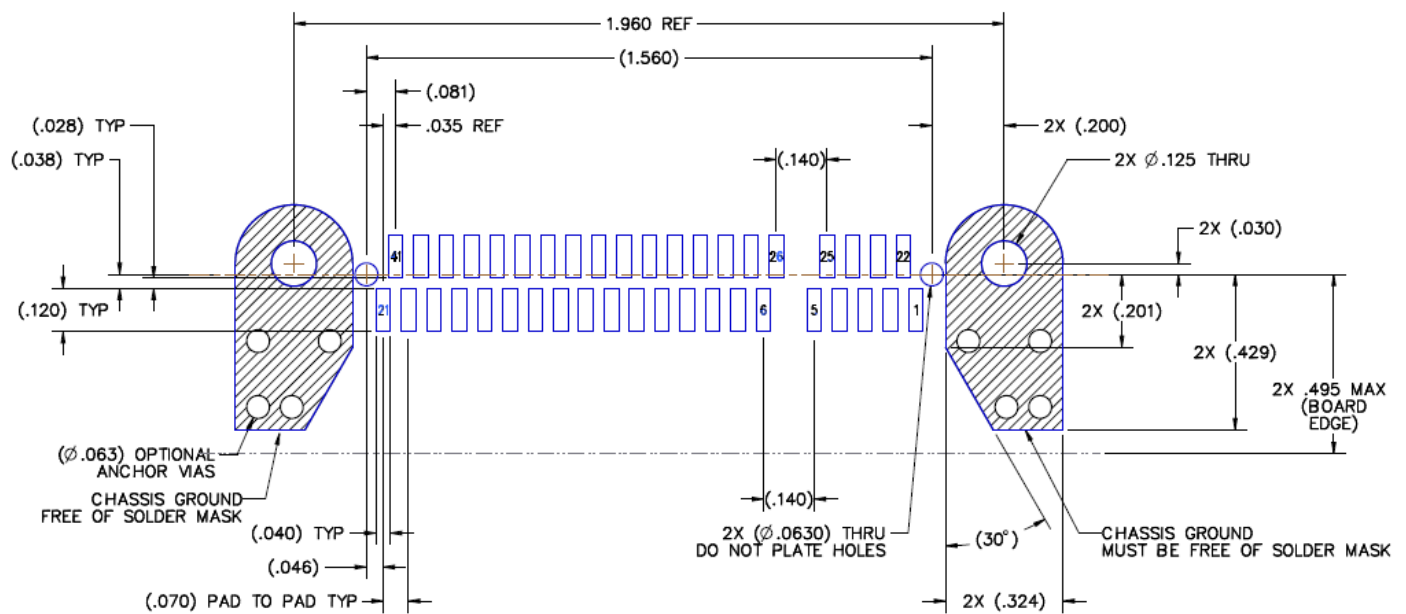
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIM-PCB-2
ESG6056-R0-P5

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

4X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

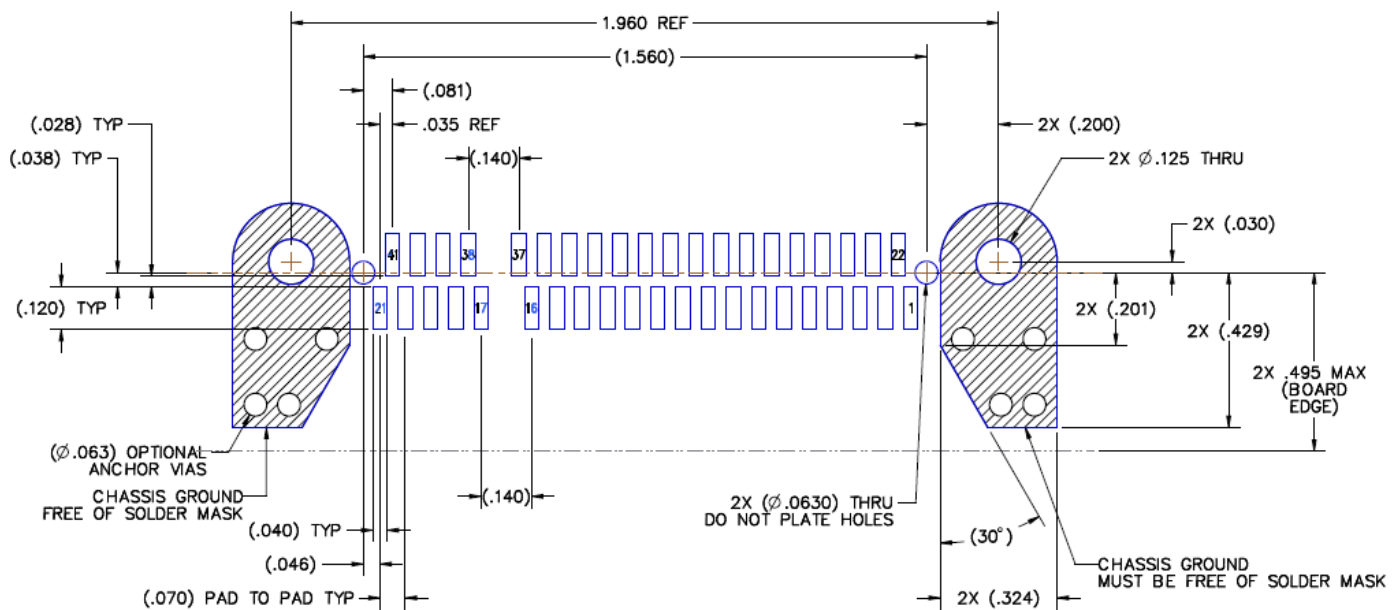
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See “Polarized Interface Pinouts” on page 46-47
5. See “Keying Hardware Options” on page 48-49

MKSIM-PCB-3
ESG6056-R0-P6

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

4X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

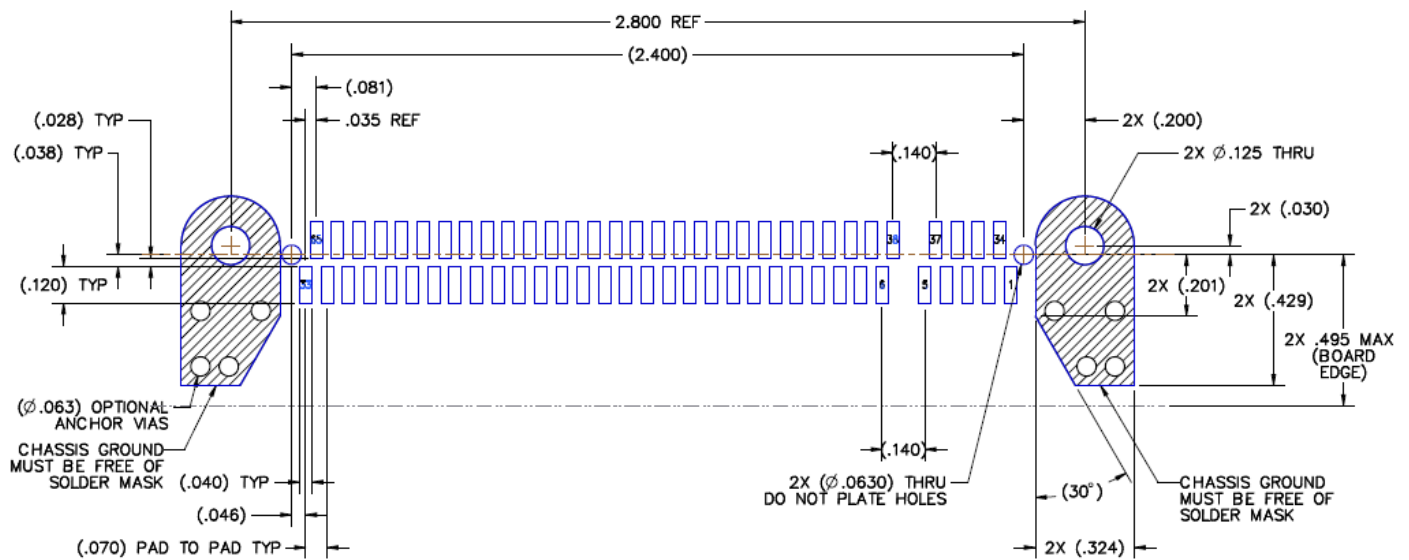
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIM-PCB-4
ESG6056-R0-P7

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

8X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

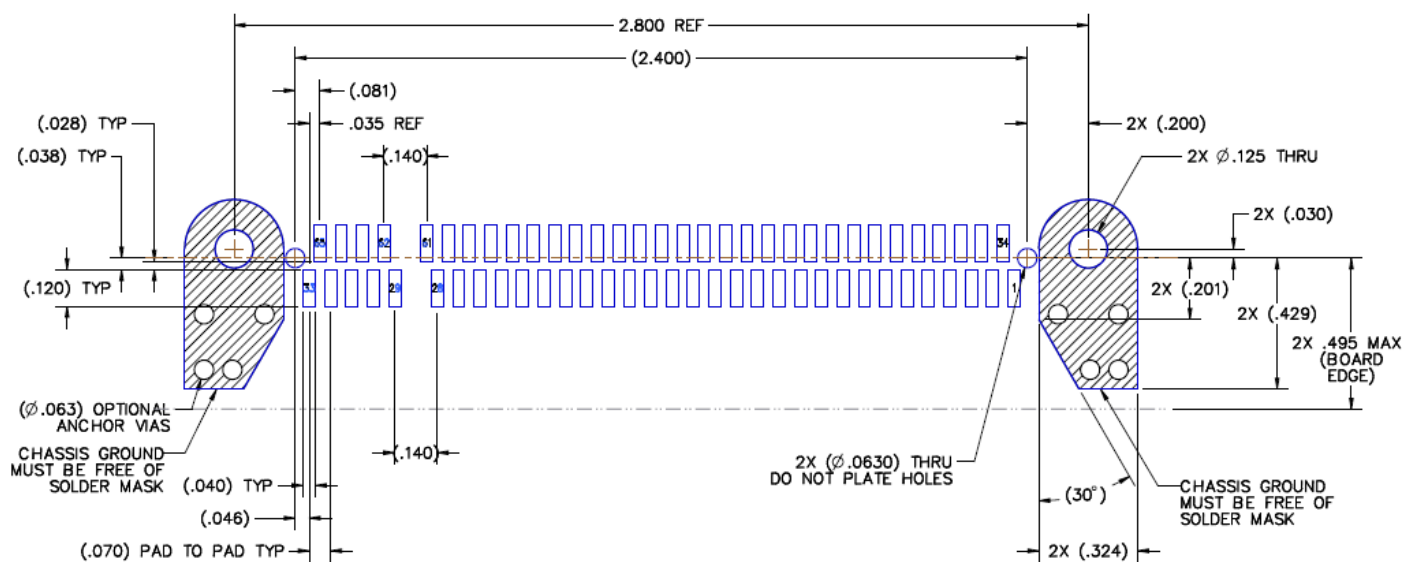
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIM-PCB-5
ESG6056-R0-P8

AIRBORN MICROSI - MKSI RECOMMENDED PC BOARD LAYOUT (PLUG)

8X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

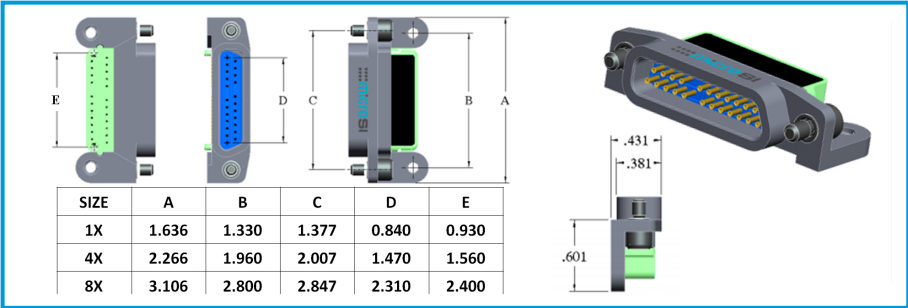
MKSIM-PCB-6
ESG6056-R0-P9



AirBorn microSI
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. It comes with a variety of hardware options.

DIMENSIONS



Sample Part Number Format: MKSI-01L-2000-275-2620

MKSI

SERIES
AirBorn microSI Right-Angle (Female)
1.78mm

SIZE and 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 jacknut
810 – Turning jackscrews, captivated**
NXX – Keying jacknuts***
JXX – Keying jackscrews***

High-Reliability Contact
MIL-DTL-83513

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

NOTES

- 1.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 Hardware Options" on page 48-49.

MATERIALS and FINISHES

- Socket Contact: Brass
- Pin Contacts: BeCu alloy strip
- Contact Finish: Gold plate, 50 μin 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 and L-II-49
- Hardware: Corrosion-resistant steel
- Interfacial Seal Gaskets: Fluorosilicone
- EMI Gaskets: Corrosion-resistant steel

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

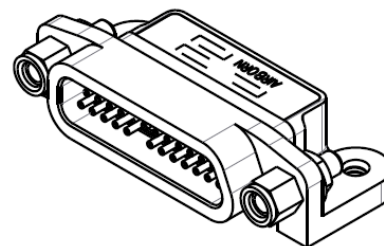
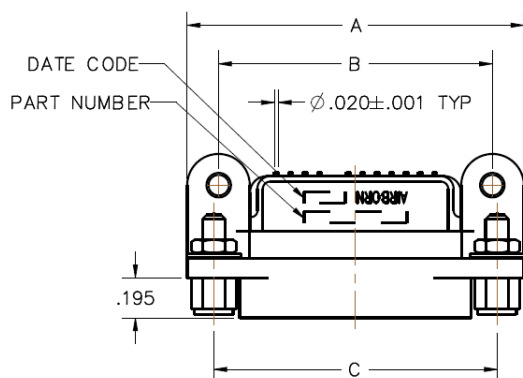
PERFORMANCE

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

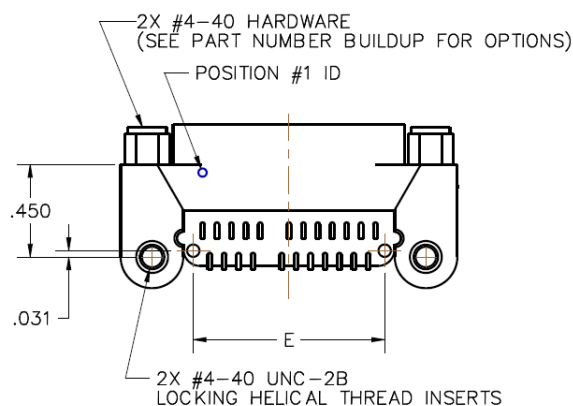
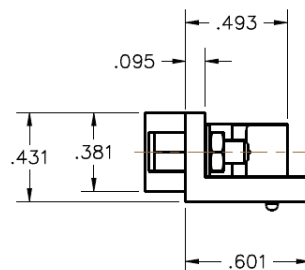
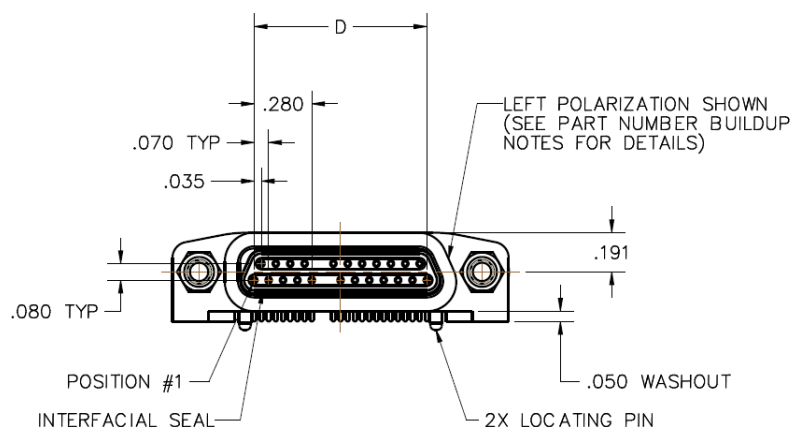
NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.

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

AIRBORN MICROSI - MKSI DIMENSIONS (RECEPTACLE)



ISOMETRIC VIEW
MKSI-01L-2000-275-2620
FOR REFERENCE ONLY



SIZE	A	B	C	D	E
1x	1.636	1.330	1.377	.840	.930
4x	2.266	1.960	2.007	1.470	1.560
8x	3.106	2.800	2.847	2.310	2.400

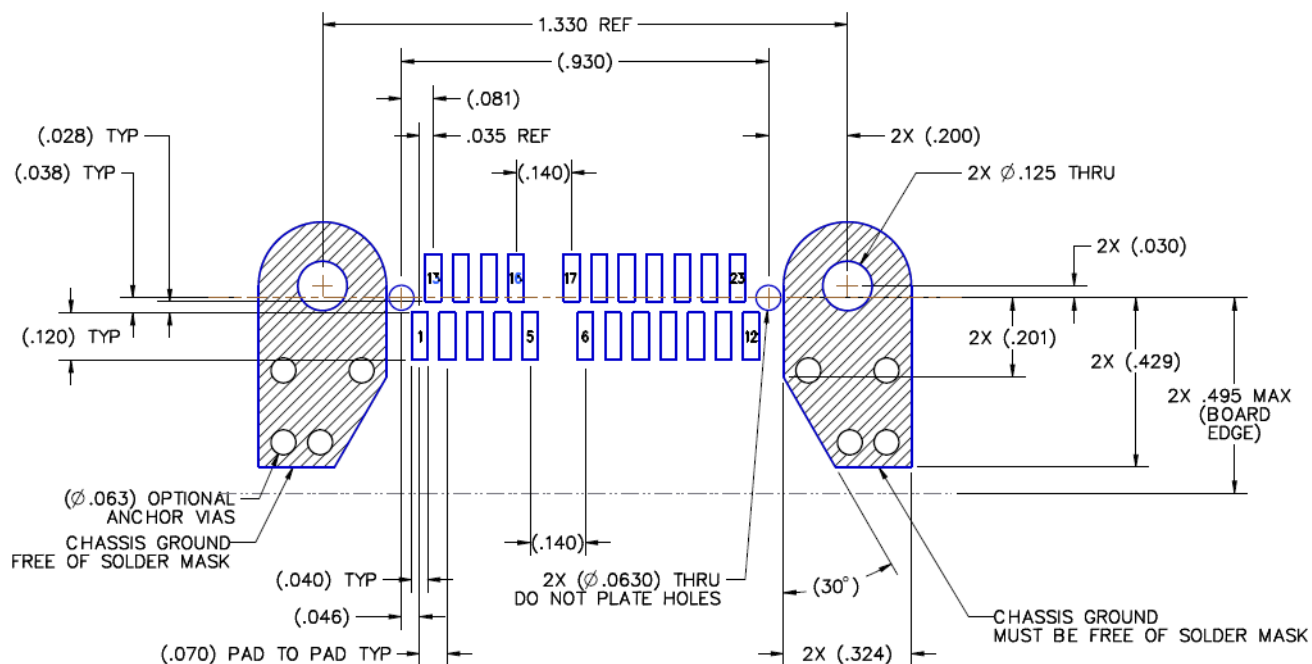
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIF-DIM-1
ESG6057-R0-P1

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

1X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

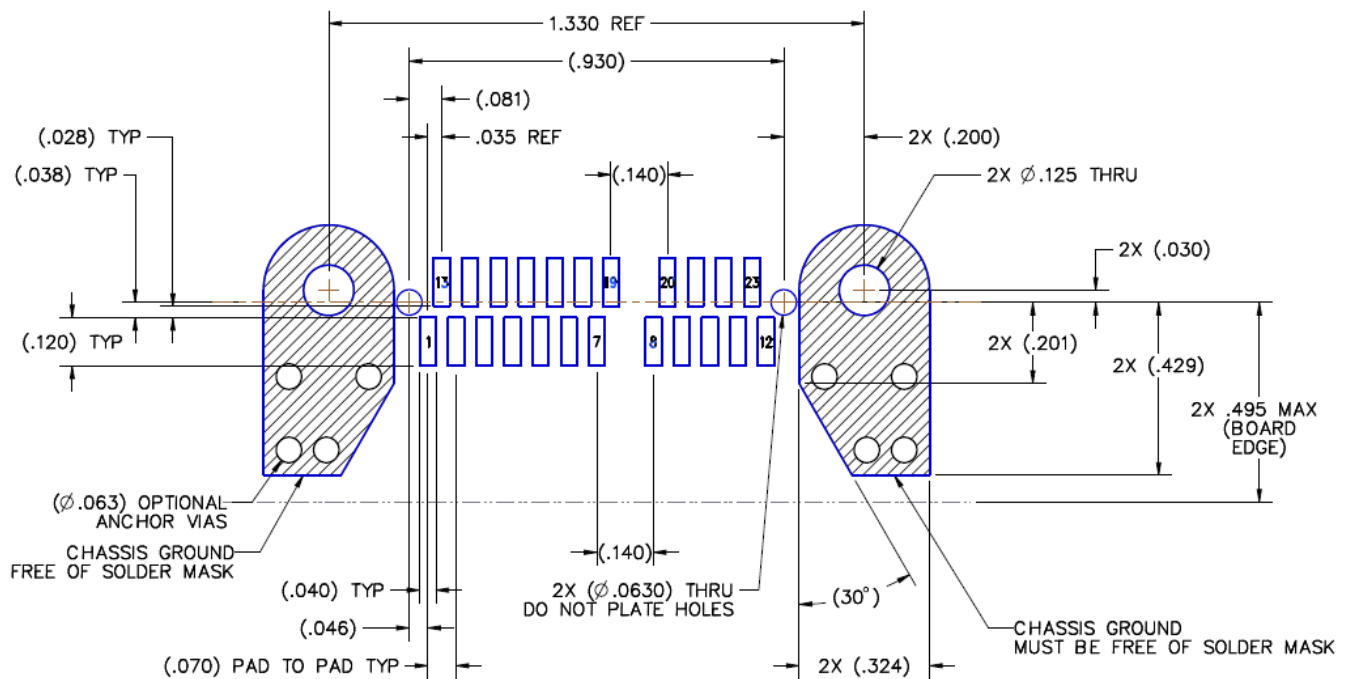
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIF-PCB-1
ESG6057-R0-P4

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

1X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

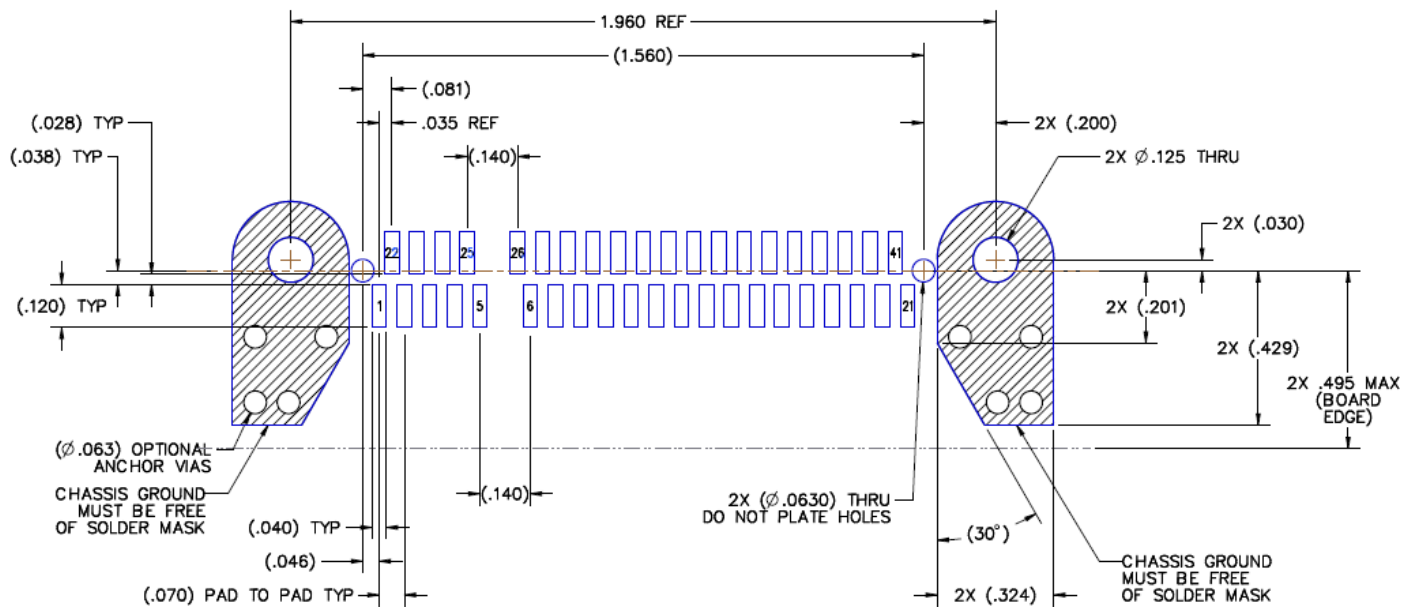
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIF-PCB-2
ESG6057-R0-P5

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

4X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

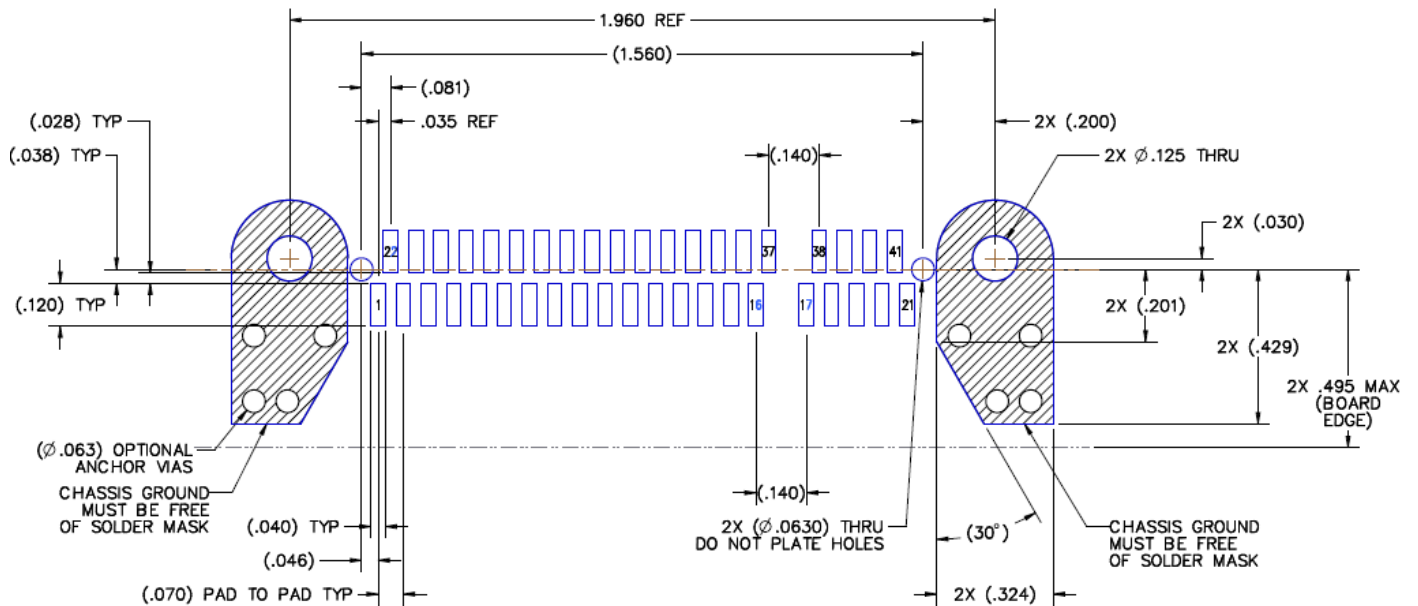
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See “Polarized Interface Pinouts” on page 46-47
5. See “Keying Hardware Options” on page 48-49

MKSIF-PCB-3
ESG6057-R0-P6

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

4X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

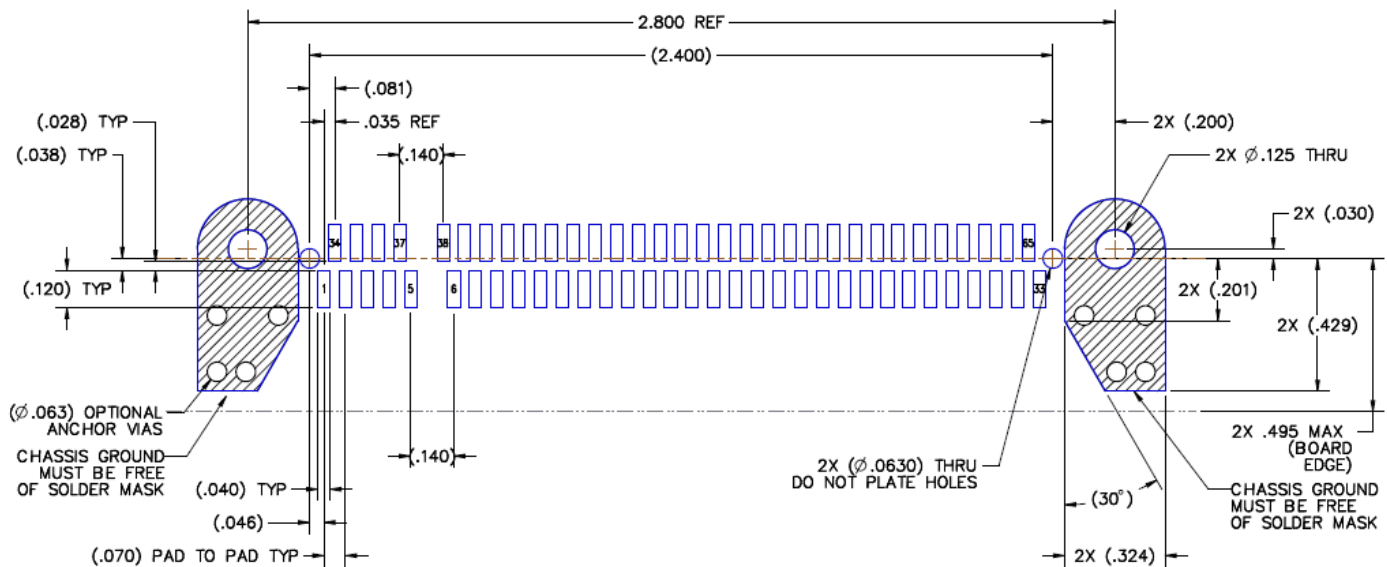
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIF-PCB-4
ESG6057-R0-P7

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

8X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

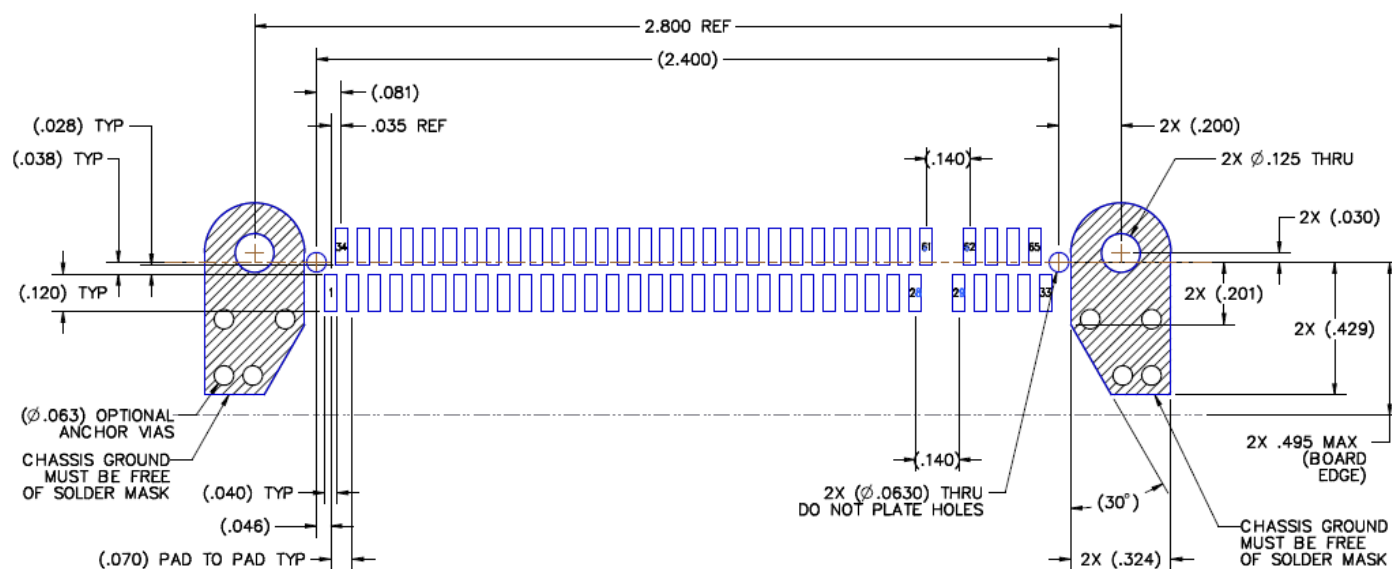
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MKSIF-PCB-5
ESG6057-R0-P8

AIRBORN MICROSI - MKSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

8X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See “Polarized Interface Pinouts” on page 46-47
5. See “Keying Hardware Options” on page 48-49

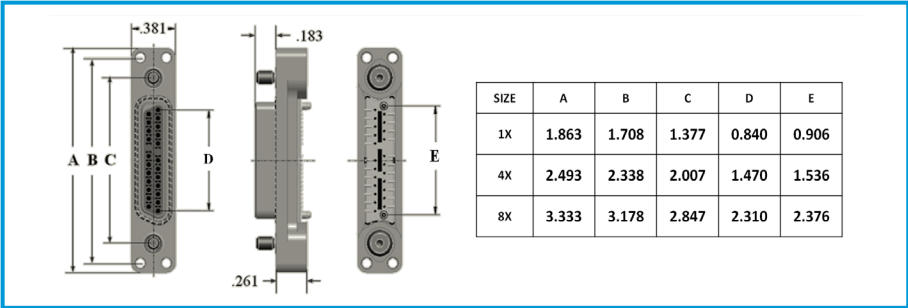
MKSIF-PCB-6
ESG6057-R0-P9



AirBorn microSI
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. It comes with a variety of hardware options.

DIMENSIONS



Sample Part Number Format: MLSI-08L-1000-378-2810

MLSI

SERIES
AirBorn microSI
Vertical (Male)
1.78mm

**SIZE and 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)**
375 – Sn/Pb alloy ☒
378 – SAC305

BODY PLATING
2 – Electroless nickel
6 – Gold

HARDWARE
620 – Fixed jacknut
810 – Turning jackscrews,
captivated**
NXX – Keying jacknuts***
JXX – Keying jackscrews***

High-Reliability Contact
MIL-DTL-83513

PLEASE CONSULT THE MOLEX 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 Hardware Options” on page 48-49

MATERIALS and FINISHES

Socket Contact: Brass
Pin Contacts: BeCu alloy strip
Contact Finish: Gold plate, 50 pinminimum
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 and L-II-49
Hardware: Corrosion-resistant steel
Interfacial Seal Gaskets: Fluorosilicone
EMI Gaskets: Corrosion-resistant steel

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

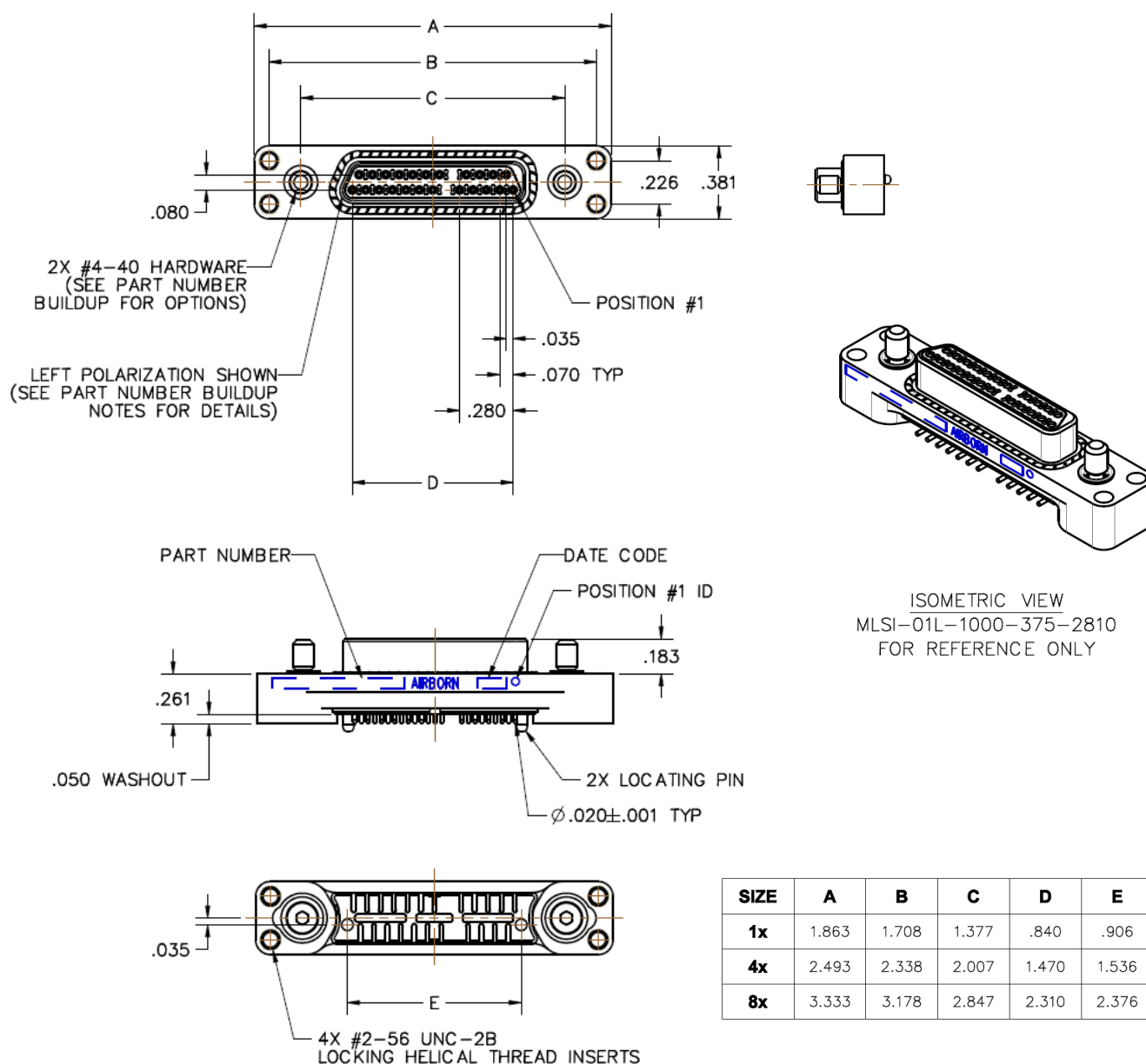
PERFORMANCE

Contact Rating: 3 amperes maximum
Operating Temperature: -55° C to 125° C
Maximum Working Voltage: 200V, RMS, 60 Hz
Insulation Resistance: 5,000 megohms minimum at 500 VDC
Durability: 500 connector mating cycles
Contact Engaging Force: 6.0oz maximum/contact
Contact Separating Force: 0.5oz minimum/contact
Mating and Unmating Force: 10.0 oz 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 Ω
2	Diff. Insertion Loss	10 GHz at -3 dB
3	Diff. Return Loss	7.5 GHz at -10 dB
4	Intra-Pair	< 2 ps

AIRBORN MICROSI - MLSI DIMENSIONS (PLUG)



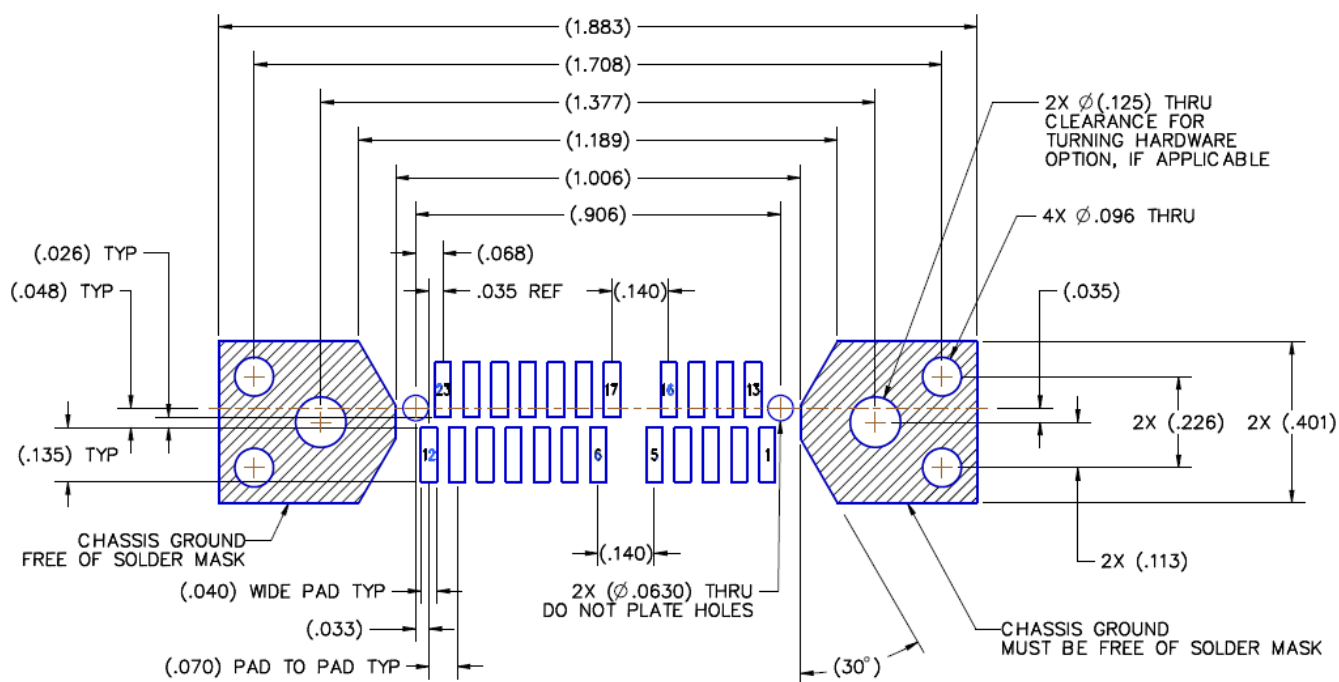
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIM-DIM-1
ESG6054-R0-P1

AIRBORN MICROSI - MLSI RECOMMENDED PC BOARD LAYOUT (PLUG)

1X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

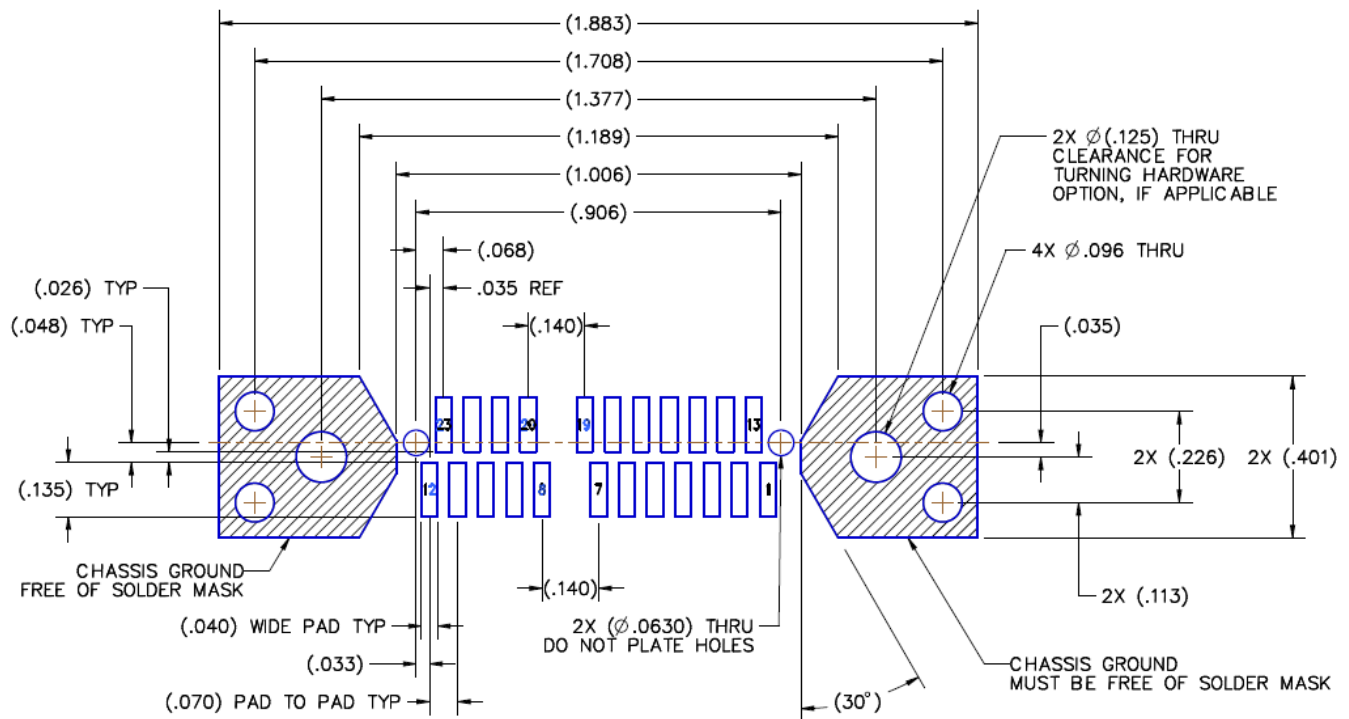
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIM-PCB-1
ESG6054-R0-P4

AIRBORN MICROSI - MLSI RECOMMENDED PC BOARD LAYOUT (PLUG)

1X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIM-PCB-2
ESG6054-R0-P5

(.026) TYP
(.048) TYP
(.135) TYP
MUST BE FREE OF SOLDER MASK
CHASSIS GROUND MUST BE FREE OF SOLDER MASK
(.040) WIDE PAD TYP
(.033)
(.070) PAD TO PAD TYP

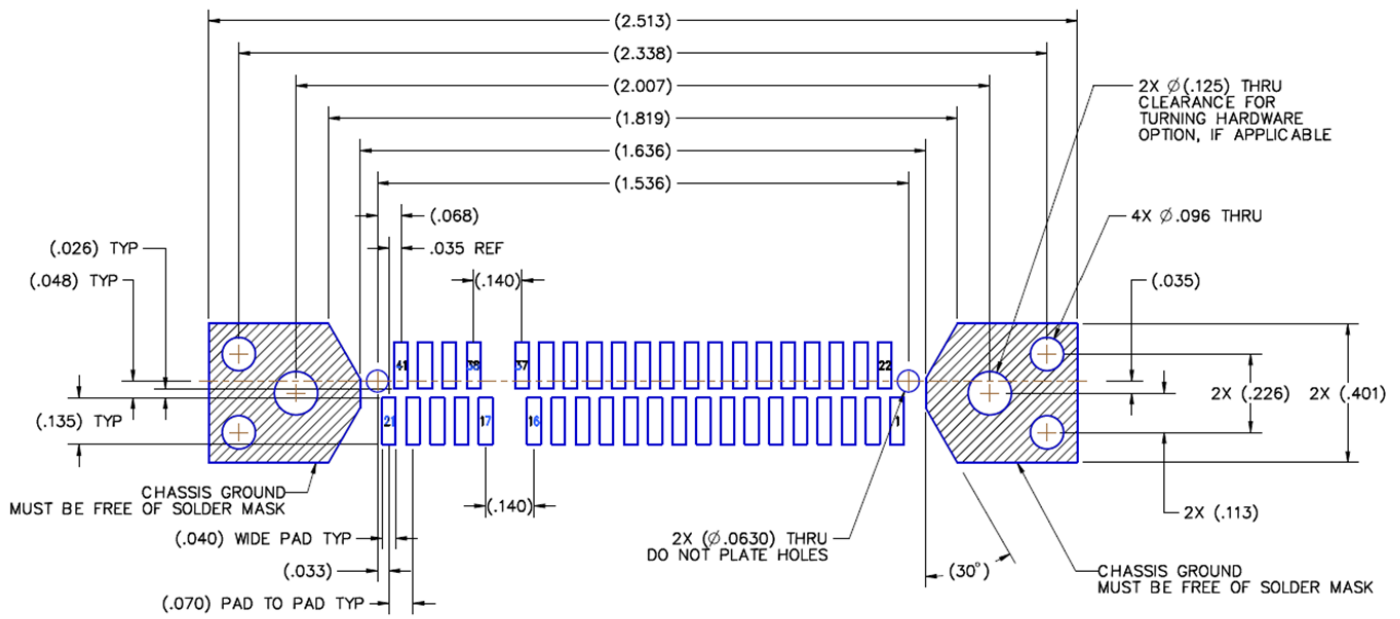
(2.513)
(2.338)
(2.007)
(1.819)
(1.636)
(1.536)
(.068)
.035 REF
(.140)
2X (.0630) THRU
DO NOT PLATE HOLES
2X (.125) THRU
CLEARANCE FOR
TURNING HARDWARE
OPTION, IF APPLICABLE
4X .096 THRU
(.035)
2X (.226)
2X (.401)
2X (.113)
(.30°)
CHASSIS GROUND
MUST BE FREE OF SOLDER MASK

NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

MLSIM-PCB-3
ESG6054-R0-P6

AIRBORN MICROSI - MLSI RECOMMENDED PC BOARD LAYOUT (PLUG)

4X Sample with Right Polarization



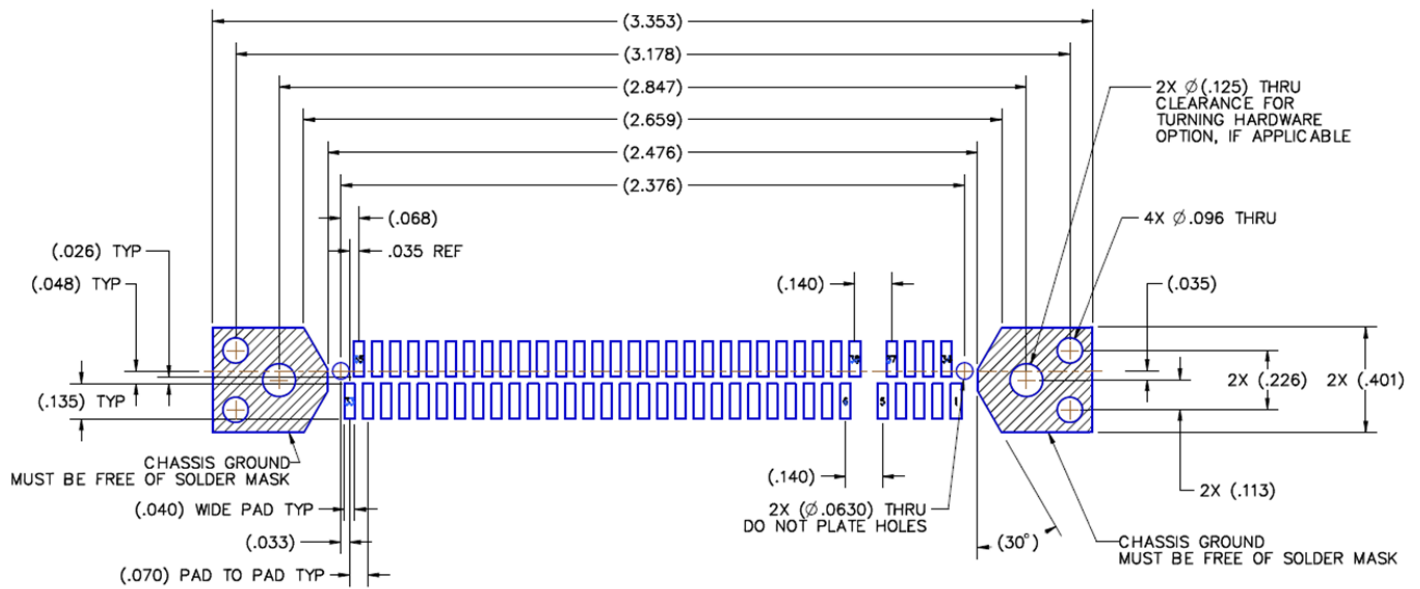
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIM-PCB-4
ESG6054-R0-P7

AIRBORN MICROSI - MLSI RECOMMENDED PC BOARD LAYOUT (PLUG)

8X Sample with Left Polarization



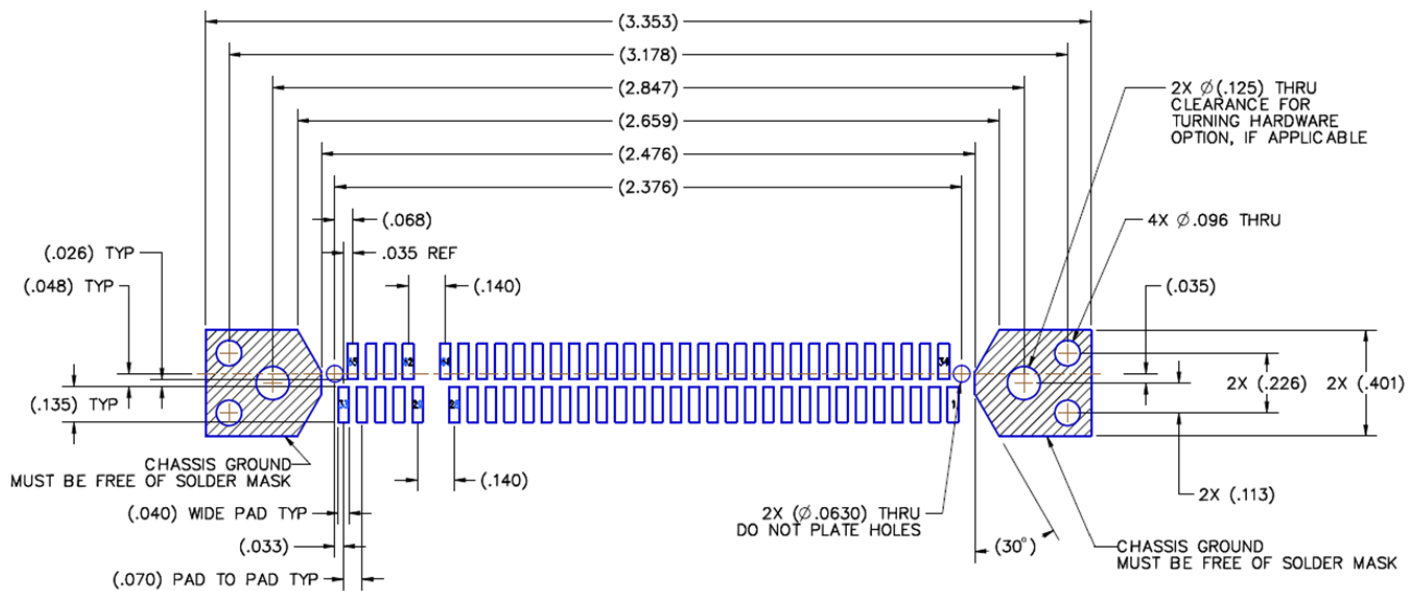
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIM-PCB-5
ESG6054-R0-P8

AIRBORN MICROSI - MLSI RECOMMENDED PC BOARD LAYOUT (PLUG)

8X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

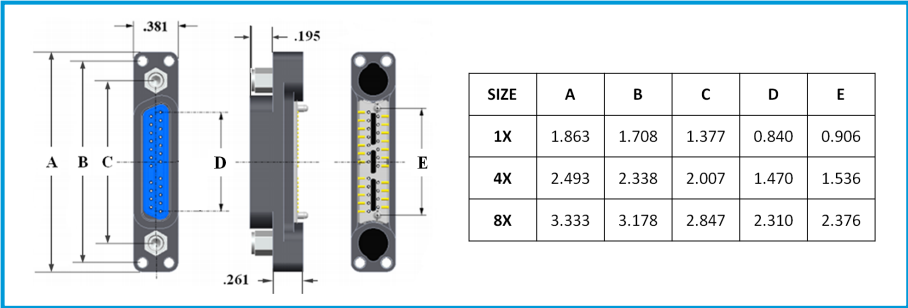
MLSIM-PCB-6
ESG6054-R0-P9



AirBorn microSI
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. It comes with a variety of hardware options.

DIMENSIONS



Sample Part Number Format: MLSI-04L-2000-478-2810

MLSI

SERIES
AirBorn microSI
Vertical
(Female)
1.78mm

SIZE and 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 pin Au Contact)
475 – Sn/Pb alloy ☒
478 – SAC305

BODY PLATING
2 – Electroless nickel
6 – Gold

HARDWARE
620 – Fixed jacknut
810 – Turning jackscrews, captivated**
NXX – Keying jacknuts***
JXX – Keying jackscrews***

High-Reliability Contact
MIL-DTL-83513

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

NOTES

- 1. 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 Hardware Options" on page 48-49.

MATERIALS and FINISHES

- Socket Contact: Brass
- Pin Contacts: BeCu alloy strip
- Contact Finish: Gold plate, 50 µin 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 and L-II-49
- Hardware: Corrosion-resistant steel
- Interfacial Seal Gaskets: Fluorosilicone
- EMI Gaskets: Corrosion-resistant steel

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

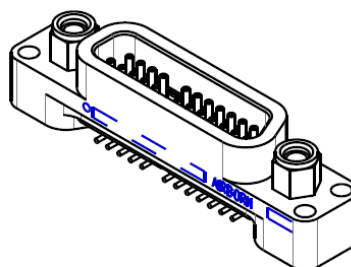
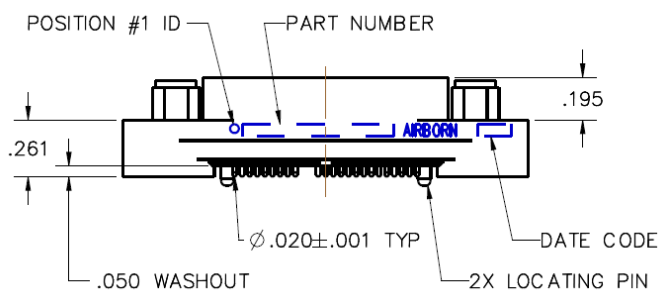
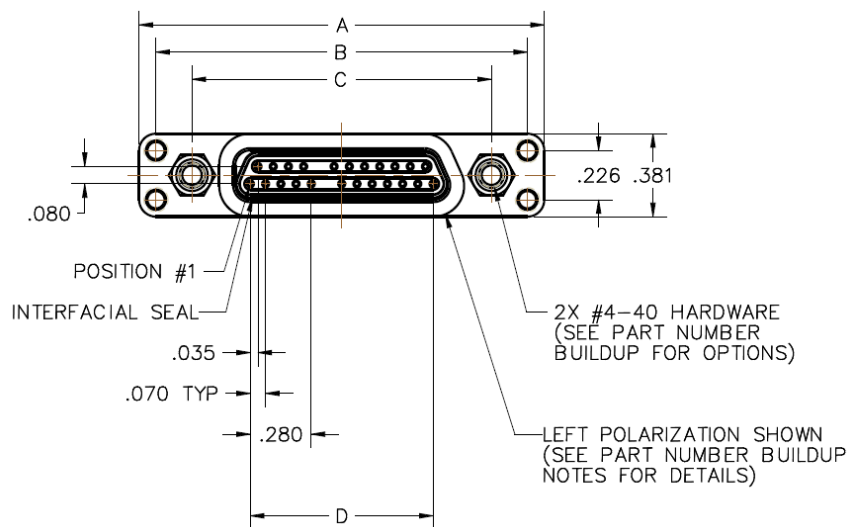
PERFORMANCE

- Contact Rating: 3 amperes maximum
- Operating Temperature: -55° C to 125° C
- Maximum Working Voltage: 200V, RMS, 60 Hz
- Insulation Resistance: 5,000 megohms minimum at 500 VDC
- Durability: 500 connector mating cycles
- Contact Engaging Force: 6.0oz maximum/contact
- Contact Separating Force: 0.5oz minimum/contact
- Mating and Unmating Force: 10.0oz maximum/contact

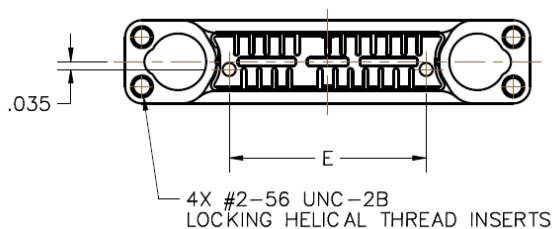
NOTE: Performance values are estimates at this time. Actual values will be determined when final product testing is complete.

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)		
1	Diff. Impedance, filtered to 79 ps (20-80%)	100 Ω
2	Diff. Insertion Loss	10 GHz at -3 dB
3	Diff. Return Loss	7.5 GHz at -10 dB
4	Intra-Pair	< 2 ps

AIRBORN MICROSI - MLSI DIMENSIONS (RECEPTACLE)



ISOMETRIC VIEW
MLSI-01L-2000-475-2620
FOR REFERENCE ONLY



SIZE	A	B	C	D	E
1x	1.863	1.708	1.377	.840	.906
4x	2.493	2.338	2.007	1.470	1.536
8x	3.333	3.178	2.847	2.310	2.376

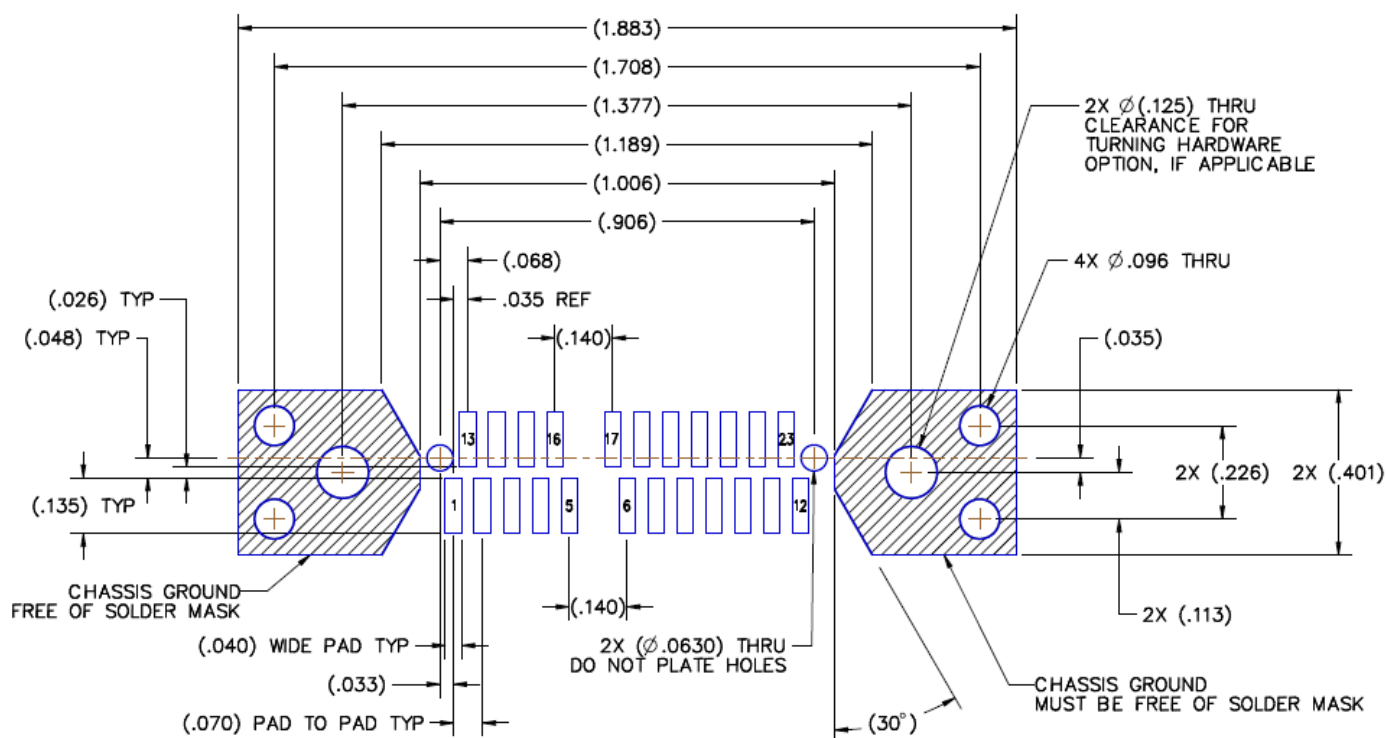
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-DIM-1
ESG6055-R0-P1

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

1X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

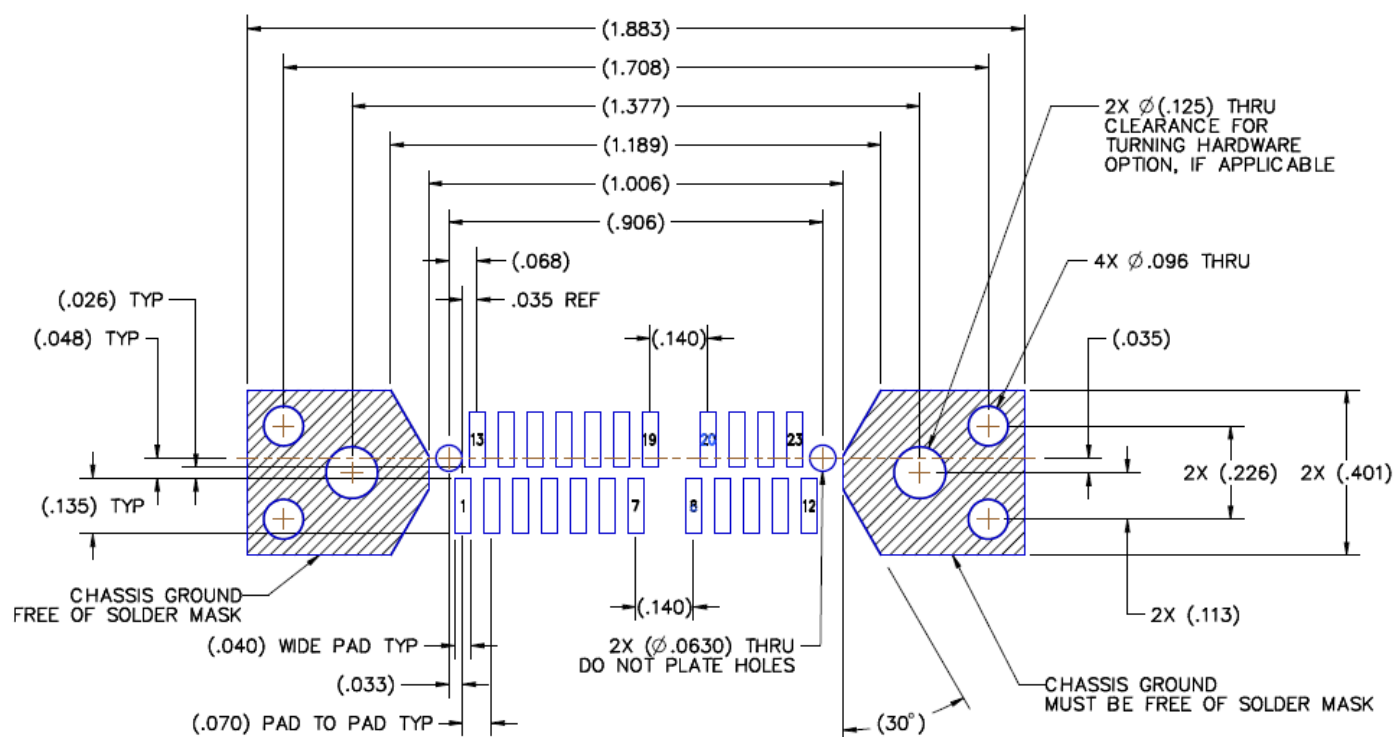
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-1
ESG6055-R0-P4

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

1X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

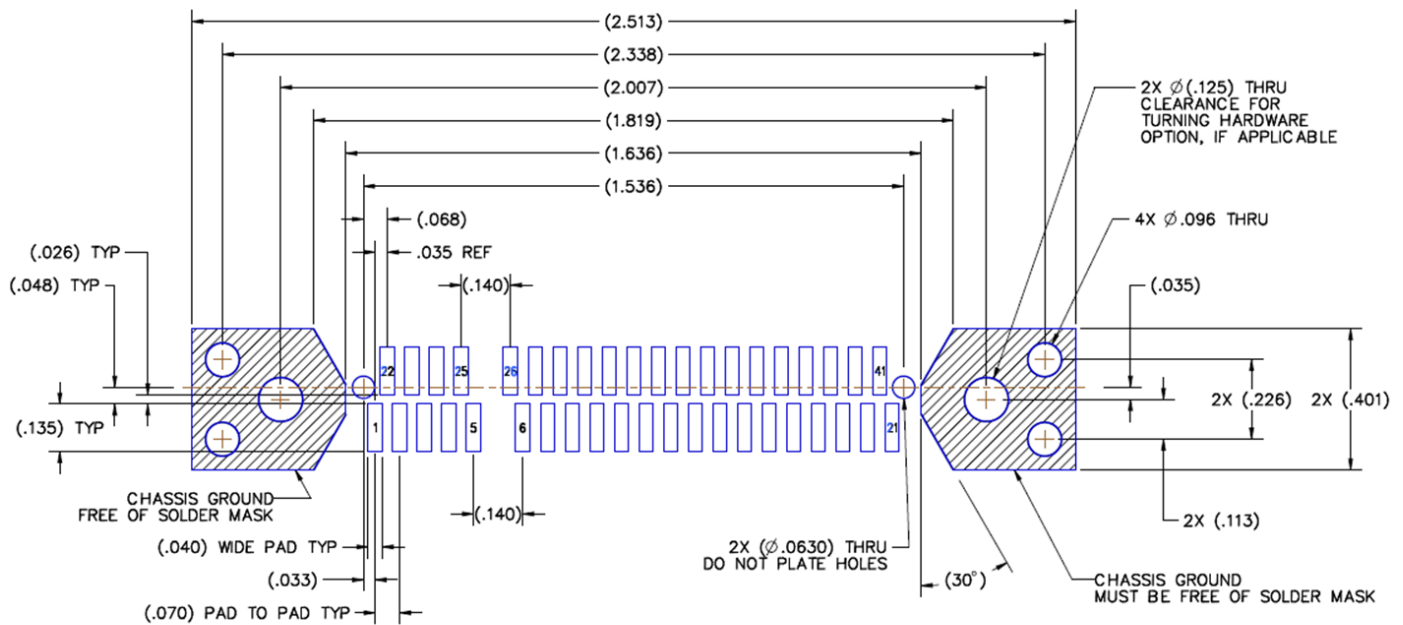
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-2
ESG6055-R0-P5

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

4X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

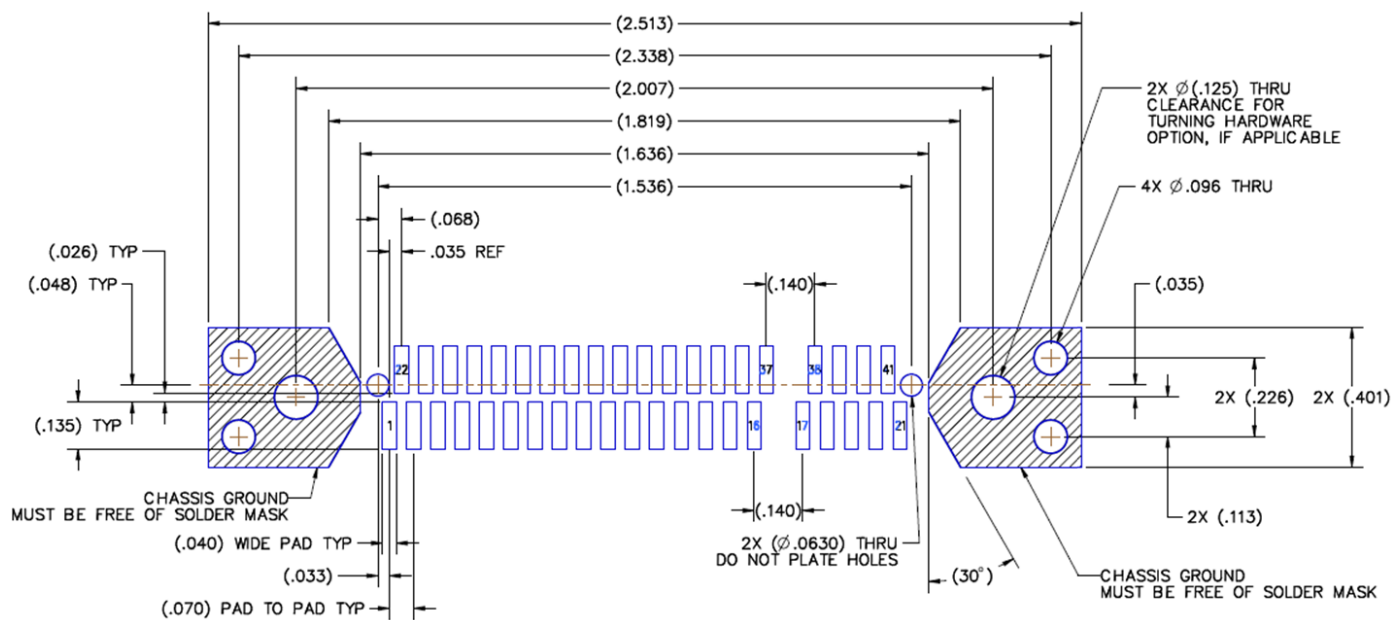
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-3
ESG6055-R0-P6

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

4X Sample with Right Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

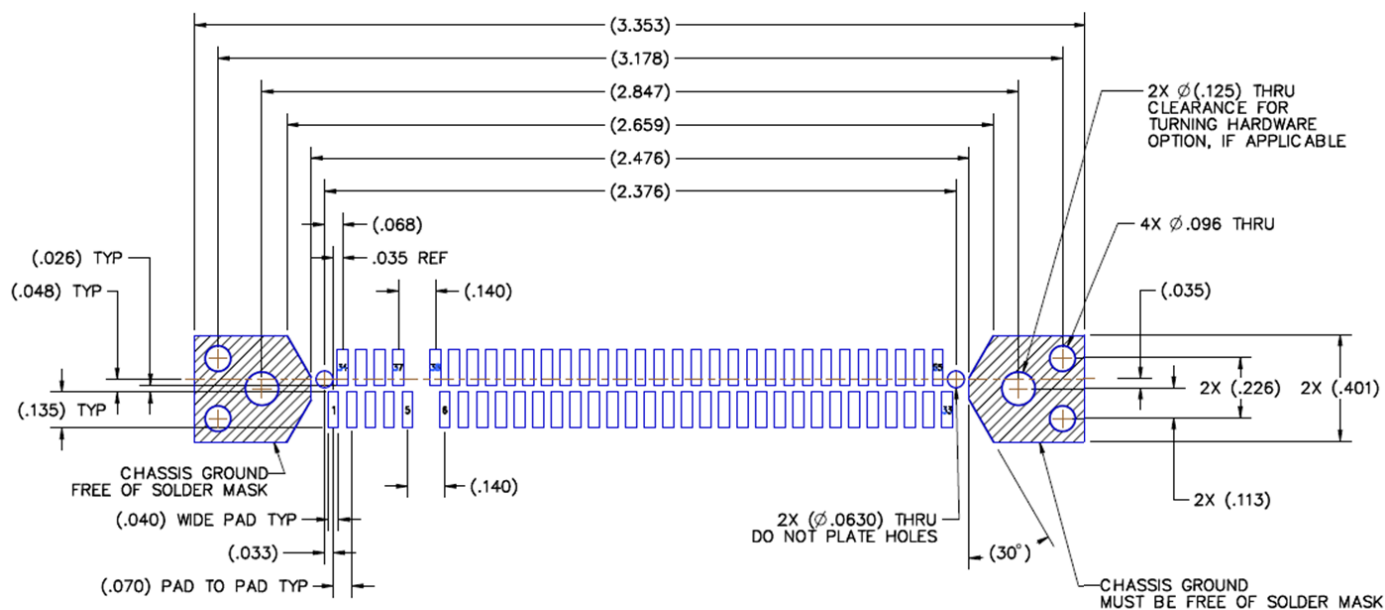
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-4
ESG6055-R0-P7

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

8X Sample with Left Polarization



NOTE: ALL PADS MUST BE FREE OF SOLDER MASK

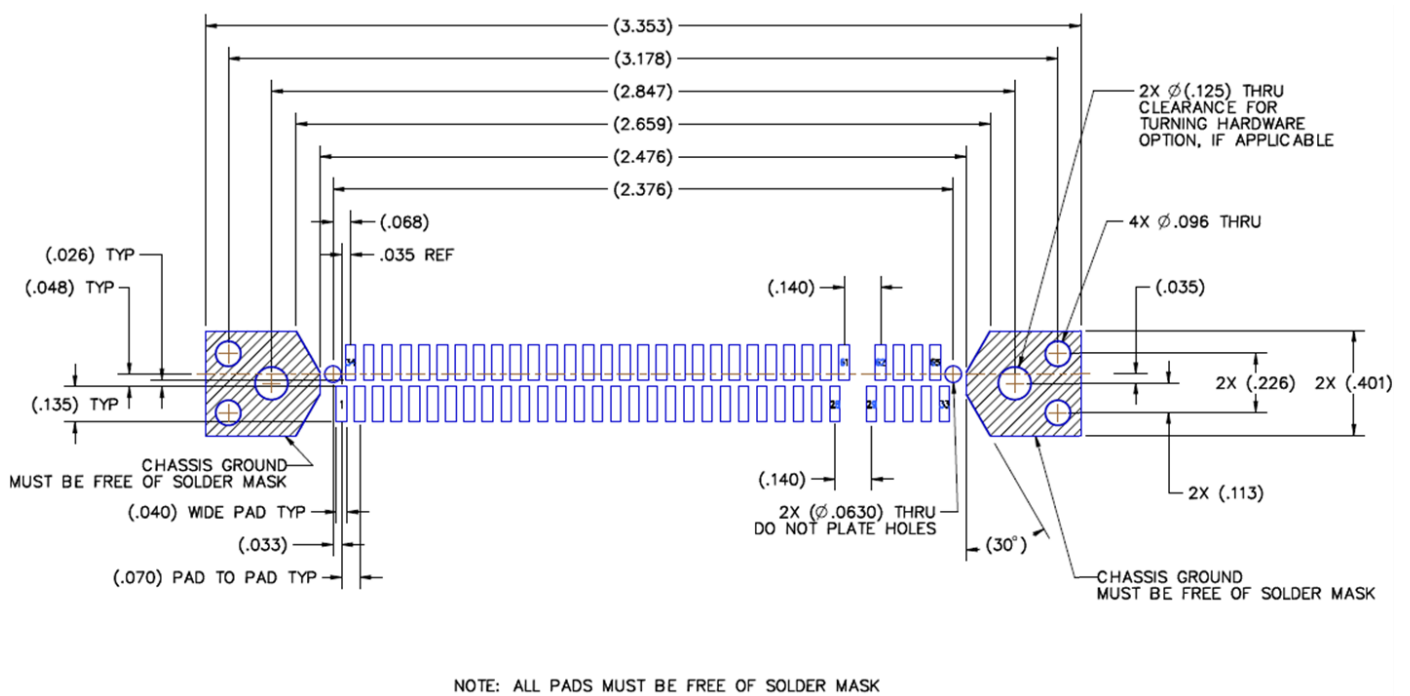
NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. See "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-5
ESG6055-R0-P8

AIRBORN MICROSI - MLSI SUGGESTED PC BOARD LAYOUT (RECEPTACLE)

8X Sample with Right Polarization

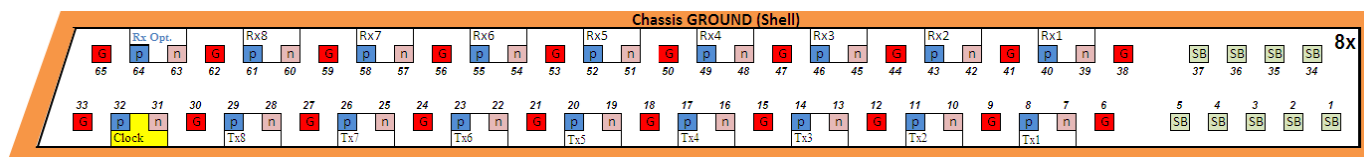
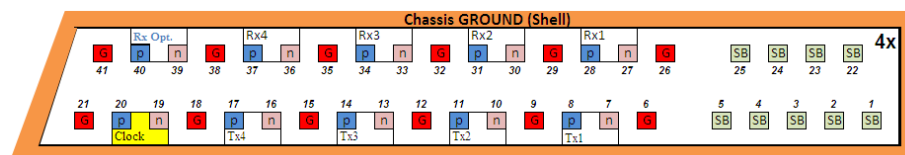
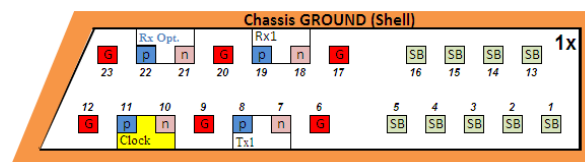
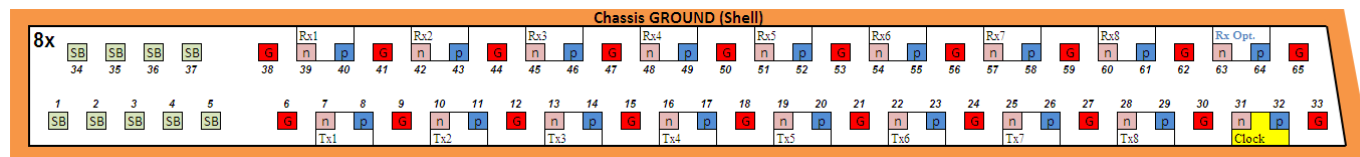
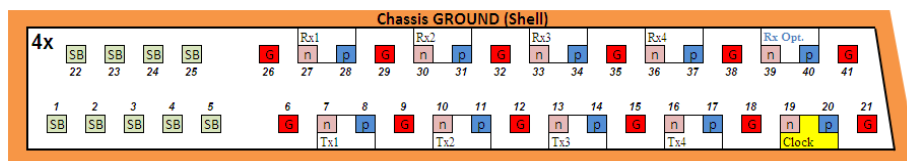


NOTES:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.
4. "Polarized Interface Pinouts" on page 46-47
5. See "Keying Hardware Options" on page 48-49

MLSIF-PCB-6
ESG6055-R0-P9

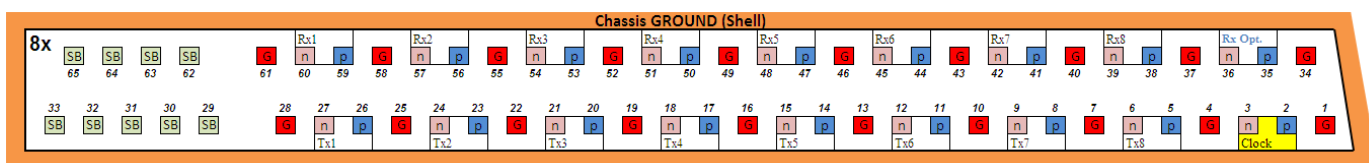
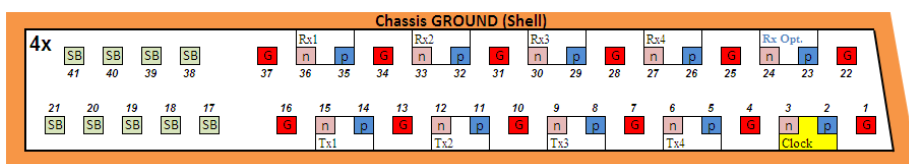
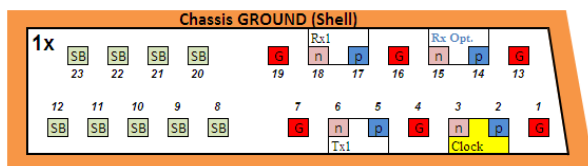
	=	Ground
	=	Positive
	=	Negative
	=	Sideband

[illegible]

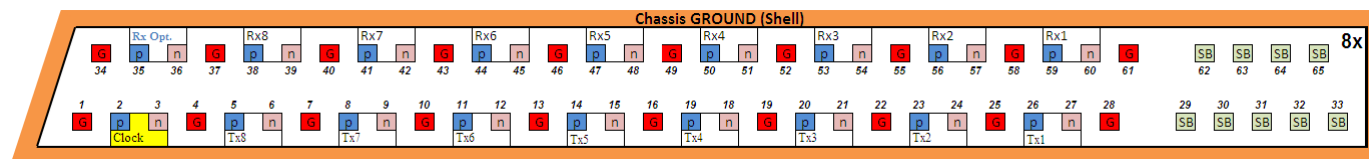
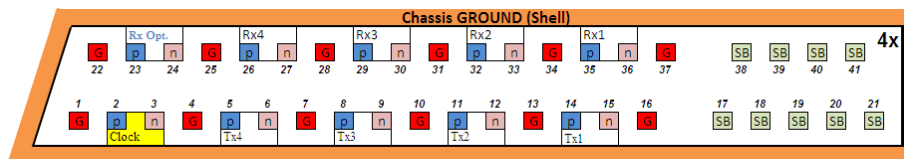
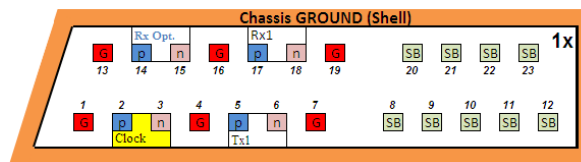
45

AIRBORN MICROSI - INTERFACE PINOUT, RIGHT POLARIZATION

Plug



Receptacle



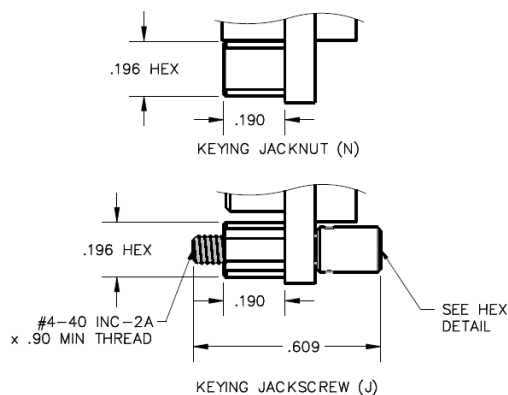
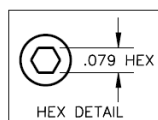
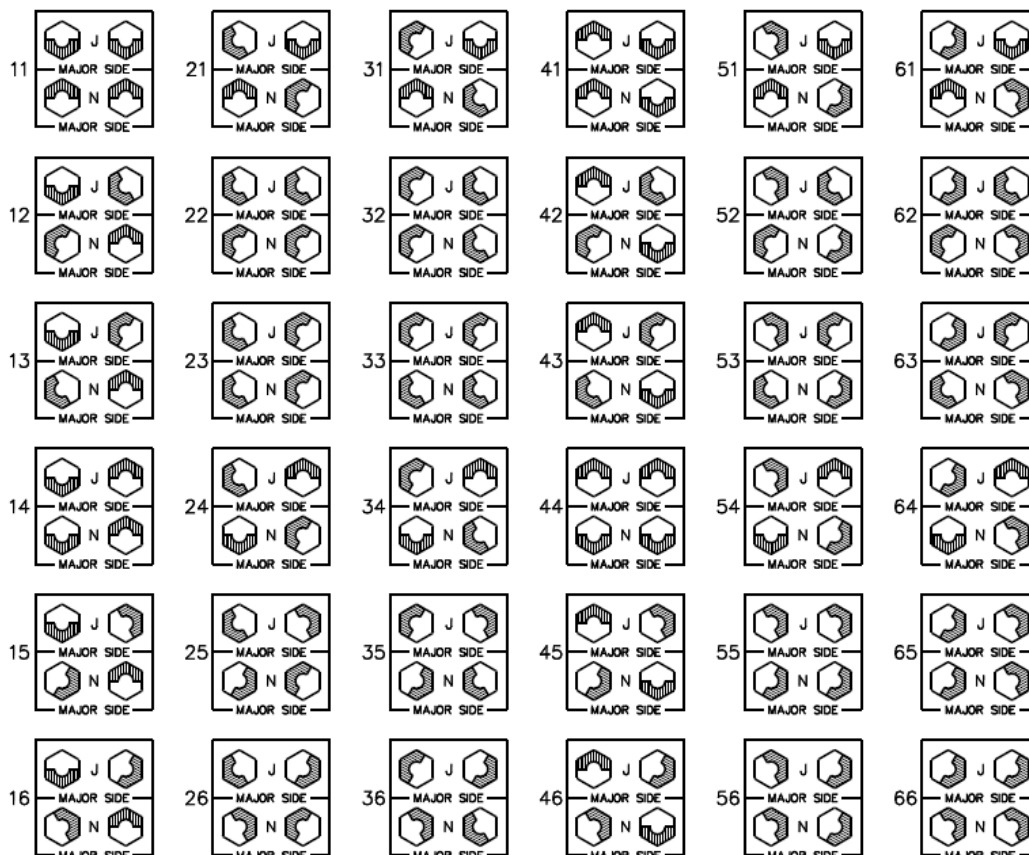
NOTES:

Polarization Mating:

1. A LEFT plug mates with a LEFT receptacle.
2. A RIGHT plug mates with a RIGHT receptacle.
3. Left-polarization connectors will not mate with right-polarization connectors.

MSI-CON-2
ESG6060-R0-P6

AIRBORN MICROSI - POLARIZED KEYING HARDWARE OPTIONS (PLUG)



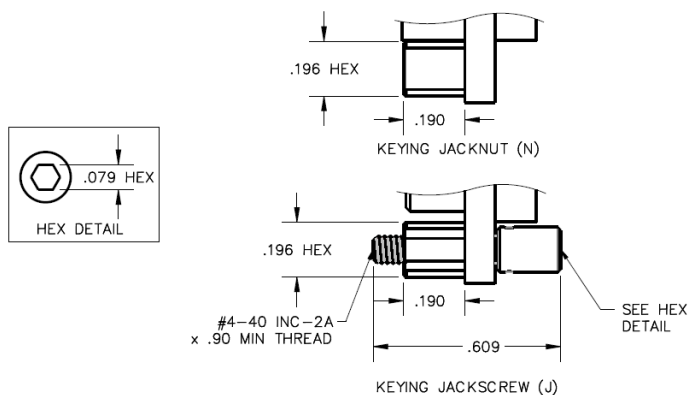
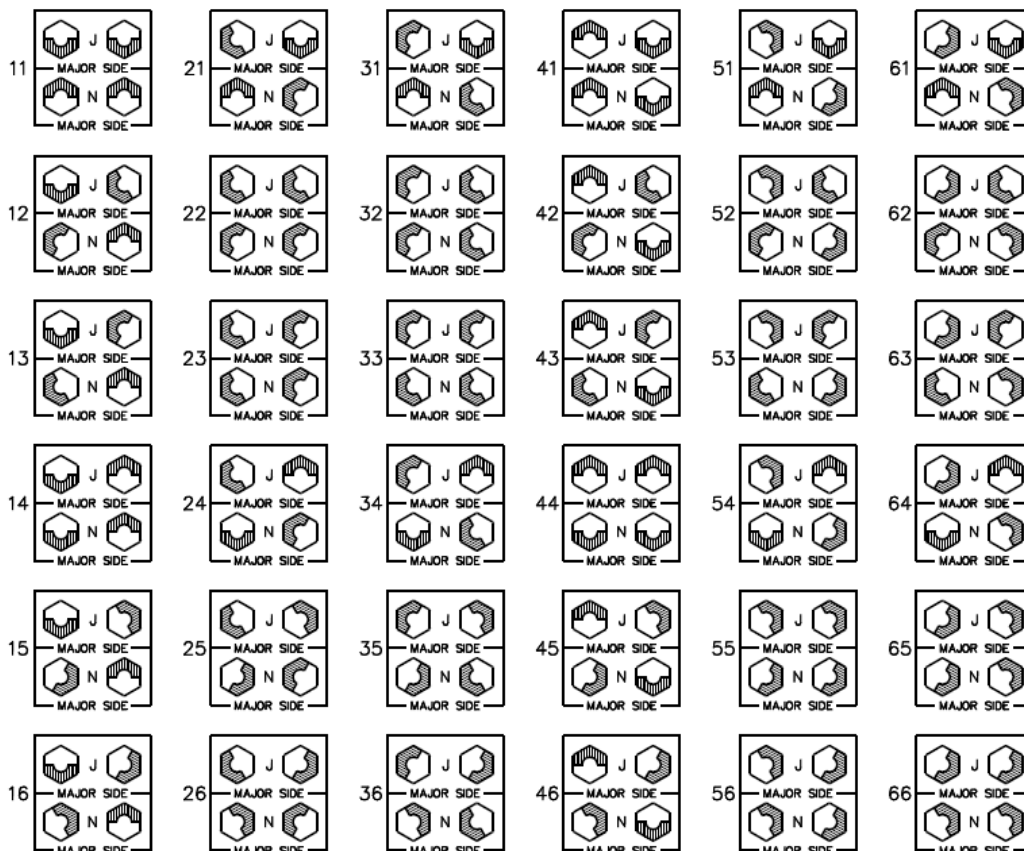
NOTES:

Select the appropriate two-digit number and include as the last two digits of the hardware code in the part number.

Keying hardware is factory-installed and non-removable.

MSIM-HDW-1
ESG6058-R0-P6

AIRBORN MICROSI - POLARIZED KEYING HARDWARE OPTIONS (RECEPTACLE)



NOTES:

Select the appropriate two-digit number and include as the last two digits of the hardware code in the part number.

Keying hardware is factory-installed and non-removable.

MSIF-HDW-1
ESG6059-R0-P6



molex

creating connections for life