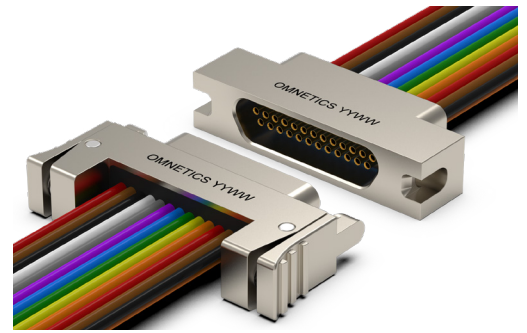


LATCHING MICRO-D DISCRETE LEADWIRE (TYPE WD)

Omnetics' **Latching Micro-D connectors** offer a rugged quick latch system. The Latching Micro-D connectors are available in sizes 9-51 and use Omnetics' Flex Pin contact system, which meets all the standard performance requirements of MIL-DTL-83513, including shock and vibration. These connectors provide a secure connection without the need for tools and jacking hardware and are available in wired, board mount, panel mount configurations as well as with back shell options.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

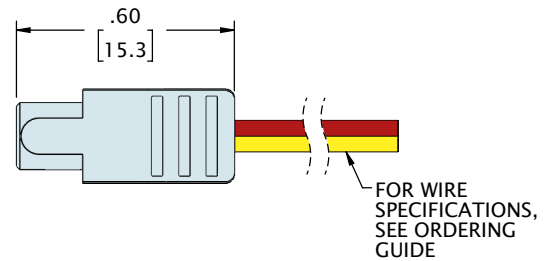
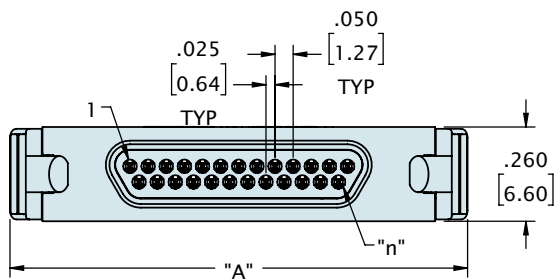
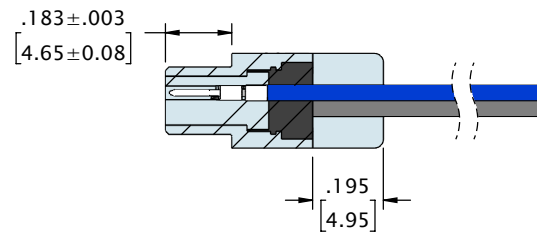
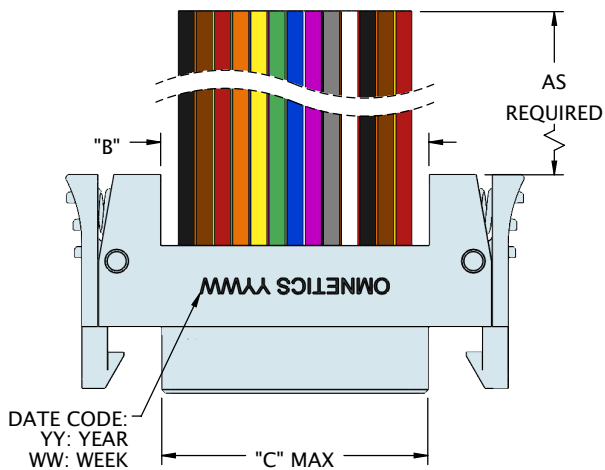
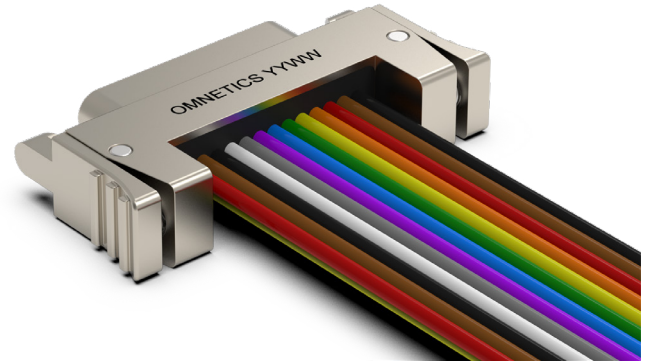
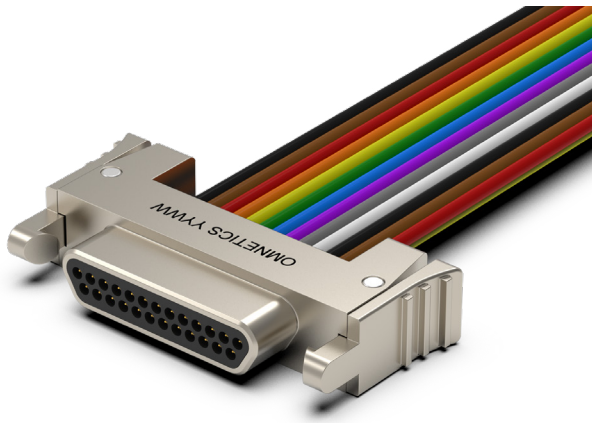
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

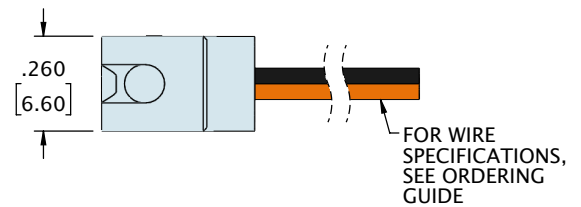
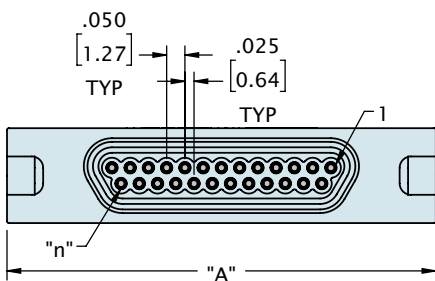
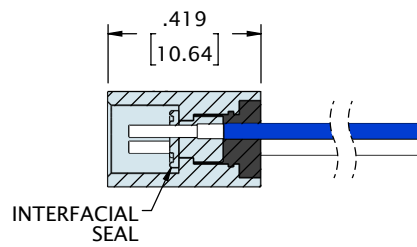
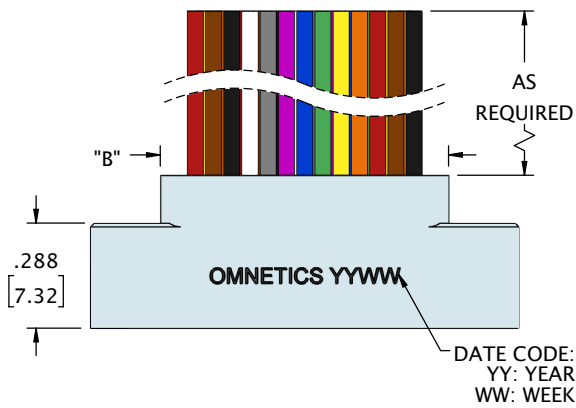
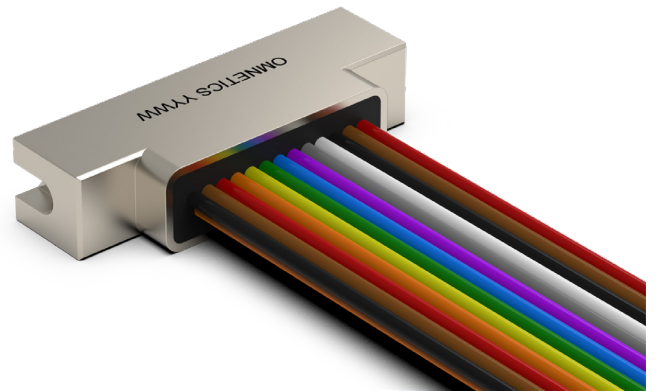
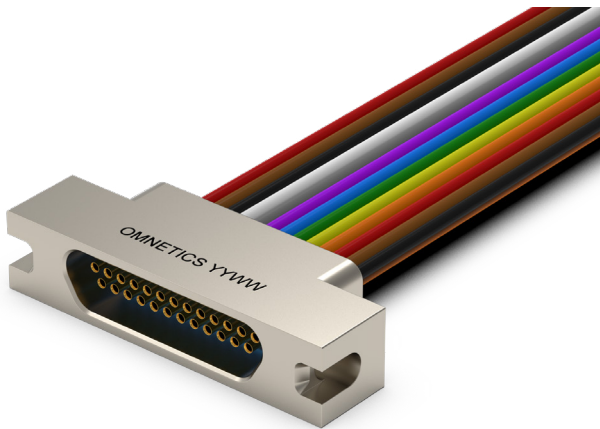
LATCHING MICRO-D DISCRETE LEADWIRE (TYPE WD)



CONTACTS	ROWS	"A"	"B"	"C"
9	2	.86 [21.8]	.340 [8.64]	.334 [8.48]
15	2	1.01 [25.7]	.490 [12.45]	.484 [12.29]
21	2	1.16 [29.5]	.640 [16.26]	.634 [16.10]
25	2	1.26 [32.0]	.740 [18.80]	.734 [18.64]
31	2	1.41 [35.8]	.890 [22.61]	.884 [22.45]
37	2	1.56 [39.6]	1.040 [26.42]	1.034 [26.26]
51	2	1.91 [48.5]	1.390 [35.31]	1.384 [35.15]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D DISCRETE LEADWIRE (TYPE WD)

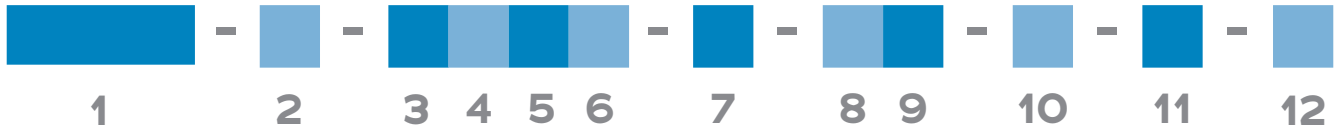


CONTACTS	ROWS	"A"	"B"
9	2	.775 [19.69]	.390 [9.91]
15	2	.925 [23.50]	.540 [13.72]
21	2	1.075 [27.31]	.690 [17.53]
25	2	1.175 [29.85]	.790 [20.07]
31	2	1.325 [33.66]	.940 [23.88]
37	2	1.475 [37.47]	1.090 [27.69]
51	2	1.825 [46.36]	1.440 [36.58]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D DISCRETE LEADWIRE (TYPE WD)

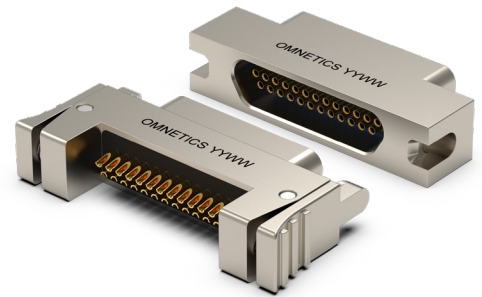
ORDERING GUIDE



1 Series	LMDP Latching Metal Micro-D Pin LMDP - Latch Side (STD)	LMDS Latching Metal Micro-D Socket LMDS - Latch Receptacle side (STD)
2 Number of Contacts	009 015 021 025 031 037 051*	
	* Use 512 for Two Rows 051	
3 Termination Type	WD Discrete Leadwire	
4 Wire AWG	4 24 AWG 6 26 AWG (STD)	8 28 AWG 0 30 AWG
5 Wire Type	Q Nema HP3 (STD) R M22759/11	S M22759/33 X Other
6 Wire Length (inches)	18.0 18.00 (STD) XX.X Custom length	
7 Color Scheme	1 10 Repeating 2 Blue 3 White	4 Non Repeating 5 Yellow
8 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated B Aluminium Shell, Black Anodized	CD Aluminium Shell, Cadmium Plated P Stainless Steel Shell, Passivated
9 Common Options	PA Panel Mount Rear, O-Ring IBS Integrated Backshel HT High Temp Epoxy	PB Panel Mount, Rear BSY Custom Backshell RH RoHS Compliant
10 Shield / Jacket	D Slip On Metal Braid E Machine Braid F Flexo Braid J Nomex Braid ST Shrink Tube	
11 Mod Code	M10 Keyed M30 Ground Spring M50 Space Grade Micro-D, SPT1 M53 Space Grade Micro-D, SPT2	
12 Special Instructions	YYY Describe anything that is not covered in standard options	

LATCHING MICRO-D SOLDER CUP (TYPE SS)

Achieve a highly stable and secure connection for Micro-D terminations with Omnetics' rugged **Latching Solder Cup Micro-D connectors**. This shell configuration provides exceptional reliability for critical applications in the aerospace, military, oil and gas, medical, and other industries. Omnetics builds these rugged connectors to meet or exceed the demanding requirements of MIL-DTL-83513. They can endure more than 2,000 mating cycles in operating conditions that include temperate extremes ranging from -55° to 200°C. Available in a range of shell, plating, and pin options to serve an extensive range of systems.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

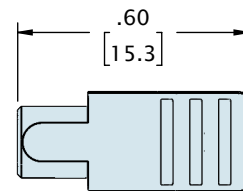
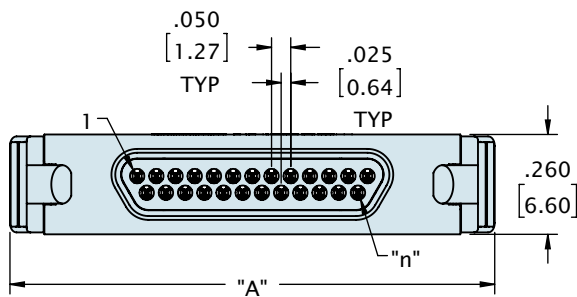
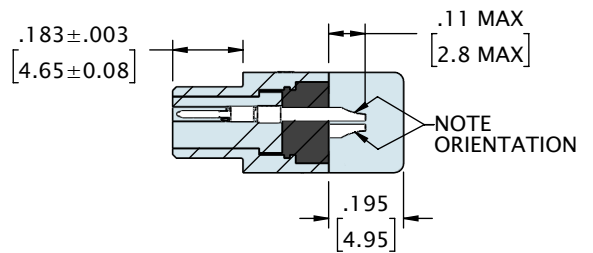
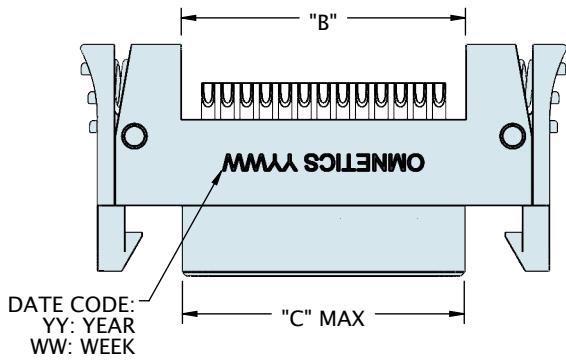
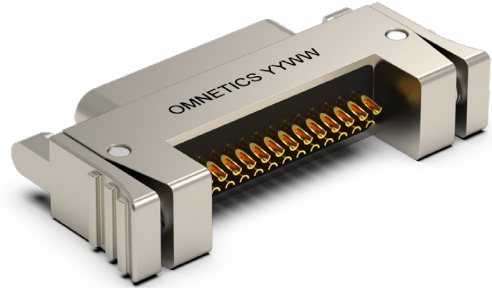
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

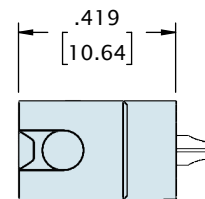
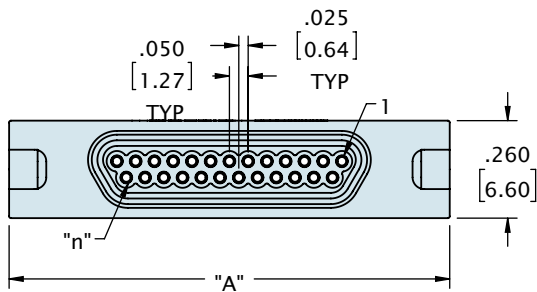
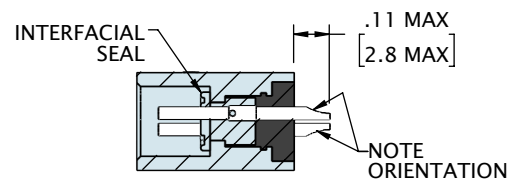
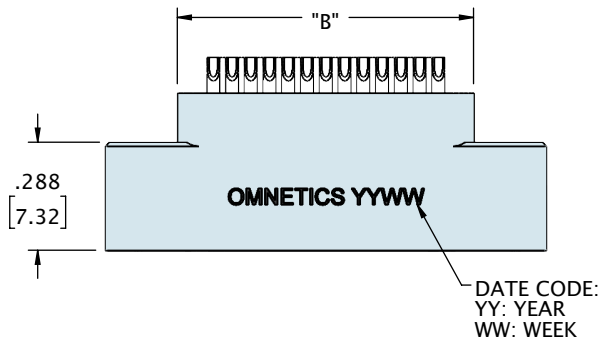
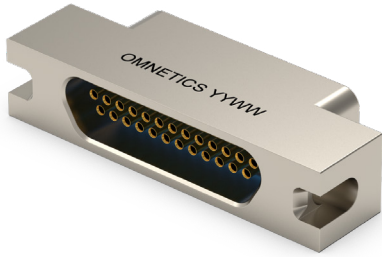
LATCHING MICRO-D SOLDER CUP (TYPE SS)



CONTACTS	ROWS	"A"	"B"	"C"
9	2	.86 [21.8]	.340 8.636	.334 [8.48]
15	2	1.01 [25.7]	.490 12.446	.484 [12.29]
21	2	1.16 [29.5]	.640 16.256	.634 [16.10]
25	2	1.26 [32.0]	.740 18.796	.734 [18.64]
31	2	1.41 [35.8]	.890 22.606	.884 [22.45]
37	2	1.56 [39.6]	1.040 26.416	1.034 [26.26]
51	2	1.91 [48.5]	1.390 35.306	1.384 [35.15]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

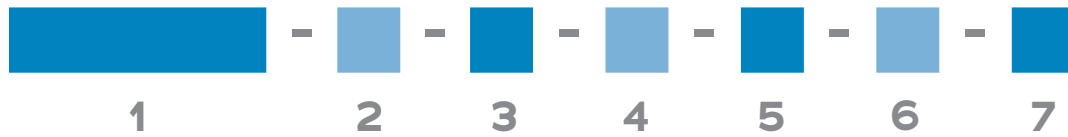
LATCHING MICRO-D SOLDER CUP (TYPE SS)



CONTACTS	ROWS	"A"	"B"
9	2	.775 [19.69]	.390 [9.91]
15	2	.925 [23.50]	.540 [13.72]
21	2	1.075 [27.31]	.690 [17.53]
25	2	1.175 [29.85]	.790 [20.07]
31	2	1.325 [33.66]	.940 [23.88]
37	2	1.475 [37.47]	1.090 [27.69]
51	2	1.825 [46.36]	1.440 [36.58]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

ORDERING GUIDE



1 Series	LMDP Latching Metal Micro-D Pin LMDP - Latch Side (STD)	LMDS Latching Metal Micro-D Socket LMDS - Latch Receptacle side (STD)
2 Number of Contacts	O09 O15 O21 O25 O31 O37 O51* * Use 512 for Two Rows O51	
3 Termination Type	SS Soldercup	
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated B Aluminium Shell, Black Anodized	CD Aluminium Shell, Cadmium Plated P Stainless Steel Shell, Passivated
5 Common Options	PA Panel Mount Rear, O-Ring (LMDS only) BSY Custom Backshell (LMDP only) RH RoHS Compliant	PB Panel Mount, Rear (LMDS only) HT High Temp Epoxy
6 Mod Codes	M10 Keyed M50 Space Grade Micro-D, SPT1	M30 Ground Spring M53 Space Grade Micro-D, SPT2
7 Special Instructions	YYY Describe anything that is not covered in standard options	

LATCHING MICRO-D HORIZONTAL SURFACE MOUNT (TYPE HO)

Omnetics **Latching Micro-D Horizontal Surface Mount** Connectors feature our easy-to-use quick-latch mechanism. No tools are required to achieve a supremely secure connection that can endure the rigors of military, aeronautics, and space applications. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. They are available in pin counts from 9 to 51 and can be configured to support the unique needs of every design, with discrete wires, overmolded cable, panel mount housings, or PCB-mounted versions. .



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

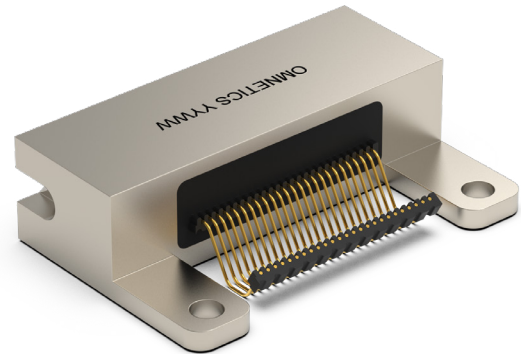
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

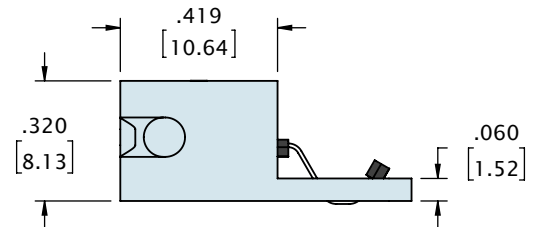
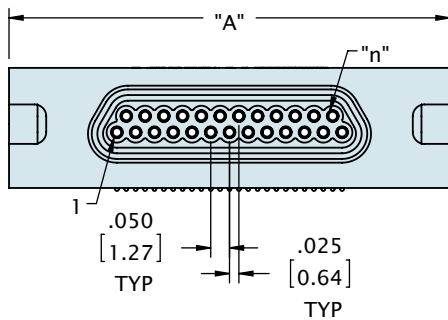
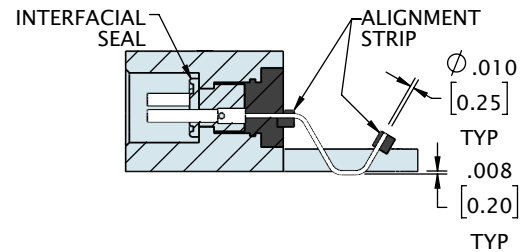
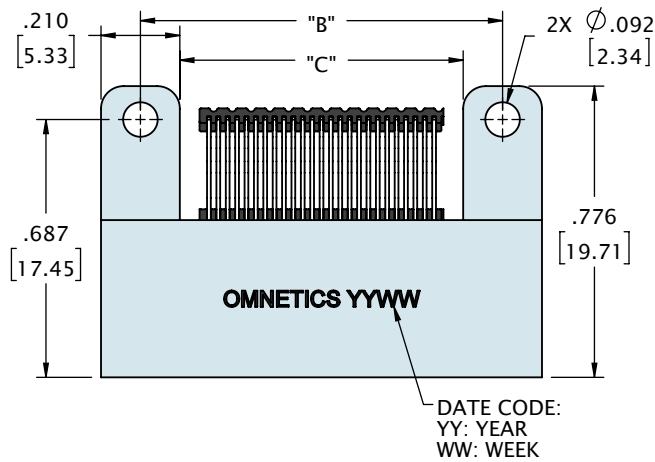
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

LATCHING MICRO-D HORIZONTAL SURFACE MOUNT (TYPE HO)



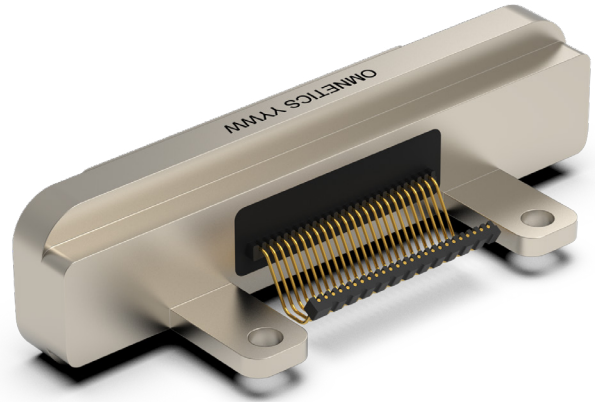
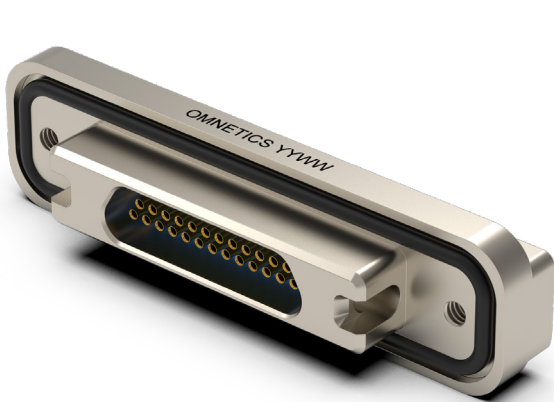
See page 158 for recommended board layout



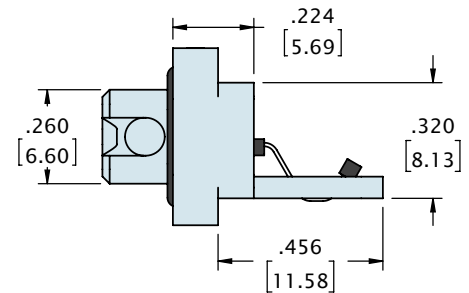
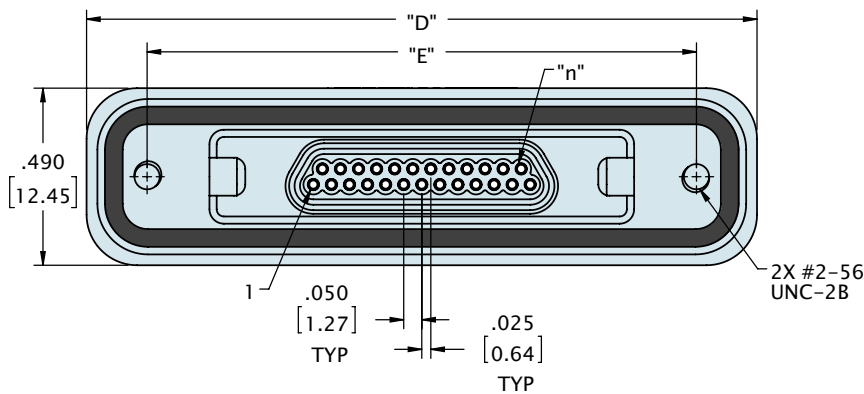
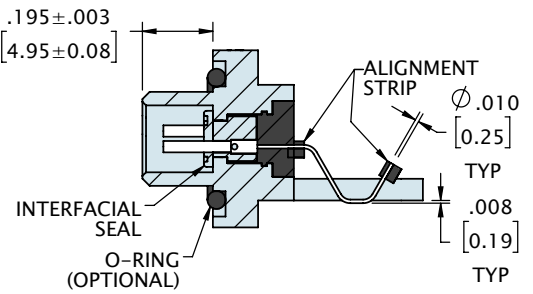
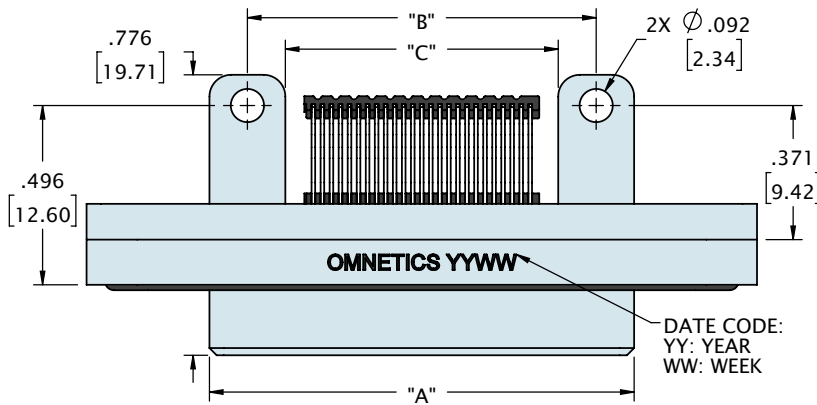
CONTACTS	ROWS	"A"	"B"	"C"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D HORIZONTAL SURFACE MOUNT (TYPE HO)



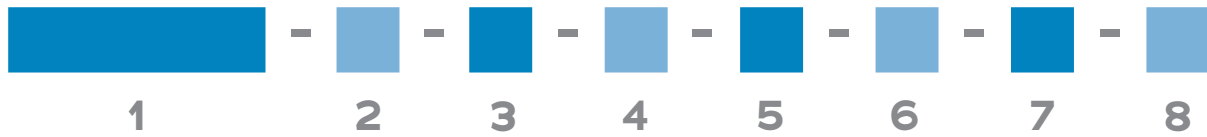
See page 158 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"	"D"	"E"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]	1.455 [36.96]	1.120 [28.45]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]	1.605 [40.77]	1.270 [32.26]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]	1.755 [44.58]	1.420 [36.07]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]	1.855 [47.12]	1.520 [38.61]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]	2.005 [50.93]	1.670 [42.42]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]	2.155 [54.74]	1.820 [46.23]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]	2.505 [63.63]	2.170 [55.12]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

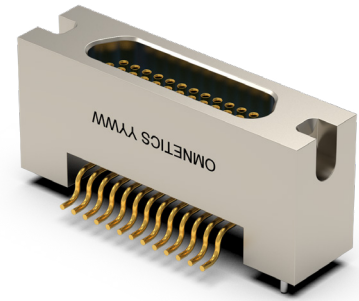
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket	
2 Number of Contacts	O09 O15 O21 O25 O31 O37 O51*	
	* Use 512 for Two Rows O51	
3 Termination Type	HO Horizontal Surface Mount	
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated B Aluminium Shell, Black Anodized	CD Aluminium Shell, Cadmium Plated P Stainless Steel Shell, Passivated
6 Common Options	PA Panel Mount Rear, O-Ring HT High Temp Epoxy	PB Panel Mount, Rear RH RoHS Compliant
7 Mod Codes	M10 Keyed M50 Space Grade Micro-D, SPT1	M30 Ground Spring M53 Space Grade Micro-D, SPT2
8 Special Instructions	YYY Describe anything that is not covered in standard options	

LATCHING MICRO-D VERTICAL SURFACE MOUNT (TYPE VV)

Omnetics **Latching Micro-D Vertical Surface Mount** Connectors feature our easy-to-use quick-latch mechanism. No threaded hardware is involved and no tools are required to achieve a supremely secure connection that can endure the rigors of military, aeronautics, and space applications. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. They feature Omnetics' one-piece flex pin design to provide additional protection against shock and vibration. This is an ideal connector for applications that are in constant or unpredictable motion. We offer a wide range of configurations, including multiple plating options, and a panel mount version with discrete wire, cable, or solder cup.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

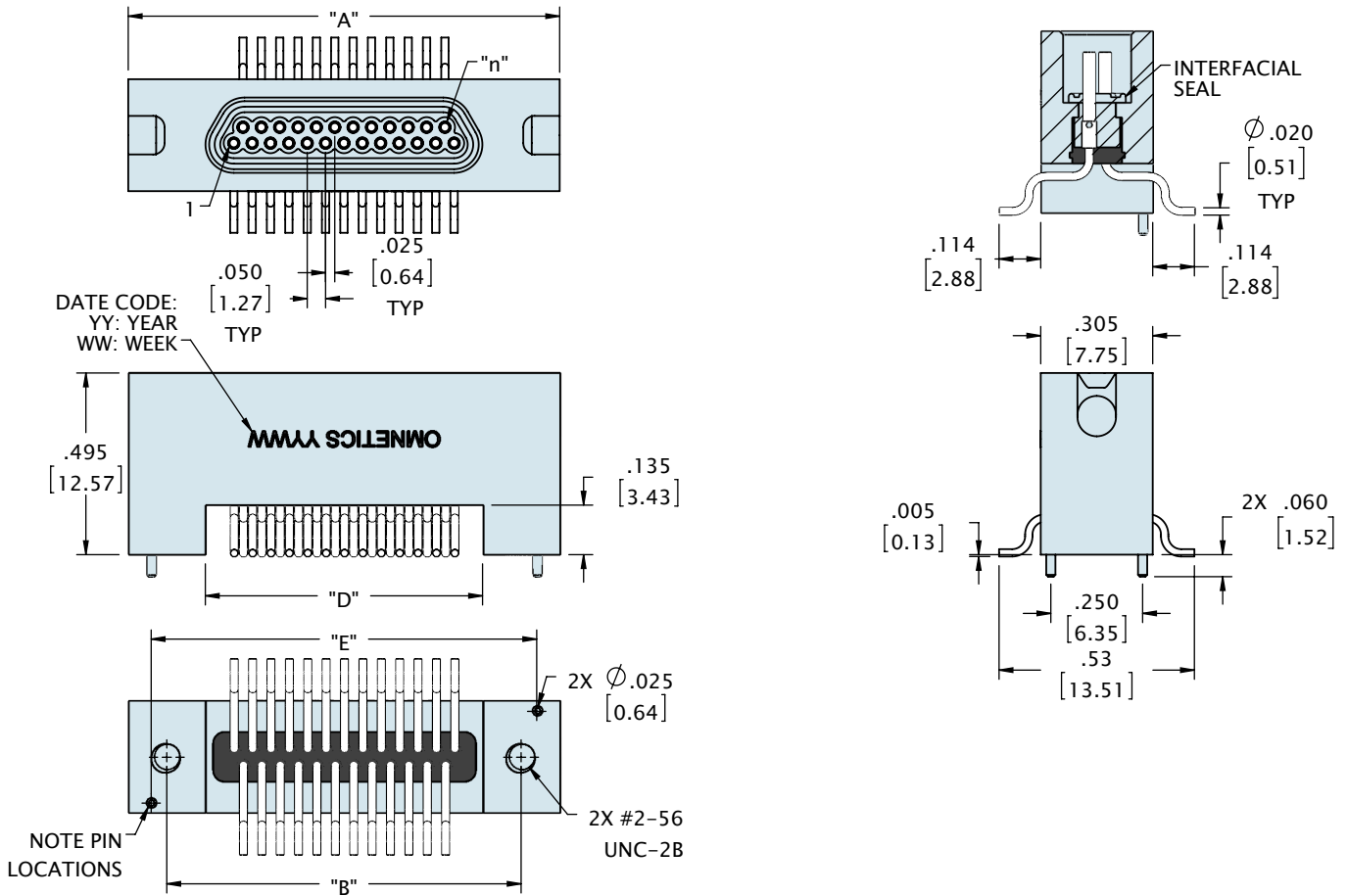
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

LATCHING MICRO-D VERTICAL SURFACE MOUNT (TYPE VV)



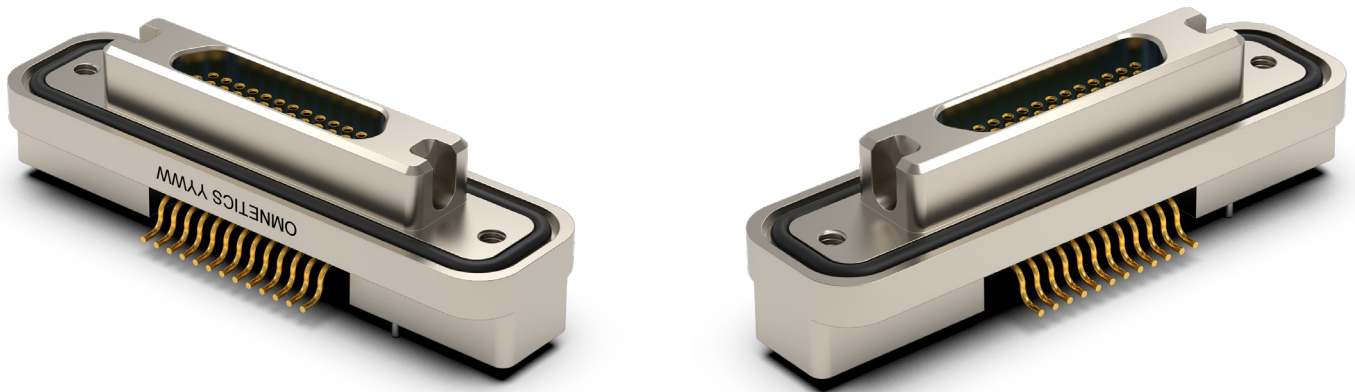
See page 158 for recommended board layout



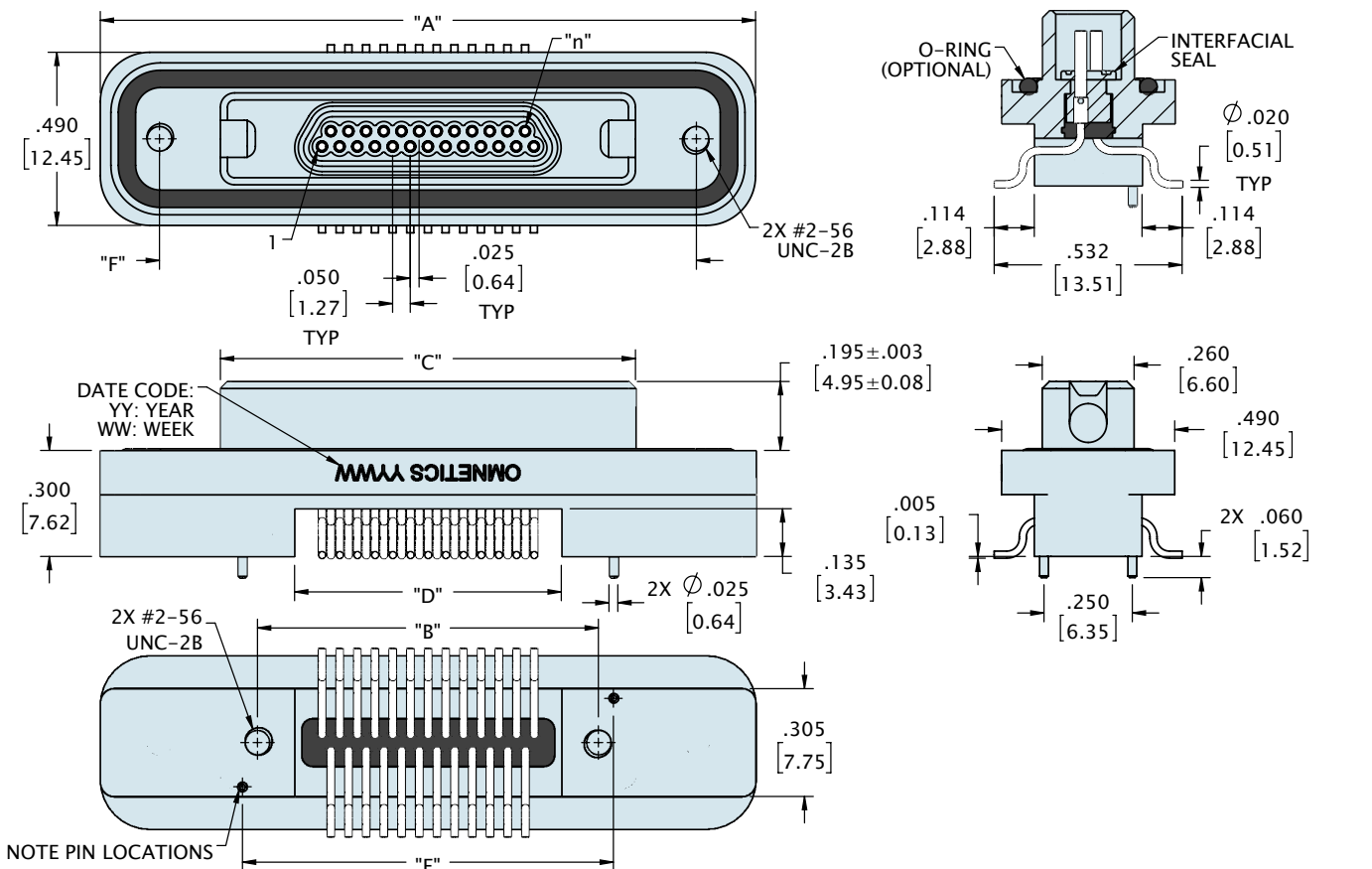
CONTACTS	ROWS	"A"	"B"	"D"	"E"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]	.650 [16.51]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]	.800 [20.32]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]	.950 [24.13]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]	1.050 [26.67]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]	1.200 [30.48]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]	1.350 [34.29]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]	1.700 [43.18]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D VERTICAL SURFACE MOUNT (TYPE VV)



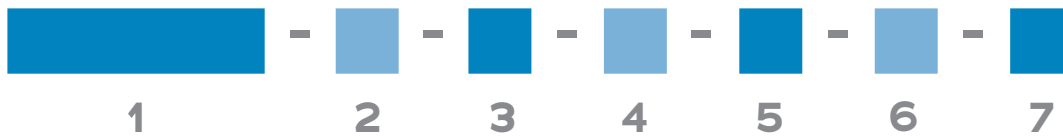
See page 158 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"	"D"	"E"	"F"
9	2	1.455 [36.96]	.565 [14.35]	.775 [19.69]	.355 [9.02]	.650 [16.51]	1.120 [28.45]
15	2	1.605 [40.77]	.715 [18.16]	.925 [23.50]	.505 [12.83]	.800 [20.32]	1.270 [32.26]
21	2	1.755 [44.58]	.865 [21.97]	1.075 [27.31]	.655 [16.64]	.950 [24.13]	1.420 [36.07]
25	2	1.855 [47.12]	.965 [24.51]	1.175 [29.85]	.755 [19.18]	1.050 [26.67]	1.520 [38.61]
31	2	2.005 [50.93]	1.115 [28.32]	1.325 [33.66]	.905 [22.99]	1.200 [30.48]	1.670 [42.42]
37	2	2.155 [54.74]	1.265 [32.13]	1.475 [37.47]	1.055 [26.80]	1.350 [34.29]	1.820 [46.23]
51	2	2.505 [63.63]	1.615 [41.02]	1.825 [46.36]	1.405 [35.69]	1.700 [43.18]	2.170 [55.12]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

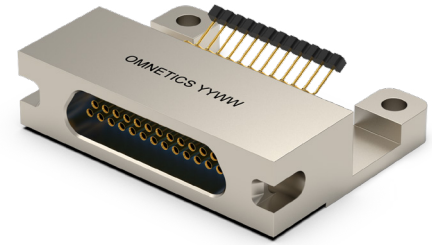
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket						
2 Number of Contacts	009	015	021	025	031	037	051*
	* Use 512 for Two Rows 051						
3 Termination Type	VV Vertical Surface Mount						
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated			
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated			
5 Common Options	PA Panel Mount Rear, O-Ring			PB Panel Mount, Rear			
	HT High Temp Epoxy			RH RoHS Compliant			
6 Mod Codes	M10 Keyed			M30 Ground Spring			
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2			
7 Special Instructions	YYY Describe anything that is not covered in standard options						

LATCHING MICRO-D CARD EDGE SURFACE MOUNT (TYPE CO)

Omnetics **Latching Micro-D Card Edge Surface Mount** Connectors save space on the board while providing exceptional security through our easy-to-use quick-latch mechanism. No threaded hardware is involved and no tools are required to achieve a supremely secure connection that can endure the rigors of military, aeronautics, and space applications. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. They feature our one-piece flex pin design to provide additional protection against shock and vibration. We offer this connector in a wide range of configurations to suit your specifications, including shell sizes from 9 to 51 contacts, multiple plating options, and a panel mount version with discrete wire, cable, or solder cup.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

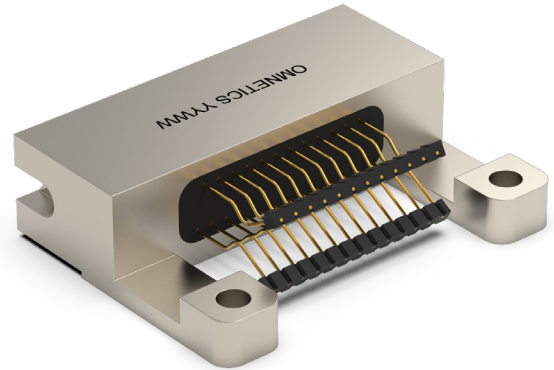
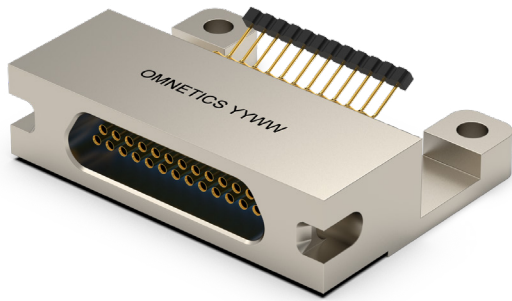
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

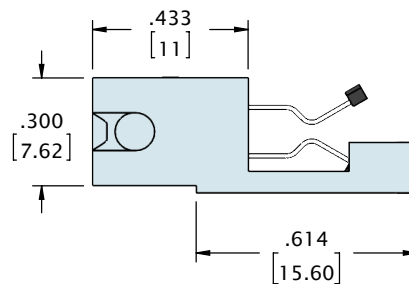
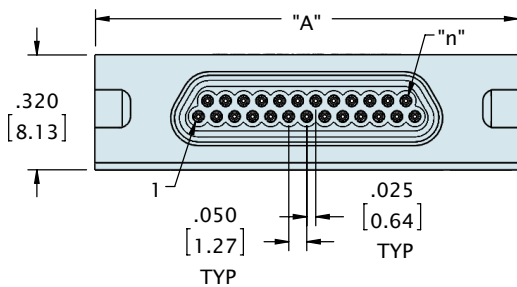
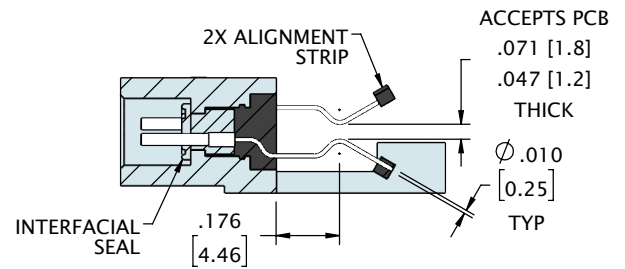
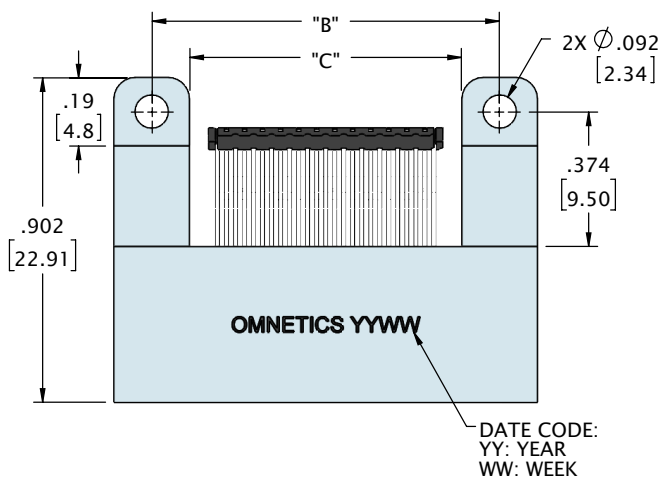
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

LATCHING MICRO-D CARD EDGE SURFACE MOUNT (TYPE CO)



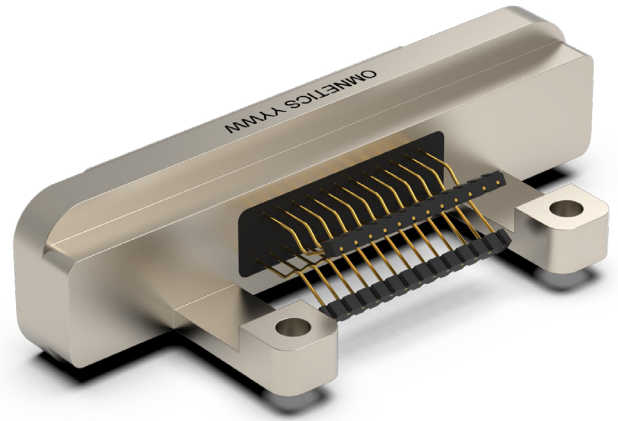
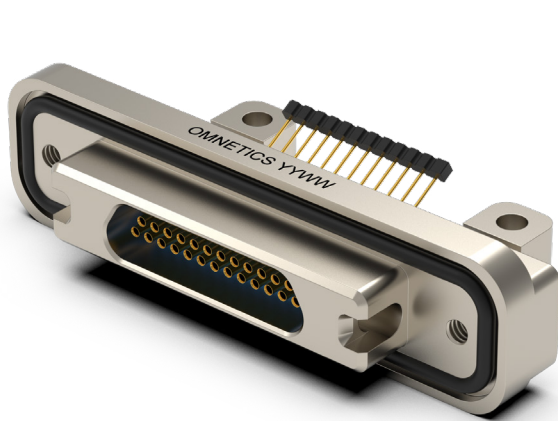
See page 159 for recommended board layout



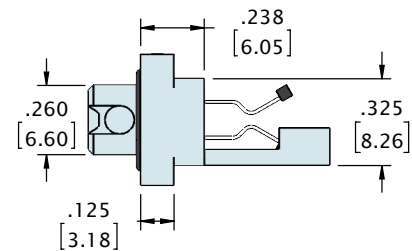
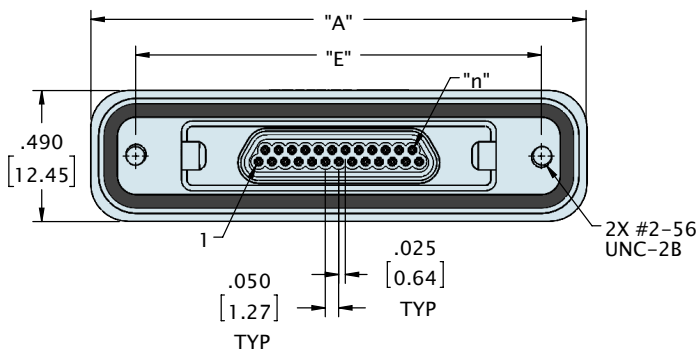
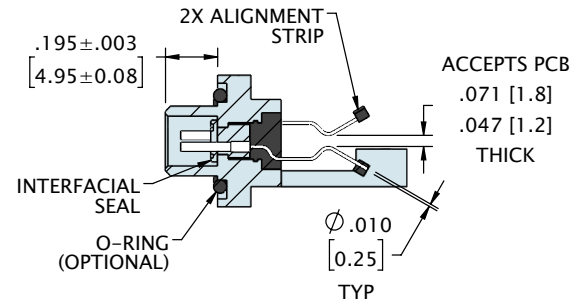
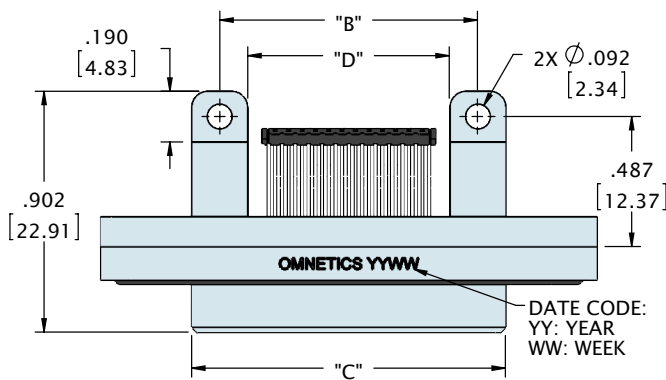
CONTACTS	ROWS	"A"	"B"	"C"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D CARD EDGE SURFACE MOUNT (TYPE CO)



See page 159 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"	"D"	"E"
9	2	1.455 [36.96]	.565 [14.35]	.775 [19.69]	.355 [9.02]	1.230 [31.24]
15	2	1.605 [40.77]	.715 [18.16]	.925 [23.50]	.505 [12.83]	1.380 [35.05]
21	2	1.755 [44.58]	.865 [21.97]	1.075 [27.31]	.655 [16.64]	1.530 [38.86]
25	2	1.855 [47.12]	.965 [24.51]	1.175 [29.85]	.755 [19.18]	1.630 [41.40]
31	2	2.005 [50.93]	1.115 [28.32]	1.325 [33.66]	.905 [22.99]	1.780 [45.21]
37	2	2.155 [54.74]	1.265 [32.13]	1.475 [37.47]	1.055 [26.80]	1.930 [49.02]
51	2	2.505 [63.63]	1.615 [41.02]	1.825 [46.36]	1.405 [35.69]	2.280 [57.91]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

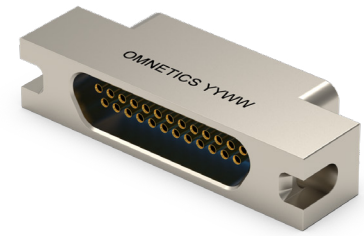
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket							
2 Number of Contacts	<table style="width: 100%; border: none;"> <tr> <td style="text-align: center;">009</td> <td style="text-align: center;">015</td> <td style="text-align: center;">021</td> <td style="text-align: center;">025</td> <td style="text-align: center;">031</td> <td style="text-align: center;">037</td> <td style="text-align: center;">051*</td> </tr> </table> <p><small>* Use 512 for Two Rows 051</small></p>	009	015	021	025	031	037	051*
009	015	021	025	031	037	051*		
3 Termination Type	CO Card Edge Surface Mount							
4 Shell Material & Finish	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">N Aluminum Shell, Electroless Nickel Plated</td> <td style="width: 50%;">CD Aluminium Shell, Cadmium Plated</td> </tr> <tr> <td>B Aluminium Shell, Black Anodized</td> <td>P Stainless Steel Shell, Passivated</td> </tr> </table>	N Aluminum Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated	B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated			
N Aluminum Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated							
B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated							
5 Common Options	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">PA Panel Mount Rear, O-Ring</td> <td style="width: 50%;">PB Panel Mount, Rear</td> </tr> <tr> <td>HT High Temp Epoxy</td> <td>RH RoHS Compliant</td> </tr> </table>	PA Panel Mount Rear, O-Ring	PB Panel Mount, Rear	HT High Temp Epoxy	RH RoHS Compliant			
PA Panel Mount Rear, O-Ring	PB Panel Mount, Rear							
HT High Temp Epoxy	RH RoHS Compliant							
6 Mod Codes	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">M10 Keyed</td> <td style="width: 50%;">M30 Ground Spring</td> </tr> <tr> <td>M50 Space Grade Micro-D, SPT1</td> <td>M53 Space Grade Micro-D, SPT2</td> </tr> </table>	M10 Keyed	M30 Ground Spring	M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2			
M10 Keyed	M30 Ground Spring							
M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2							
7 Special Instructions	YYY Describe anything that is not covered in standard options							

LATCHING MICRO-D FLEX TAIL (TYPE FF)

Omnetics **Latching Micro-D Flex Tail** Connectors provide today's rugged technologies with exceptional security through our quick-latch mechanism. This easy-to-use connector requires no threaded or tools to achieve a supremely secure connection that can endure the rigors of medical, military, aeronautics, and space applications. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. They feature Omnetics' one-piece flex pin design to provide additional protection against shock and vibration. We offer this connector in a wide range of configurations to suit your specifications, including shell sizes from 9 to 51 contacts, multiple plating options, and a panel mount version with discrete wire, cable, or solder cup.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

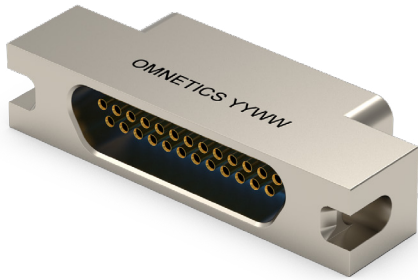
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

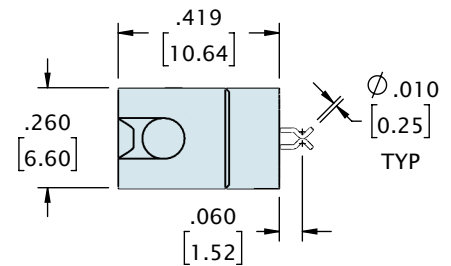
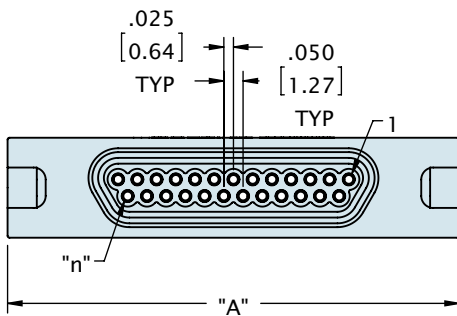
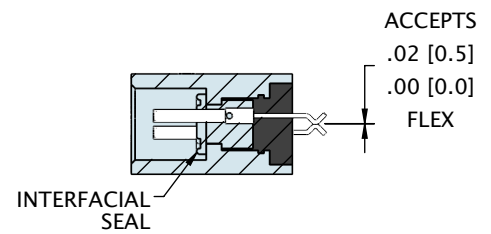
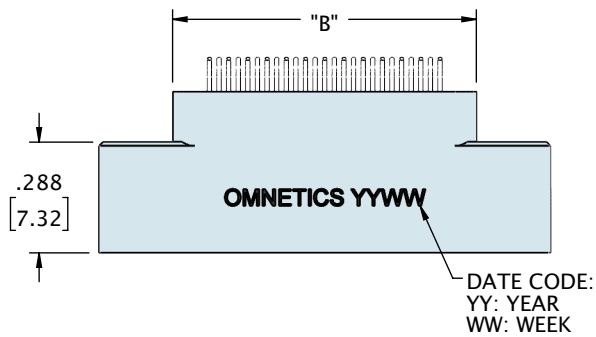
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

LATCHING MICRO-D FLEX TAIL (TYPE FF)



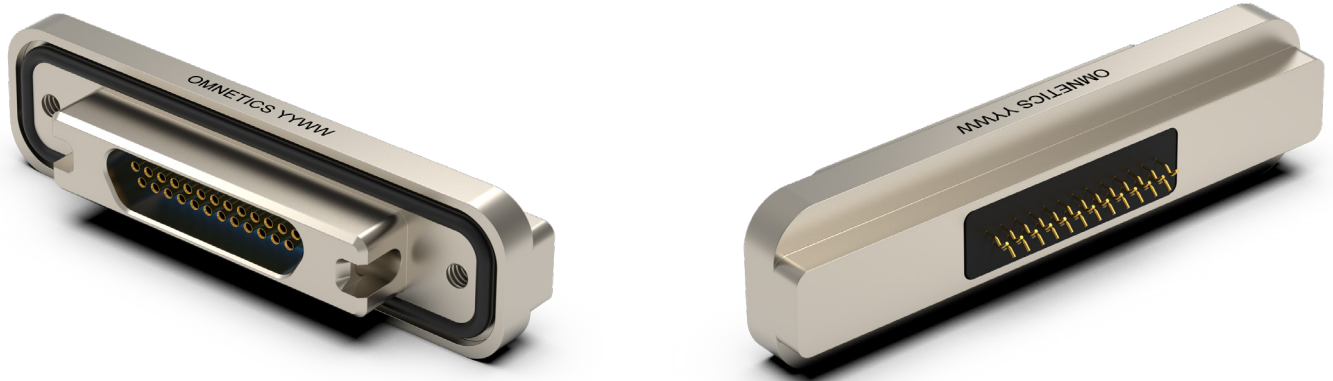
See page 159 for recommended board layout



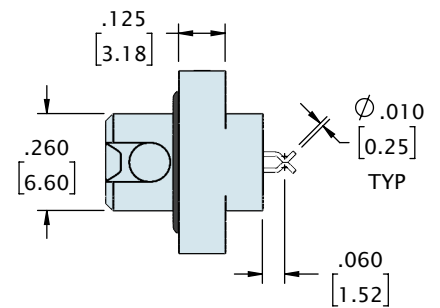
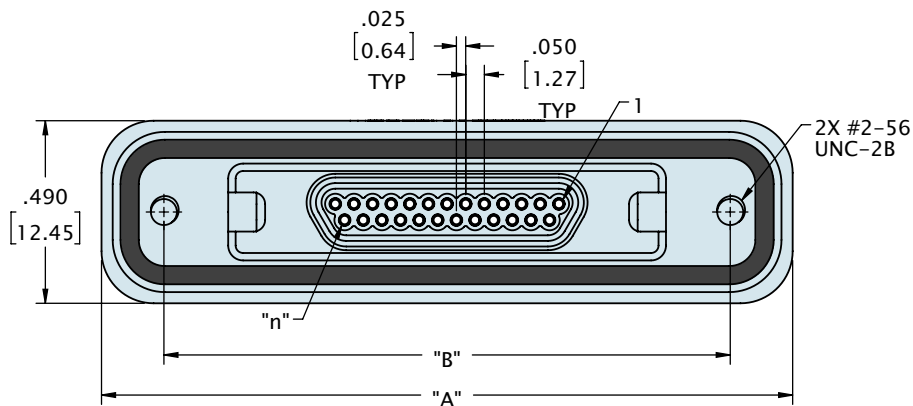
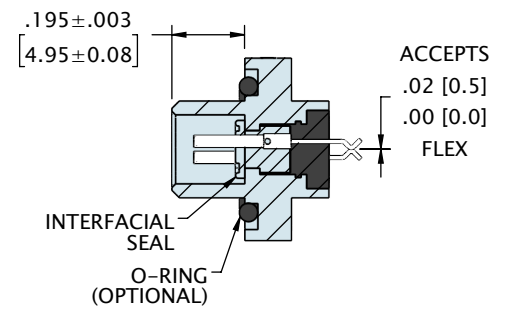
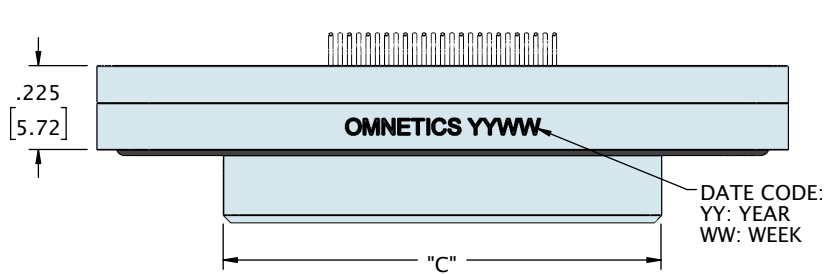
CONTACTS	ROWS	"A"	"B"
9	2	.775 [19.69]	.390 [9.91]
15	2	.925 [23.50]	.540 [13.72]
21	2	1.075 [27.31]	.690 [17.53]
25	2	1.175 [29.85]	.790 [20.07]
31	2	1.325 [33.66]	.940 [23.88]
37	2	1.475 [37.47]	1.090 [27.69]
51	2	1.825 [46.36]	1.440 [36.58]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D FLEX TAIL (TYPE FF)



See page 159 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"
9	2	1.455 [36.96]	1.120 [28.45]	.775 [19.69]
15	2	1.605 [40.77]	1.270 [32.26]	.925 [23.50]
21	2	1.755 [44.58]	1.420 [36.07]	1.075 [27.31]
25	2	1.855 [47.12]	1.520 [38.61]	1.175 [29.85]
31	2	2.005 [50.93]	1.670 [42.42]	1.325 [33.66]
37	2	2.155 [54.74]	1.820 [46.23]	1.475 [37.47]
51	2	2.505 [63.63]	2.170 [55.12]	1.825 [46.36]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

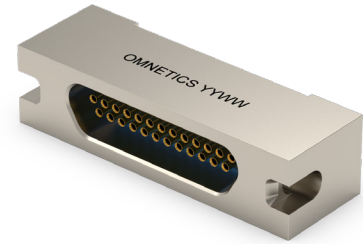
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket						
2 Number of Contacts	O09	O15	O21	O25	O31	O37	O51*
	* Use 512 for Two Rows O51						
3 Termination Type	FF Flex Tail						
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated			
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated			
5 Common Options	PA Panel Mount Rear, O-Ring			PB Panel Mount, Rear			
	HT High Temp Epoxy			RH RoHS Compliant			
6 Mod Codes	M10 Keyed			M30 Ground Spring			
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2			
7 Special Instructions	YYY Describe anything that is not covered in standard options						

LATCHING MICRO-D STRAIGHT THRU-HOLE (TYPE DD)

Omnetics **Latching Micro-D Straight Thru-Hole** Connectors provide today's rugged technologies with exceptional security through our quick-latch mechanism. Simple connectivity in the field can be achieved without threading or tools. Our goal is to serve designers of military, aeronautics, space, and other high-reliability technologies with components that enable their most ambitious ideas. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. They feature Omnetics' one-piece flex pin design to provide additional protection. We offer this connector in a wide range of configurations to suit your specifications, including shell sizes from 9 to 51 contacts, multiple plating options, and a panel mount version.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

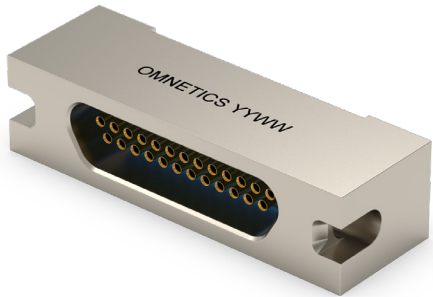
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

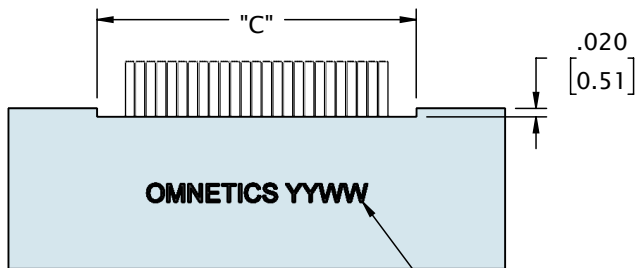
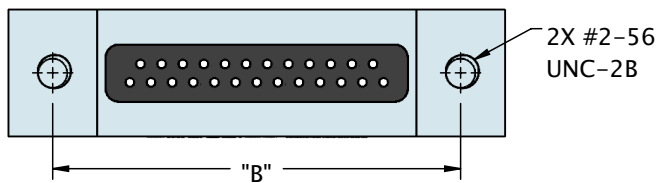
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

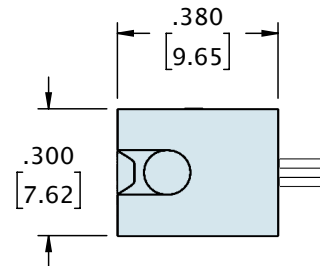
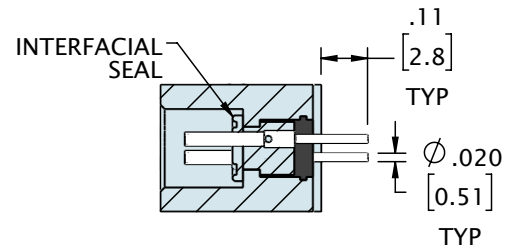
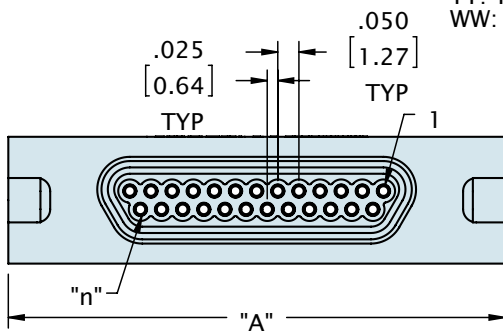
LATCHING MICRO-D STRAIGHT THRU-HOLE (TYPE DD)



See page 160 for recommended board layout



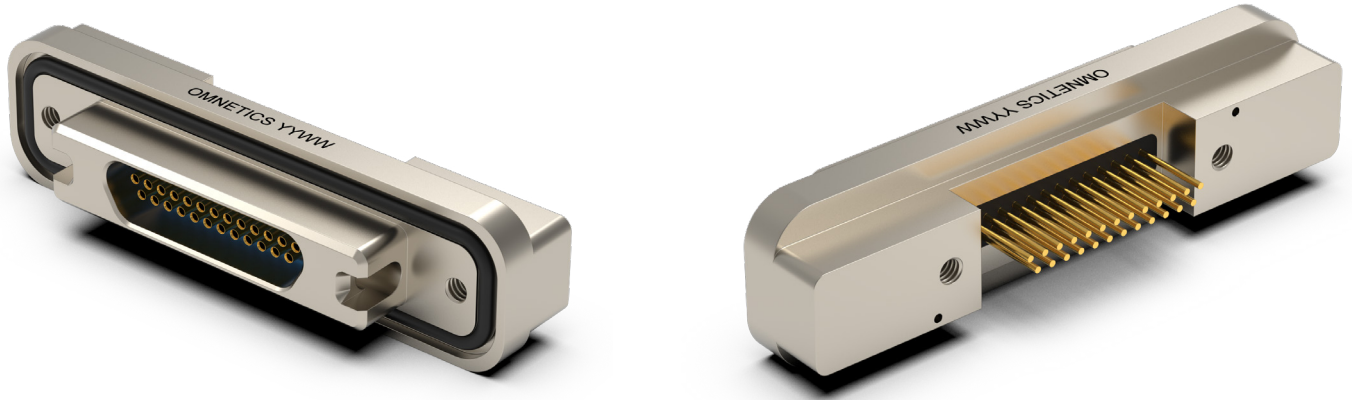
DATE CODE:
YY: YEAR
WW: WEEK



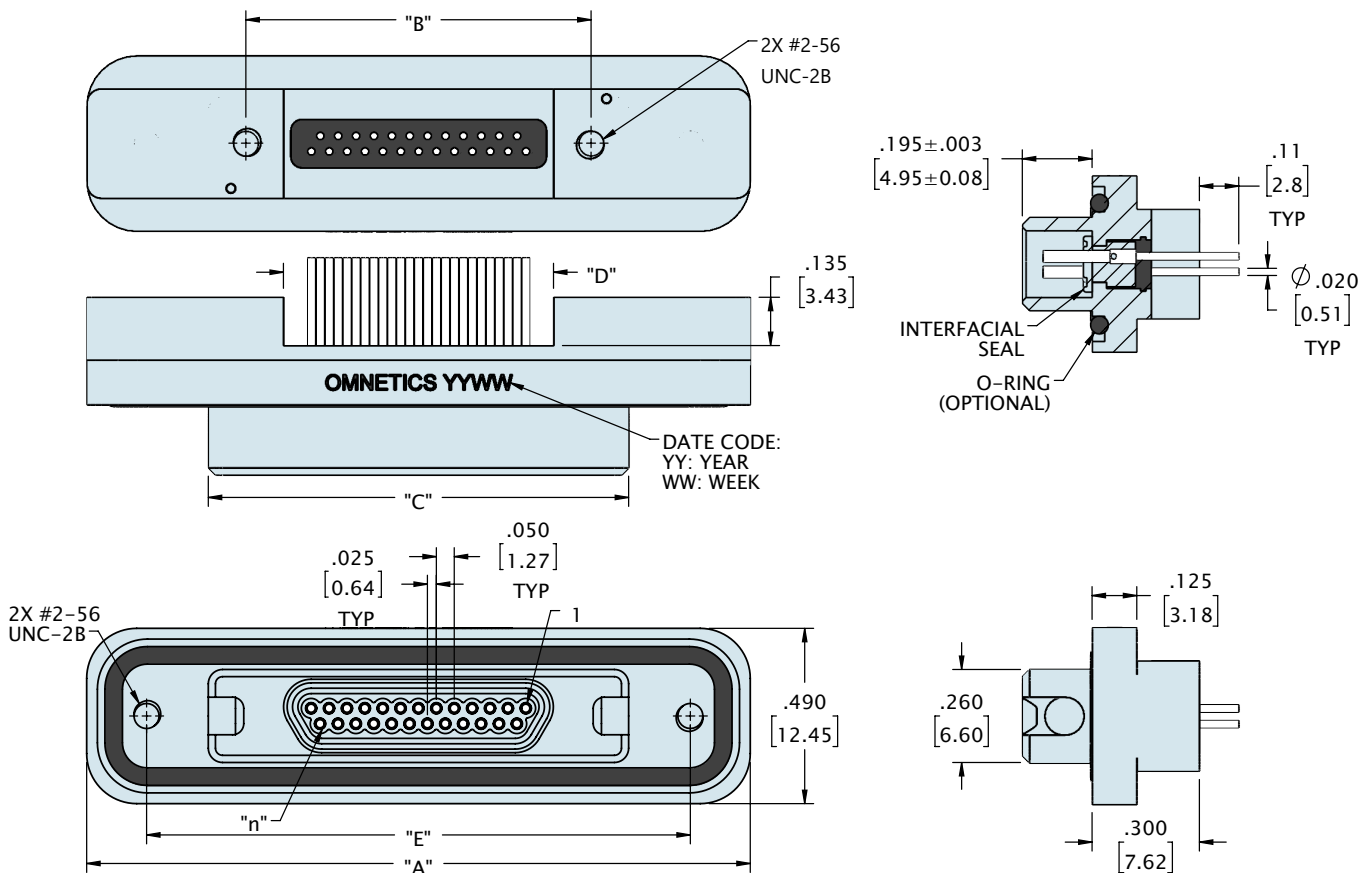
CONTACTS	ROWS	"A"	"B"	"C"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D STRAIGHT THRU-HOLE (TYPE DD)



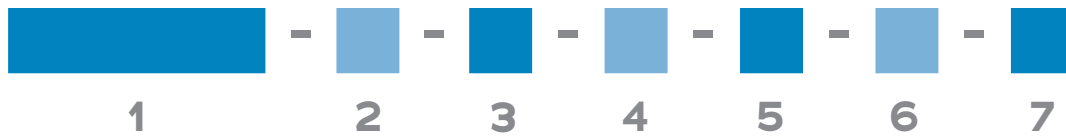
See page 160 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"	"D"	"E"
9	2	1.455 [36.96]	.565 [14.35]	.775 [19.69]	.355 [9.02]	1.120 [28.45]
15	2	1.605 [40.77]	.715 [18.16]	.925 [23.50]	.505 [12.83]	1.270 [32.26]
21	2	1.755 [44.58]	.865 [21.97]	1.075 [27.31]	.655 [16.64]	1.420 [36.07]
25	2	1.855 [47.12]	.965 [24.51]	1.175 [29.85]	.755 [19.18]	1.520 [38.61]
31	2	2.005 [50.93]	1.115 [28.32]	1.325 [33.66]	.905 [22.99]	1.670 [42.42]
37	2	2.155 [54.74]	1.265 [32.13]	1.475 [37.47]	1.055 [26.80]	1.820 [46.23]
51	2	2.505 [63.63]	1.615 [41.02]	1.825 [46.36]	1.405 [35.69]	2.170 [55.12]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

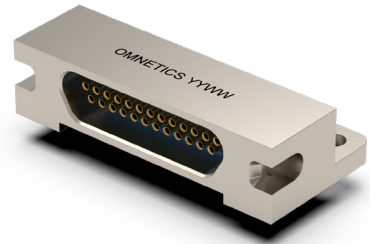
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket						
2 Number of Contacts	O09	O15	O21	O25	O31	O37	O51*
	* Use 512 for Two Rows O51						
3 Termination Type	DD Straight Thru-Hole						
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated			
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated			
5 Common Options	PA Panel Mount Rear, O-Ring			PB Panel Mount, Rear			
	HT High Temp Epoxy			RH RoHS Compliant			
6 Mod Codes	M10 Keyed			M30 Ground Spring			
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2			
7 Special Instructions	YYY Describe anything that is not covered in standard options						

LATCHING MICRO-D RIGHT ANGLE THRU-HOLE (TYPE H2)

Omnetics **Latching Micro-D Right Angle Thru-Hole Connectors** support complex or space-constrained designs. This tiny connector provides the most rugged technologies with exceptional security through our quick-latch mechanism. No threading or tools are needed to achieve a connection. Designers can depend on this connector to perform in the most demanding conditions and in applications where size and weight are concerns. These high-reliability connectors meet or exceed the shock and vibration requirements of MIL-DTL-83513. We offer this connector in a wide range of configurations to suit your specifications, including shell sizes from 9 to 51 contacts, multiple plating options, and a panel mount version with discrete wire, cable, or solder cup.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

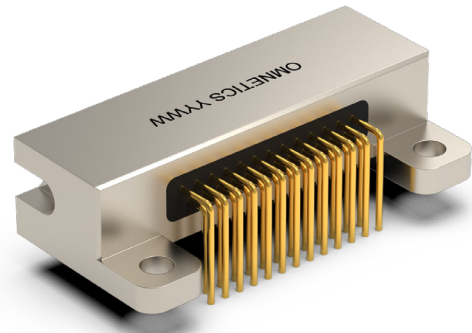
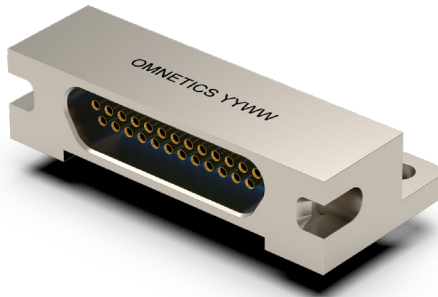
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

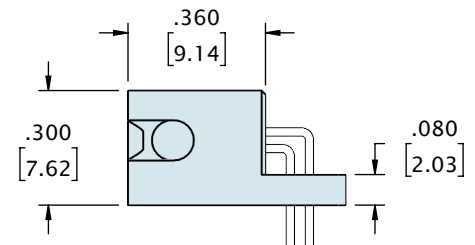
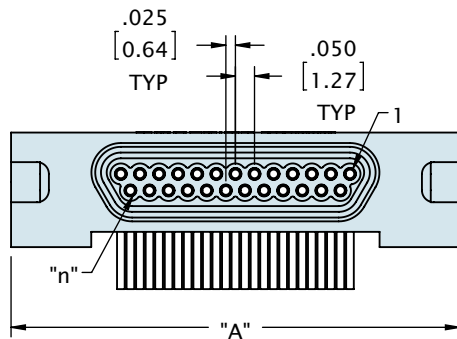
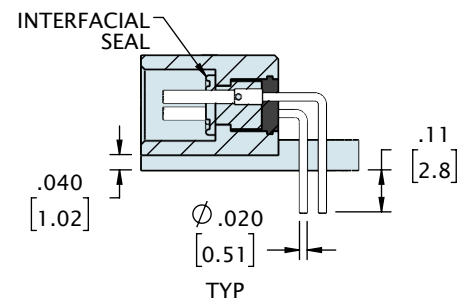
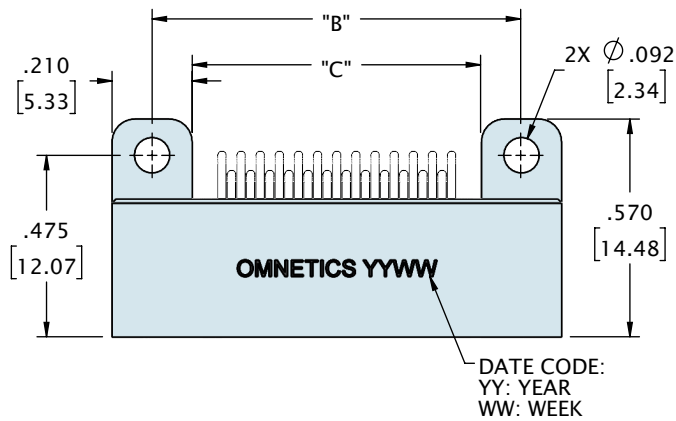
Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

LATCHING MICRO-D RIGHT ANGLE THRU-HOLE (TYPE H2)



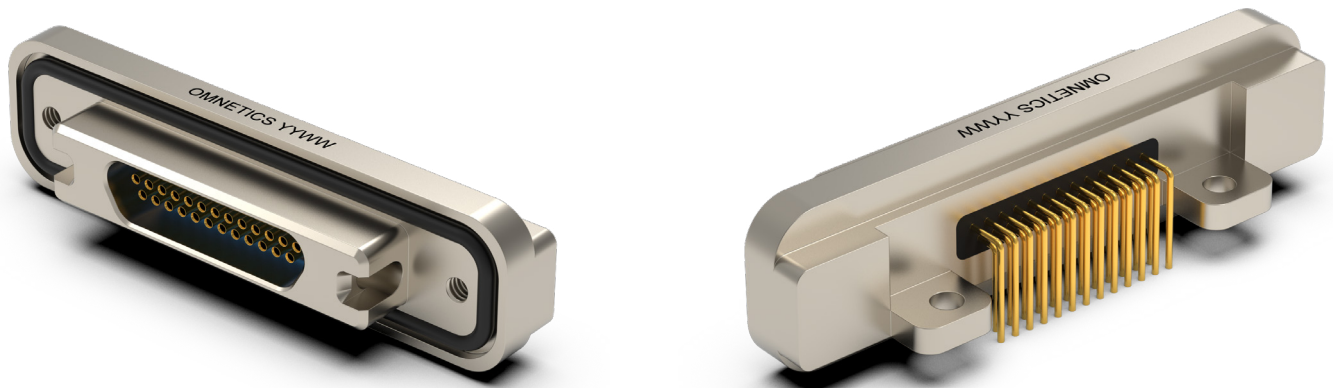
See page 161 for recommended board layout



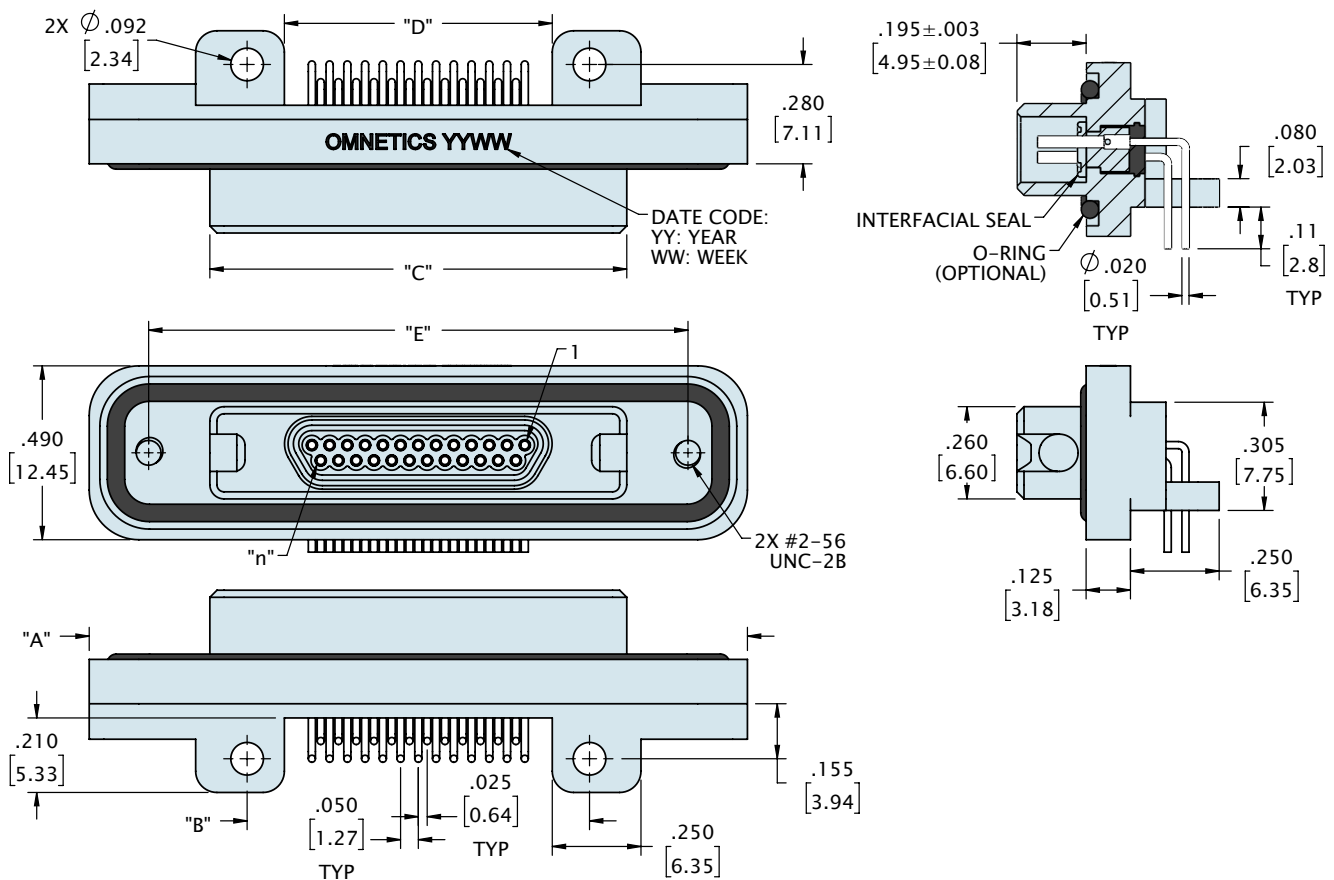
CONTACTS	ROWS	"A"	"B"	"C"
9	2	.775 [19.69]	.565 [14.35]	.355 [9.02]
15	2	.925 [23.50]	.715 [18.16]	.505 [12.83]
21	2	1.075 [27.31]	.865 [21.97]	.655 [16.64]
25	2	1.175 [29.85]	.965 [24.51]	.755 [19.18]
31	2	1.325 [33.66]	1.115 [28.32]	.905 [22.99]
37	2	1.475 [37.47]	1.265 [32.13]	1.055 [26.80]
51	2	1.825 [46.36]	1.615 [41.02]	1.405 [35.69]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D RIGHT ANGLE THRU-HOLE (TYPE H2)



See page 161 for recommended board layout



CONTACTS	ROWS	"A"	"B"	"C"	"D"	"E"
9	2	1.455 [36.96]	.565 [14.35]	.775 [19.69]	.355 [9.02]	1.120 [28.45]
15	2	1.605 [40.77]	.715 [18.16]	.925 [23.50]	.505 [12.83]	1.270 [32.26]
21	2	1.755 [44.58]	.865 [21.97]	1.075 [27.31]	.655 [16.64]	1.420 [36.07]
25	2	1.855 [47.12]	.965 [24.51]	1.175 [29.85]	.755 [19.18]	1.520 [38.61]
31	2	2.005 [50.93]	1.115 [28.32]	1.325 [33.66]	.905 [22.99]	1.670 [42.42]
37	2	2.155 [54.74]	1.265 [32.13]	1.475 [37.47]	1.055 [26.80]	1.820 [46.23]
51	2	2.505 [63.63]	1.615 [41.02]	1.825 [46.36]	1.405 [35.69]	2.170 [55.12]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

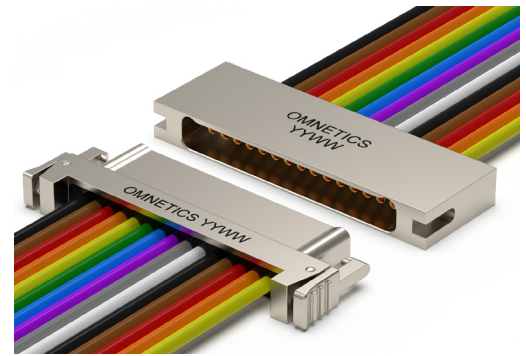
ORDERING GUIDE



1 Series	LMDS Latching Metal Micro-D Socket	
2 Number of Contacts	009 015 021 025 031 037 051*	
3 Termination Type	H2 Right Angle Thru-Hole	
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated B Aluminium Shell, Black Anodized	CD Aluminium Shell, Cadmium Plated P Stainless Steel Shell, Passivated
5 Common Options	PA Panel Mount Rear, O-Ring HT High Temp Epoxy	PB Panel Mount, Rear RH RoHS Compliant
6 Mod Codes	M10 Keyed M50 Space Grade Micro-D, SPT1	M30 Ground Spring M53 Space Grade Micro-D, SPT2
7 Special Instructions	YYY Describe anything that is not covered in standard options	

LATCHING SINGLE ROW MICRO-D DISCRETE LEADWIRE (TYPE WD)

Omnetics' **Latching Single Row Micro-D Connectors** offer a rugged quick latch system. They are built to meet or exceed the specifications of MIL-DTL-83513. Highly rugged and compact designs in shell styles from 9 to 37 contacts. The Single Row Latching Micro-D connectors incorporate Omnetics one-piece flex pin design for greater shock and vibration resistance. The high reliability gold plated flex pin is designed for >2,000 mating cycles.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

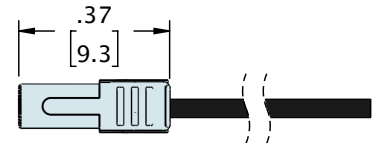
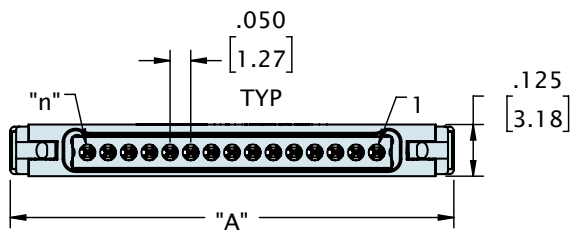
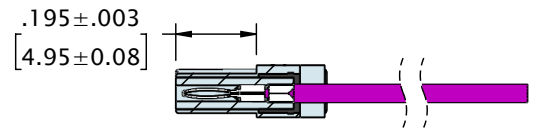
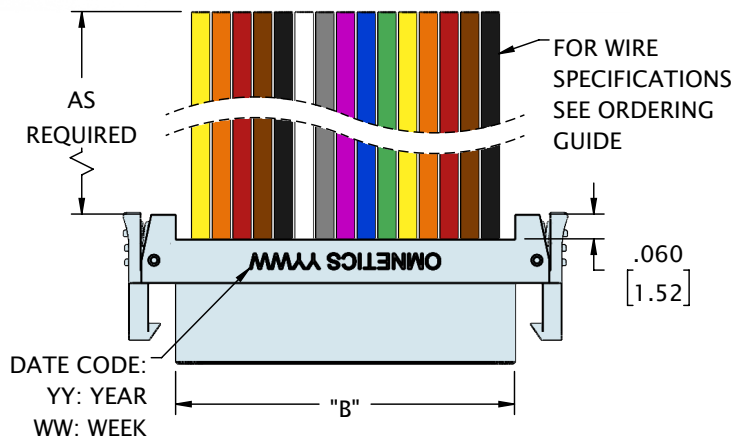
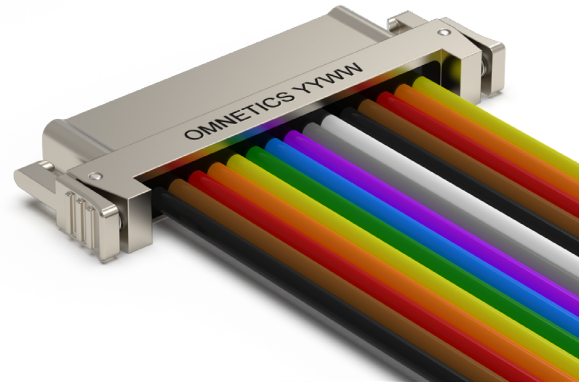
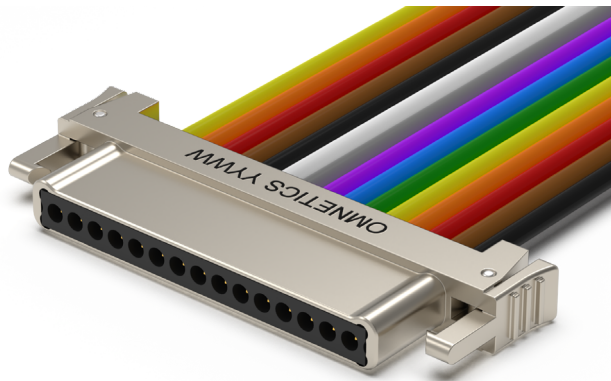
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

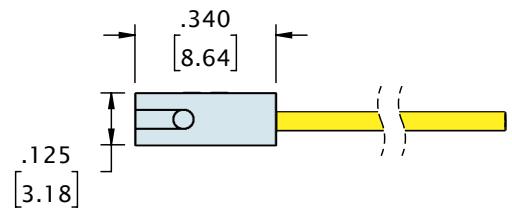
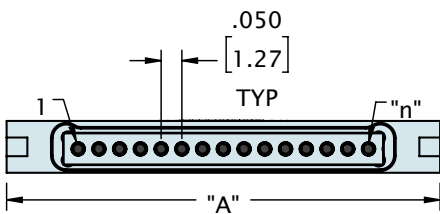
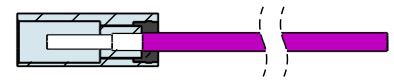
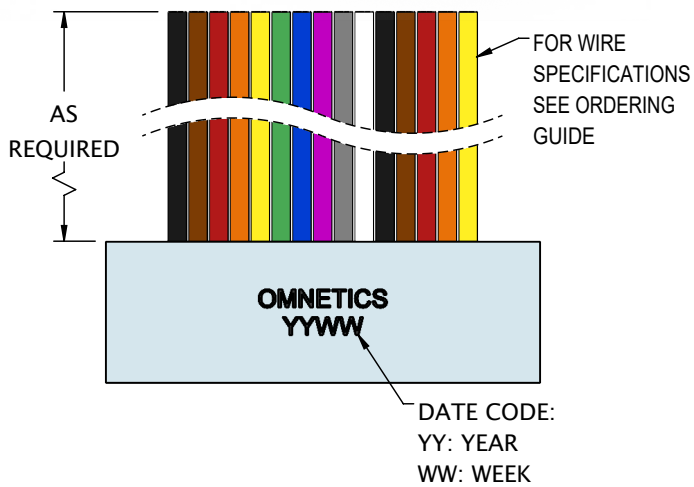
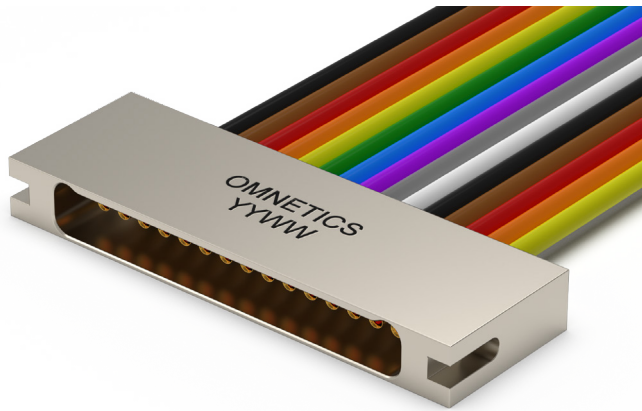
LATCHING SINGLE ROW MICRO-D DISCRETE LEADWIRE (TYPE WD)



CONTACTS	ROWS	"A"	"B"
4	1	.52 [13.2]	.270 [6.86]
9	1	.77 [19.6]	.520 [13.21]
15	1	1.07 [27.2]	.820 [20.83]
21	1	1.37 [34.8]	1.120 [28.45]
25	1	1.57 [39.9]	1.320 [33.53]
31	1	1.87 [47.5]	1.620 [41.15]
37	1	2.17 [55.1]	1.920 [48.77]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING SINGLE ROW MICRO-D DISCRETE LEADWIRE (TYPE WD)



CONTACTS	ROWS	"A"
4	1	.495 [12.57]
9	1	.745 [18.92]
15	1	1.045 [26.54]
21	1	1.345 [34.16]
25	1	1.545 [39.24]
31	1	1.845 [46.86]
37	1	2.145 [54.48]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING SINGLE ROW MICRO-D DISCRETE LEADWIRE (TYPE WD)

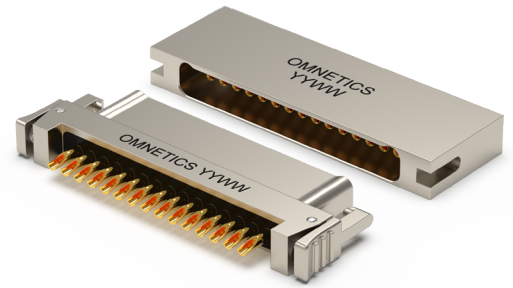
ORDERING GUIDE



1 Series	LMSP Latching Single Row Micro-D Pin	LMSS Latching Single Row Micro-D Socket				
	LMSP - Latch Side (STD)			LMSS - Latch Receptacle side (STD)		
2 Number of Contacts	04	09	15	21	25	31 37
3 Termination Type	WD Discrete Leadwire					
4 Wire AWG	4 24 AWG		6 26 AWG (STD)		8 28 AWG 0 30 AWG	
5 Wire Type	Q Nema HP3 (STD)		R M22759/11		S M22759/33 X Other	
6 Wire Length (inches)	18.0 18.00 (STD)			XX.X Custom length		
7 Color Scheme	1 10 Repeating		2 Blue	3 White	4 Non Repeating 5 Yellow	
8 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated		
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated		
9 Common Options	IBS Integrated Backshell (LMSP only)			BSY Custom Backshell (LMSP only)		
	HT High Temp Epoxy			RH RoHS Compliant		
10 Shield / Jacket	D Slip On Metal Braid		E Machine Braid	F Flexo Braid		
	J Nomex Braid		ST Shrink Tube			
11 Mod Code	M10 Keyed			M30 Ground Spring		
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2		
12 Special Instructions	YYY Describe anything that is not covered in standard options					

LATCHING SINGLE ROW MICRO-D SOLDER CUP (TYPE SS)

Omnetics' **Latching Single Row Micro-D Solder Cup Connectors** offer a rugged quick latch system. These connector feature Solder Cup termination and are built to meet or exceed the specifications of MIL-DTL-83513. Highly rugged and compact designs in shell styles from 9 to 37 contacts. The Single Row Micro-D connectors incorporate Omnetics one-piece flex pin design for greater shock and vibration resistance. The high reliability gold plated flex pin is designed for >2,000 mating cycles.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

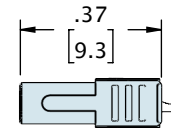
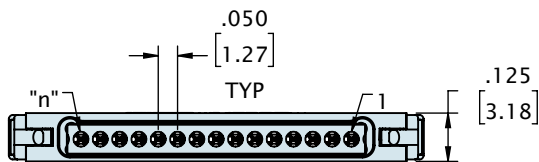
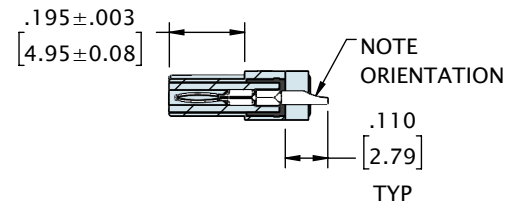
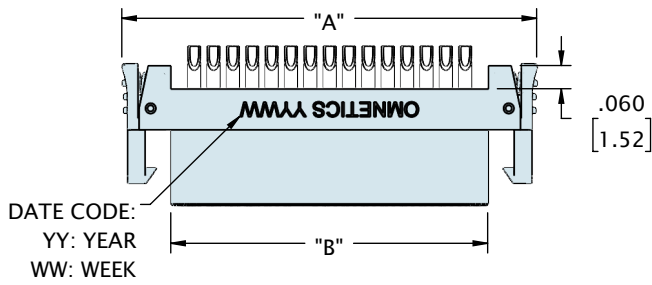
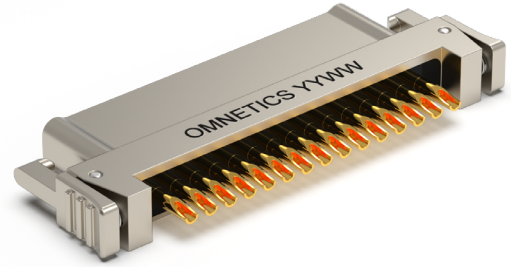
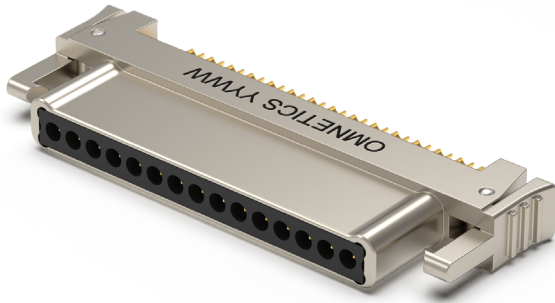
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

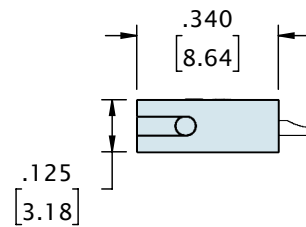
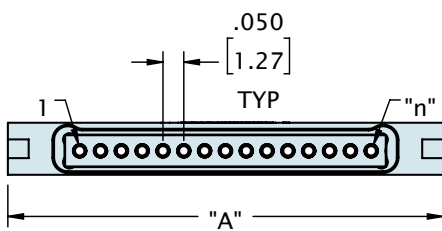
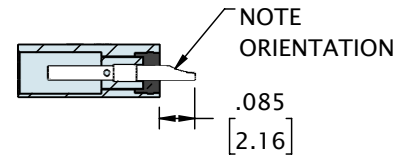
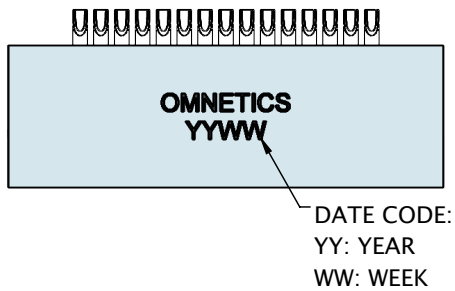
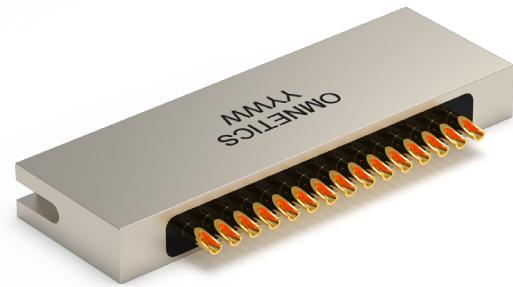
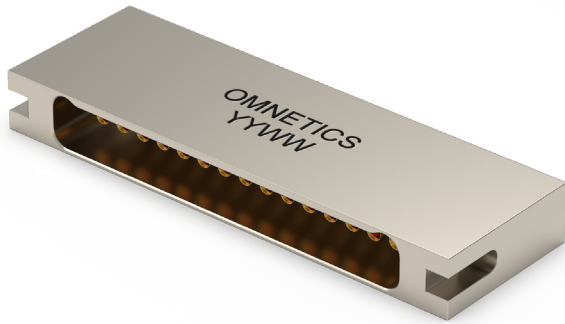
LATCHING SINGLE ROW MICRO-D SOLDER CUP (TYPE SS)



CONTACTS	ROWS	"A"	"B"
4	1	.52 [13.2]	.270 [6.86]
9	1	.77 [19.6]	.520 [13.21]
15	1	1.07 [27.2]	.820 [20.83]
21	1	1.37 [34.8]	1.120 [28.45]
25	1	1.57 [39.9]	1.320 [33.53]
31	1	1.87 [47.5]	1.620 [41.15]
37	1	2.17 [55.1]	1.920 [48.77]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

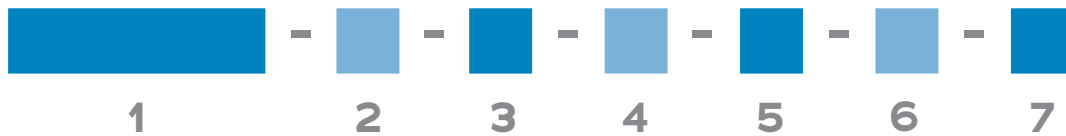
LATCHING SINGLE ROW MICRO-D SOLDER CUP (TYPE SS)



CONTACTS	ROWS	"A"
4	1	.495 [12.57]
9	1	.745 [18.92]
15	1	1.045 [26.54]
21	1	1.345 [34.16]
25	1	1.545 [39.24]
31	1	1.845 [46.86]
37	1	2.145 [54.48]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

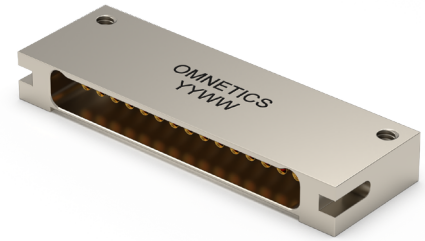
ORDERING GUIDE



1 Series	LMSP Latching Single Row Micro-D Pin	LMSS Latching Single Row Micro-D Socket					
	LMSP - Latch Side (STD)		LMSS - Latch Receptacle side (STD)				
2 Number of Contacts	04	09	15	21	25	31	37
3 Termination Type	SS Soldercup						
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated			
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated			
5 Common Options	BSY Custom Backshell (LMSP only)		HT High Temp Epoxy		RH RoHS Compliant		
6 Mod Code	M10 Keyed			M30 Ground Spring			
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2			
7 Special Instructions	YYY Describe anything that is not covered in standard options						

LATCHING SINGLE ROW MICRO-D 90° BOARD MOUNT (TYPE AA)

Omnetics' **Latching Single Row Micro-D 90° Board Mount Connectors** offer a rugged quick latch system. This connector features a compact board termination and are built to meet or exceed the specifications of MIL-DTL-83513. Highly rugged and compact designs in shell styles from 9 to 37 contacts. The Single Row Micro-D connectors incorporate Omnetics one-piece flex pin design for greater shock and vibration resistance. The high reliability gold plated flex pin is designed for >2,000 mating cycles.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

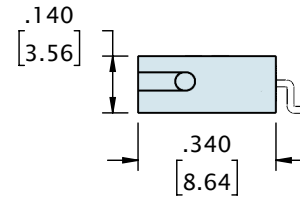
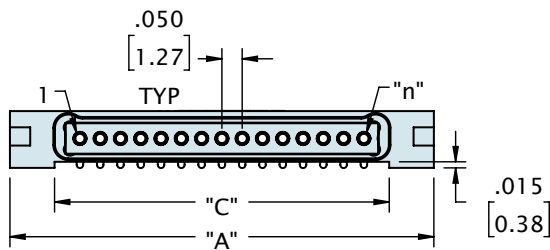
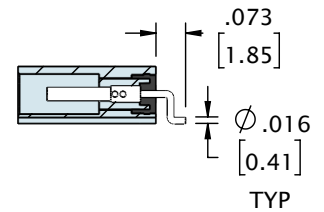
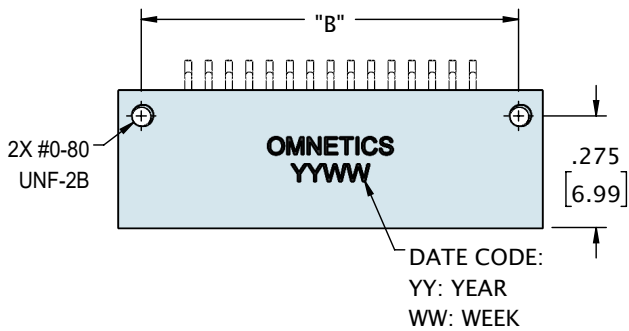
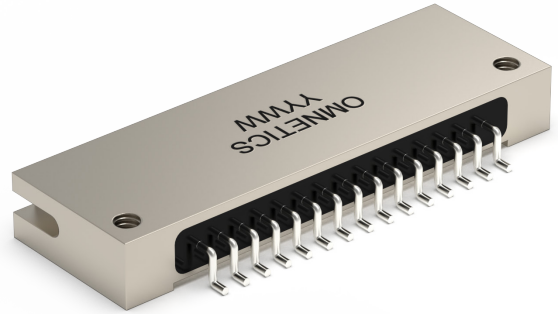
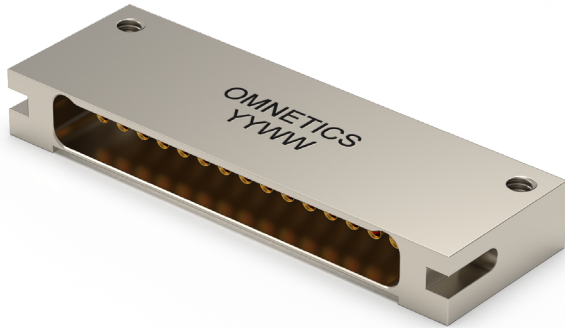
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

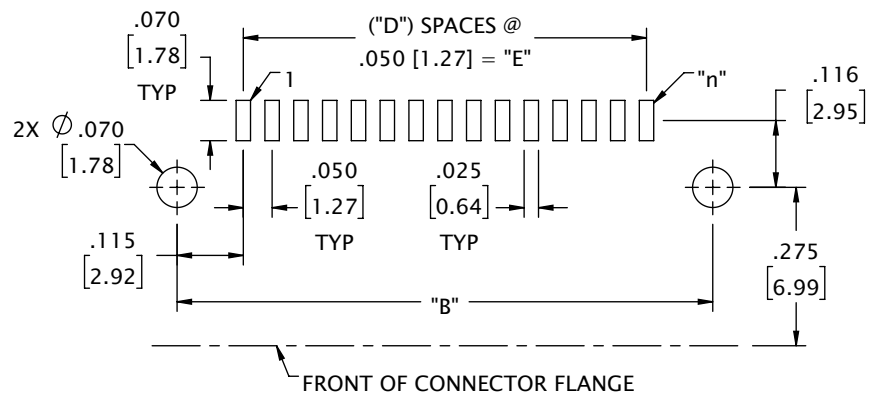
LATCHING SINGLE ROW MICRO-D 90° BOARD MOUNT (TYPE AA)



CONTACTS	ROWS	"A"	"B"	"C"
4	1	.495 [12.57]	.380 [9.65]	.275 [6.99]
9	1	.745 [18.92]	.630 [16.00]	.525 [13.34]
15	1	1.045 [26.54]	.930 [23.62]	.825 [20.96]
21	1	1.345 [34.16]	1.230 [31.24]	1.125 [28.58]
25	1	1.545 [39.24]	1.430 [36.32]	1.325 [33.66]
31	1	1.845 [46.86]	1.730 [43.94]	1.625 [41.28]
37	1	2.145 [54.48]	2.030 [51.56]	1.925 [48.90]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

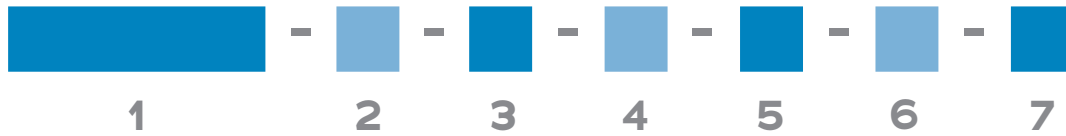
LATCHING SINGLE ROW MICRO-D 90° BOARD MOUNT LAYOUT



CONTACTS	ROWS	"B"	"D"	"E"
4	1	.380 [9.65]	3	.150 [3.81]
9	1	.630 [16.00]	8	.400 [10.16]
15	1	.930 [23.62]	14	.700 [17.78]
21	1	1.230 [31.24]	20	1.000 [25.40]
25	1	1.430 [36.32]	24	1.200 [30.48]
31	1	1.730 [43.94]	30	1.500 [38.10]
37	1	2.030 [51.56]	36	1.800 [45.72]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

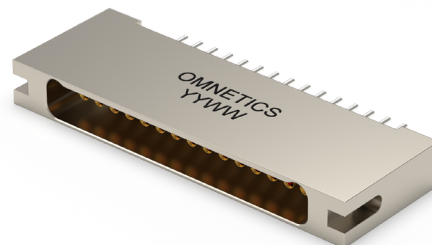
ORDERING GUIDE



1 Series	LMSS Latching Micro-D Single Row Socket				
2 Number of Contacts	O4 O9 15 21 25 31 37				
3 Termination Type	AA 90° Board Mount				
4 Shell Material & Finish	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">N Aluminium Shell, Electroless Nickel Plated</td> <td>CD Aluminium Shell, Cadmium Plated</td> </tr> <tr> <td>B Aluminium Shell, Black Anodized</td> <td>P Stainless Steel Shell, Passivated</td> </tr> </table>	N Aluminium Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated	B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated
N Aluminium Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated				
B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated				
5 Common Options	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">HT High Temp Epoxy</td> <td>RH RoHS Compliant</td> </tr> </table>	HT High Temp Epoxy	RH RoHS Compliant		
HT High Temp Epoxy	RH RoHS Compliant				
6 Mod Codes	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">M10 Keyed</td> <td>M30 Ground Spring</td> </tr> <tr> <td>M50 Space Grade Micro-D, SPT1</td> <td>M53 Space Grade Micro-D, SPT2</td> </tr> </table>	M10 Keyed	M30 Ground Spring	M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2
M10 Keyed	M30 Ground Spring				
M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2				
7 Special Instructions	YYY Describe anything that is not covered in standard options				

LATCHING MICRO-D SINGLE ROW STRAIGHT THRU-HOLE (TYPE DD)

Omnetics' **Latching Single Row Micro-D Straight Thru-Hole Board Mount Connectors** offer a rugged quick latch system. This connector features a compact board termination and are built to meet or exceed the specifications of MIL-DTL-83513. Highly rugged and compact designs in shell styles from 9 to 37 contacts. The Single Row Micro-D connectors incorporate Omnetics one-piece flex pin design for greater shock and vibration resistance. The high reliability gold plated flex pin is designed for >2,000 mating cycles.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

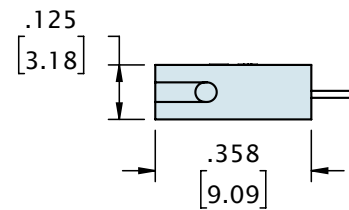
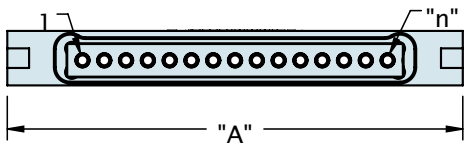
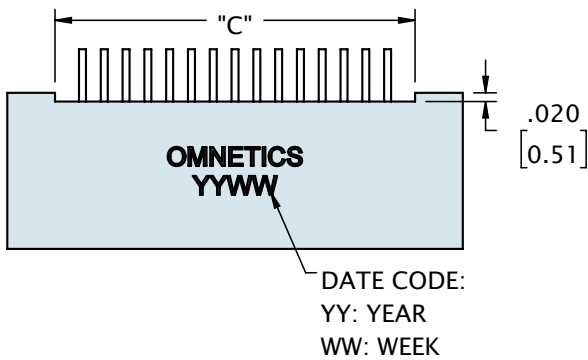
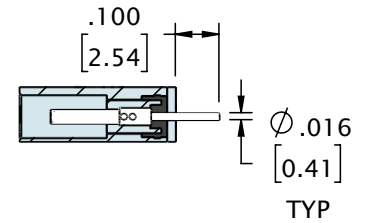
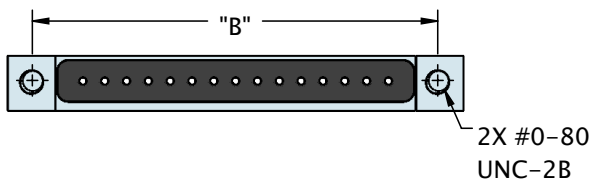
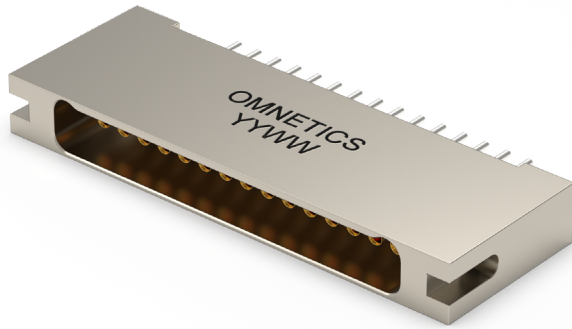
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

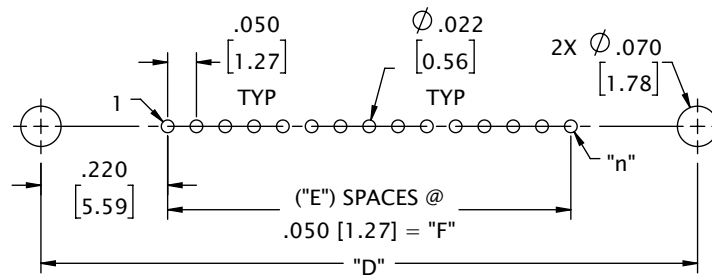
LATCHING MICRO-D SINGLE ROW STRAIGHT THRU-HOLE (TYPE DD)



CONTACTS	ROWS	"A"	"B"	"C"
4	1	.495 [12.57]	.380 [9.65]	.276 [7.01]
9	1	.745 [18.92]	.630 [16.00]	.526 [13.36]
15	1	1.045 [26.54]	.930 [23.62]	.826 [20.98]
21	1	1.345 [34.16]	1.230 [31.24]	1.126 [28.60]
25	1	1.545 [39.24]	1.430 [36.32]	1.326 [33.68]
31	1	1.845 [46.86]	1.730 [43.94]	1.626 [41.30]
37	1	2.145 [54.48]	2.030 [51.56]	1.926 [48.92]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D SINGLE ROW STRAIGHT THRU-HOLE BOARD MOUNT LAYOUT



CONTACTS	ROWS	"B"	"E"	"F"
4	1	.590 [14.99]	3	.150 [3.81]
9	1	.840 [21.34]	8	.400 [10.16]
15	1	1.140 [28.96]	14	.700 [17.78]
21	1	1.440 [36.58]	20	1.000 [25.40]
25	1	1.640 [41.66]	24	1.200 [30.48]
31	1	1.940 [49.28]	30	1.500 [38.10]
37	1	2.240 [56.90]	36	1.800 [45.72]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

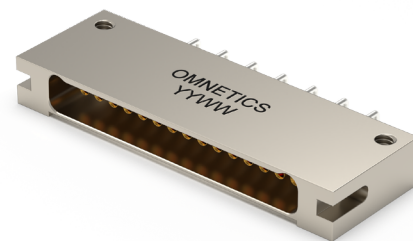
ORDERING GUIDE



1 Series	LMSS Latching Micro-D Single Row Socket				
2 Number of Contacts	O4 O9 15 21 25 31 37				
3 Termination Type	DD Straight Thru-Hole				
4 Shell Material & Finish	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">N Aluminum Shell, Electroless Nickel Plated</td> <td style="width: 50%;">CD Aluminium Shell, Cadmium Plated</td> </tr> <tr> <td>B Aluminium Shell, Black Anodized</td> <td>P Stainless Steel Shell, Passivated</td> </tr> </table>	N Aluminum Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated	B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated
N Aluminum Shell, Electroless Nickel Plated	CD Aluminium Shell, Cadmium Plated				
B Aluminium Shell, Black Anodized	P Stainless Steel Shell, Passivated				
5 Common Options	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">HT High Temp Epoxy</td> <td style="width: 50%;">RH RoHS Compliant</td> </tr> </table>	HT High Temp Epoxy	RH RoHS Compliant		
HT High Temp Epoxy	RH RoHS Compliant				
6 Mod Codes	<table style="width: 100%; border: none;"> <tr> <td style="width: 50%;">M10 Keyed</td> <td style="width: 50%;">M30 Ground Spring</td> </tr> <tr> <td>M50 Space Grade Micro-D, SPT1</td> <td>M53 Space Grade Micro-D, SPT2</td> </tr> </table>	M10 Keyed	M30 Ground Spring	M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2
M10 Keyed	M30 Ground Spring				
M50 Space Grade Micro-D, SPT1	M53 Space Grade Micro-D, SPT2				
7 Special Instructions	YYY Describe anything that is not covered in standard options				

LATCHING MICRO-D SINGLE ROW RIGHT ANGLE THRU-HOLE (TYPE H2)

Omnetics' **Latching Single Row Micro-D Right Angle Thru-Hole Board Mount Connectors** offer a rugged quick latch system. This connector features a compact board termination and are built to meet or exceed the specifications of MIL-DTL-83513. Highly rugged and compact designs in shell styles from 9 to 37 contacts. The Single Row Micro-D connectors incorporate Omnetics one-piece flex pin design for greater shock and vibration resistance. The high reliability gold plated flex pin is designed for >2,000 mating cycles.



Electro-Mechanical Specifications

TYPE	PERFORMANCE
Durability	> 2000 Mating Cycles min
Temperature	-55°C to +125°C (200 °C w/HTE)
Current rating	3 Amps per contact per MIL-DTL-83513
Voltage Rating (DWV)	600 VAC RMS Sea Level
Insulation Resistance	5,000 Megohms @ 500 VDC
Shock	50 g's with no discontinuities > 1 microsecond
Vibration	20 g's with no discontinuities > 1 microsecond
Thermal Vacuum Outgassing	1.0% max TML, 0.1% max CVCM - NASA SP-R-0022
Contact Resistance	26 milliohms (65 mV) max @ 2.5 Amps per MIL-DTL-83513
Mating/Unmating Force	3 oz. (.85g) typical per contact

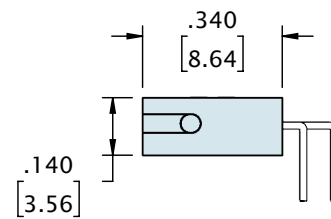
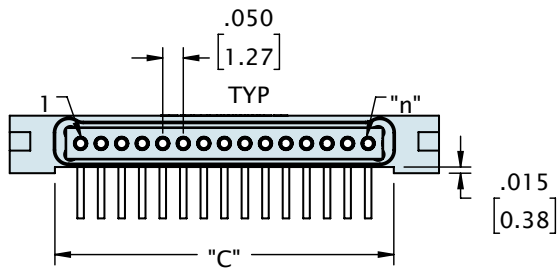
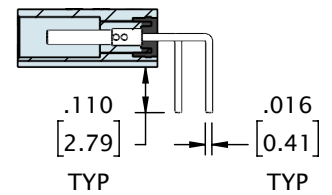
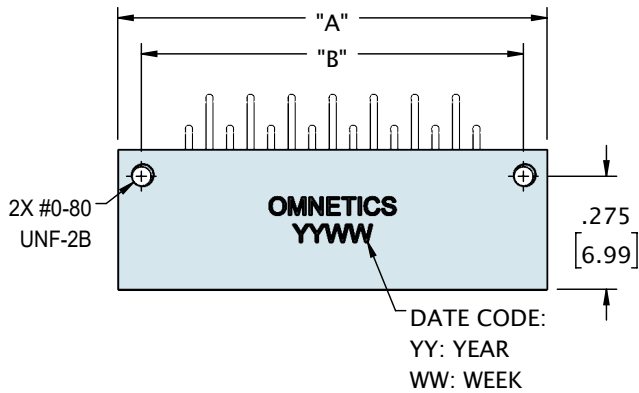
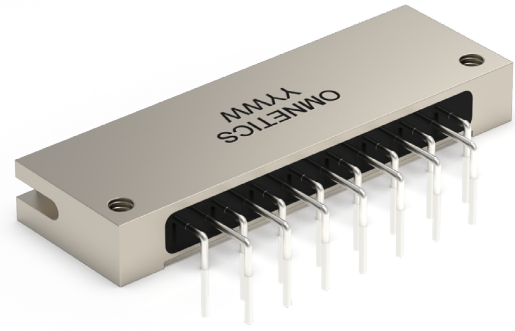
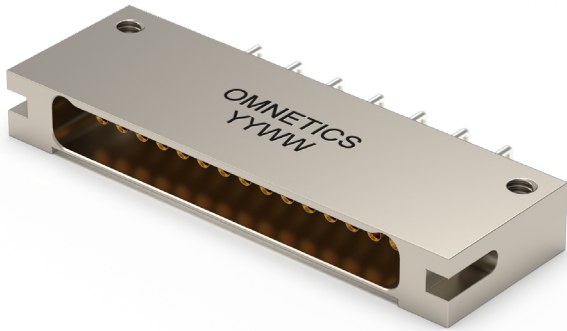
Material Specifications

TYPE	PERFORMANCE
Contact	Copper Alloy Per MIL-DTL-83513
Contact Finish	Gold per ASTM B488, Type II, Class 1.27, Code C Over Nickel Underplate
Insulator	Thermoplastic per MIL-DTL-83513
Interfacial Seal	Silicone Elastomer per A-A-59588
Hardware	Stainless Steel, 300 Series, Passivated per SAE AMS-2700

Shell Options

MATERIAL	FINISH
Aluminum 6061	Electroless Nickel per SAE-AMS-2404
Stainless Steel, 300 Series	Passivated per SAE-AMS-2700

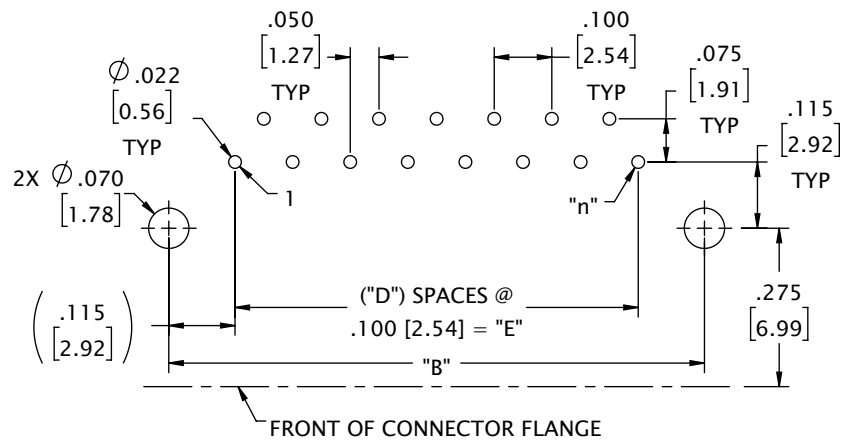
LATCHING MICRO-D SINGLE ROW RIGHT ANGLE THRU-HOLE (TYPE H2)



CONTACTS	ROWS	"A"	"B"	"C"
4	1	.495 [12.57]	.380 [9.65]	.275 [6.99]
9	1	.745 [18.92]	.630 [16.00]	.525 [13.34]
15	1	1.045 [26.54]	.930 [23.62]	.825 [20.96]
21	1	1.345 [34.16]	1.230 [31.24]	1.125 [28.58]
25	1	1.545 [39.24]	1.430 [36.32]	1.325 [33.66]
31	1	1.845 [46.86]	1.730 [43.94]	1.625 [41.28]
37	1	2.145 [54.48]	2.030 [51.56]	1.925 [48.90]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY

LATCHING MICRO-D SINGLE ROW RIGHT ANGLE THRU-HOLE BOARD MOUNT LAYOUT



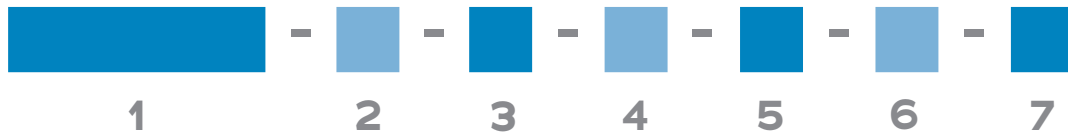
CONTACTS	ROWS	"B"	"D"	"E"
4	1	.380 [9.65]	3	.300 [7.62]
9	1	.630 [16.00]	8	.800 [20.32]
15	1	.930 [23.62]	14	1.400 [35.56]
21	1	1.230 [31.24]	20	2.000 [50.80]
25	1	1.430 [36.32]	24	2.400 [60.96]
31	1	1.730 [43.94]	30	3.000 [76.20]
37	1	2.030 [51.56]	36	3.600 [91.44]

DIMENSIONS IN [] ARE IN MILLIMETERS AND ARE FOR REFERENCE ONLY



LATCHING MICRO-D SINGLE ROW RIGHT ANGLE THRU-HOLE (TYPE H2)

ORDERING GUIDE



1 Series	LMSS Latching Micro-D Single Row Socket						
2 Number of Contacts	O4	O9	15	21	25	31	37
3 Termination Type	H2 Right Angle Thru-Hole						
4 Shell Material & Finish	N Aluminum Shell, Electroless Nickel Plated			CD Aluminium Shell, Cadmium Plated			
	B Aluminium Shell, Black Anodized			P Stainless Steel Shell, Passivated			
5 Common Options	HT High Temp Epoxy			RH RoHS Compliant			
6 Mod Codes	M10 Keyed			M30 Ground Spring			
	M50 Space Grade Micro-D, SPT1			M53 Space Grade Micro-D, SPT2			
7 Special Instructions	YYY Describe anything that is not covered in standard options						