



microQUAD

MLHS – Vertical Surface Board-Mount w/Turning Hardware (Female)

MLHS are rugged metal connectors used in applications where a vertical orientation and a surface board-mount termination style are desired. These connectors have turning hardware.

DIMENSIONS

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A	Body Length (w/o feet) for V-SMT Turning Hardware (see calculation below)
C	"A" minus 0.640
D	"A" minus 0.320
E	"A" minus 0.570
F	"A" PLUS 0.430
G	"F" minus 0.250
Y	"A" minus 0.624

TABLE A	
Module	0.200
SIG 10	0.321
SIG 20	0.571
SIG 30	0.821
SIG 40	1.071
SIG 50	1.321

TABLE B		
Module	0.028	0.028
SIG xx	0.028	0.028

0.896

ORDER FORM

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

ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE	ENTER CODE
MLHS							
SERIES Vertical Surface-Mount (Female)	HIGH-SPEED MODULES 01 – 1 Module 02 – 2 Modules 03 – 3 Modules 04 – 4 Modules 05 – 5 Modules (max. sig. 40) 06 – 6 Modules (max. sig. 30) 07 – 7 Modules (max. sig. 20) 08 – 8 Modules (max. sig. 10) 09 – 9 Modules (max. sig. 10) 0A – 10 Modules (no signals)	BODY STYLE 600 – Female w/Mounting Ears 800 – Female with Ground Fingers & Mounting Ears (preferred)	CONTACT TERMINATION 47 – Socket, Vertical SMT, Staggered Leads – All 67 – Socket, Vertical SMT, Staggered Leads – High-Speed, Single-Sided Leads – Signals 87 – Socket, Vertical SMT, Single-Sided Leads – High-Speed, Staggered Leads, Signals B7 – Socket, Vertical SMT, Single-Sided Leads – All	TERMINATION PLATING 5 – 50 μ" Gold Contact, Sn/Pb Alloy Termination ☑ 7 – 50 μ" Gold Contact, SAC305-Plated Termination	BODY PLATING (LCP INSULATORS) 2 – Electroless Nickel-Plated Aluminum Shell 3 – Electrodeposited Cadmium-Plated Aluminum Shell ☑ 6 – Gold-Plated Aluminum Shell	HARDWARE 000 – No Hardware 810 – Two Turning Jackscrews Captivated** JXX – Keying Jackscrews***	SIGNAL CONTACTS L0 – Left Side Key – No Signal Contacts L1 – Left Side Key – 10 Signal Contacts L2 – Left Side Key – 20 Signal Contacts L3 – Left Side Key – 30 Signal Contacts L4 – Left Side Key – 40 Signal Contacts L5 – Left Side Key – 50 Signal Contacts R0 – Right Side Key – No Signal Contacts R1 – Right Side Key – 10 Signal Contacts R2 – Right Side Key – 20 Signal Contacts R3 – Right Side Key – 30 Signal Contacts R4 – Right Side Key – 40 Signal Contacts R5 – Right Side Key – 50 Signal Contacts

High-Reliability Contact
 ML-DTL-83513

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

NOTES

- ☑ Option not RoHS compliant.
- 1. All high-speed receptacles have fluoropolymer interfacial seals.
- * Left or right polarization is determined by looking at the male interface with the LONG SIDE downward. The key is the angled side of the interface.
- ** Captivated hardware is factory-installed and non-removable.
- *** Refer to "Hardware Polarization" catalog page for keying options.

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, electrodeposited cadmium, or gold-plated
Molded Insulators:	.....	Glass-filled liquid crystal polymer (LCP)
Embedment:	.....	Frey Eng. Co. compound CF3003-80 & L-II-49
Hardware:	.....	Corrosion-resistant steel
Interfacial Seal Gaskets:	.....	Fluorosilicone
EMI Gaskets:	.....	Corrosion-resistant steel

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

SIGNAL INTEGRITY PERFORMANCE (Connectors Only)

1	Diff. Impedance, filtered to 70 ps (20-80%)	100 ohm +/- 10
2	Diff. Insertion Loss	4.0 GHz @ -3 dB
3	Diff. Return Loss	1.8 GHz @ -20 dB
4	Intra-Pair	15 ps

PERFORMANCE

Contact Rating:	.....	3 amperes maximum
Operating Temperature:	.....	-55° C to 125° C
Maximum Working Voltage:	.....	600V, RMS, 60Hz
Insulation Resistance:	.....	5,000 megohms minimum @ 500 VDC
Durability:	.....	500 connector mating cycles
Contact Engaging Force:	.....	6.0 ounces maximum/contact
Contact Separating Force:	.....	0.5 ounces minimum/contact
Mating and Unmating Force:	.....	10 ounces maximum/contact