



**THE DATASHEET OF  
LSHM-120-03.0-F-DV-A-N-K-TR**

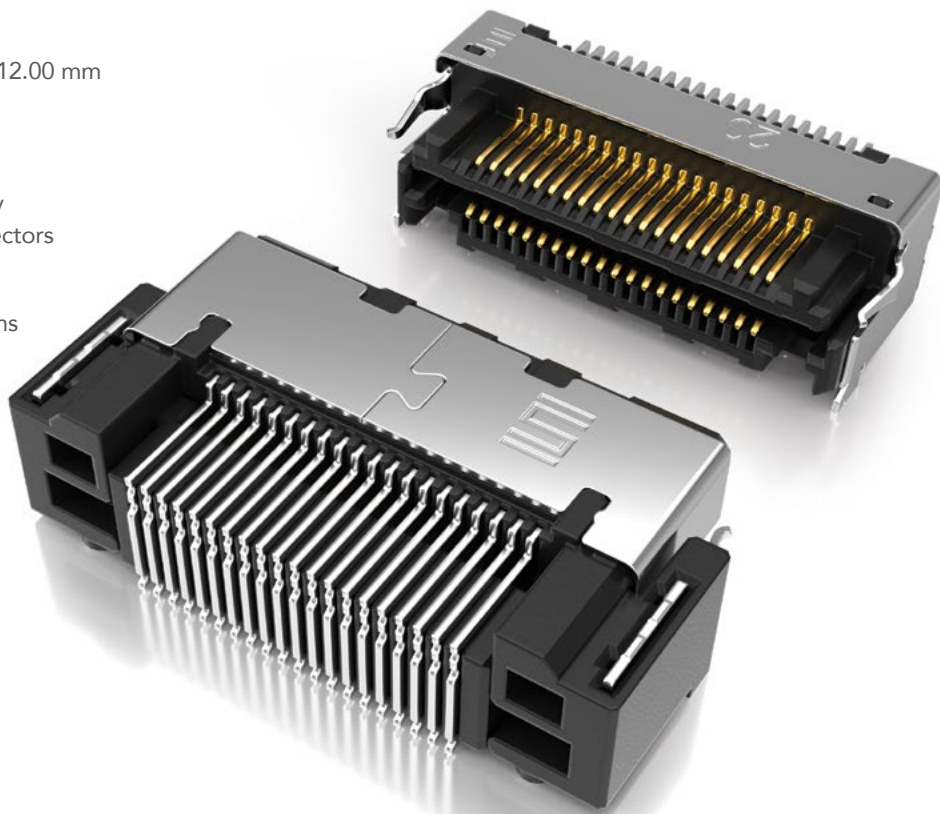


# FINE PITCH SELF MATING CONNECTORS

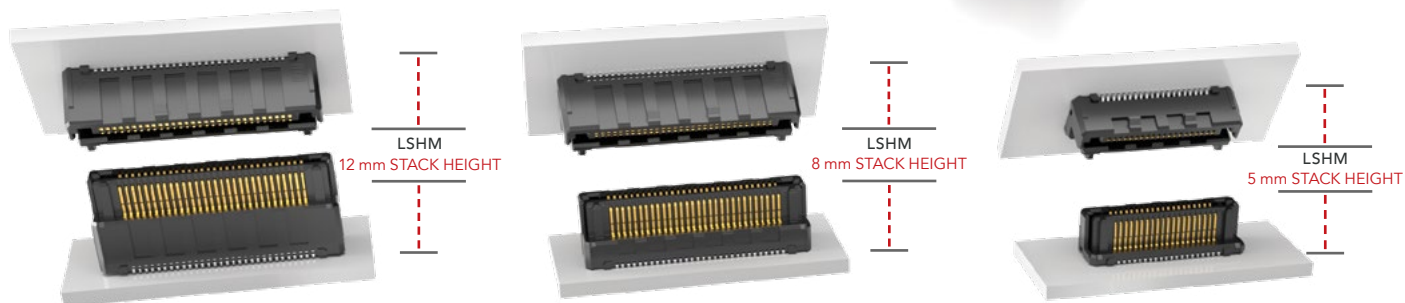
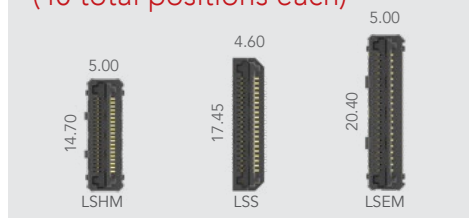
(0.50 mm) .0197" PITCH

## FEATURES & BENEFITS

- Ten stack height options from 5.00 mm to 12.00 mm
- 0.50 mm, 0.635 mm or 0.80 mm pitches
- Audible click when mated
- Mating and unmating forces approximately 4-6x greater than typical micro pitch connectors
- Self-mating system reduces inventory cost
- Parallel, perpendicular and coplanar systems
- Shielded and lubricated options
- Severe Environment Testing qualified (LSHM); aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)



## SLIM BODY DESIGNS (40 total positions each)



## KEY SPECIFICATIONS

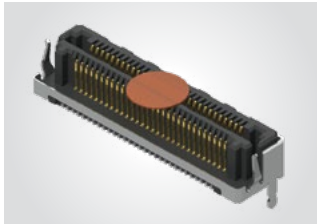
INSULATOR MATERIAL	CONTACT MATERIAL	PLATING	OPERATING TEMP RANGE	CURRENT RATING	SMT COPLANARITY	LEAD-FREE SOLDERABLE
Black LCP	Phosphor Bronze	Au or Sn over 50 μ" (1.27 μm) Ni	-55 °C to +125 °C	LSHM: 2.0 A per pin LSS: 1.7 A per pin LSEM: 1.8 A per pin	(0.10 mm) .004" max	Yes

**(0.50 mm) .0197" PITCH • RUGGED HERMAPHRODITIC CONNECTORS**

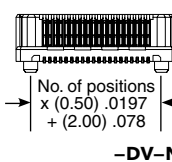
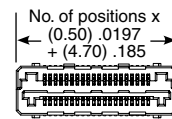
LSHM	1	NO. PINS PER ROW	LEAD STYLE	PLATING OPTION	TAIL OPTION	A	SHIELD OPTION	K	"X"R
		05, 10, 20, 30, 40, 50	(Vertical) <b>Specify LEAD STYLE from chart</b>  (Right-angle) <b>-01</b> = Standard  (Right-angle) <b>-L1</b> = Lubricated	<b>-F</b> = Gold flash on contact, Matte Tin on tail  <b>-L</b> = 10 μ" (0.25 μm) Gold on contact, Matte Tin on tail	<b>-DV</b> = Vertical  <b>-DH</b> = Right-angle (Lead style -01 & -L1 only)  <b>-RH</b> = Reverse Right-angle (Lead style -01 & -L1 only)		<b>-S</b> = With Shield  <b>-N</b> = Without Shield	<b>-K</b> = (3.50 mm) .138" DIA Polyimide film Pick & Place Pad	<b>-TR</b> = Tape & Reel  <b>-FR</b> = Full Reel Tape & Reel (must order maximum quantity per reel; contact Samtec for quantity breaks)

**LSHM**

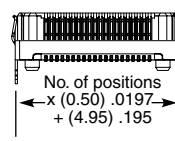
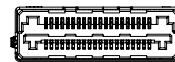
Board Mates:  
LSHM  
Cable Mates:  
HLCD



LEAD STYLE (STANDARD)	LEAD STYLE (LUBRICATED)	A	B
-02.5	-L2.5	(3.95) .156	(1.00) .039
-03.0	-L3.0	(4.45) .175	(1.50) .059
-04.0	-L4.0	(5.45) .215	(2.50) .098
-06.0	-L6.0	(7.45) .293	(4.50) .177



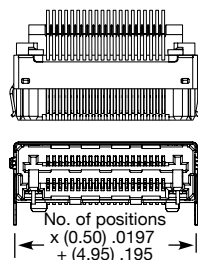
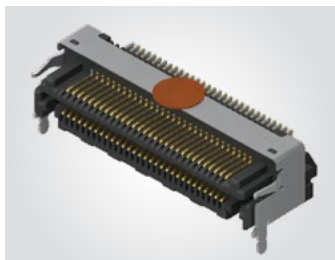
**-DV-N**



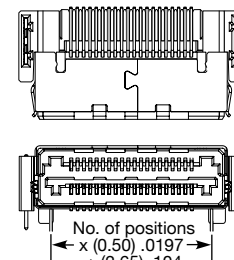
**-DV-S**

LEAD STYLE	MATED HEIGHT *
-02.5 & -02.5	(5.00) .196
-02.5 & -03.0	(5.50) .217
-03.0 & -03.0	(6.00) .236
-02.5 & -04.0	(6.50) .256
-03.0 & -04.0	(7.00) .276
-04.0 & -04.0	(8.00) .315
-02.5 & -06.0	(8.50) .335
-03.0 & -06.0	(9.00) .354
-04.0 & -06.0	(10.00) .394
-06.0 & -06.0	(12.00) .472

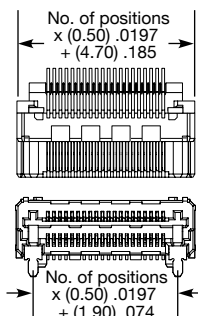
\*Processing conditions will affect mated height.



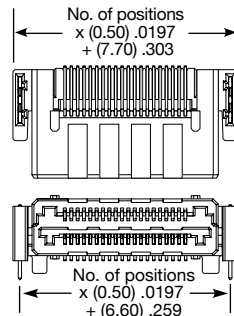
**-DH-S**



**-RH-S**



**-DH-N**



**-RH-N**



**Notes:**  
Severe Environment Testing qualified; aligns with MIL-DTL-55302. Visit [samtec.com/set](http://samtec.com/set)

Some lengths, styles and options are non-standard, non-returnable.

View complete specifications at: [samtec.com?LSHM](http://samtec.com?LSHM)

## Looking for pricing, stock, or lifecycle information?

Click below to explore more details on WIN SOURCE:

-  [View LSHM-120-03.0-F-DV-A-N-K-TR on WIN SOURCE](#)
-  [Samtec Inc. Information](#)

## Optimize Your Supply Chain with WIN SOURCE Solutions

-  Global Sourcing Solution
-  Obsolete Management
-  Cost Control Management
-  Shortage Management
-  Alternative Solution
-  Excess Inventory Management