

# Hermaphroditic Interfaces



## Razor Beam™ High Speed, High Density Micro Systems

The Razor Beam™ family of interconnects includes micro rugged hermaphroditic interfaces for high speed/high density applications. These self-mating systems reduce inventory costs and are available in a variety of pitches and lead styles for increased flexibility.

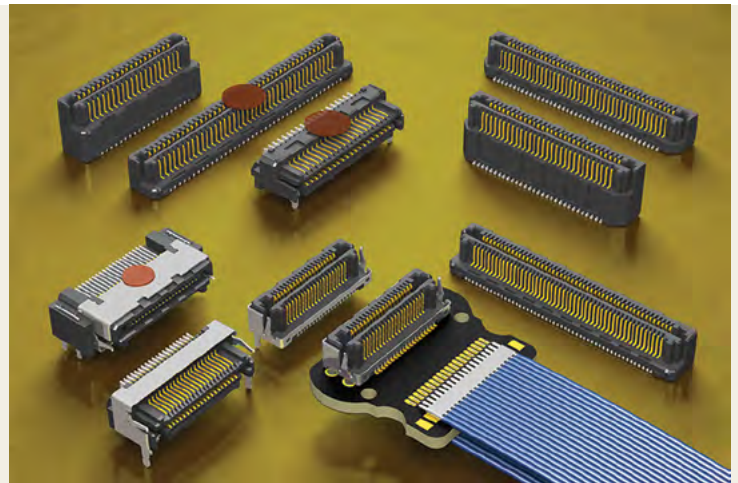


The slim row-to-row design is available in 0,50 mm (.0197") pitch (LSHM Series), 0,635 mm (.025") pitch (LSS Series) and 0,80 mm (.0315") pitch (LSEM Series) systems for parallel, perpendicular and coplanar applications. The 0,50 mm (.0197") pitch system offers optional lubricated contacts for resistance stability, as well as optional EMI shielding to limit signal degradation and optimize connector performance. The Razor Beam™ cable assembly (HLCD Series) is available in 0,50 mm (.0197") pitch with 38 AWG coax cable. It features 50Ω single-ended signal routing and a variety of options for increased design flexibility.

Razor Beam™ contacts are designed to help create high speed, fine pitch and rugged interconnects. Mating contacts feature undercut retention notches that produce an audible click when the contacts engage. This also increases mating and unmating forces approximately four to six times greater than typical micro pitch interconnects.

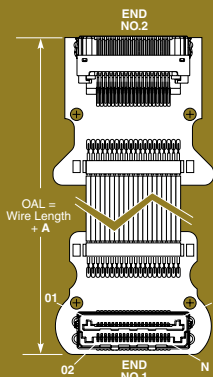
### Features:

- Stack heights from 5 mm to 12 mm
- Parallel, perpendicular and coplanar applications
- Cable performance (7dB IL):
  - 8 GHz at 10" cable length
  - 2 GHz at 1 m cable length
- Connector performance (3dB IL): Up to 20 GHz
- Optional lubricated contacts and shielding for EMI protection available on 0,50 mm (.0197") pitch system
- Optional rugged screw downs available on cable assembly



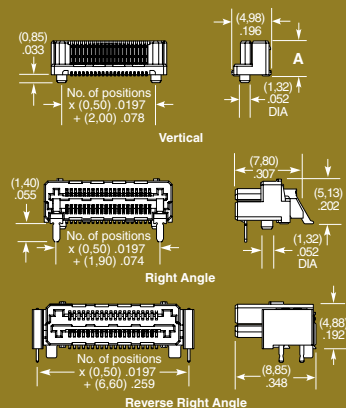
### 0,50 mm Pitch

Cable: HLCD



END TO END	A
Vertical to Vertical	(21,84) .860
Vertical to Right Angle	(25,35) .998
Right Angle to Right Angle	(28,85) 1.136

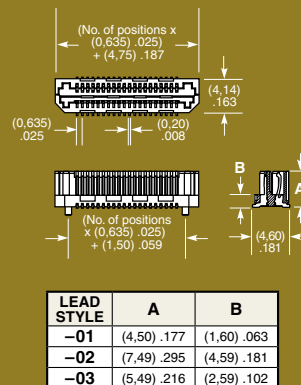
Connector: LSHM



LEAD STYLE		A
(STANDARD)	(LUBRICATED)	
-02.5	-L2.5	(3,95) .156
-03.0	-L3.0	(4,45) .175
-04.0	-L4.0	(5,45) .215
-06.0	-L6.0	(7,45) .293

### 0,635 mm Pitch

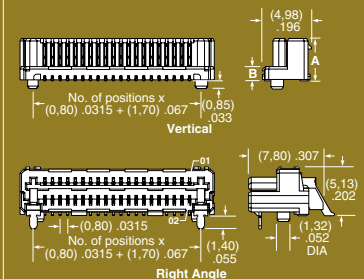
Connector: LSS



LEAD STYLE	A	B
-01	(4,50) .177	(1,60) .063
-02	(7,49) .295	(4,59) .181
-03	(5,49) .216	(2,59) .102

### 0,80 mm Pitch

Connector: LSEM



LEAD STYLE	A	B
-03.0	(4,45) .175	(1,50) .059
-04.0	(5,45) .215	(2,50) .098
-06.0	(7,45) .293	(4,50) .177