



Creative
Interconnect
Solutions

FMM

Spring-like terminals.
Where Tolerance meets Performance.



→ Floating
Connector

FMM

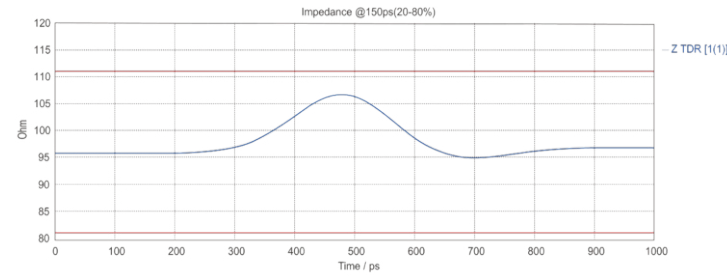
Feature 01
Low profile design for space-constrained applications

Feature 03
Min 100 mating cycles

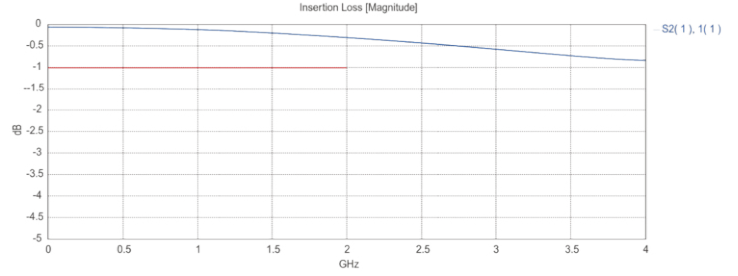
Feature 02
10-160 contacts: signal, power, or hybrid

Feature 04
Multiple mounting options & shielding choices

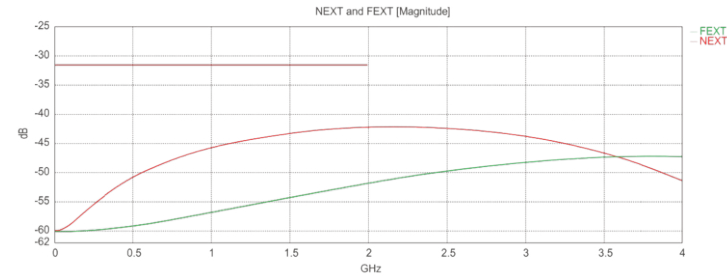
Impedance:
100Ω±15Ω @150ps(20-80%)



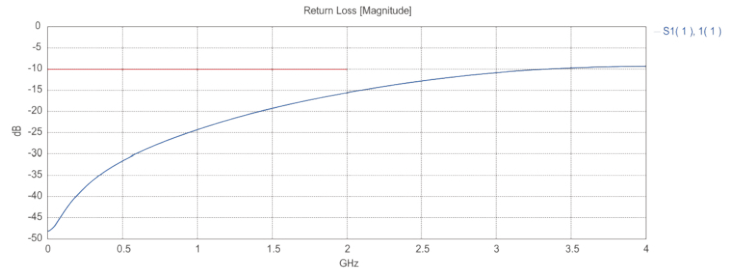
Insertion Loss:
Greater than - 1dB up To 2Ghz



NEXT and FEXT:
Less than -32dB up to 2GHz



Return Loss:
Less than -10dB up to 2GHz



SPECIFICATIONS

- PITCH**
0.5-0.625-0.8-1.27MM
- DURABILITY**
MIN 100 MATING CYCLES
- LCP**
HIGH-TEMP POLYMER
- WORKING TEMPERATURE**
FROM -55°C TO +125°C
- FLOATING RANGE**
+/- 0.5MM IN X, Y, Z AXIS
- CONTACT RESISTANCE**
100mΩ MAX
- LF**
CURRENT RATING UP TO 1.7A FOR LF CONTACT UP TO 6A FOR HP CONTACT
- V**
WITHSTAND VOLTAGE UP TO 500V AC

TARGET MARKETS



WHY FLOATING?

Floating Connectors = easy assembly

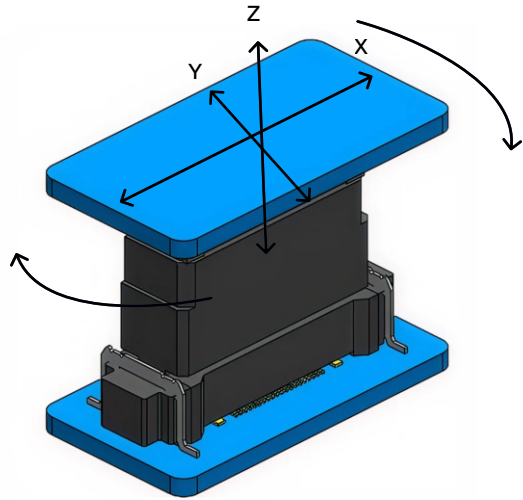
- Auto-alignment: handles misalignments automatically.
- High-speed ready: perfect for SMT & multi-connector boards.
- Reliable yield: less stress, less rework, more precision.
- Tolerance compensation: ± 0.5 mm on X/Y/Z axes.

Core design

- Dual-axis float \rightarrow absorbs stress during mating.
- Weld tabs \rightarrow stronger joints.
- Positioning posts \rightarrow prevent PCB shift.
- Various heights & pins \rightarrow flexible design.

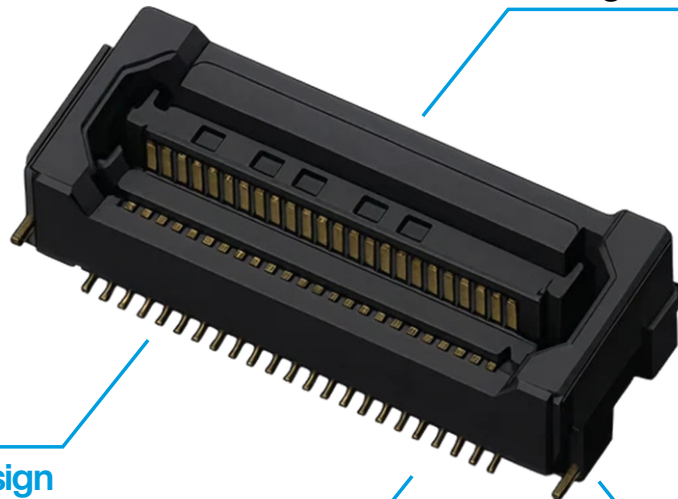
Material

- Insulator: LCP (high-temp polymer).
- Contact: copper alloy, precision formed.
- Plating: Gold over Nickel.



Floating Ability: X, Y, Z axis ± 0.5 mm

Enable **misalignment tolerance** during PCB assembly.



Enables **greater design flexibility**.

Reduces assembly-induced stress.

Ideal for **multi-connector applications** on a single PCB.

PART NUMBERING

Product Category	Series No.	Pitch	No. of Contact	Contact Plating
FA Floating	xx	# eg: F, S, H, E	nnn eg: 020/040/060	-yyy eg: G02/S30/S50
FB Fixed				

PN example: FA01F040-G02
FA09E060-G02
FB17E060-G02

What does different alphabet stand for?

For Pitch:

- F = 0.5mm
- S = 0.635mm
- H = 1.27mm
- E = 0.8mm

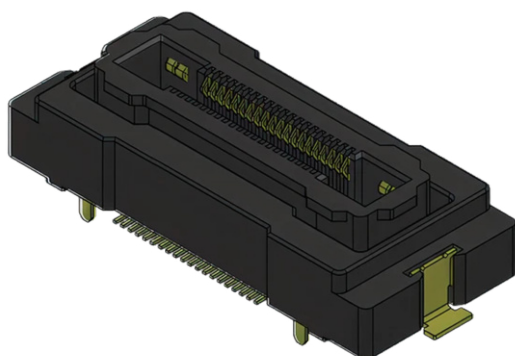
For Contact Plating:

- G = Std Gold
- S = Selective Gold

Additional plating options will be available soon. Please contact your local sales representative.

→ 0.50mm PITCH

FA01 SERIES



KEY SPECIFICATION

Pitch	F
No. of Contact	020-120
Contact Plating	G02
Current Rating	0.5A per signal contact 3A per power contact

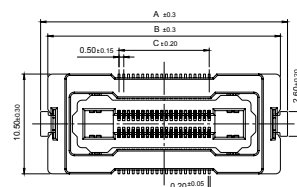
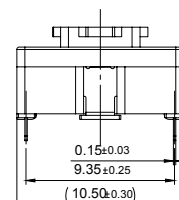
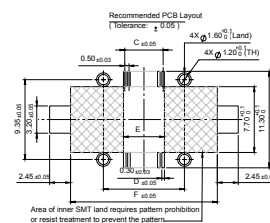
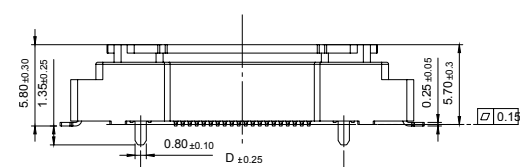
MATING



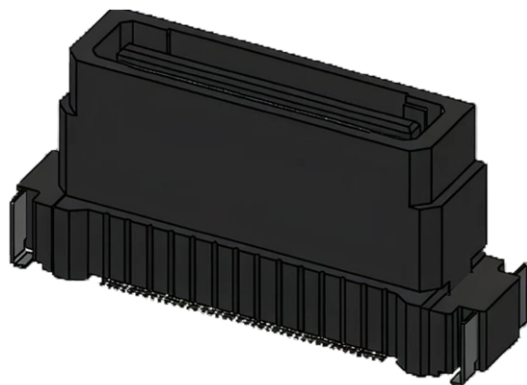
FB01SERIES

DIMENSION

No. of Contact	A	B	C	D	E	F
20	21.00	19.50	4.50	9.50	4.80	17.20
40	26.00	24.50	9.50	14.50	9.80	22.20
60	31.00	29.50	14.50	19.50	14.80	27.20
80	36.00	34.50	19.50	24.50	19.80	32.20
100	41.00	39.50	24.50	29.50	24.80	37.20
120	46.00	44.50	29.50	34.50	29.80	42.20



FA02 SERIES



KEY SPECIFICATION

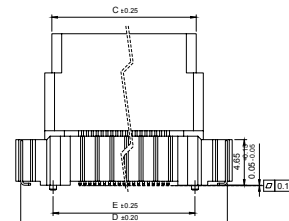
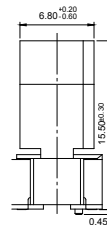
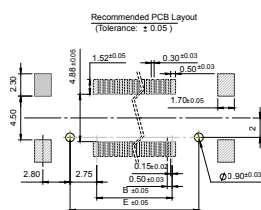
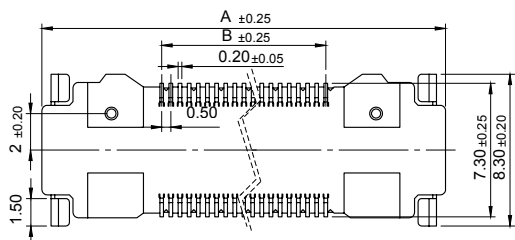
Pitch	F
No. of Contact	030-160
Contact Plating	G02
Current Rating	0.4A per contact

MATING

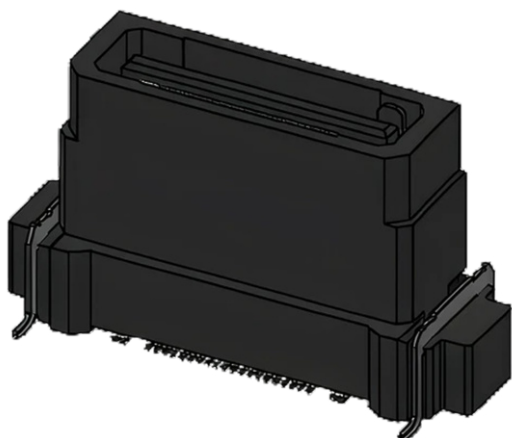


DIMENSION

No. of Contact	A	B	C	D	E
30	20.10	7.00	12.50	12.75	19.10
40	22.60	9.50	15.00	15.25	21.60
60	27.60	14.50	20.00	20.25	26.60
80	32.60	19.50	25.00	25.25	31.60
100	37.60	24.50	30.00	30.25	36.60
120	42.60	29.50	35.00	35.25	41.60
140	47.60	34.50	40.00	40.25	46.60
160	52.60	39.50	45.00	45.25	51.60



FA03 SERIES



KEY SPECIFICATION

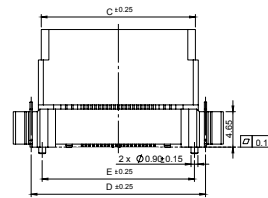
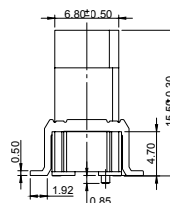
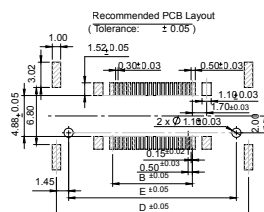
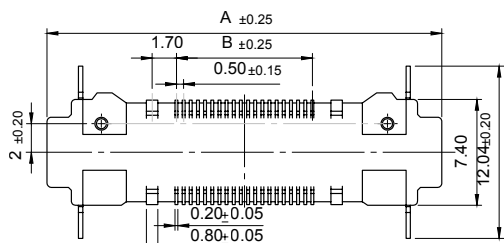
Pitch	F
No. of Contact	030-140
Contact Plating	G40
Current Rating	0.5A per signal contact 6A per power contact

MATING

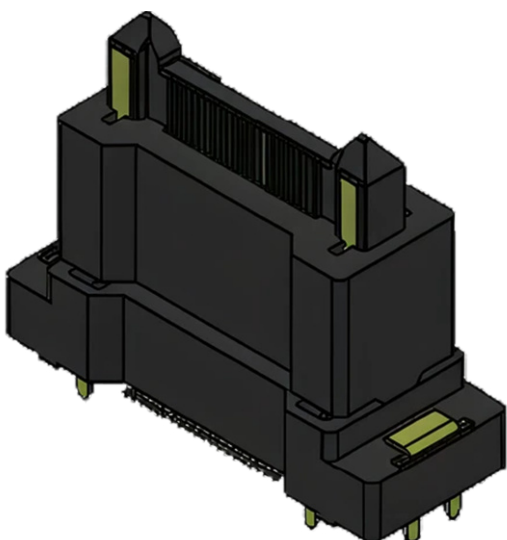


DIMENSION

No. of Contact	A	B	C	D	E
30	25.10	7.00	17.50	17.75	20.40
40	27.60	9.50	20.00	20.25	22.90
60	32.60	14.50	25.00	25.25	27.90
80	37.60	19.50	30.00	30.25	32.90
100	42.60	24.50	35.00	35.25	37.90
120	47.60	29.50	40.00	40.25	42.90
140	52.60	34.50	45.00	45.25	47.90



FA04 SERIES



KEY SPECIFICATION

Pitch	F
No. of Contact	020-120
Contact Plating	S30
Current Rating	0.5A per signal contact 3A per power contact

MATING

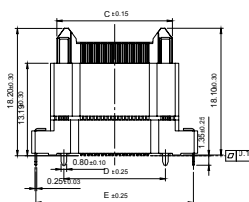
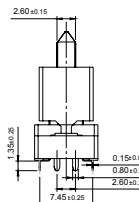
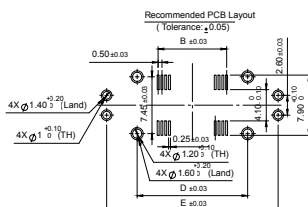
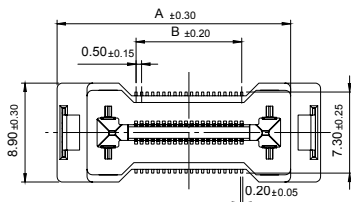


FB06 SERIES

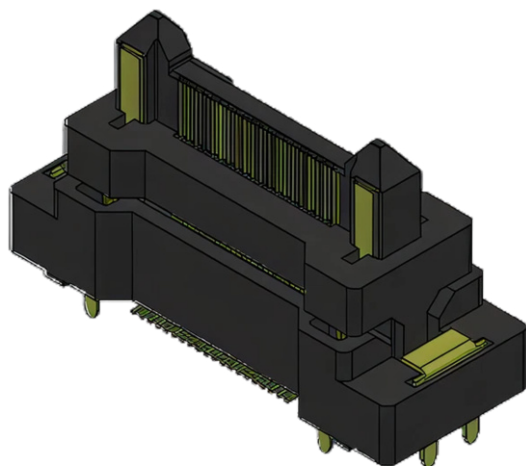
FB07 SERIES (90°)

DIMENSION

No. of Contact	A	B	C	D	E
20	18.70	4.50	11.50	9.50	17.50
40	23.70	9.50	16.50	14.50	22.50
60	28.70	14.50	21.50	19.50	27.50
80	33.70	19.50	26.50	24.50	32.50
100	38.70	24.50	31.50	29.50	37.50
120	43.70	29.50	36.50	34.50	42.50



FA05 SERIES



KEY SPECIFICATION

Pitch	F
No. of Contact	020-120
Contact Plating	G02
Current Rating	0.5A per signal contact 3A per power contact

MATING

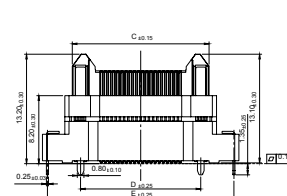
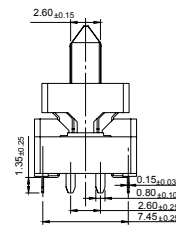
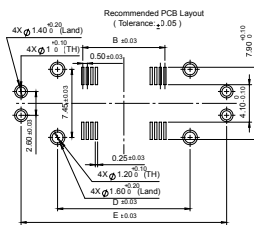
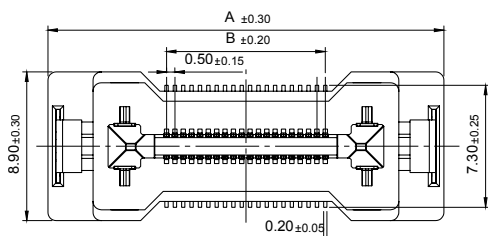


FB06 SERIES

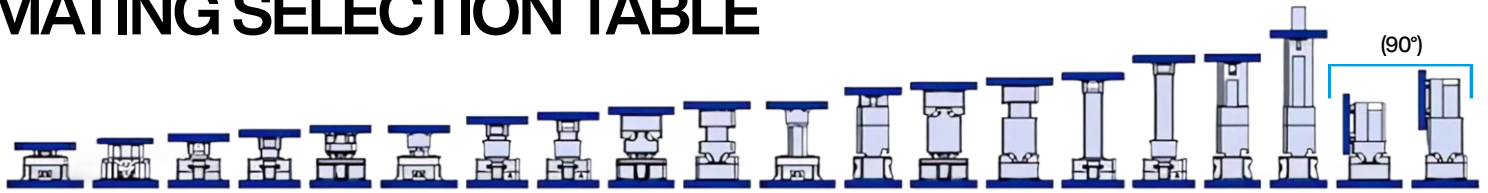
FB07 SERIES (90°)

DIMENSION

No. of Contact	A	B	C	D	E
20	18.70	4.50	11.50	9.50	17.50
40	23.70	9.50	16.50	14.50	22.50
60	28.70	14.50	21.50	19.50	27.50
80	33.70	19.50	26.50	24.50	32.50
100	38.70	24.50	31.50	29.50	37.50
120	43.70	29.50	36.50	34.50	42.50



MATING SELECTION TABLE



Pitch	FA Series	FB Series Part Numbering	Image-FB Series	Mating Height	Floating Tolerance (when mating with FA Series)
0.5mm	FA01	FB01Fnnn-S06		7.2-9.4mm	X-axis±0.5mm Y-axis±0.5mm
	FA02	FB02Fnnn-G02		29.5-31.0mm	
		FB03Fnnn-G02		17.5-19.0mm	
		FB04Fnnn-G02		24.5-26.0mm	
	FA03	FB05Fnnn-G40		19.5-21.0mm	
	FA04 FA05	FB06Fnnn-G02		FA04: 19.5-21.0mm FA05: 14.5-16.0mm	X-axis±0.6mm Y-axis±0.6mm
FB07Fnnn-S30			FA04: 21.4-22.3mm FA05: 16.3-17.2mm		
0.635mm	FA07	FB09Snnn-G02		5.8-7.3mm	X-axis±0.7mm Y-axis±0.7mm
		FB10Snnn-G02		9.5-11.0mm	
		FB11Snnn-G02		14.5-16.0mm	
1.27mm	FA08	FB12Hnnn-S50		10.63-11.8mm	X-axis±0.5mm Y-axis±0.5mm
		FB13Hnnn-S50		13.43-14.6mm	
		FB14Hnnn-S50		18.08-19.2mm	
0.8mm	FA09 FA10	FB15Ennn-G02		FA09: 12.45-13.45mm FA10: 8.7-9.7mm	X-axis±0.8mm Y-axis±0.8mm
		FB16Ennn-G02		FA09: 11.45-12.45mm FA10: 7.7-8.7mm	
		FB17Ennn-G02		FA09: 24.4-25.4mm FA10: 20.65-21.65mm	
		FB18Ennn-G02		FA09: 13.65-14.65mm FA10: 9.9-10.9mm	
		FB19Ennn-G02		FA09: 17.4-18.4mm FA10: 13.7-14.7mm	

MATING CONTACTS AVAILABILITIES

FA Series	FB Series	10	12	16	20	26	30	32	40	46	50	60	68	80	100	120	140	160
FA01	FB01				✓				✓			✓		✓	✓	✓		
FA02	FB02						✓		✓			✓		✓	✓	✓	✓	✓
	FB03						✓		✓			✓		✓	✓	✓	✓	✓
	FB04						✓		✓			✓		✓	✓	✓	✓	✓
FA03	FB05						✓		✓			✓		✓	✓	✓	✓	
FA04 FA05	FB06				✓				✓			✓		✓	✓	✓		
	FB07				✓				✓			✓		✓	✓	✓		
FA07	FB09								✓			✓		✓				
	FB10											✓		✓				
	FB11								✓			✓		✓				
FA08	FB12	✓	✓	✓	✓	✓	✓	✓			✓		✓	✓				
	FB13		✓	✓	✓	✓		✓	✓		✓	✓	✓	✓				
	FB14		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	✓				
FA09 FA10	FB15	✓										✓		✓				
	FB16											✓		✓				
	FB17						✓					✓		✓	✓			
	FB18											✓		✓	✓			
	FB19											✓		✓	✓			



ABOUT US

Nicomatic designs and manufactures **high-reliability interconnect solutions** for demanding applications across aerospace, defense, medical, automotive, and industrial markets.

Driven by **innovation and precision engineering**, we deliver **compact, robust, and performance-driven connectors** built to operate in the **most challenging environments**.

With a strong **focus on customer needs**, our solutions are developed to support space-constrained designs, critical missions, and long-term reliability.

At Nicomatic, we are **committed** to enabling **our partners' success** through trusted connectivity solutions.

Looking for MIL Standard Connector?

CMM

1



Description

- MIL-DTL-55302F
- Extreme modularity (Signal, power and coaxial contacts, from 1 to 3 rows, up to 120 pins)

DMM

2

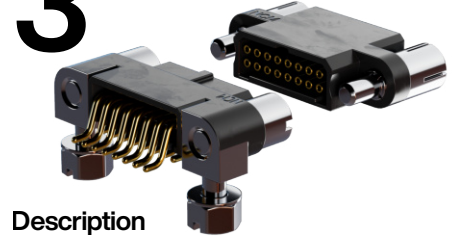


Description

- MIL-DTL-83513G
- High modularity: contacts Signal (LF), Power (HP), and Coax (HF) up to 10M arrangements

EMM

3

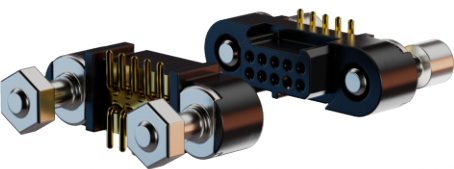


Description

- MIL-DTL-83513
- Suited to both board-to-board (thanks to its secure wiping length) and board-to-wire (from gauge 24 to gauge 30) configurations

Looking for Small Pitch Connector?

AMM



Description

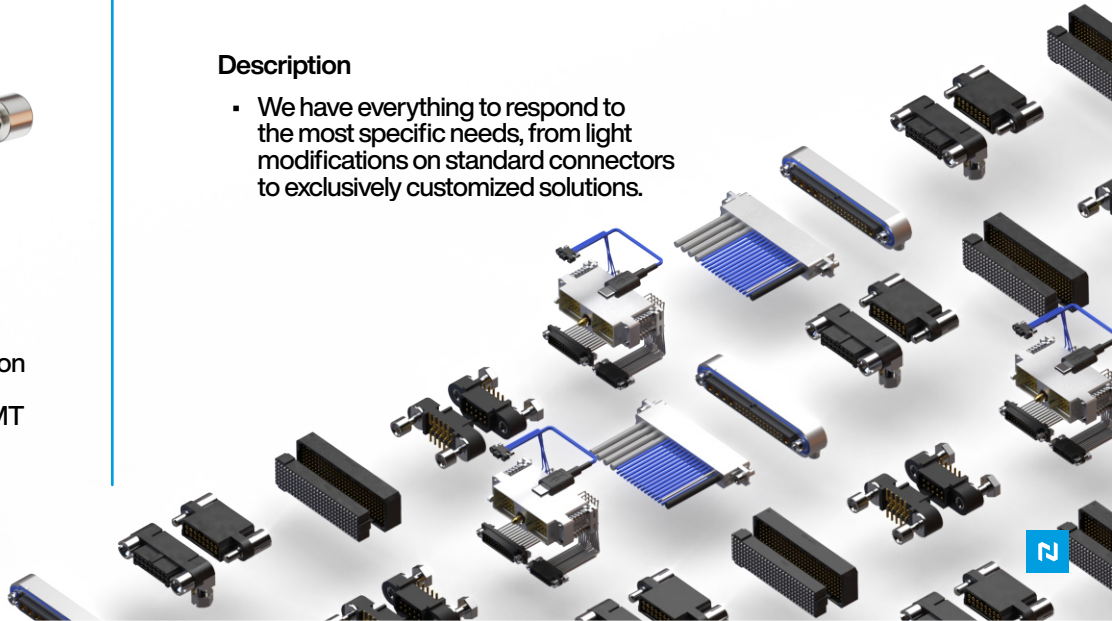
- 1mm pitch
- Easy to configure with 5 termination types: male and female straight through PCB, male and female SMT on PCB, female on cables.

Looking for Customization?

ALL

Description

- We have everything to respond to the most specific needs, from light modifications on standard connectors to exclusively customized solutions.



DESIGNING WITH TIGHT TOLERANCES?

Misalignment, SMT stress, multi-connector boards?
Floating solutions require careful validation.

GET YOUR FMM INTEGRATION REVIEWED BY OUR ENGINEERS

- Free technical review
- No commitment
- Engineering-driven feedback



Scan to describe your application
and constraints related to **FMM**
floating connectors.