



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

Up to 100 mating cycles

Feature 02

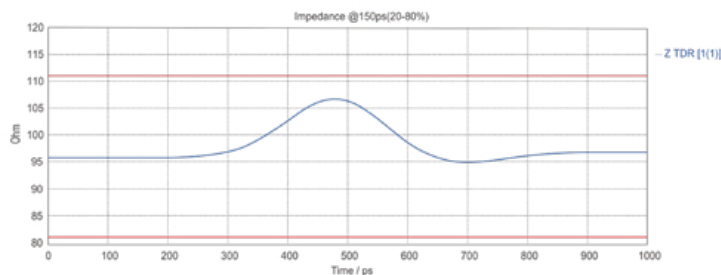
10-160 contacts: signal, power, or hybrid

Feature 04

Multiple mounting options & shielding choices

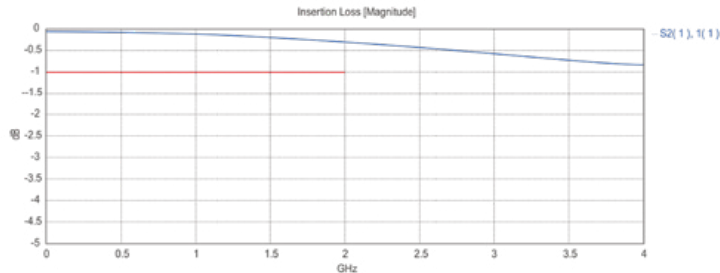
Impedance:

100Ω±15Ω @150ps(20-80%)



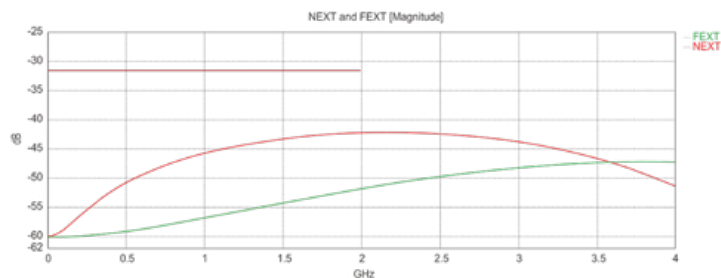
Insertion Loss:

Greater than - 1dB up To 2Ghz



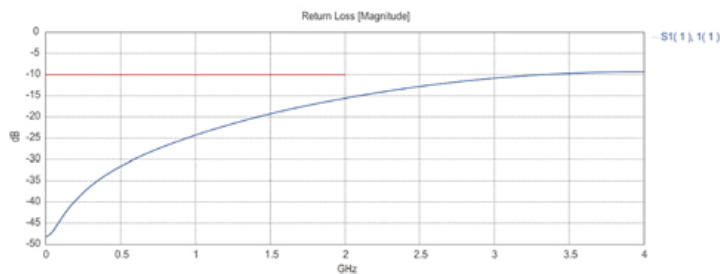
NEXT and FEXT:

Less than -32dB up to 2GHz



Return Loss:

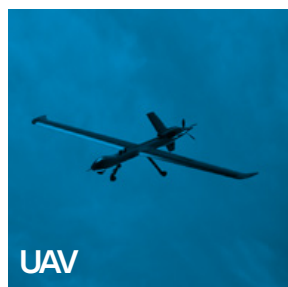
Less than -10dB up to 2GHz



SPECIFICATIONS

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

TARGET MARKETS



WHY FLOATING?

Floating Connectors = easy assembly

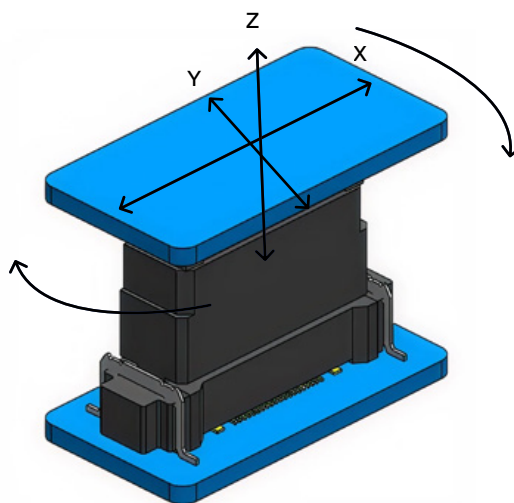
- Auto-alignment: handles misalignments automatically.
- High-speed ready: perfect for SMT & multi-connector boards.
- Reliable yield: less stress, less rework, more precision.
- Tolerance compensation: ± 0.5 mm on X/Y/Z axes.

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

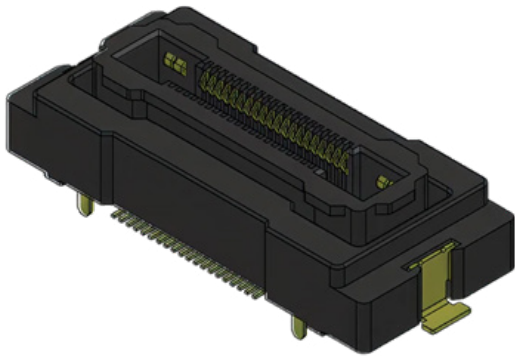
For Contact Plating:

- 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

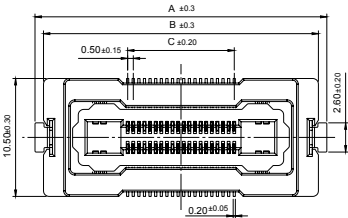
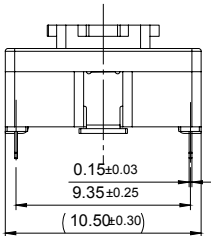
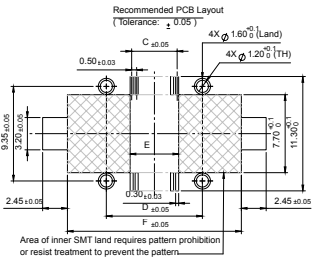
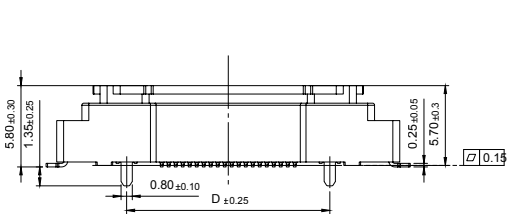
MATING



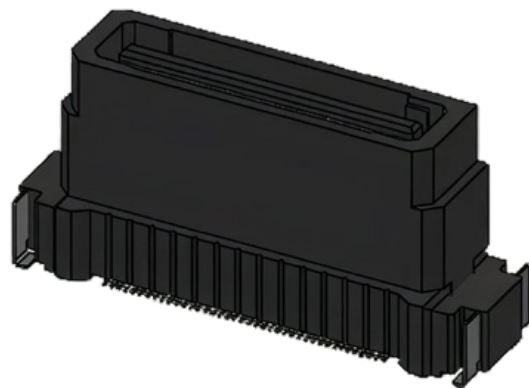
FB01 SERIES

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

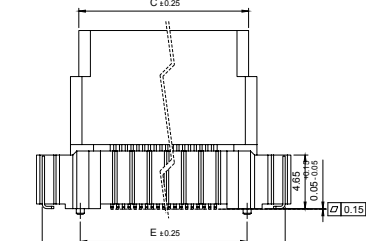
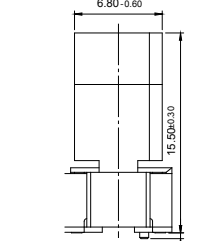
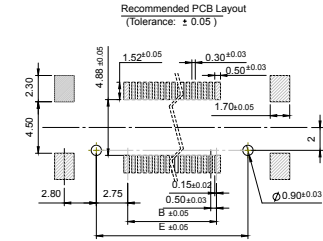
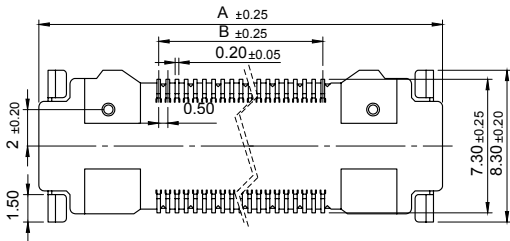
Pitch	F
No. of Contact	030-160
Contact Plating	G02
Current Rating	0.4A per contact

MATING

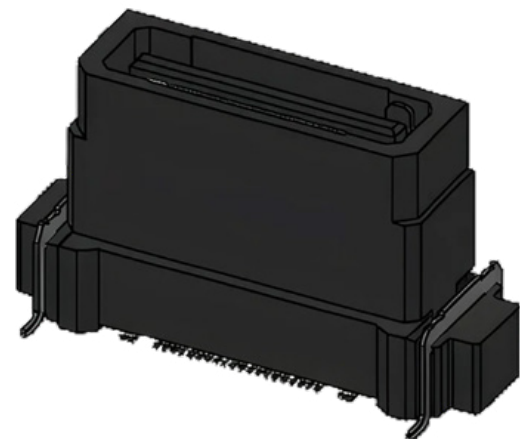


DIMENSION

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

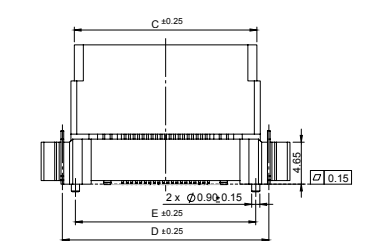
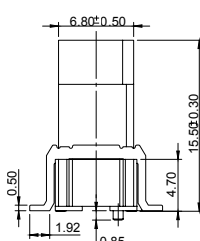
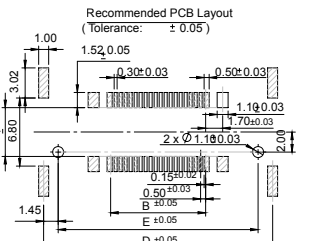
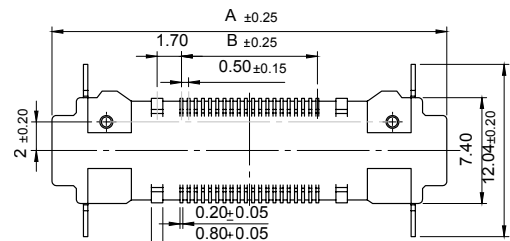
Pitch	F
No. of Contact	030-140
Contact Plating	G40
Current Rating	0.5A per signal contact 6A per power contact

MATING

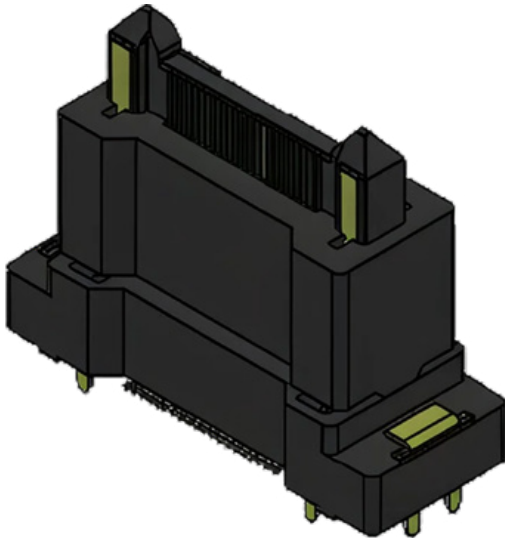


DIMENSION

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

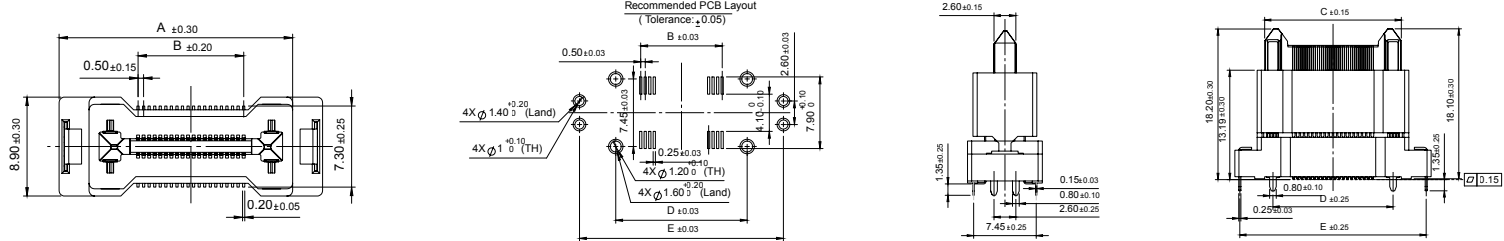
Pitch	F
No. of Contact	020-120
Contact Plating	S30
Current Rating	0.5A per signal contact 3A per power contact

MATING

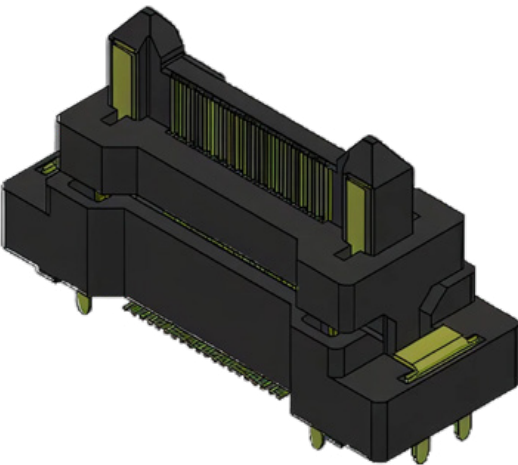


DIMENSION

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

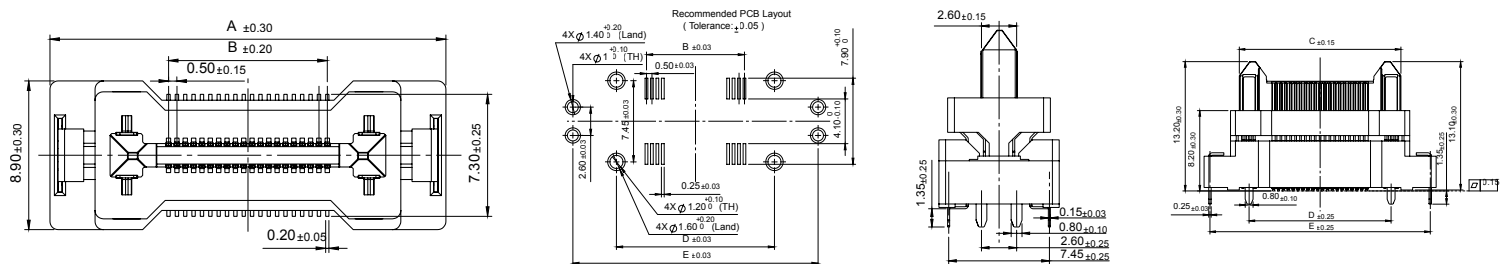
Pitch	F
No. of Contact	020-120
Contact Plating	G02
Current Rating	0.5A per signal contact 3A per power contact

MATING



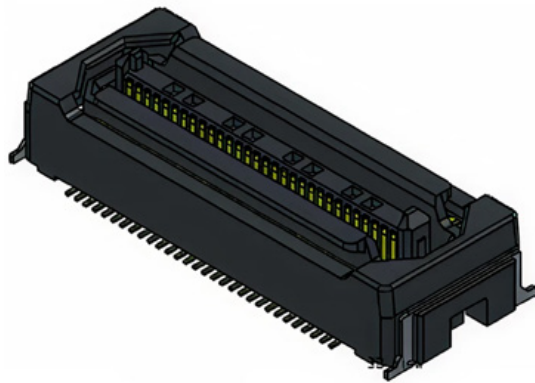
DIMENSION

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



→ 0.635mm PITCH

FA07 SERIES



KEY SPECIFICATION

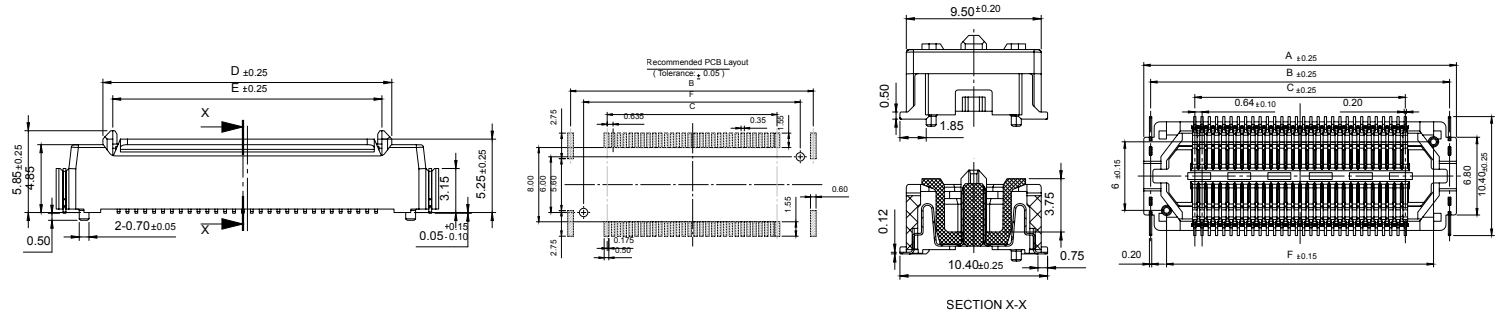
Pitch	S
No. of Contact	040-080
Contact Plating	G02
Current Rating	0.5A per signal contact

MATING



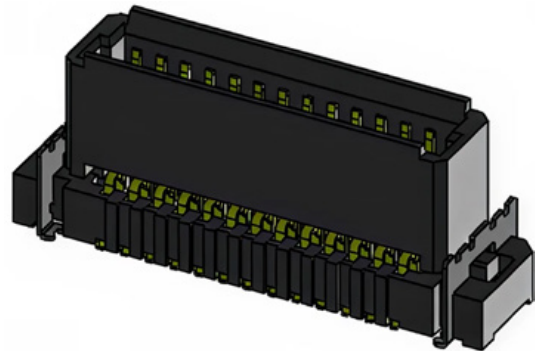
DIMENSION

No. of Contact	A	B	C	D	E	F
40	21.00	19.80	12.065	14.30	12.90	17.00
60	27.35	26.15	18.415	20.65	19.25	23.35
80	33.70	32.50	24.765	27.00	25.60	29.70



→ 1.27mm PITCH

FA08 SERIES



KEY SPECIFICATION

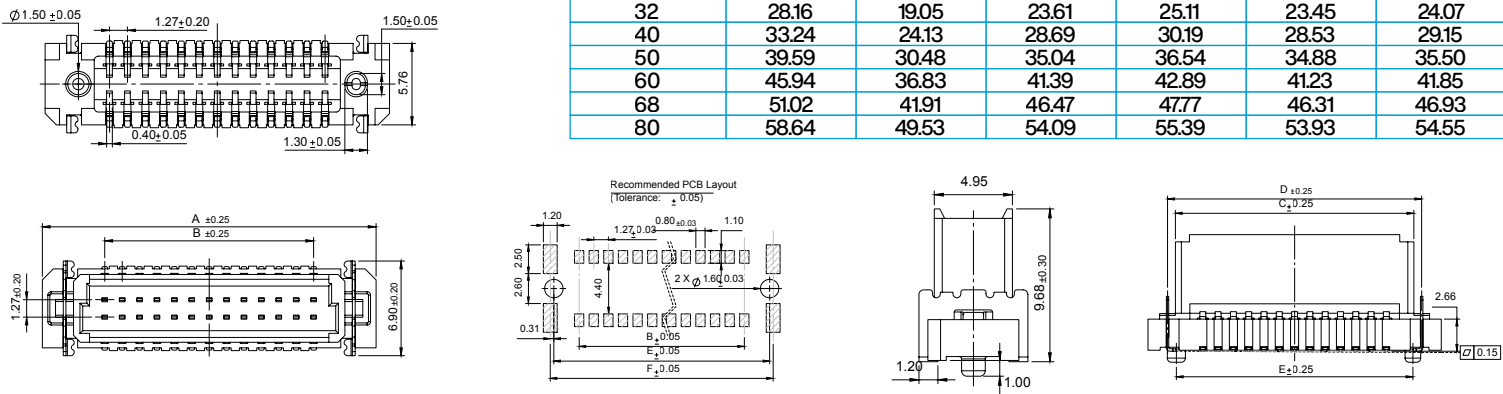
Pitch	H
No. of Contact	010-080
Contact Plating	S50
Current Rating	1.7A per contact

MATING



DIMENSION

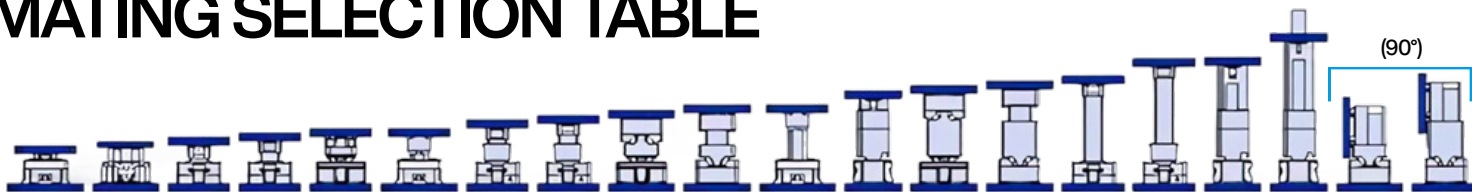
No. of Contact	A	B	C	D	E	F
10	14.19	5.08	9.64	10.94	9.48	10.10
12	15.46	6.35	10.91	12.21	10.75	11.37
16	18.00	8.89	13.45	14.75	13.29	13.91
20	20.54	11.43	15.99	17.49	15.83	16.45
26	24.35	15.24	19.80	21.10	19.64	20.26
32	28.16	19.05	23.61	25.11	23.45	24.07
40	33.24	24.13	28.69	30.19	28.53	29.15
50	39.59	30.48	35.04	36.54	34.88	35.50
60	45.94	36.83	41.39	42.89	41.23	41.85
68	51.02	41.91	46.47	47.77	46.31	46.93
80	58.64	49.53	54.09	55.39	53.93	54.55



FA09 SERIES

MATING SELECTION TABLE

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	X-axis±0.6mm Y-axis±0.6mm
	FA04 FA05	FB06Fnnn-G02		FA04: 19.5-21.0mm FA05: 14.5-16.0mm	
0.635mm		FB07Fnnn-S30 (90°)		FA04: 21.4-22.3mm FA05: 16.3-17.2mm	X-axis±0.7mm Y-axis±0.7mm
FA07	FB09Snnn-G02		5.8-7.3mm		
	FB10Snnn-G02		9.5-11.0mm		
	1.27mm		FB11Snnn-G02		14.5-16.0mm
FA08	FB12Hnnn-S50		10.63-11.8mm		
	FB13Hnnn-S50		13.43-14.6mm		
	0.8mm		FB14Hnnn-S50		18.08-19.2mm
FA09 FA10	FB15Ennn-G02		FA09: 12.45-13.45mm FA10: 8.7-9.7mm		
	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

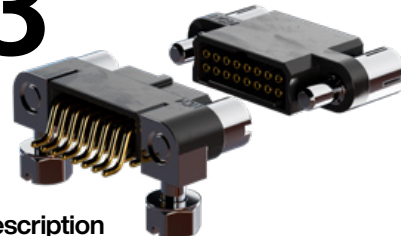


Description

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

EMM

3

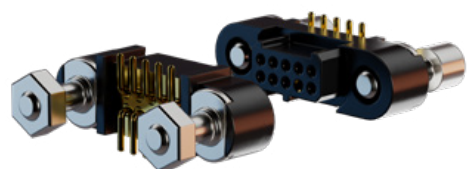


Description

- 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

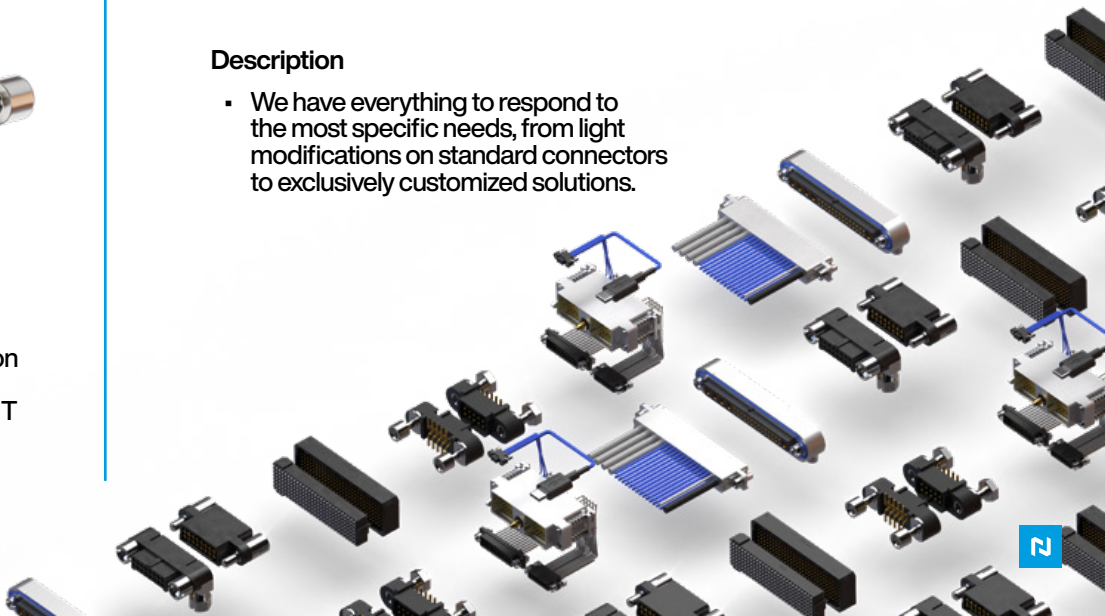
- 1mm pitch
- Easy to configure with 5 termination types: male and female straight through PCB, male and female SMT on PCB, female on cables.

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.