

RASTLINK Connector

Pitch: 2.5mm

RCSGA106 Series

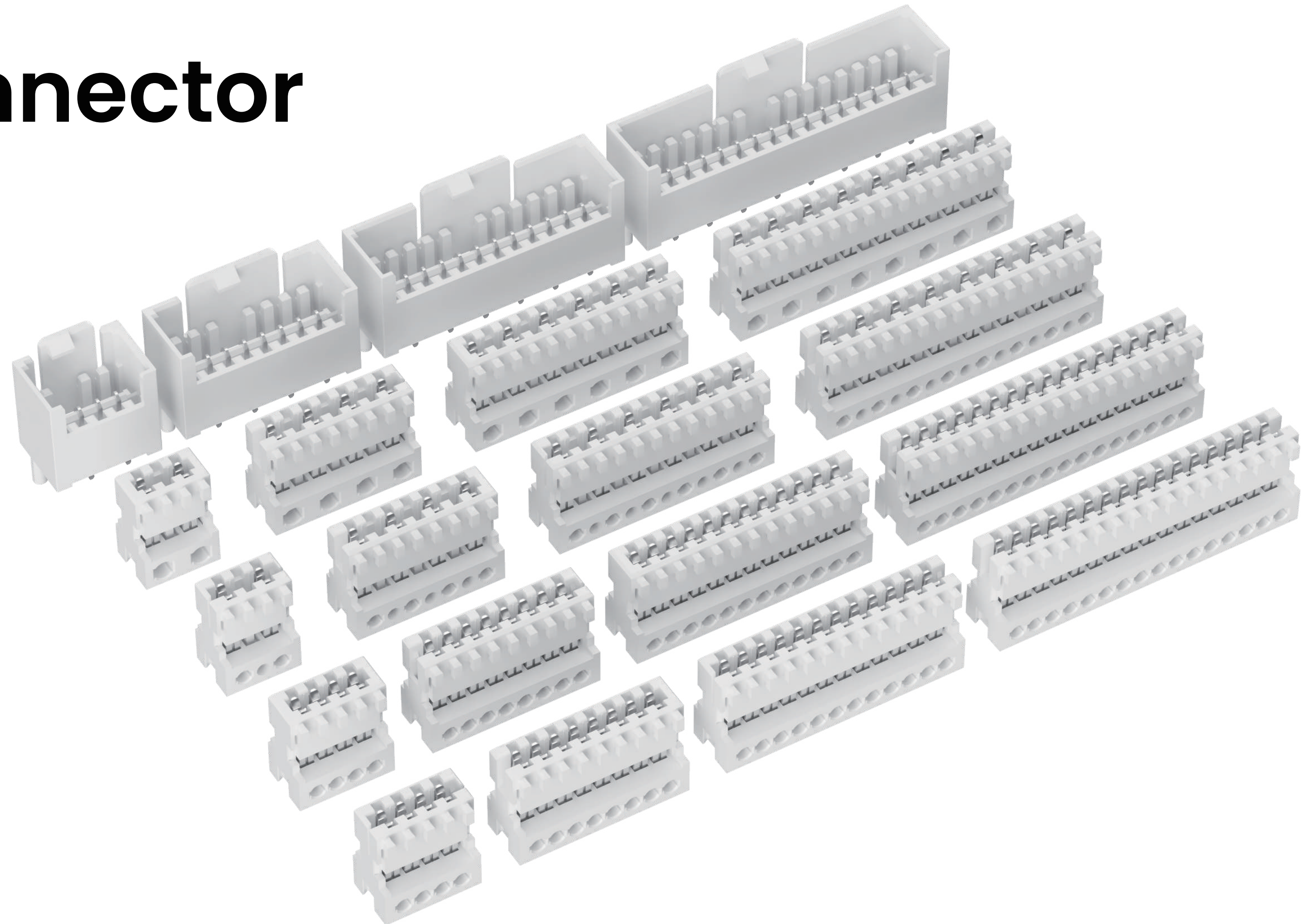
RCSGA107 Series

RCSGA109 Series

Pitch: 5.0mm

RCSGA110 Series

RCSGA111 Series



[RAST] Introduction

[RAST] is an abbreviation derived from the German term "Raster Anschluss Steck Technik," which means "grid connection plug-in technology." It is a standardized electrical interconnection component designed for modular devices, commonly used in home appliances, industrial control systems, and automotive electronics.

The RAST model name is followed by a number that represents the pin pitch. For example, RAST 2.5 indicates a product with a 2.5mm pitch. The naming convention is as follows:

RAST 2.5 – Raster Anschluss Steck Technik 2.5mm



Basic Dimension Standards

Encoding Description

Product Encoding Description:

XXRGA XXX – XX XX AX XX X X A B – XXX – TXX

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩ ⑪ ⑫

- ① : CSRGA=Female socket/wire end; GPRGA=Male socket/board end
- ② : Serial number
- ③ : Pin count
- ④ : Plating 97=Tin 100-200μ"...
- ⑤ : Positioning and Locking variations: AA/AB/AC/AD/AE/AF/AG/AH
- ⑥ : Keying variations: 00/12/9A...
- ⑦ : Plastic material: A=PBT; E=PA66
- ⑧ : Plastic color: 1=Black; 4=Natural color...
- ⑨ : Contact material: A=Phosphor bronze; B=Brass
- ⑩ : Tray packaging
- ⑪ : PXX=Pin variations: P00/P01/PA...; KX=Latch position variations: K0/K1/KA...
- ⑫ : Polarisation variations: T00/T01/TA...

Application Scenarios

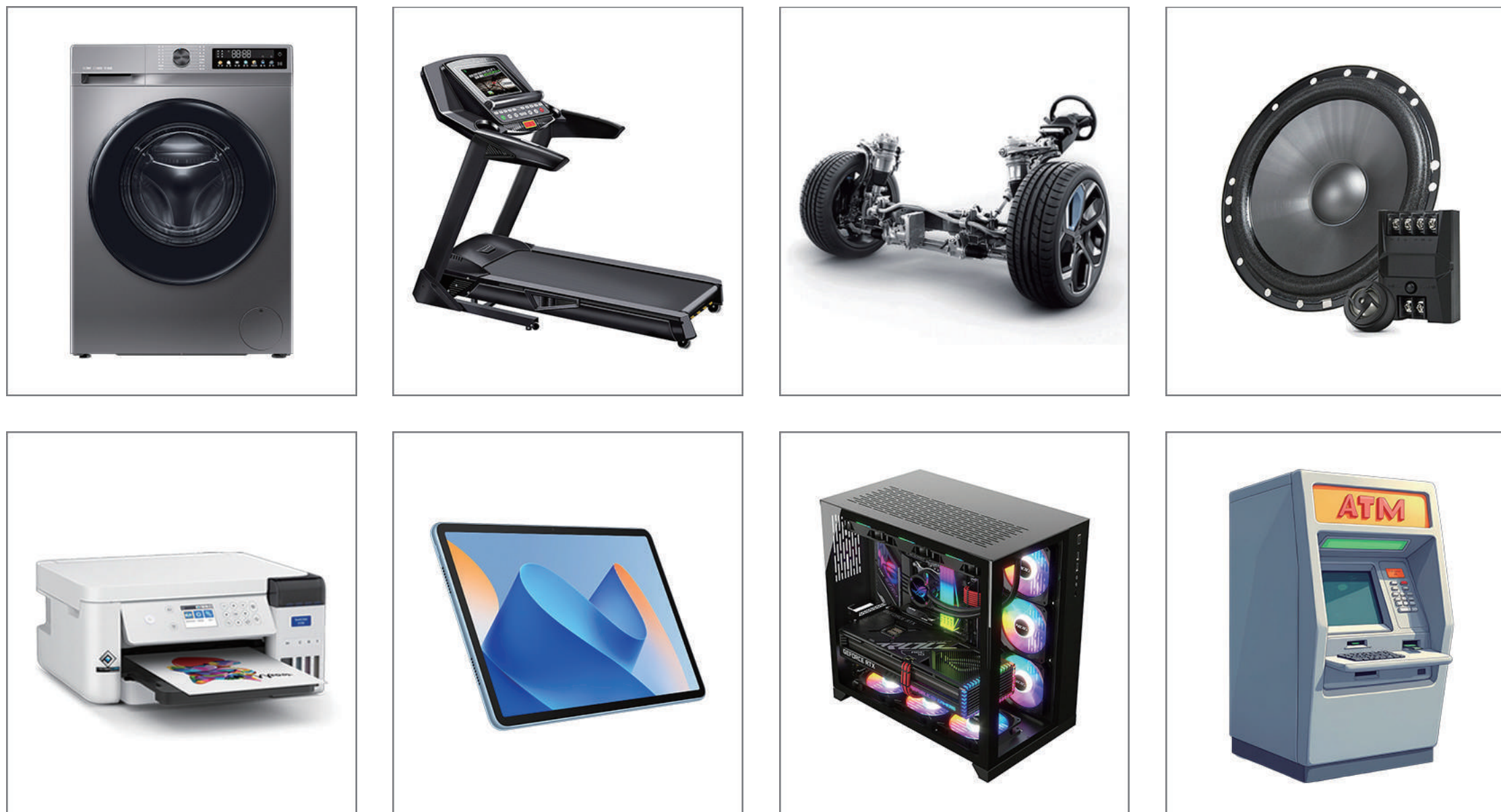
Home Appliances: Washing Machines, Dishwashers, Treadmills, Vacuum Cleaners

Automotive Equipment: Car Audio Systems, Headlights, Steering Switches, Seat Switches, Electric Steering Systems, Visual Parking Systems

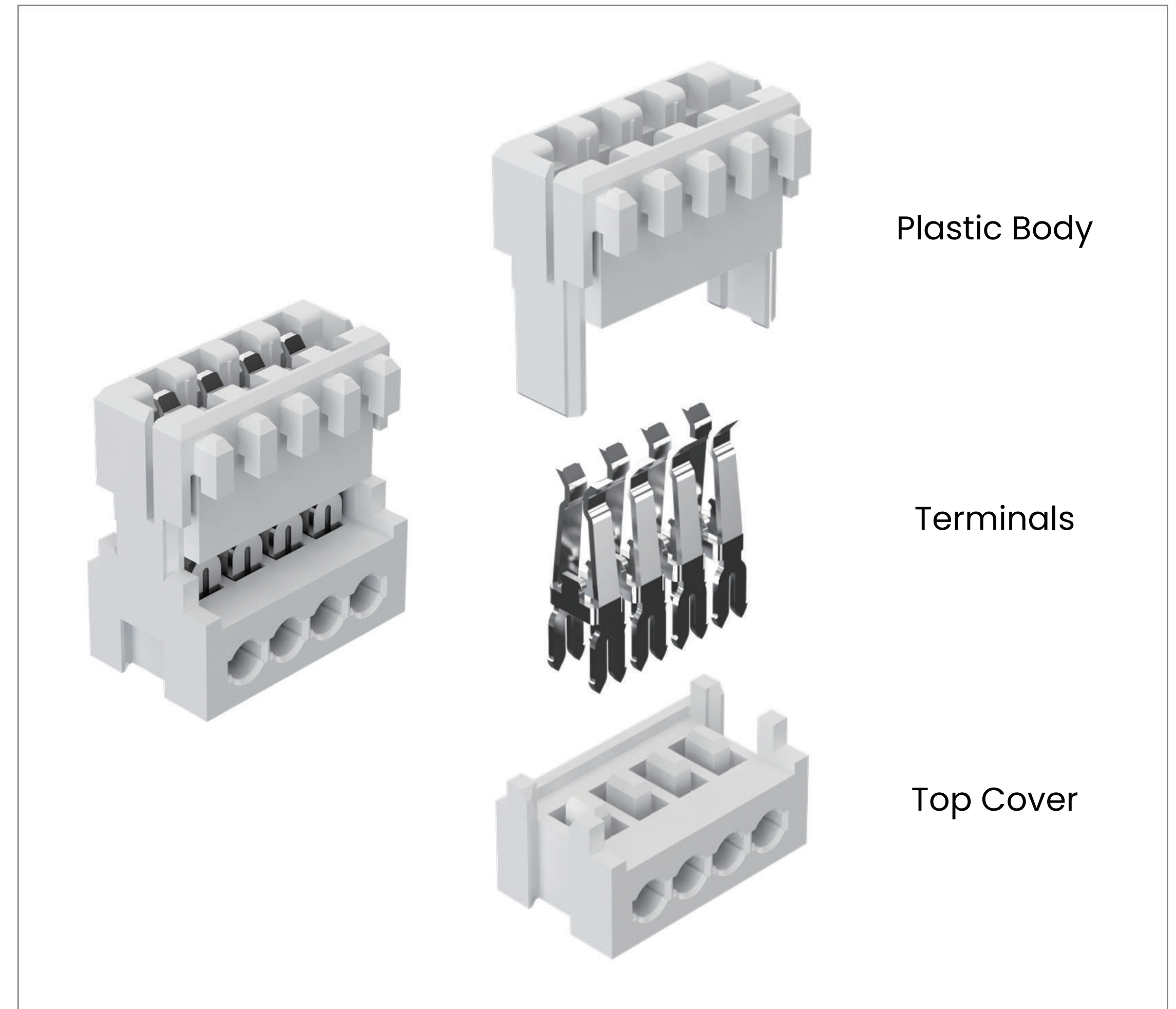
Office Equipment: Printers, Scanners, Fax Machines, Copiers

Computer Products: Desktop Computers, Personal Computers, Tablets, Servers

Financial Equipment: ATMs, Cash Registers



Product Structure



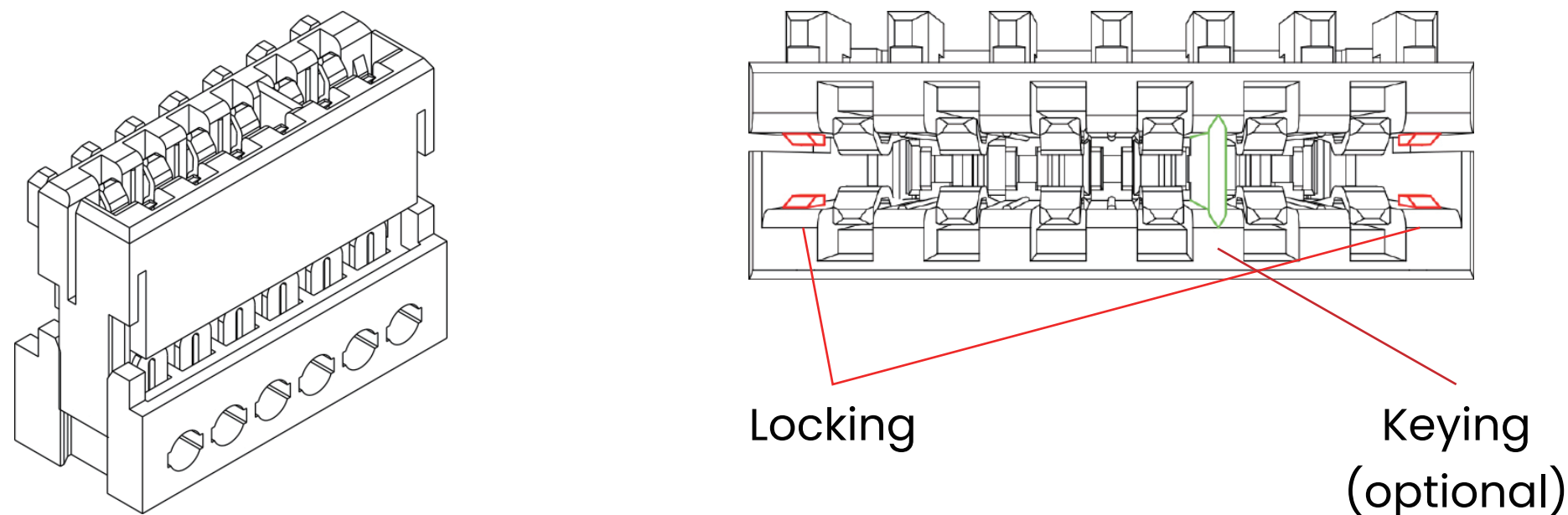
Diverse Product Configurations

RASTLINK Connectors offer various optional specifications, including 'Locking', 'Keying', and 'Positioning', which can be customized according to requirements.

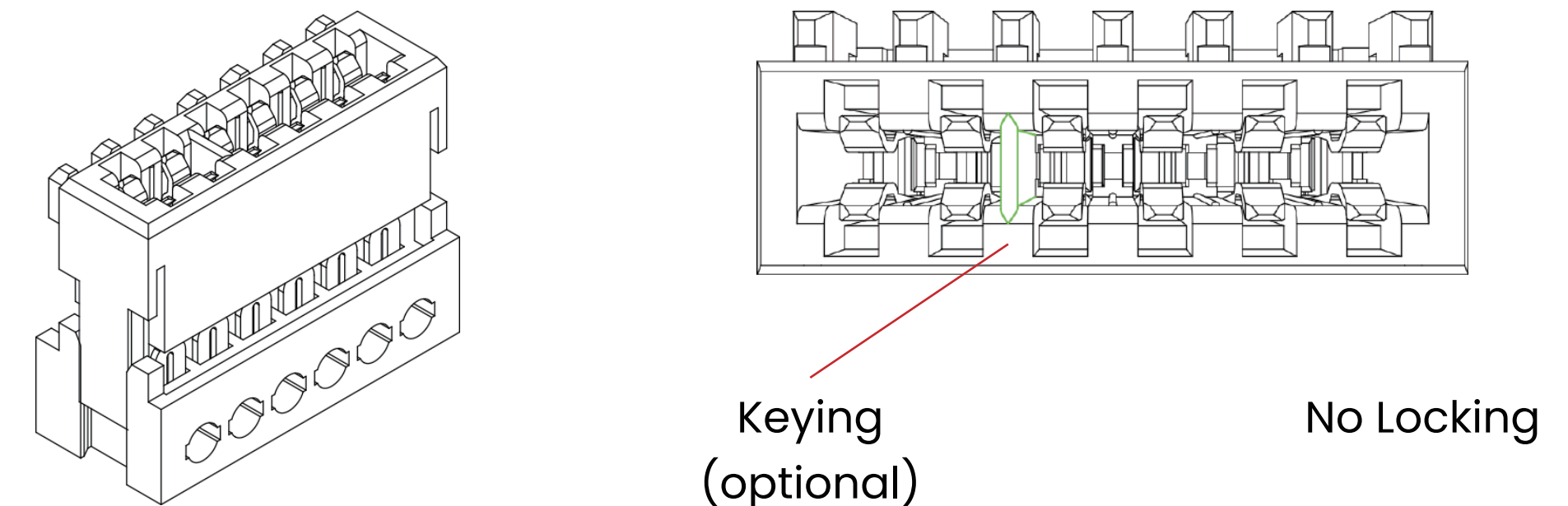
Locking: Effectively locks after assembly to prevent disconnection.

Keying and Positioning: Features foolproof design to ensure precise alignment during assembly, avoiding installation errors.

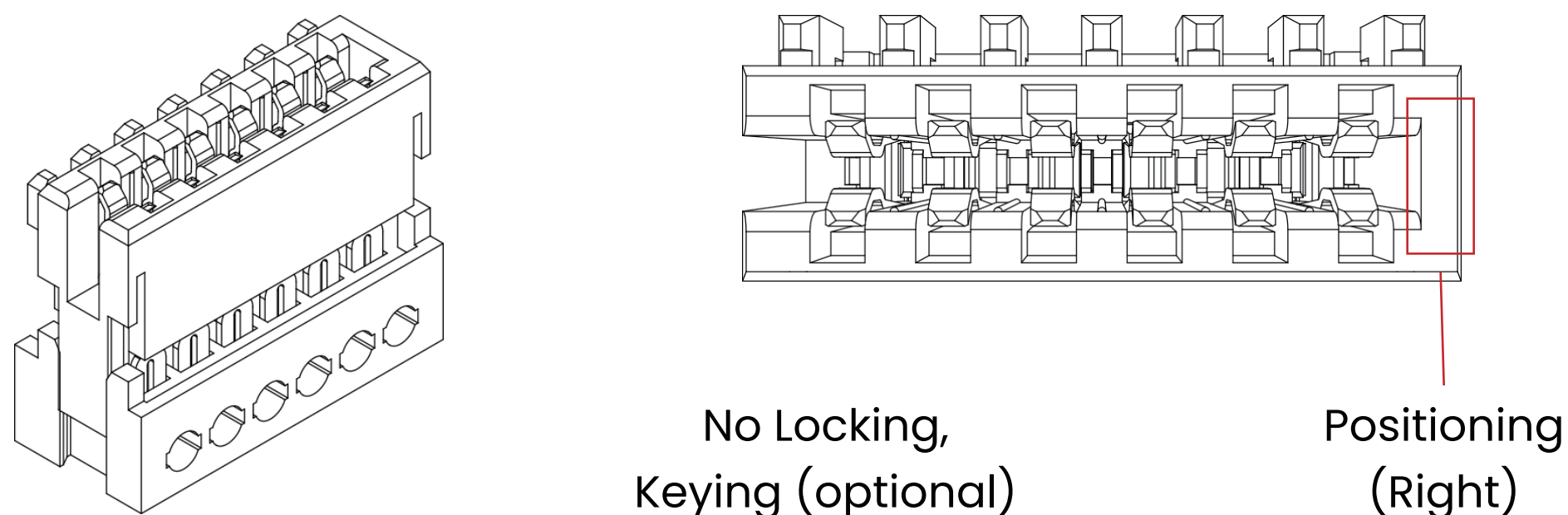
Configuration 1: Locking, Keying (optional)



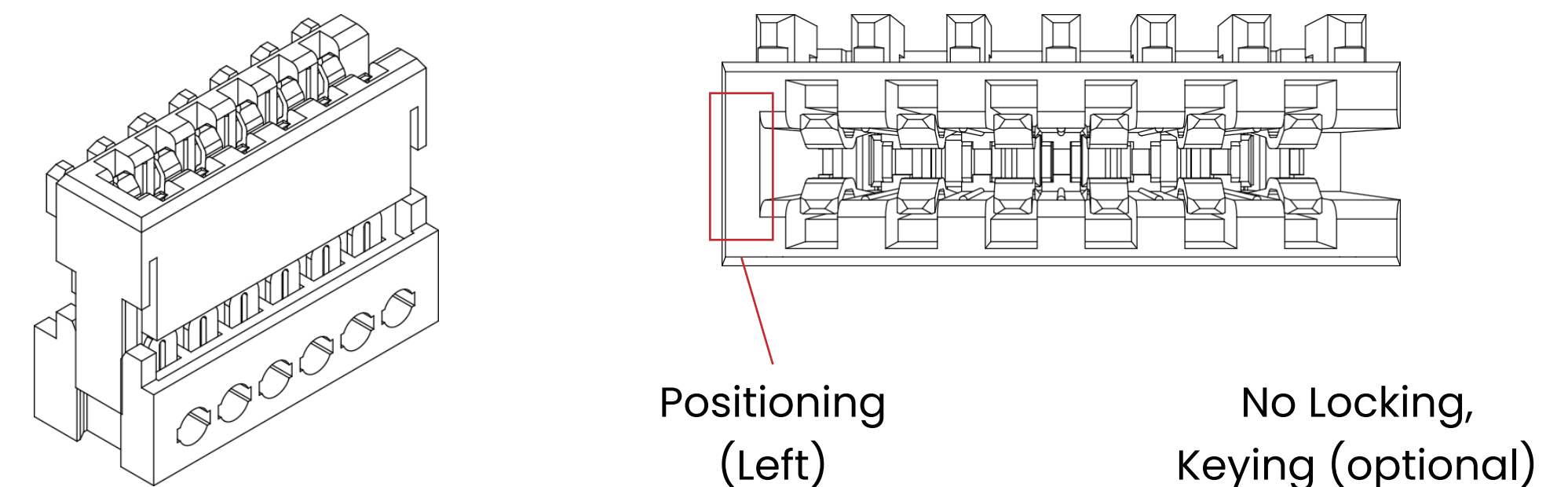
Configuration 2: No Locking, Keying (optional)



Configuration 3: Positioning (Right), No Locking, Keying (optional)

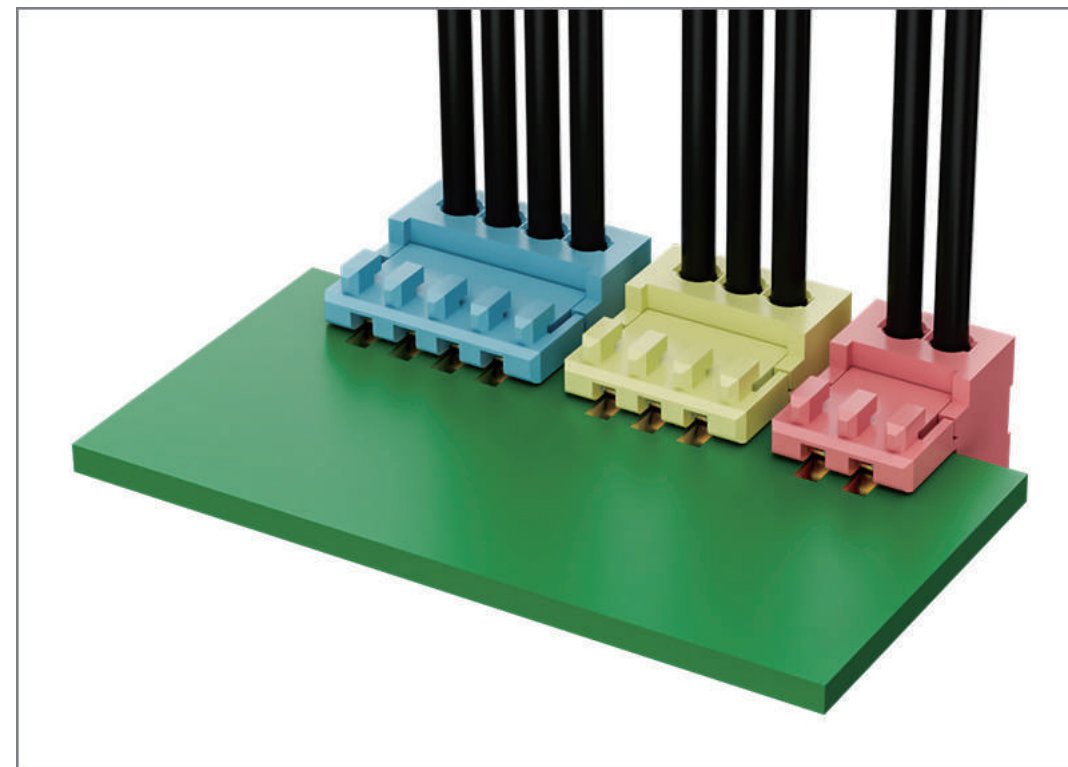
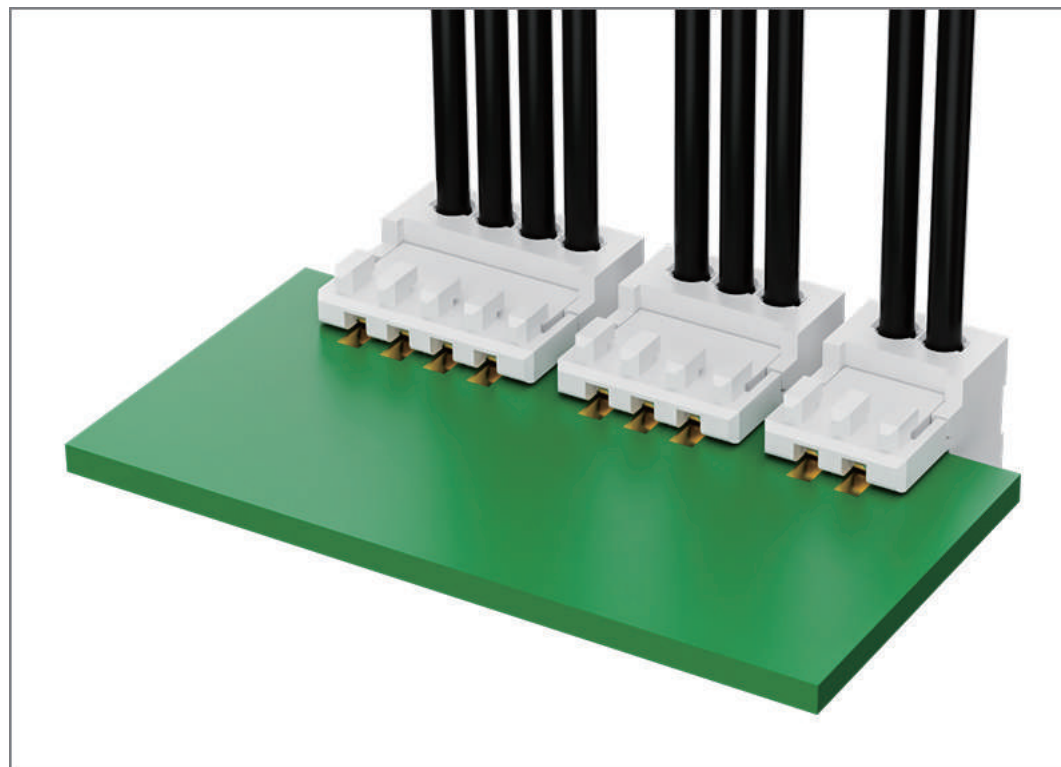


Configuration 4: Positioning (Left), No Locking, Keying (optional)



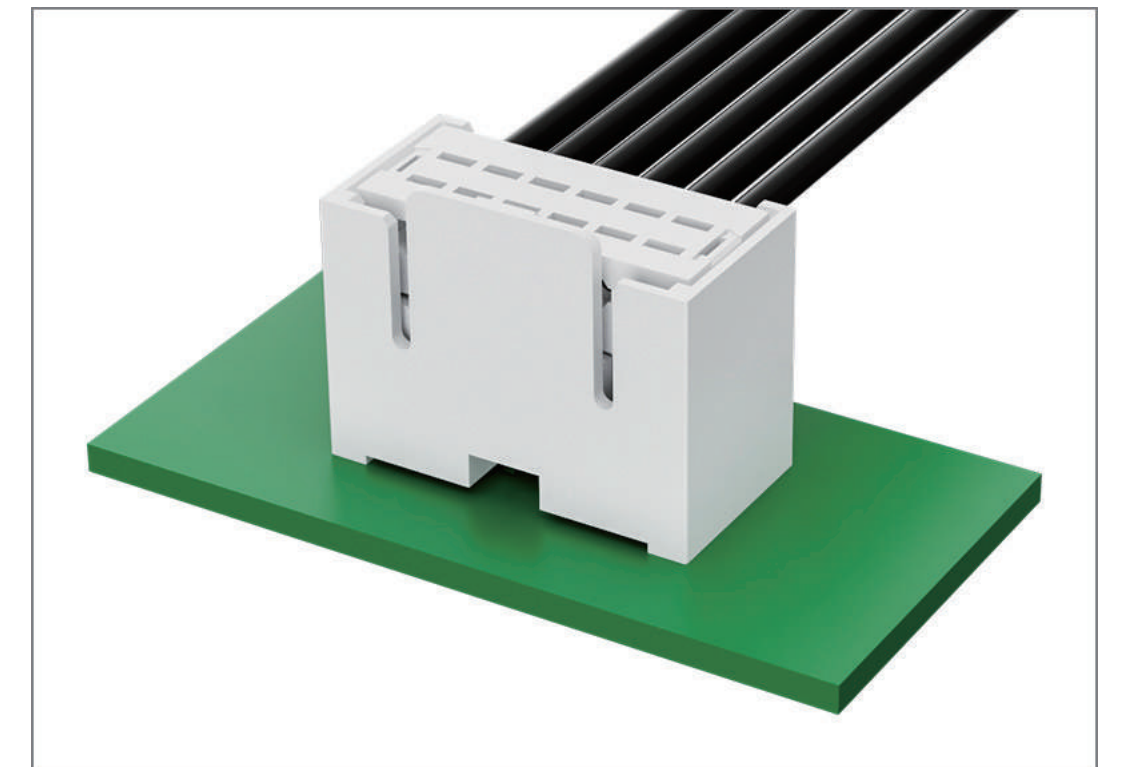
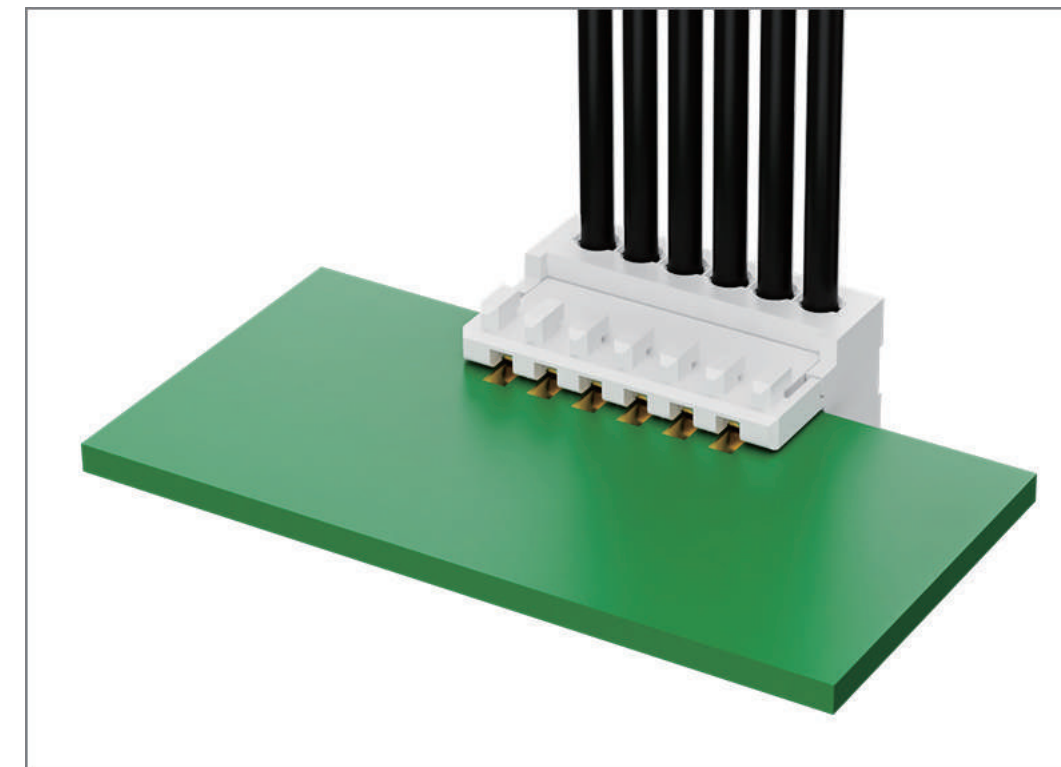
Multiple Color Codes for Easy Visual Identification

Available in multiple color options, these connectors allow staff to quickly confirm during operations and reduce installation errors.



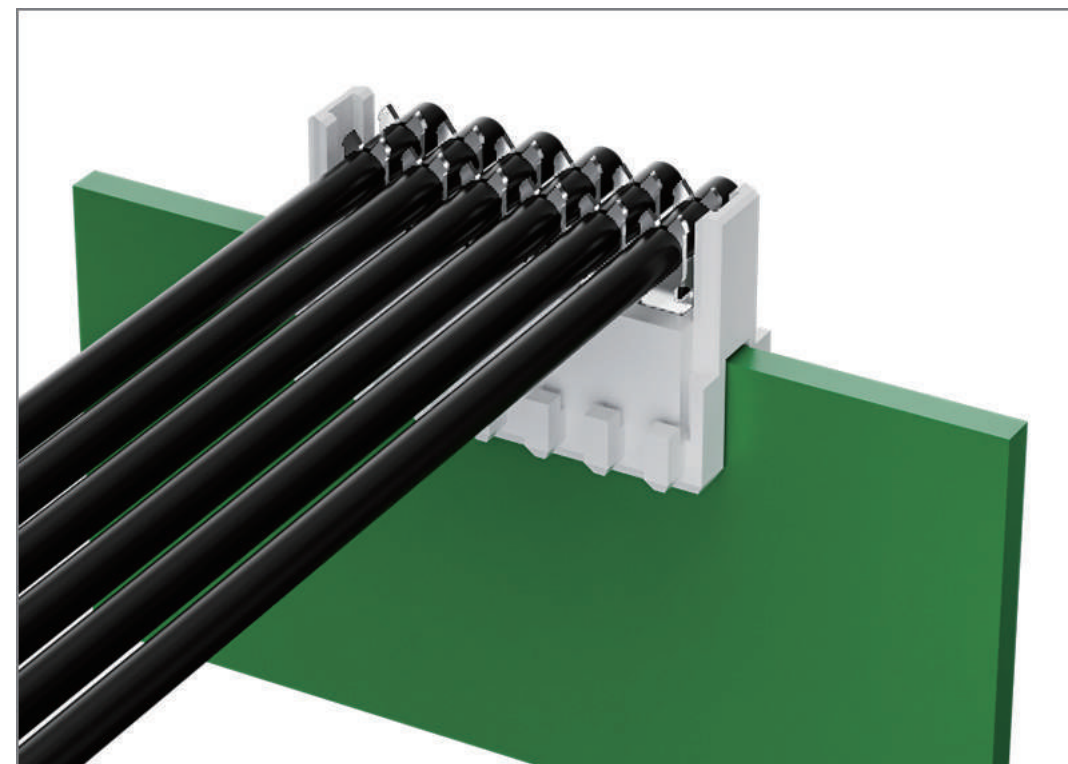
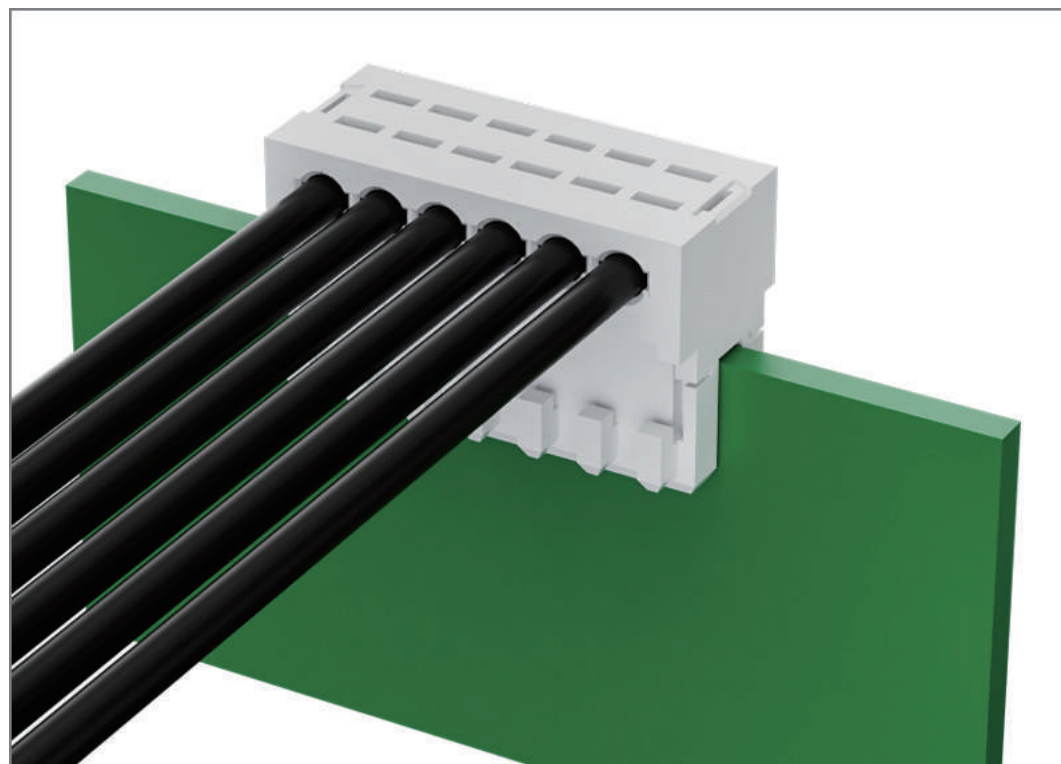
Powerful Interface Compatibility

Can directly or indirectly connect to PCBs without connectors, simplifying wiring in tight spaces and preventing disconnection with a locking mechanism.



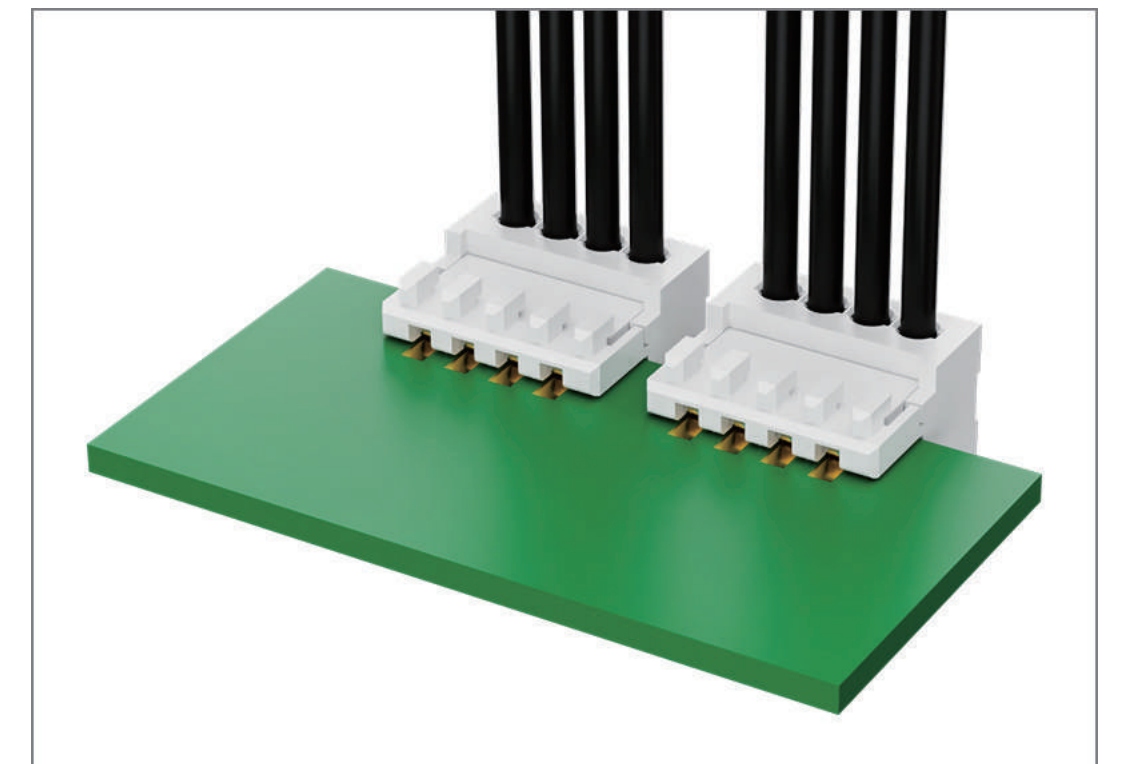
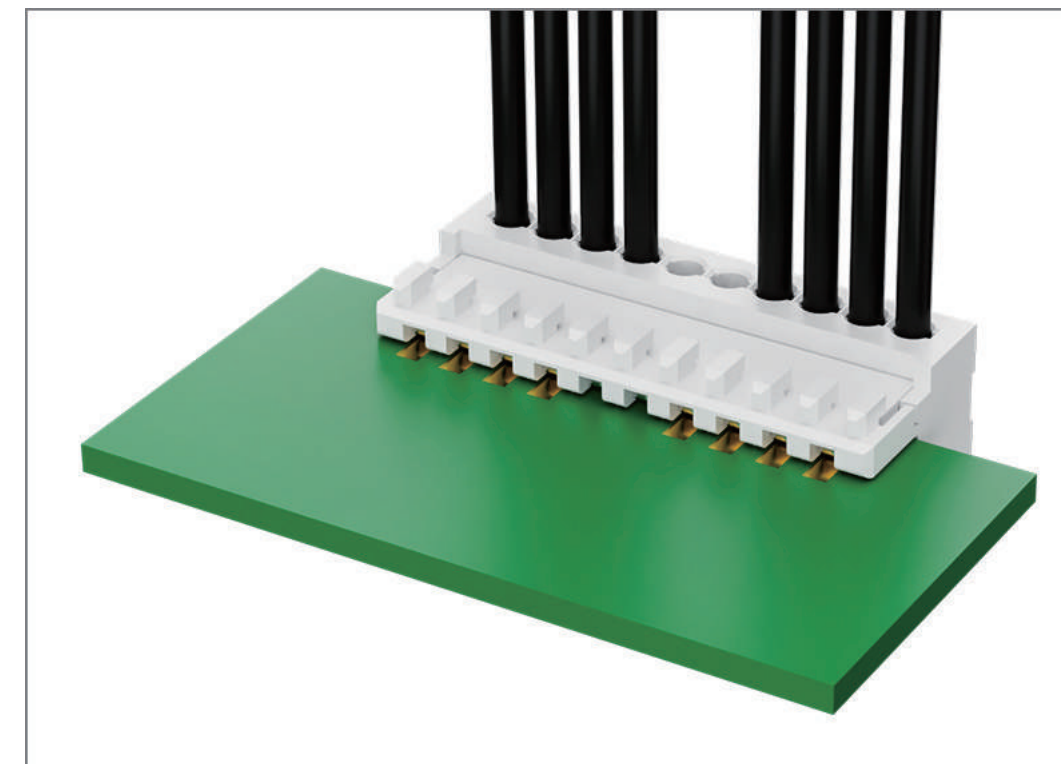
IDC Piercing Connection Technology

During IDC crimping, the insulation of the wire is pierced, ensuring a stable electrical connection and reliable signal transmission.



Simplified Assembly and Cost Reduction

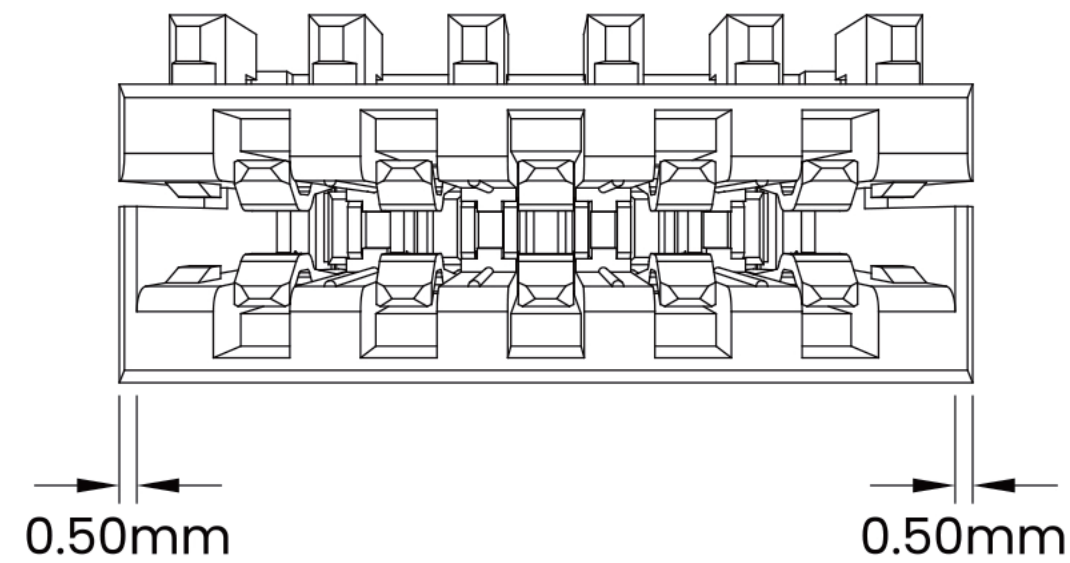
Using a single multi-position connector reduces the number of connectors needed, saving wiring space and lowering production costs.



Plastic side and clip variations

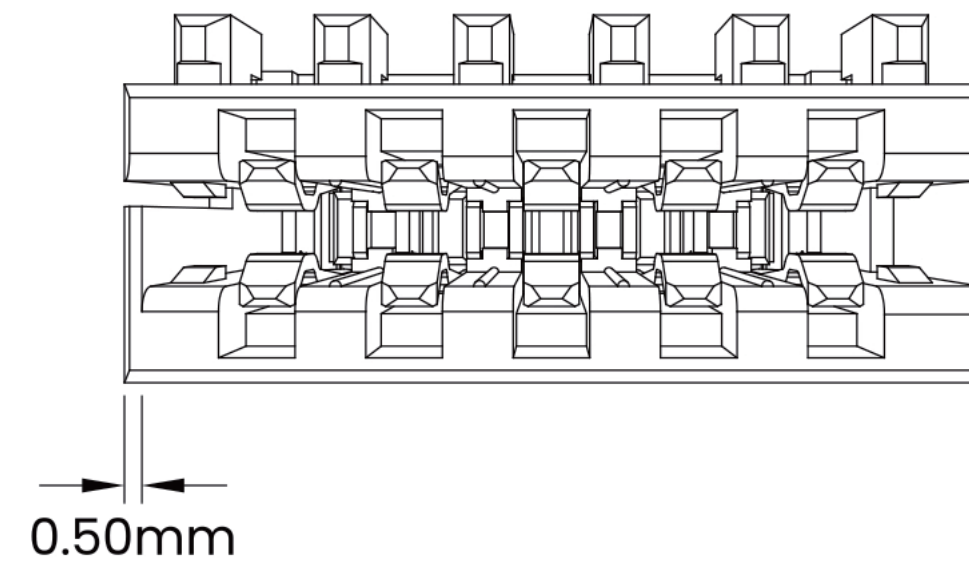
AA

Both left and right side closed
(0.50mm thick), (with clips)



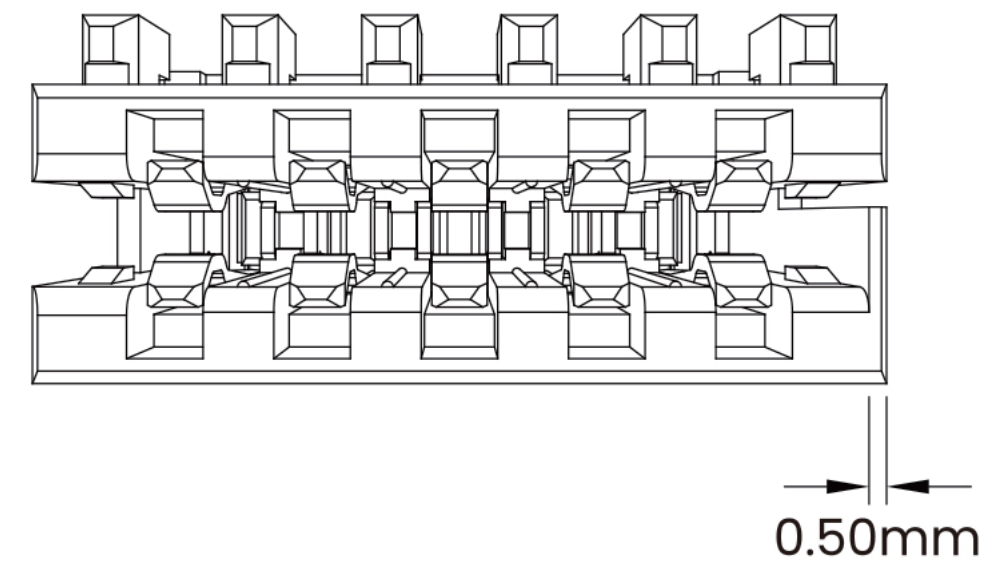
AB

Left side closed (0.50mm thick),
right side open, (with clips)



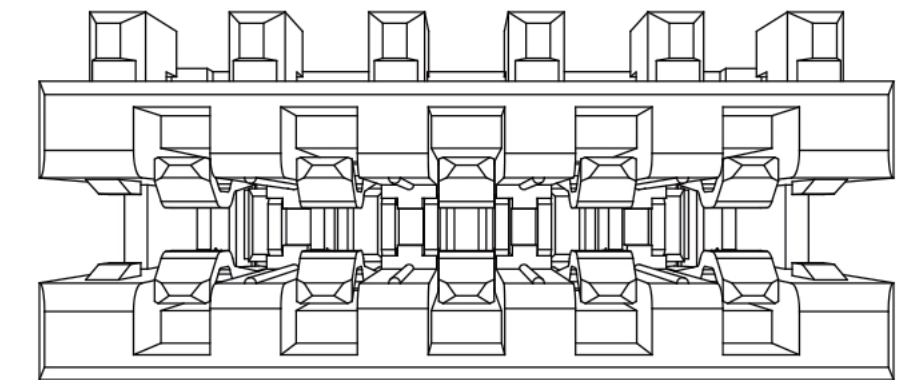
AC

Left side open, right side closed
(0.50mm thick), (with clips)



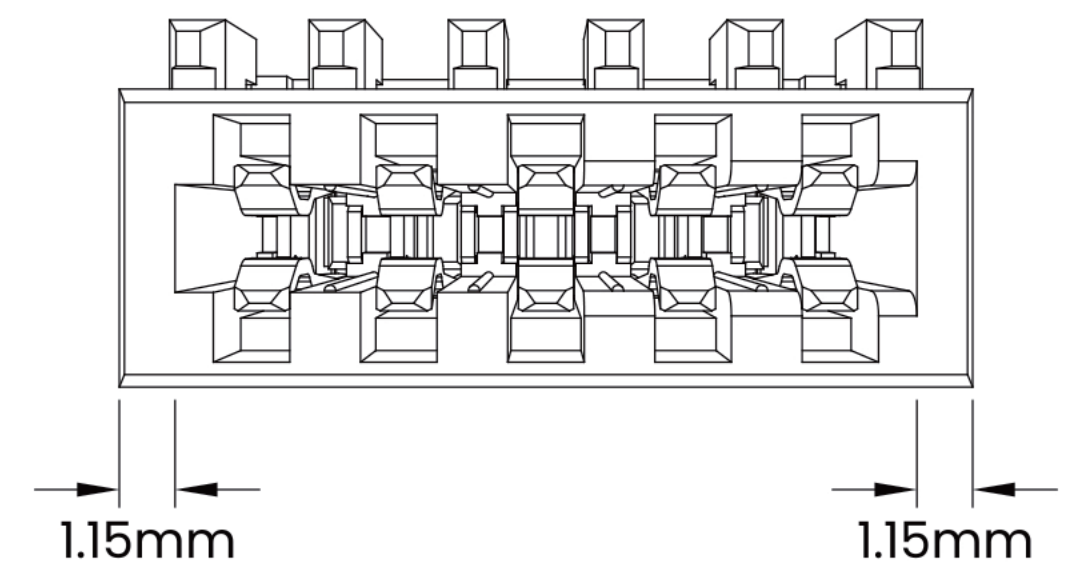
AD

Both left and right side open,
(with clips)



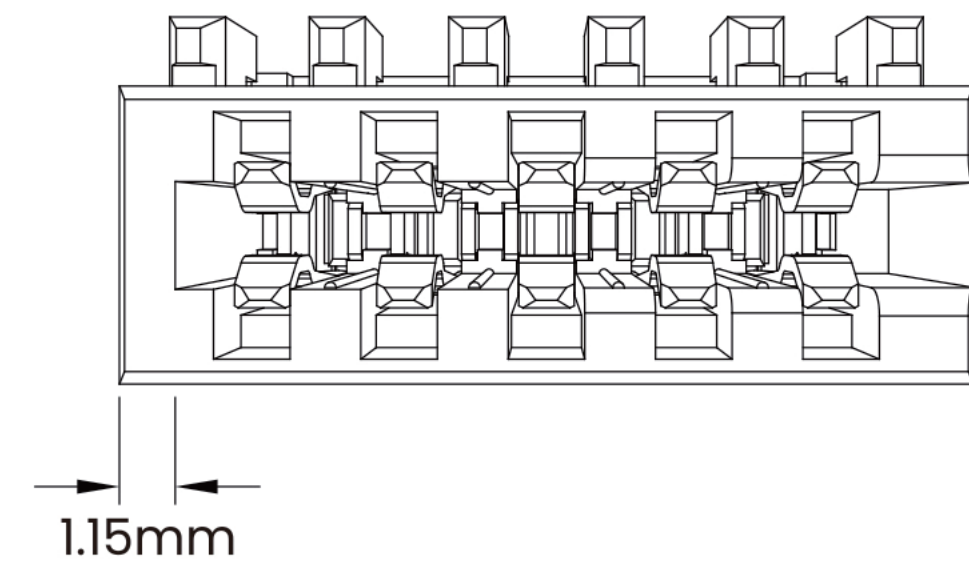
AE

Both left and right side closed
(1.15mm thick), (without clips)



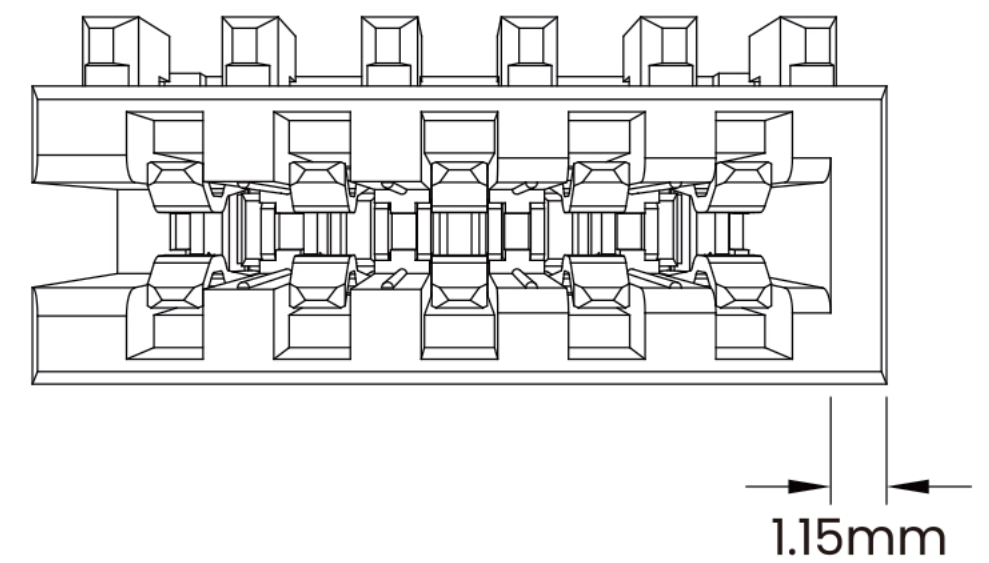
AF

Left side closed (1.15mm thick),
right side open, (without clips)



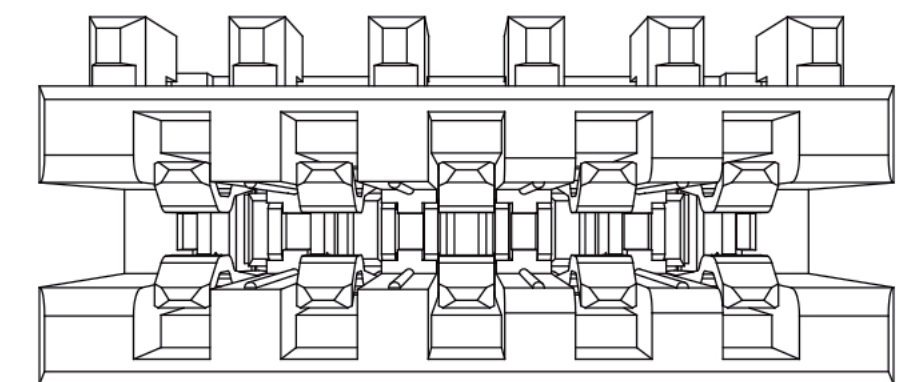
AG

Left side open, right side closed
(1.15mm thick), (without clips)



AH

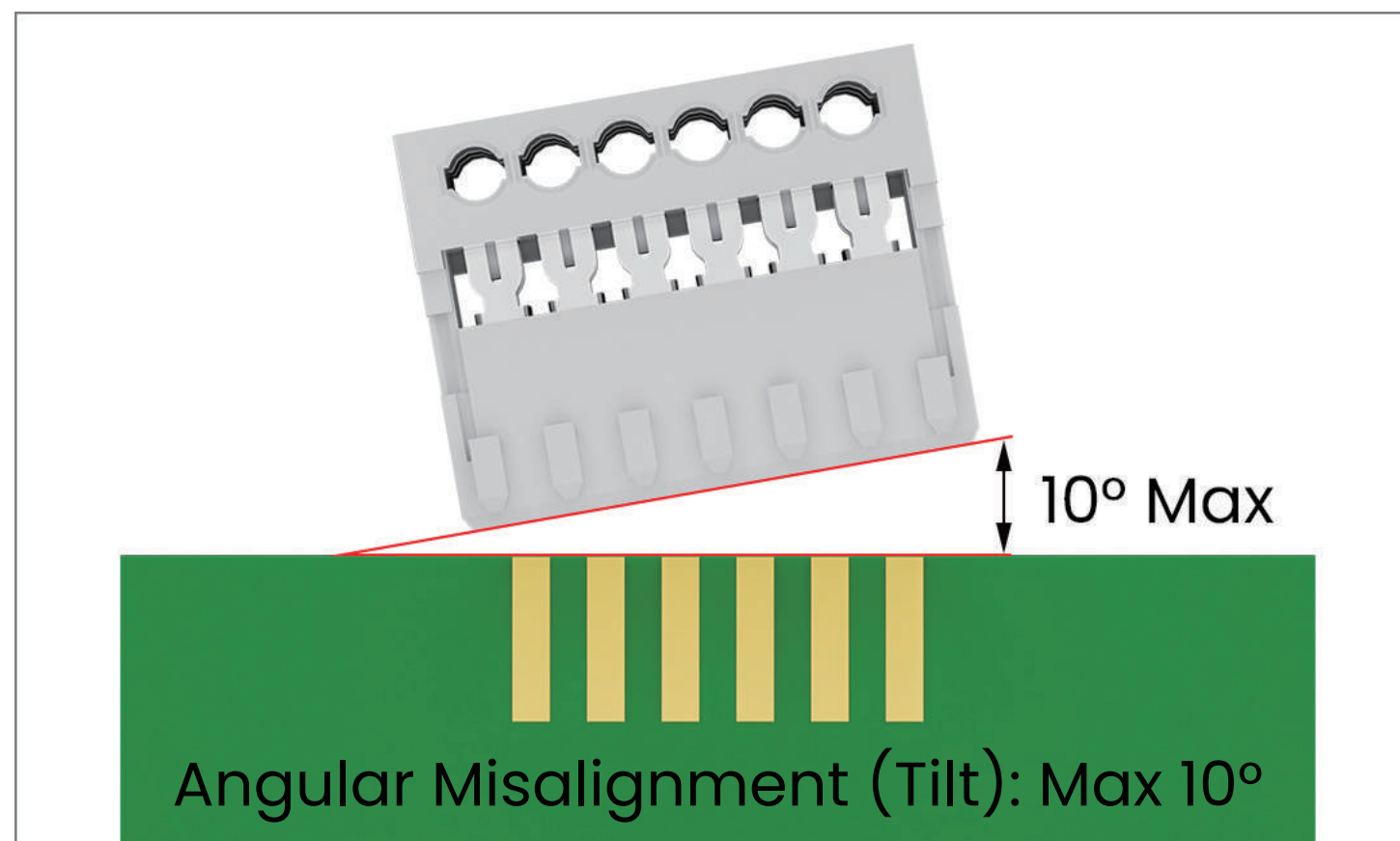
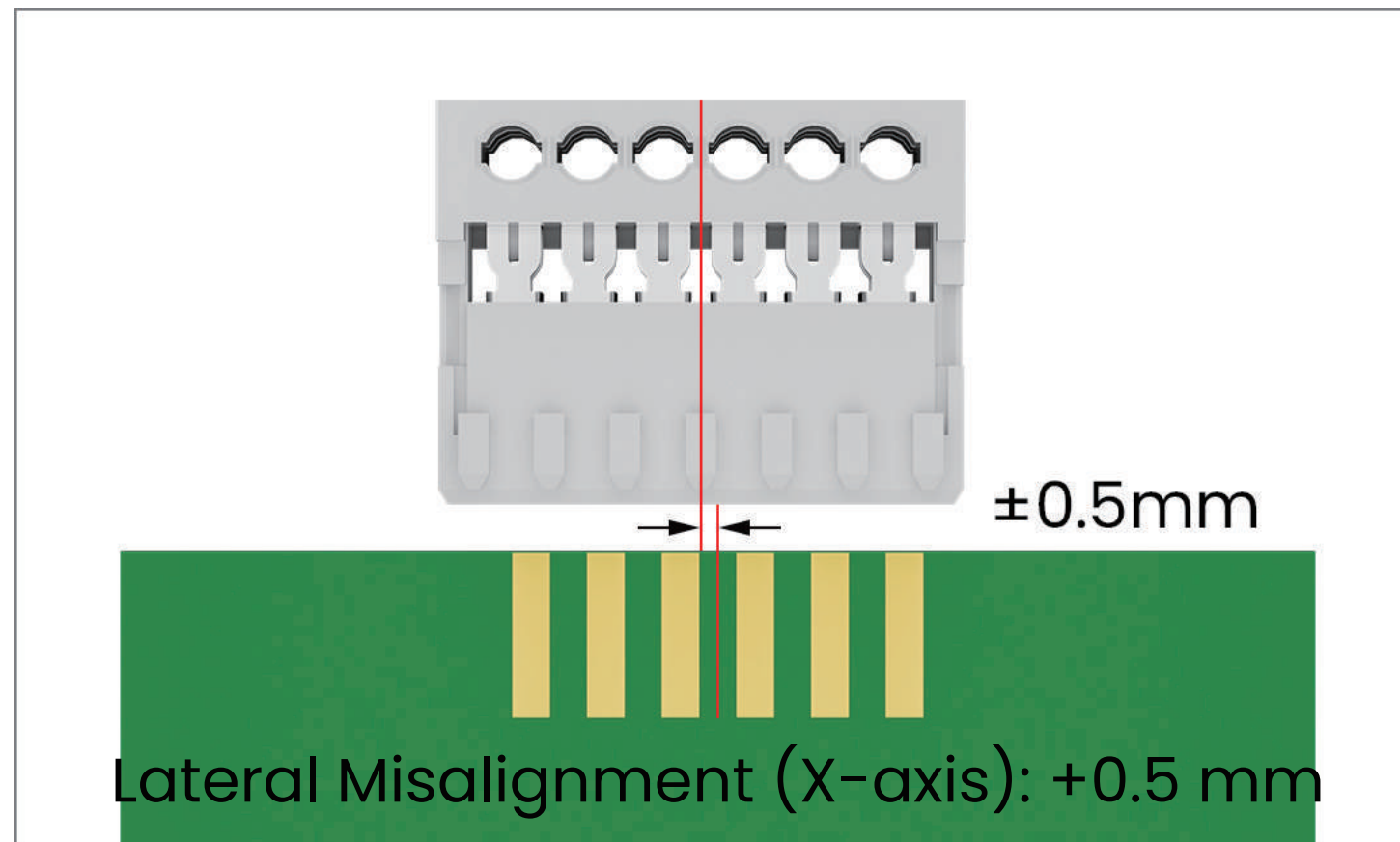
Both left and right side open,
(without clips)



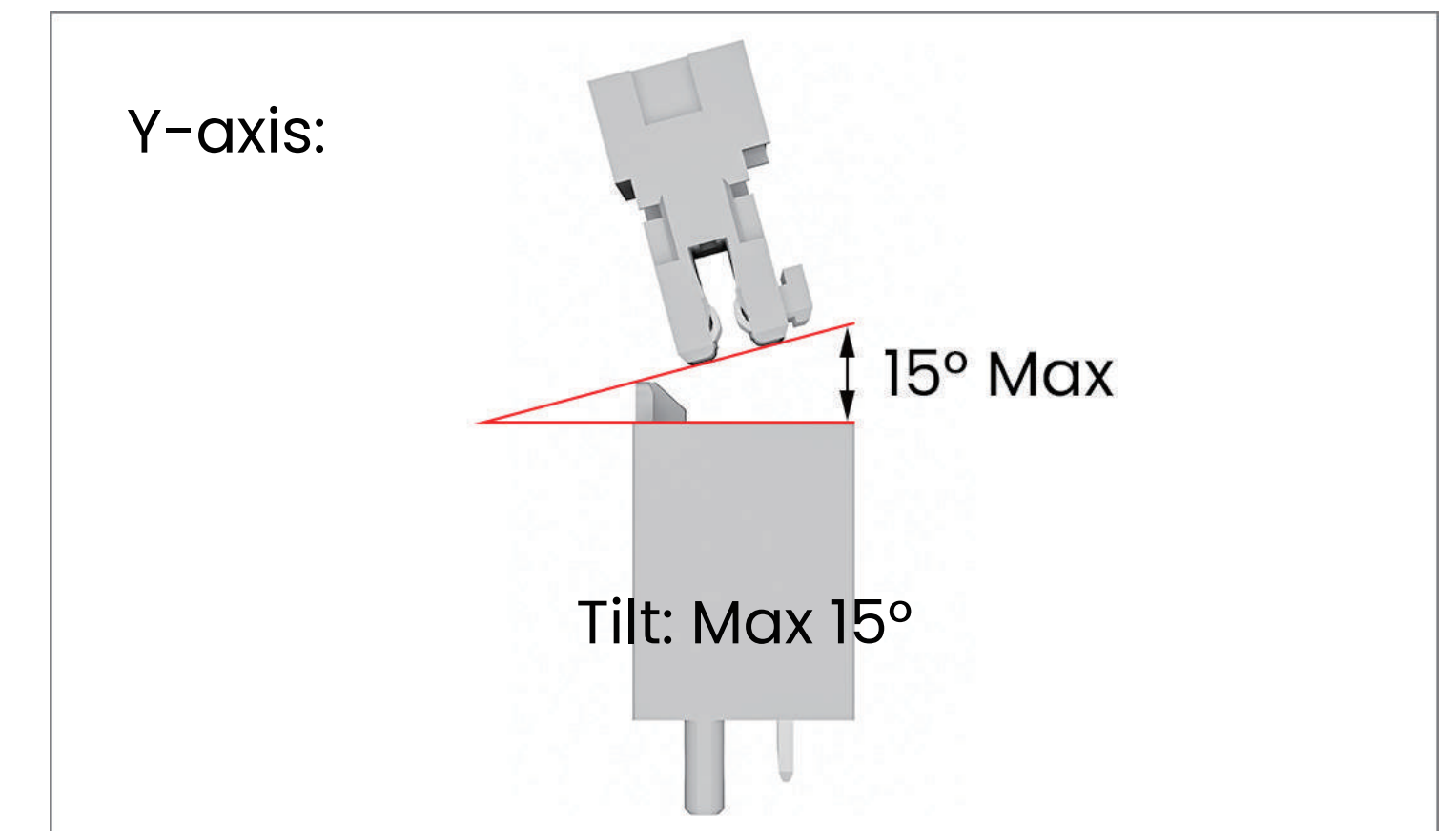
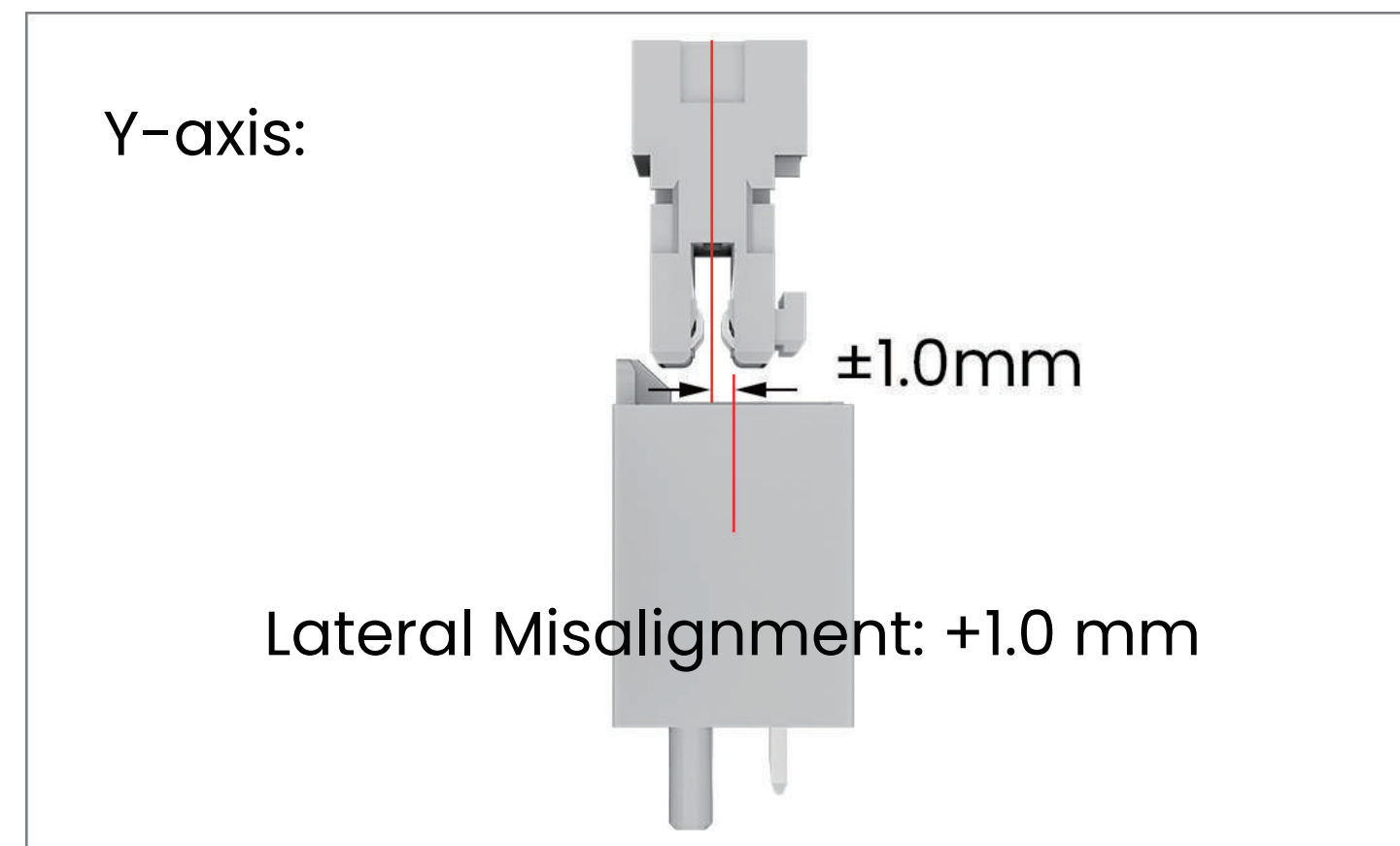
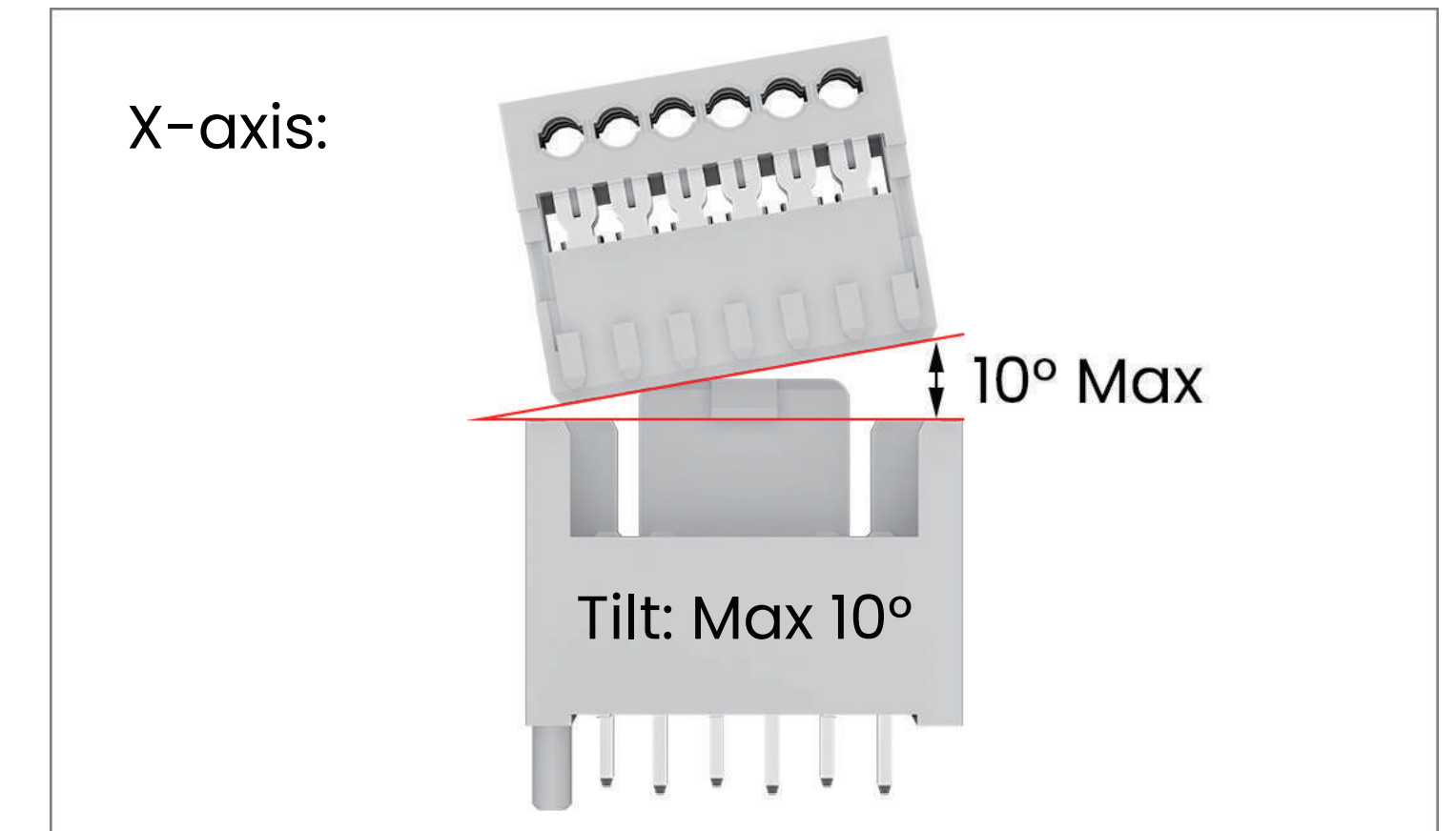
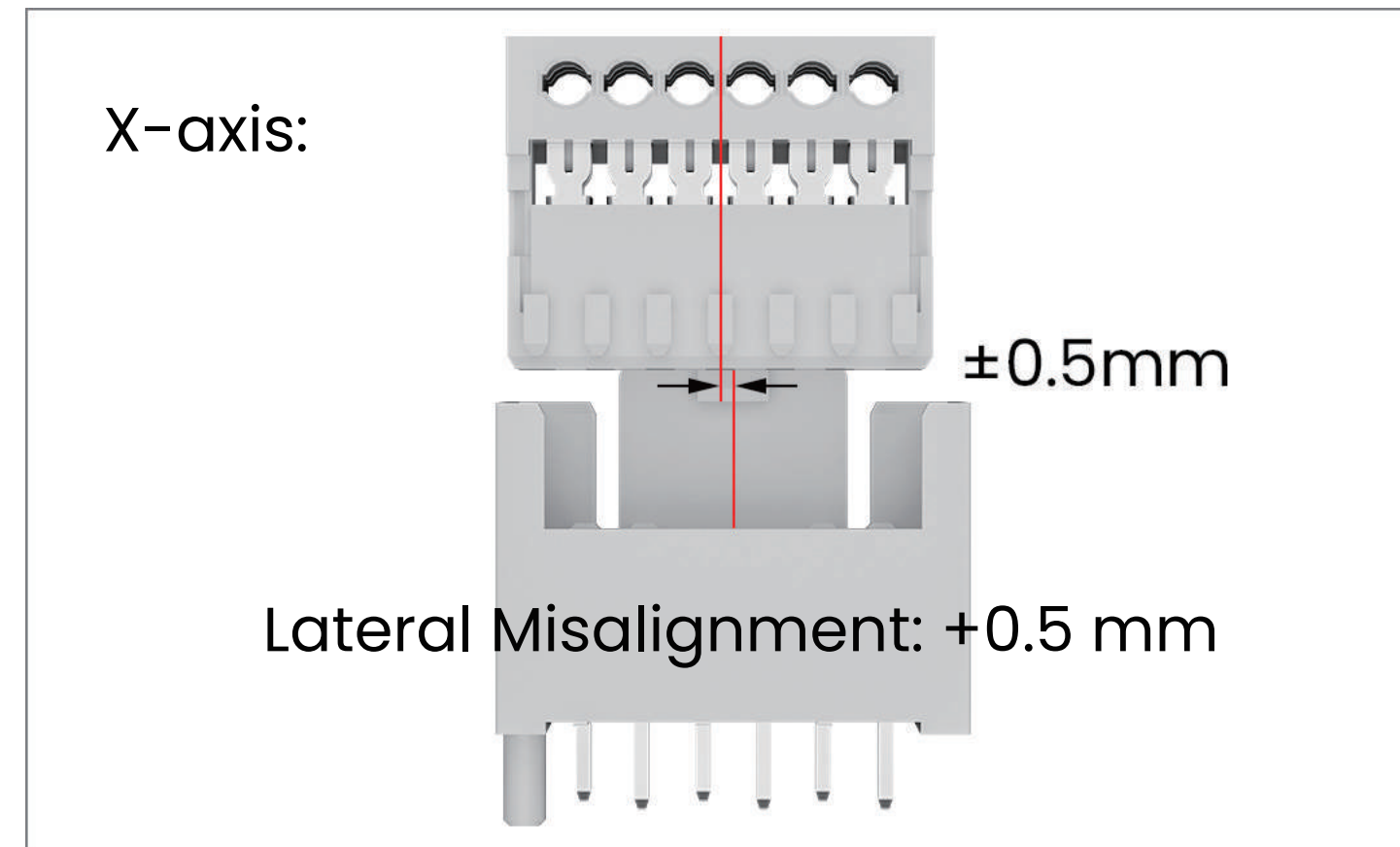
Connector Mating Tolerance Guidelines

During the mating process, connectors may not always align perfectly. To ensure proper functionality, misalignment and tilt must stay within the following tolerances:

1. Mating with PCB:

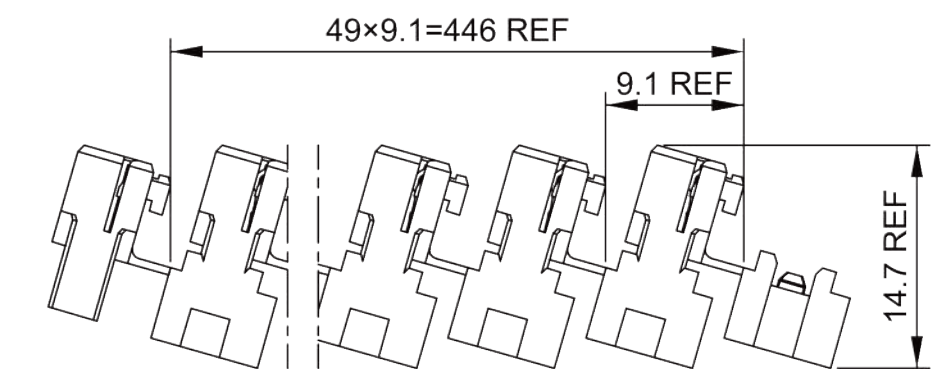
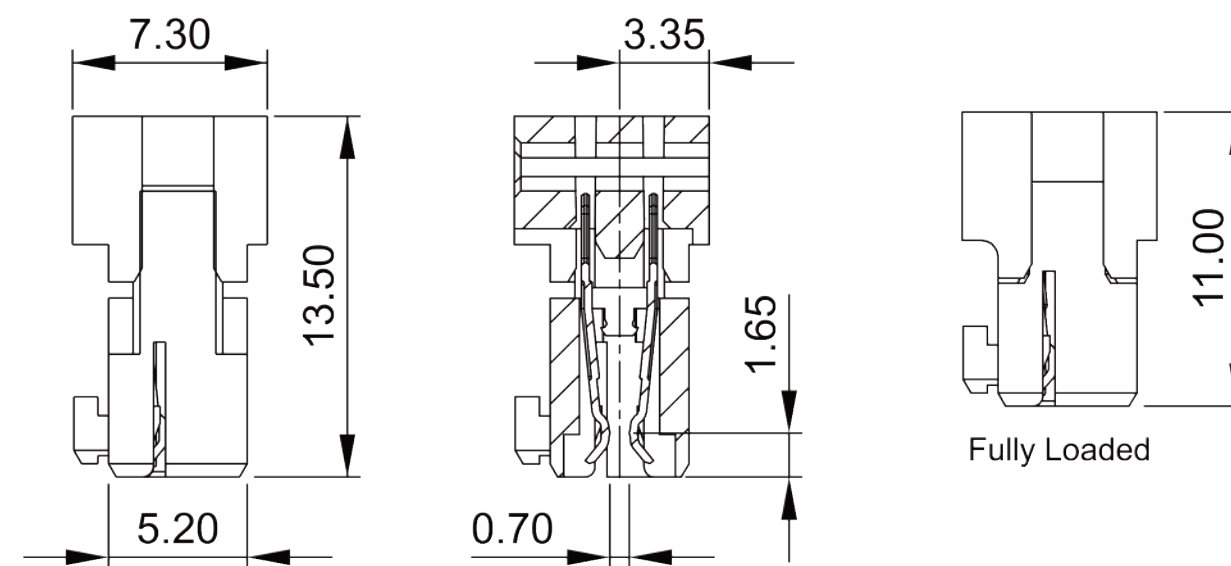
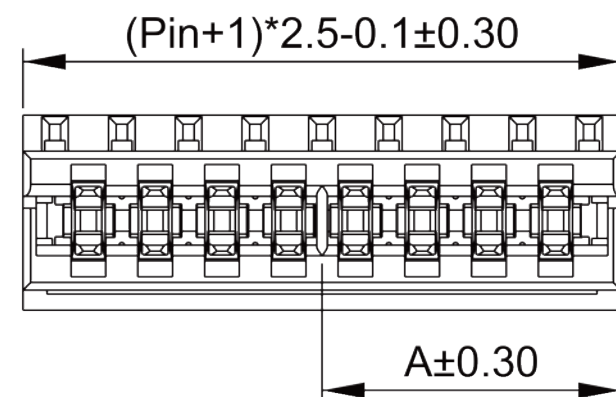
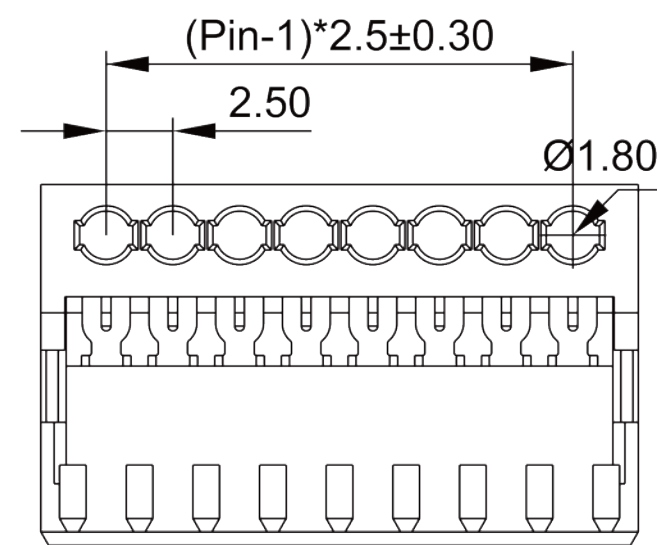


2. Mating with Connector Plug:



Series	RCSGA106	RCSGA107	RCSGA109	RCSGA110	RCSGA111
Pitch	2.50mm		2.50mm	5.00mm	
Number of Pins	2~17Pin	5/7/8Pin	8Pin	2~9Pin	
PCB Thickness	1.50±0.14mm	1.00±0.14mm	1.50±0.14mm	1.50±0.14mm	
Insulation Material	PBT or Nylon		PBT or Nylon	PBT or Nylon	
Contact Material	Phosphor Bronze		Phosphor Bronze	Phosphor Bronze	
Plating	Bottom Nickel, Top Tin Plating (optional)			Bottom Nickel, Top Tin Plating (optional)	
Insertion Force	≤ 4 N/Pin		≤ 4 N/Pin	≤ 4 N/Pin	
Withdrawal Force	≥ 0.5 N/Pin		≥ 0.5 N/Pin	≥ 0.5 N/Pin	
Mechanical Durability	20 cycles for Tin / 100 cycles for Gold			20 cycles for Tin / 100 cycles for Gold	
Rated Current	4 A/Pin (Temb 60 °C) 2 A/Pin (Temb 100 °C)		4 A/Pin (Temb 60 °C) 2 A/Pin (Temb 100 °C)	4A/Pin (Temb 60 °C) 2A/Pin (Temb 100 °C)	6A
Rated Voltage	32V AC/DC		32V AC/DC	32V AC/DC	250V AC/DC
Withstand Voltage	500V AC/minute		500V AC/minute	1200V AC/minute	
Contact Resistance	10mΩ		10mΩ	10mΩ	
Insulation Resistance	1000MΩ		1000MΩ	1000MΩ	
Operating Temperature	-40℃ ~130℃		-40℃ ~130℃	-40℃ ~+125℃	-40℃ ~+120℃
Applicable Wires	0.22~0.35mm², OD≤ø1.70mm (Electronic Wire)		0.12~0.22mm², OD≤ø1.40mm (Ribbon cable)	0.35~0.75mm², OD≤ø2.40mm (Electronic Wire)	
Standards Compliance	GWT725℃ (PBT), GWT750℃ (Nylon)				
Certification	UL				

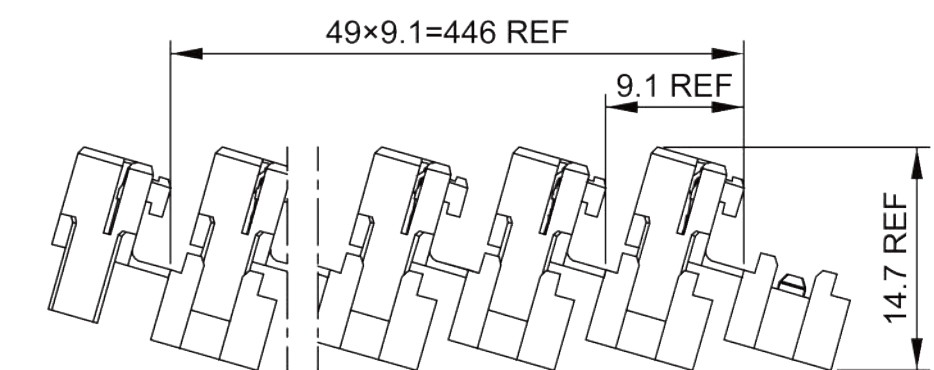
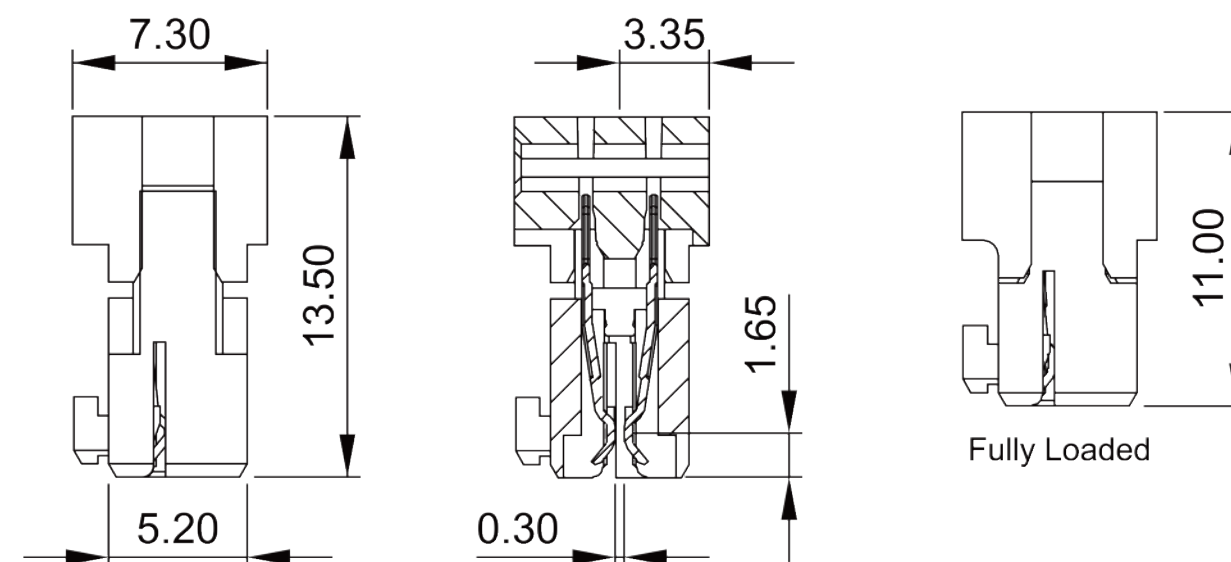
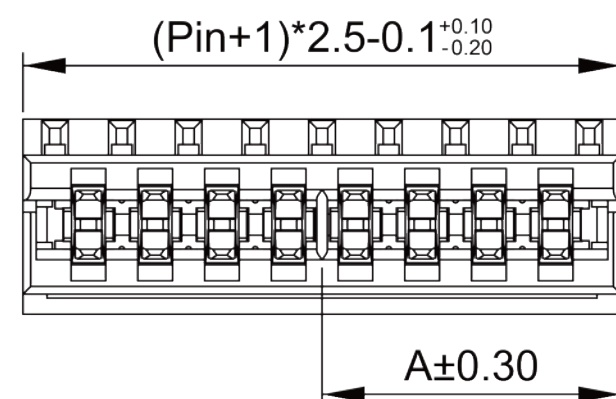
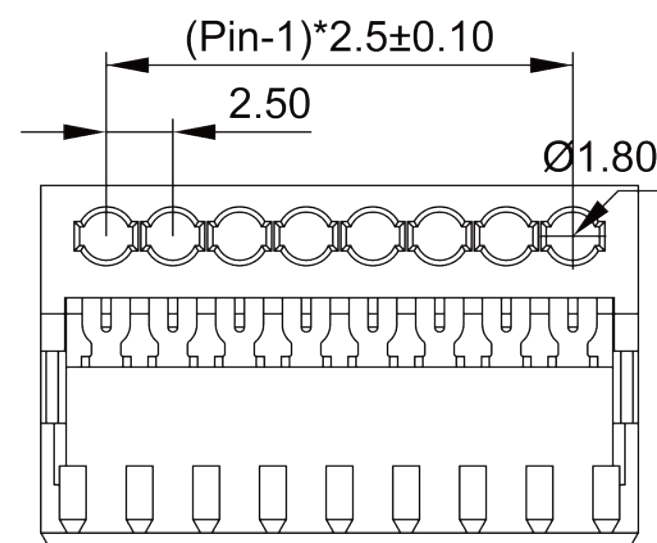
RCSGA106 Series



Shipping Arrangement: 50 sets per strip shipped in carton box

Spacer bar	00	12	23	34	45	56	67	78	89	9A	AB	BC	CD	DE	EF	FG	GH
Dim.A	/	3.7	6.2	8.7	11.2	13.7	16.2	18.7	21.2	23.7	26.2	28.7	31.2	33.7	36.2	38.7	41.2

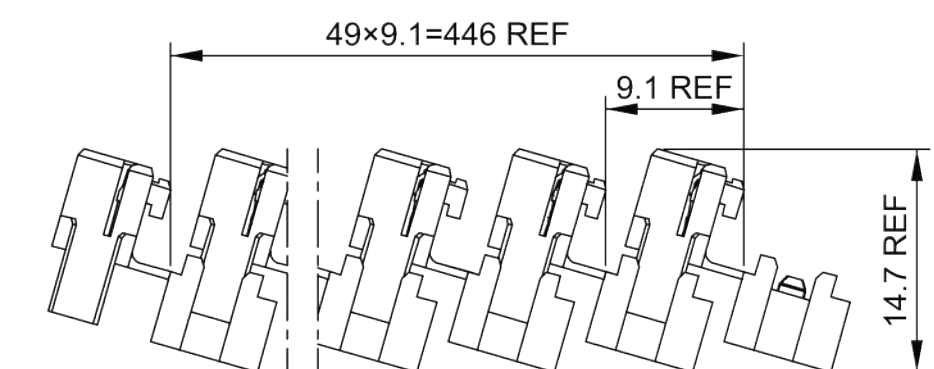
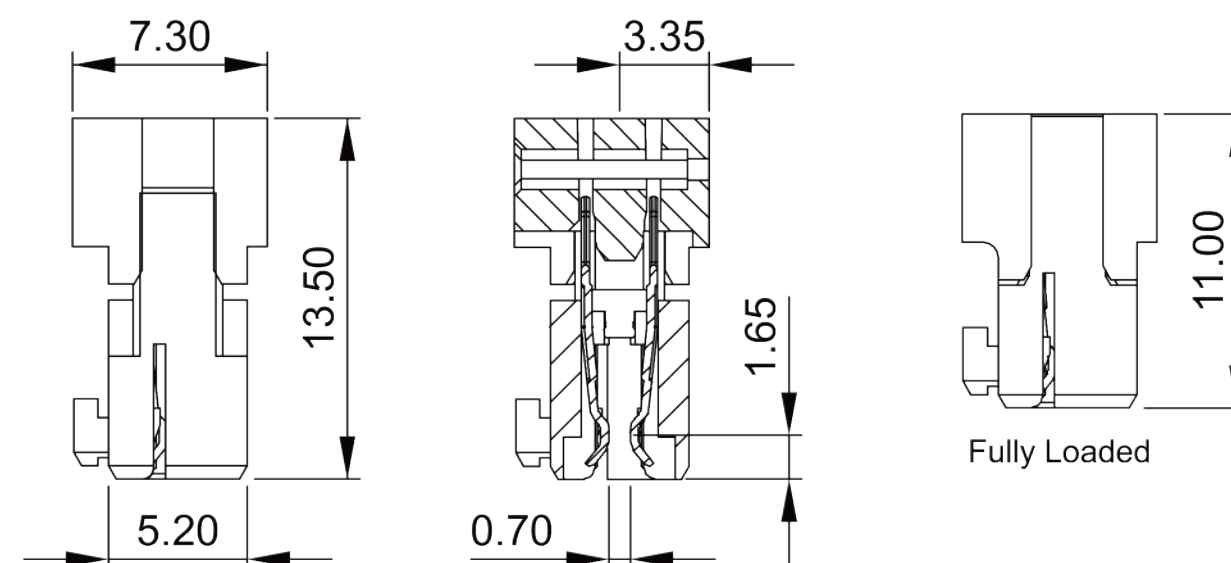
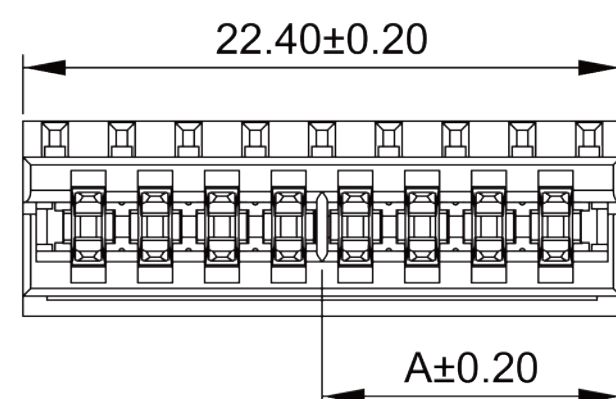
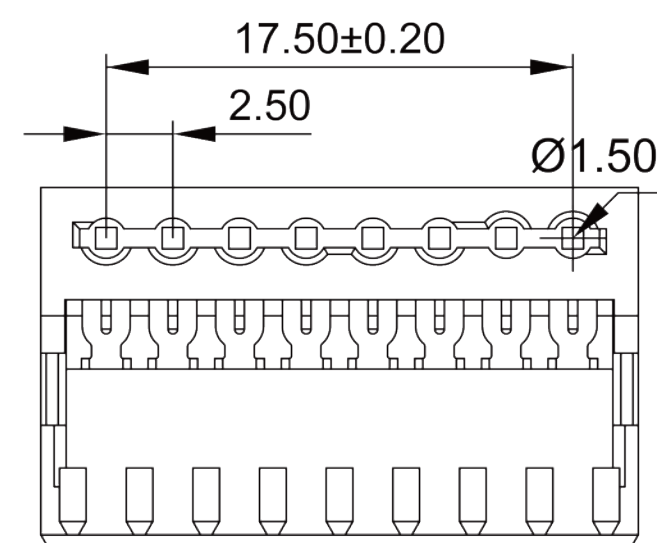
RCSGA107 Series



Shipping Arrangement: 50 sets per strip shipped in carton box

Spacer bar	00	12	23	34	45	56	67	78
Dim.A	/	3.7	6.2	8.7	11.2	13.7	16.2	18.7

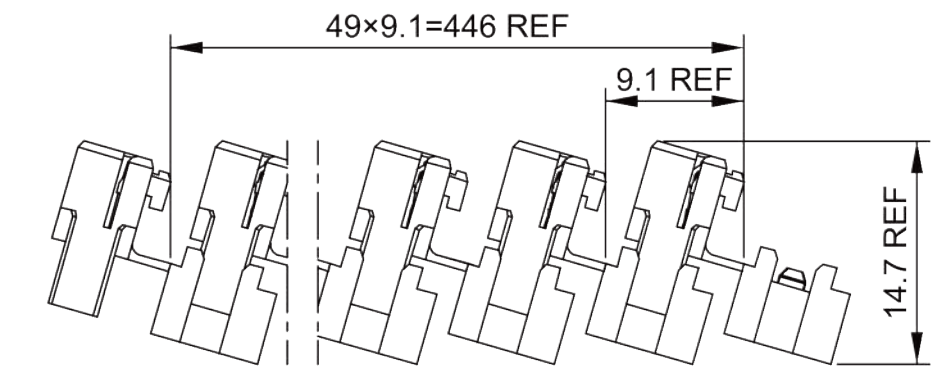
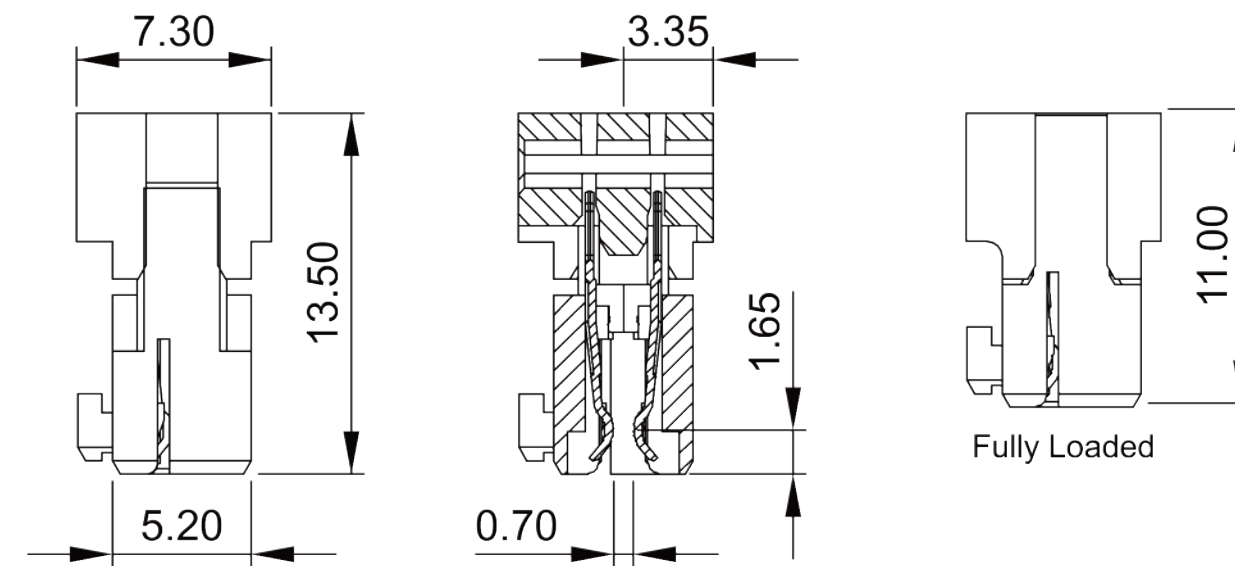
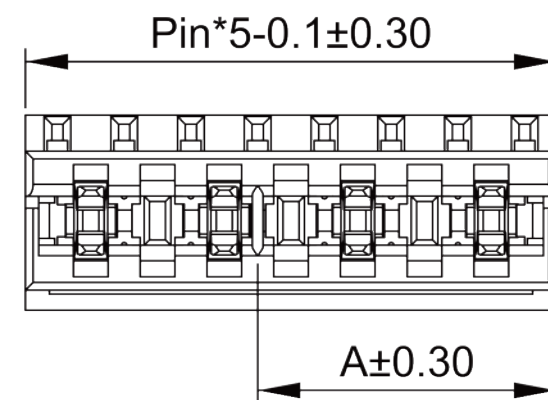
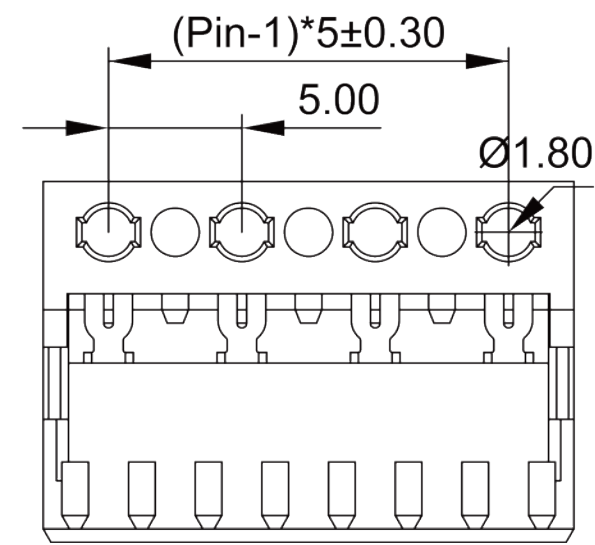
RCSGA109 Series



Shipping Arrangement: 50 sets per strip shipped in carton box

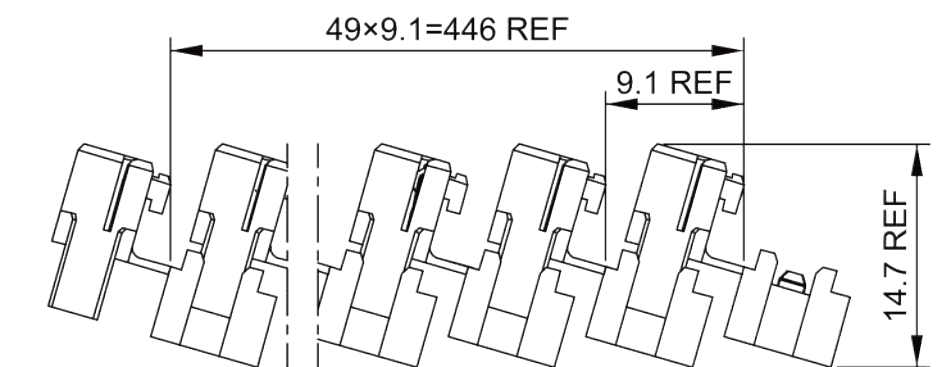
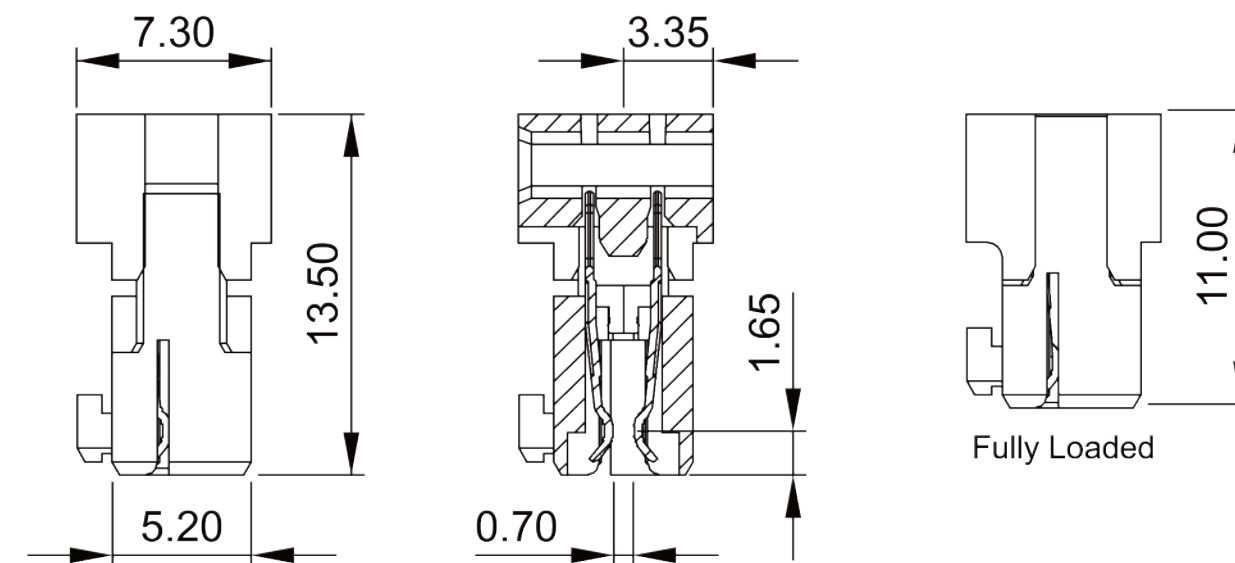
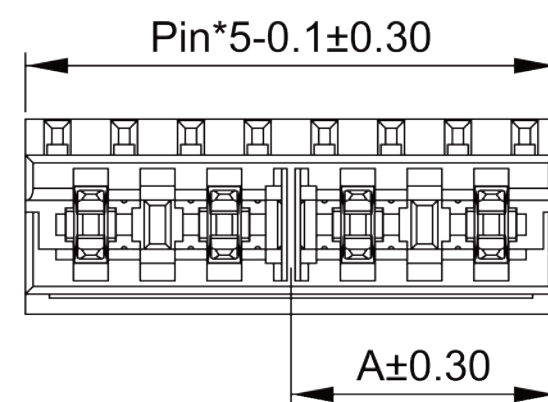
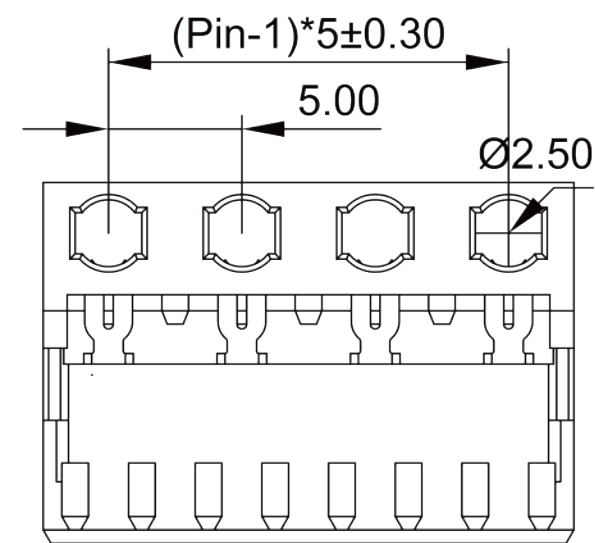
Spacer bar	00	12	23	34	45	56	67	78
Dim.A	/	3.7	6.2	8.7	11.2	13.7	16.2	18.7

RCSGA110 Series



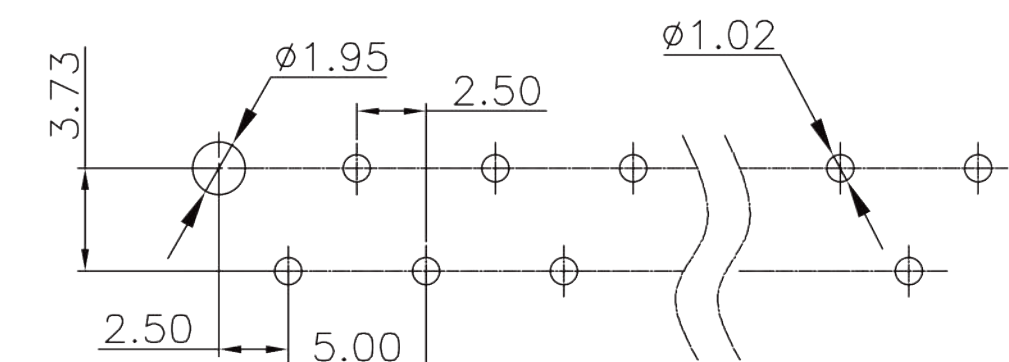
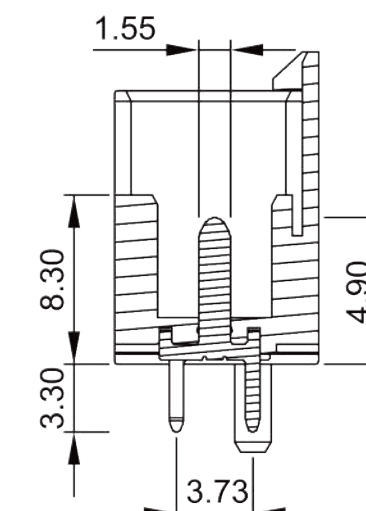
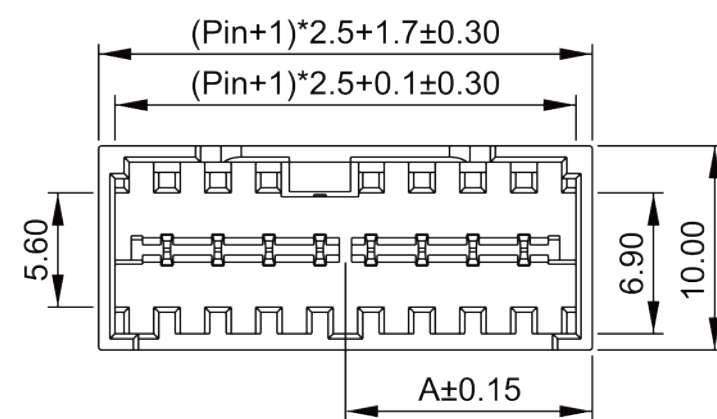
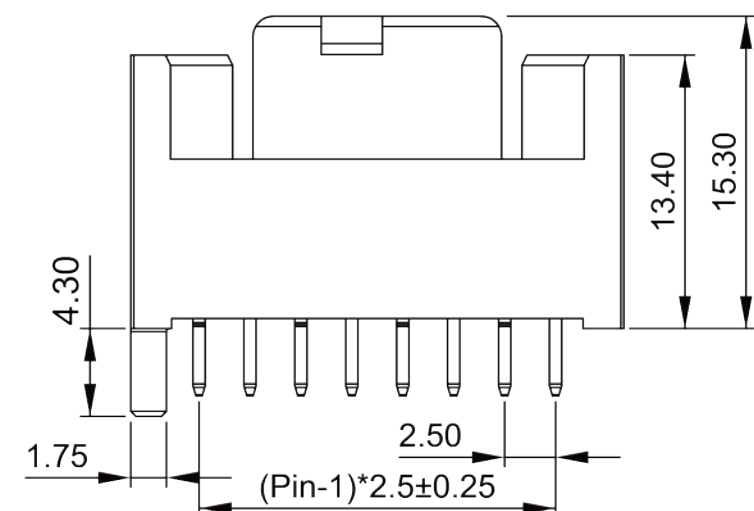
Spacer bar	00	12	23	34	45	56	67	78	89	9A	AB	BC	CD	DE	EF	FG	GH
Dim.A	/	3.7	6.2	8.7	11.2	13.7	16.2	18.7	21.2	23.7	26.2	28.7	31.2	33.7	36.2	38.7	41.2

RCSGA111 Series



Spacer bar	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G	H
Dim.A	/	2.45	4.95	7.45	9.95	12.45	14.95	17.45	19.95	22.45	24.95	27.45	29.95	32.45	34.95	37.45	39.95	42.45

RGPGA109 Series



Spacer bar	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	G
Dim.A	/	4.6	7.1	9.6	12.1	14.6	17.1	19.6	22.1	24.6	27.1	29.6	32.1	34.6	37.1	39.6	42.1

Singapore (HQ)

1 Fusionopolis Place
Unit 320 Level 03
Galaxis West Lobby
Singapore 138522

Hong Kong Office

RM409, Tower One
Silvercord Centre
30 Canton Road, TST, Kowloon
Hong Kong

Germany Operation Office

45731 Waltrop
Richtstrecke 13
Germany

China Operation Office

Unit1106-1108,
International Science Building
Hongshan Road, Xiangzhou, Zhuhai
Guangdong, China

Phone: +49 2309 647 9030

Phone: +86 756 2605001

Email: info@rts-connect.com