

WP* Series (WP3/WP7/WP9) Board-to-Board Connector

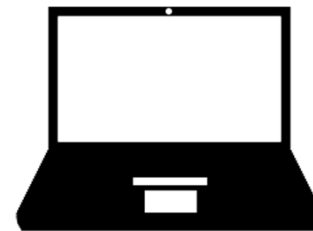
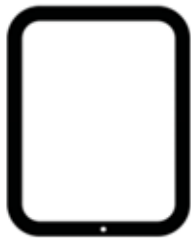
Training Module

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Application Examples

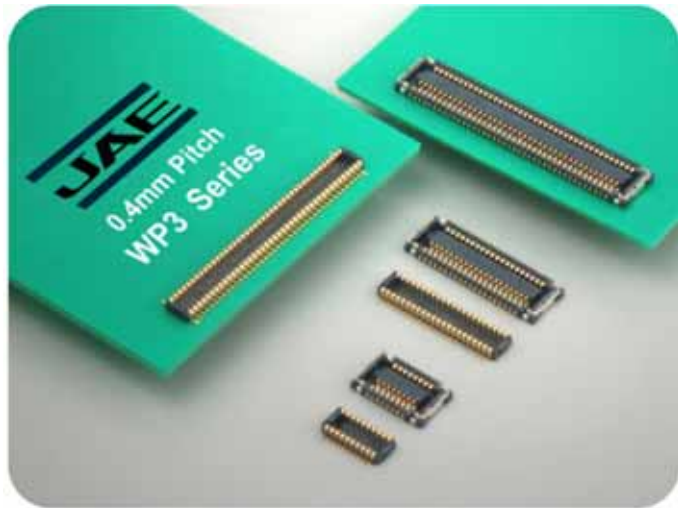
- Mobile/smart phone
 - LCD display
 - Notebook PC
 - PDA
 - Touch-panel
- Other handheld devices



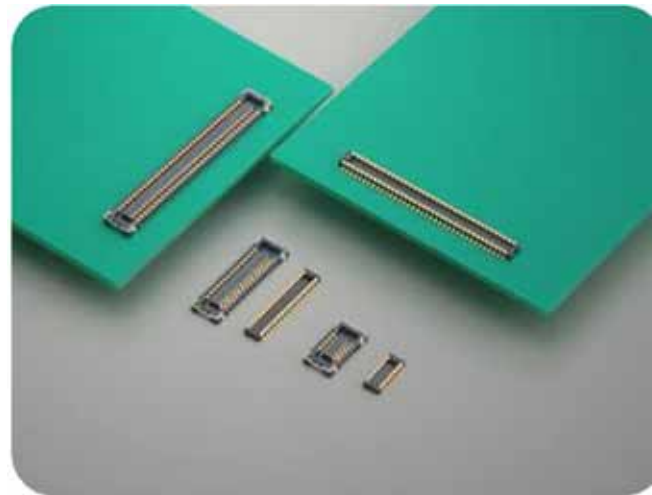
WP* Series Overview

JAE's WP* Series is a solution to support the downsizing and low-profiling of devices. It is ideal for high-density mounting in slim, communication information devices such as mobile phones and tablets.

WP3 Series



WP7 Series



WP9 Series



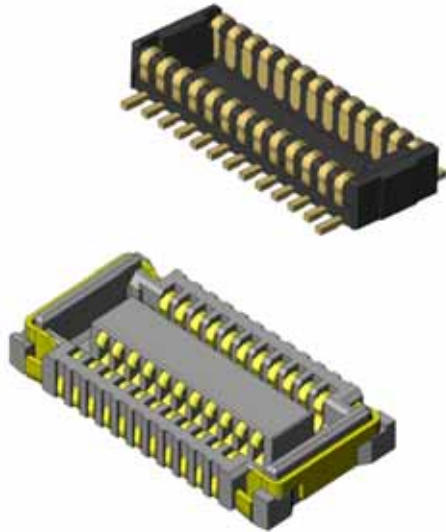
WP* Series Key Features

Space-saving low profile

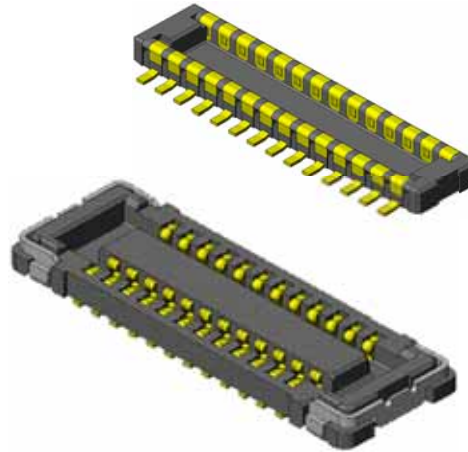
- Independent 2-point contact structure to resist twisting stress.
- Secure hold-downs prevent insulator breakage and peeling of FPC (receptacle side).
- Ni barrier to prevent solder wicking.
- Clear “clicking” sound for secure mating
- Automatic Emboss Packaging
- Inspection jig are available for both plug and receptacle sides.
- Pb-free and RoHS compliant.

Dimensions

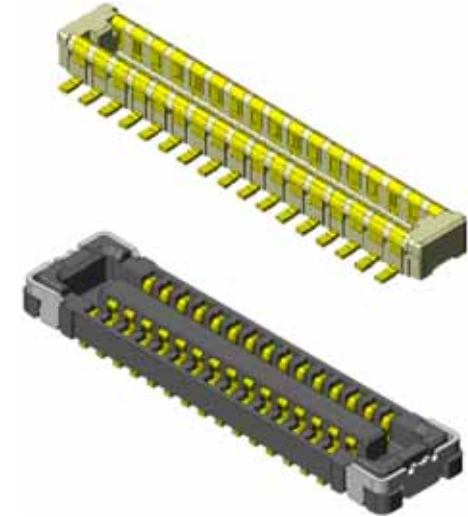
WP3 Series



WP7 Series



WP9 Series



*WP7A and WP7B have compatible foot patterns.

Product	Pitch	Width (mm)	Height (mm)	Area (mm ²)	Remarks
WP3	0.4mm	3.4	1.0	28.22	Measurement for 30 pos
WP7	0.4mm	2.5	0.7	21.50	Measurement for 30 pos
WP9	0.4mm	1.95	0.8	16.58	Measurement for 30 pos

*The area is calculated based on the most external outline of the connector.

General Specifications	WP3	WP7		WP9
		WP7A	WP7B	
No. of Contacts *() are under development	16, 20, 22, 24, 30, 36, 40, 42, 50, 64, 70, 80 pos	10, 16, 20,22, 24,26,28,30, 32 pos	40, 50, (60) 70 pos	10, 14, 20, 24, 30, 32, (34), 40, (50), (60)
Pitch	0.4mm, 2 rows			
Stacking Height	1.0mm	0.7mm		0.8 mm
Depth	3.4mm	2.5mm		1.95 mm
Contact resistance	70m Ω max (initial)			
Dielectric Withstanding Voltage	AC 250Vr.m.s (per minute)			
Operating Temperature Range	-40 to +85 ° C			
Rated Current	0.4A per pin	0.2A per pin		0.3A per pin
Rated Voltage	50 V(A.C./D.C.)			
Mating Durability	50 times	30 times		50 times
Total Insertion Force (*n = no. of pos)	Max. 1N*n	Max. 1.5N*n	Max. 1.0N*n	Max. 1.2N*n
Total Extraction Force (*n = no. of pos)	Min. 0.15N*n	Min. 0.15N*n	Min. 0.10N*n	Min. 0.15N*n

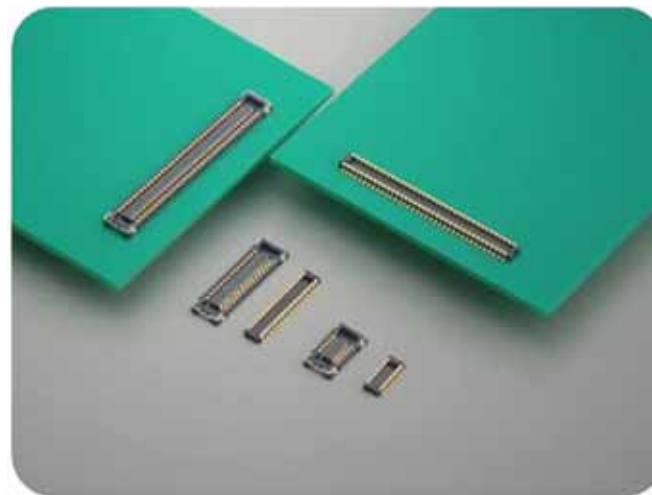
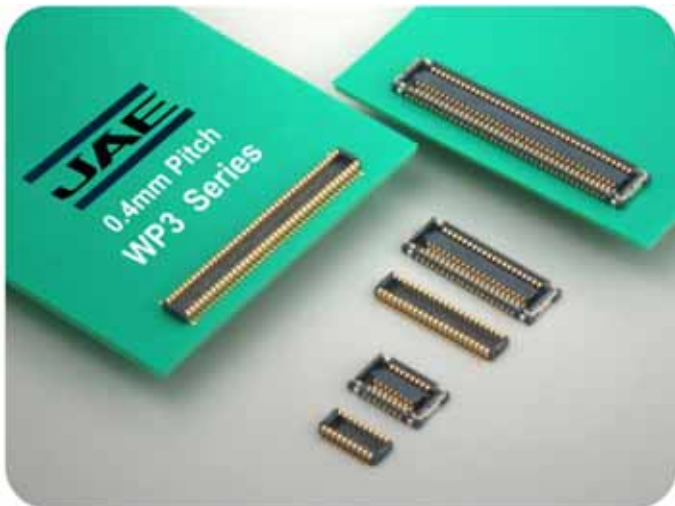
Material and Finishes

Component	Material/Finish
Contact	Contact Area: Cu alloy / Au plating (0.1 μ m min.) *WP9 Mounting Area: Cu alloy / Au plating (0.05 μ m min.)
Insulator	Heat-resistant plastic
Hold-Down	Plug: Cu alloy/ Au plating (0.1 μ m min.) Receptacle: Cu alloy/ Sn plating

WP3 Series

WP7 Series

WP9 Series



Summary

- JAE's 0.4mm pitch board-to-board connector has developed an audible "click" to ensure mating
- An independent 2-point contact structure to resist twisting stress
- The WP Series board-to-board connector has a pitch of 0.4mm
- A high pin count has a low insertion force



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