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SMK Develops "PB-4HP" Series Board-to-Board Connector for Large Current Requirements



SMK Corporation has developed a new "PB-4HP" 0.4mm pitch Board-to Board Connector to expand its lineup of products in the "PB-4H Series" that has won rave reviews since being launched in 2011. There has been an increase in demand for large current operability in board-to-board connectors due to the multi-functionality of devices and large batteries in recent years. This product assembles the number of power poles in the battery connection by offering support to large current requirements of up to one amp.

The miniature connector occupies less space on the board allowing smaller components in small environments to do more and allows for device design flexibility.

[Product Features]

- 1. Support for large currents: From a rated current of 0.3A (conventional product) to 1.0A (new product) per pole
 - The "PB-4HP" supports a rated current of 1.0A per pole. It is possible to use this as a power pole in any terminal with up to four parallel poles.
- 2. A reduction in the mounting space by assembling the FPC connections of USB Type-C[™] and number of power poles
 - This product reduces the number of poles by assembling the FPC connections of USB Type- C^{TM} and power lines. This contributes to a reduction in the area



occupied by the board and high-density mounting.

*USB Type-C™ is a trademark of USB Implementers Forum.

[Applications]

Smartphones, wearable devices as well as other mobile devices, Tablet PCs, and digital cameras

Date Released	2016/08/23	
Press Release	1064CS	
Number		
Product Name	0.4mm Pitch Board to Board Connector「PB-4HP」	
	Part numbers : CPB03XX-0158F(Socket)	
	Part numbers : CPB04XX-0158F(Plug)	
	XX = poles	
Features	1) Supports up to four parallel power poles at one amp each.	
	2) This product assembles the number of power poles by offering	
	large current support, thus reducing the area occupied on the	
	board.	
	3) Absorption space at the top of the connector for automatic	
	mounting.	
	4) Stack height of 1.0mm.	



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Major	Rating	50V DC
Specifications		Signal pole: 0.3A / Pin
		Power pole: 1.0A / Pin
		(Up to four parallel poles)
	Contact Resistance	30mΩ max
	Insulation Resistance	100V DC after 1 minute, 100M
		Ω or more
	Withstanding Voltage	100V AC after 1 minute
	Operating Temperature Range	-40℃~+80℃
Release Date	August, 2016	
Production	One million units per month	
Capacity		
Sample Price	100 yen per unit	