10141 Series - Board to Board Connector Socket-





The 10141 series is a floating board to board connector socket (0.5mm pitch, 2 rows, ST connection).

The movement allowance is \pm 1.2 mm in the X and Y directions, which is more than twice the product pitch of 0.5 mm. It absorbs deviation during board assembly and supports automatic assembly by robots. This series mates with the existing 10106B Series line up of products, providing a variety of height and pin count options. Production is currently underway and mass production is expected at the end of 2021.

[Target Application]

Car navigation, in-vehicle infotainment equipment, PLC, inverter, factory automation equipment, smart grid equipment

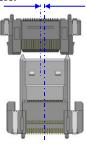
Floating Capabilities

The floating capabilities of this board to board connector are limited to the socket side only, achieving a float range \pm 1.2 mm in the X and Y directions.

The chamfered edges at the entry of the socket allow the alignment to be displaced up to 1.2 mm during mating.

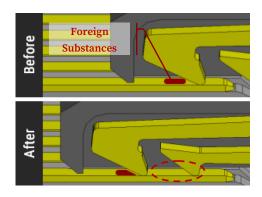
Because this product is designed with the floating component on one side, compared to dual movement board to board, it can lead to a reduction in the number of connectors, contributing to overall cost reduction of customers.

> Misalignment 1.2mm



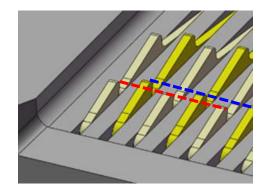
Two-Point Contact

Two-Point Contact provides reliable connections even in an environment where dust and dirt occur by reliably removing foreign matter at the front contact. It can be confidently be used in devices that require high connection reliability.



Low Insertion Force

By staggering the contact positions of every other pin, we designed a structure that evenly distributes mating force applied. In turn, this reduces the insertion force, a common challenge for two-point contact connectors.



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IMSA-10141S-XXXY9XX / IMSA-10106B-XXXY9XX

Product Spec

Item	Unit	Specification
Pitch	mm	0.5
Floating	mm	X:±1.2 Y:±1.2
Mating height	mm	20
Pin Counts	ckt	120, 140
Connecting Type	-	Stacking
Operating Temperature Range	°C	-40~+105
Rated Current	A	0.5
Rated Voltage	v	50
Contact Resistance	mΩ	100
Withstand Voltage	v	250
Durability (Insertion/Withdrawal)	times	30

Plug

Parts	Material	Plating
Housing	-	-
Retainer	-	-
Contact	-	-
Metal Flange	-	-

Socket

Component	Material	Plating
Housing	LCP	-
Retainer	LCP	-
Contact	Copper alloy	Gold
Metal Flange	Copper alloy	Tin

^{*} For packaging info, please refer to our packaging drawing.

^{*} Contents are subject to change without prior notice, due to our quest for improving product performance. Dimensions and specifications described herein are limited to major items. For more details on how to use this connector, please request a drawing and specification sheet. *Specifications may be subject to changes without prior notice, due to our quest for improving product performance.

^{*}掲載している内容・仕様・数値は、概略のものであり、予告無しに変更されることがあります。

^{*}ご使用の際は、最新の図面・仕様書をお取り寄せ頂き、正しくご使用下さい。ご不明な点などございましたら、弊社営業担当にご相談ください。

^{*}製品の梱包については図面をご確認ください