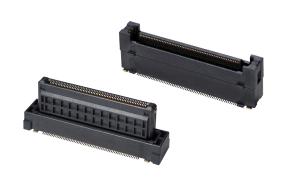
# 10143 Series - Board to Board Connector -





The 10143 series is a floating board to board connector (0.5mm pitch, 2 rows, ST/RA connection).

This is a "Hybrid" connector which supports a 25 Gbps\* high-speed transmission rate, also it has a floating function with a versatile range of motions.

Both ends of the connector are equipped with power supply terminals that are also serve as mounting brackets.

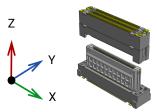
### [Target Application]

ADAS, Infotainment, Home equipment, Industrial equipment, Telecom equipment, Robot

## **Floating**

IRISO's Board-to-Board Floating connector technology allows connectors to have a greater tolerance on misalignments, especially those with multiple connections. Another benefit of our Floating connectors is that they absorb movement which reduces stress on the board from the solder tails over time. Additionally, the tri-directional floating technology helps in the connecting assembly process by allowing forgiveness in small misalignments of the mating guides.

The 10143 series connector offers a range of movement that exceeds the pitch width. It moves 0.8 mm in the X-Y directions



## **High Speed**

The demand for high-frequency component signals is omnipresent. Ever advancing technology requires modern devices to have high-speed and reliable transmission from it's connected components. IRISO has met this challenge by combining our floating connectors with high-speed transmissions technology.

The 10143 series offers one of the highest transmission speeds of 25 Gbps\* in the floating BtoB connector industry.

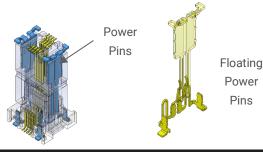
\* Based on "OIF CFI-28G-SR"

## **Power Contact**

By placing floating power supply terminals at both ends of the connector, allocating a terminal for power supply is not necessary and the connector has been reduced to a smaller

This power supply terminal also serves as a lock and contributes to the miniaturization of the entire connector. This makes it possible to reduce the overall size of the board.







# 10143 Series - Board to Board Connector -



# IMSA-10143S-XXXY9XX / IMSA-10143B-XXXY9XX

# **Product Spec**

ltem	Unit	Specification
Pitch	mm	0.5
Floating	mm	X:±0.8 Y:±0.8
Mating height	mm	10~30 (under planning)
Pin Counts	ckt	20~160 (under planning)
Connecting Type	-	Stacking
Operating Temperature Range	°C	-40~+125
Rated Current	А	Signal:0.5A/pin, Power:3.0A/pin
Rated Voltage	V	Signal:50V, Power:50V
Contact Resistance	mΩ	Signal:<=100mΩ, Power:<=50mΩ
Withstand Voltage	V	Signal: AC 150V, Power:150V
Durability (Insertion/Withdrawal)	times	

# Plug

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

## **Socket**

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

<sup>\*</sup> For packaging info, please refer to our packaging drawing.

<sup>\*</sup> 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.

<sup>\*</sup>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。

<sup>\*</sup>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。

<sup>\*</sup>製品の梱包については図面をご確認ください