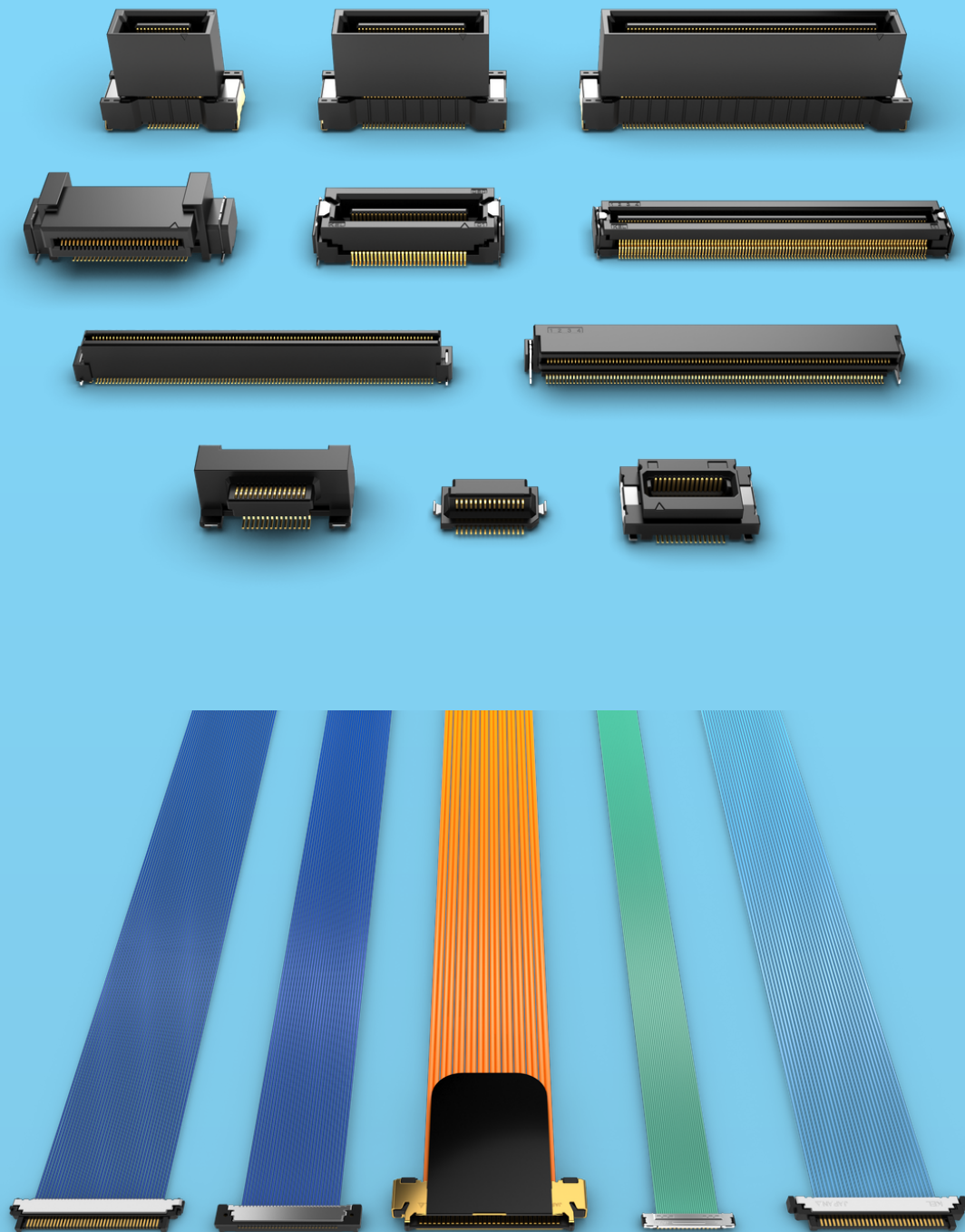




# Next Generation Connectors

Compact. High-Density. High-Speed.



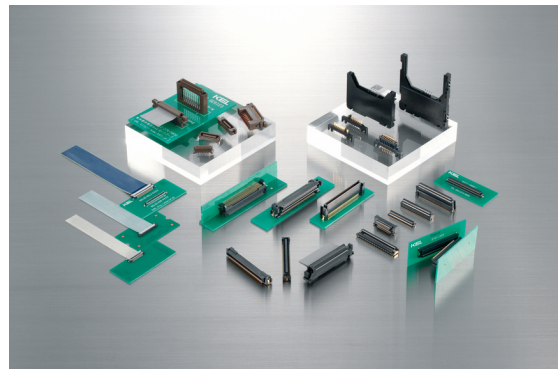
## KEL Value

With technology cultivated over 60 years, we pursue miniature, reliable and high functionality

## Flexible Customization & Consultation

Renowned for industry-leading expertise in floating connectors, we can assist you through the entire process of creating custom solutions.

We have many years of experience in connector peripheral development, design, and manufacturing.



## Top-Quality Products Made in Japan

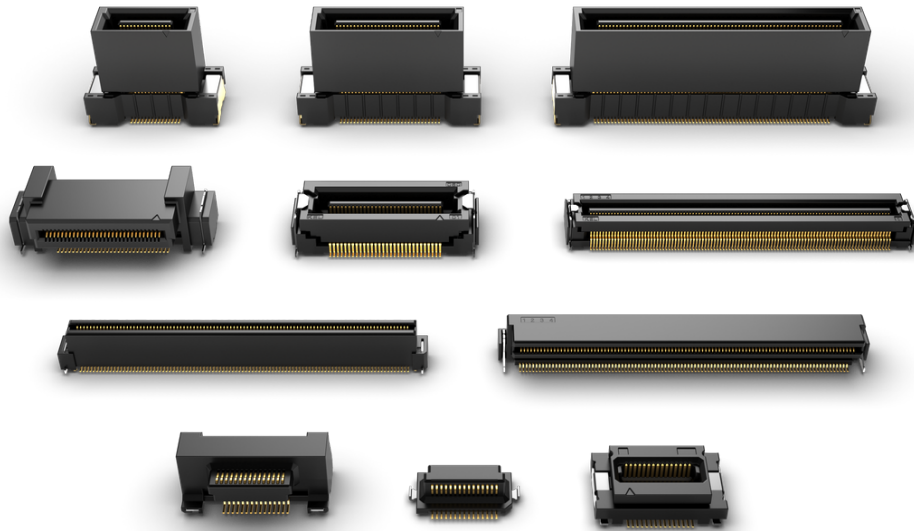
A fully automated production line for floating connectors is now in operation with a Class 100,000 cleanroom at our plant located in Japan's Yamanashi Prefecture.



# Floating Connectors

## Board-to-Board, Narrow, Multiple positions

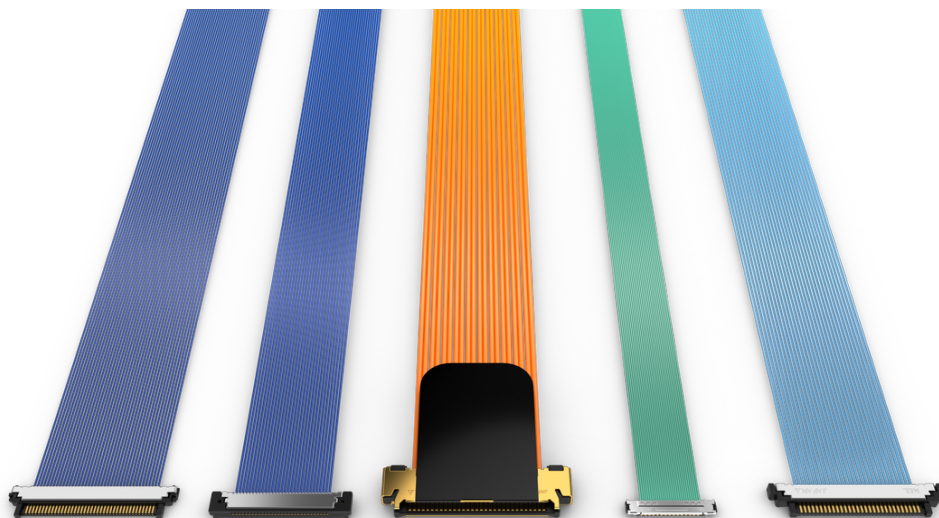
Narrow pitch, multi-position connectors enable device miniaturization



# Micro Coaxial Cable Connectors

## Board-to-Cable

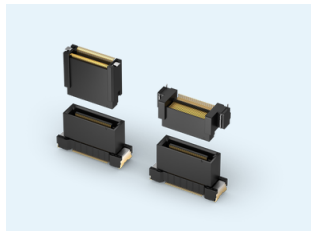
The industry's smallest and thinnest connectors offer unparalleled flexibility to devices



# Floating Connectors

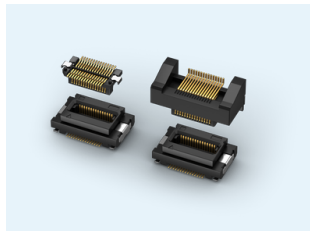
## Board-to-Board, Narrow, Multiple positions

Absorbs tolerance and misalignment during mating, preventing defects such as cracks in the board. Our narrow pitch and multiple positions enable the miniaturization of devices.



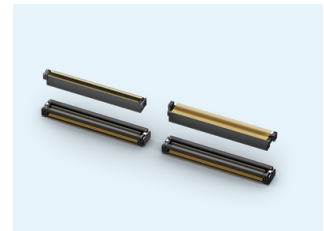
### DT / DT-FS Series

High-Speed Transmission



### DY Series

Compact and Versatile



### DU Series

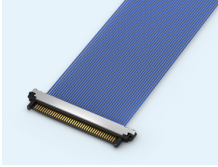
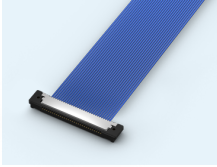
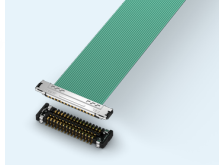
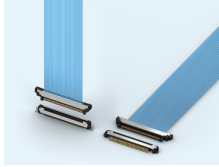

Industry's Top-Class Narrow Pitch

	DT / DT-FS Series High-Speed Transmission	DY Series Compact and Versatile	DU Series Industry's Top-Class Narrow Pitch
Pitch	0.5 mm	0.5 mm	0.4 mm
No of contacts	30, 40, 60, 80, 100, 120, 140, 160, 240	30, 40, 50, 60, 80, 100, 120, 140	80, 110, 120, 140, 200
Floating amount (XY direction)	±0.5 mm ±1.0 mm for DT-FS	±0.5 mm	±0.4 mm
Gbps(SATA)	✓	–	–
Mating length	1.5 mm 1.7 mm for horizontal connection	1.25 mm	1.1 mm for stacking connection
Stack heights	8 – 30 mm	5 – 14 mm	5mm, 7mm
Current rating	0.4-0.5 A	0.4 A per contact (Stacked Mating) 0.3 A per contact (Vertical Mating)	0.35-0.4 A
Contact Resistance	80 mΩ max.	80 mΩ max. (Stacked Mating) 100 mΩ max. (Vertical Mating)	100 mΩ max.
Withstand Voltage	AC 200 V, 1 minute	AC 200 V, 1 minute	AC 200 V, 1 minute
Insulation Resistance	DC 250 V, 100 MΩ min.	DC 250 V, 100 MΩ min.	DC 250 V, 100 MΩ min.
Operating Temperature Range	-40 °C to +105 °C	-40°C to +85°C *Heat resistant type for +105°C is available	-40°C to +105°C
Connection type (Stacking)	8-30mm	5-14mm	5mm, 7mm
Connection type (Vertical)	✓	✓	✓
Connection type (Horizontal)	✓	–	–

# Micro Coaxial Cable Connectors

Smallest board-to-cable connectors in the industry.  
High level of noise suppression for miniaturization of devices.

Micro coaxial cable connectors have excellent transmission characteristics and are used in devices that requires compact housing and high-speed transmission.

					
	<b>USL Series</b> 0.4 mm Pitch, Insulation-displacement connector (IDC)	<b>USLS Series</b> Low Profile Stack Mating Type	<b>XSLS Series</b> 0.25 mm Pitch, Stack Mating, Ultra-Compact	<b>SSL Series</b> 0.5mm Pitch, Insulation-displacement connector (IDC)	<b>TSL Series</b> 0.55mm Pitch, 32 Gbps High-Speed Transmission Next-Generation Harness
Pitch	0.4 mm	0.4 mm	0.25 mm	0.5 mm	0.55 mm
No of Contacts	20, 30, 40	20, 30, 40 for USLS20 34 for USLS21	30, 40, 52	10, 20, 30, 40	31
Mating Length	0.5 mm	0.35 mm	0.31 mm	0.5 mm	0.5 mm
Height	1.0 mm	1.65 mm	1.44 mm	1.4 mm	3.25 mm
Mating Width	5.6 mm	3.05 mm	3.05 mm	6.08 mm	10.68 mm
AWG (Applicable Cable)	#42	#40 for USL20 #42/44/46 for USLS21	#44/46	#40	#30/32/36
Bulk Pressure Welding	✓	✓ for USL20	–	✓	✓
Current Rating	0.25 A	0.25 A	0.15-0.3 A	0.3 A	0.6-1.0 A
Contact Resistance	100 mΩ max.	100 mΩ max.	100 mΩ max.	100 mΩ max.	100 mΩ max.
Withstand Voltage	AC 200 V, 1 minute	AC 200 V, 1 minute	AC 100 V, 1 minute	AC 200 V, 1 minute	AC 200 V, 1 minute
Insulation Resistance	DC 250 V, 100 MΩ min.	DC 250 V, 100 MΩ min.	DC 100 V, 50 MΩ min.	DC 250 V, 100 MΩ min.	DC 250 V, 100 MΩ min.
Operating Temperature Range	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C	-40 to +85°C





## About KEL Corporation

Founded in 1962 and listed on the Standard Market of the Tokyo Stock Exchange, KEL is one of the world's leading manufacturers of high-performance connectors for electronics.

We are committed to providing original, one-of-a-kind products to meet a wide range of needs by keeping abreast of trends in the electronics market, which demands high-quality, high-performance products while maintaining a close dialogue with our customers.

To serve our valued international customers, we have established local subsidiaries in Taiwan, Shanghai, Germany, and Hong Kong and a representative office in the U.S.

# Corporate Information

Trade Name	KEL Corporation
Founded	July 23, 1962
Capital	1,617 million yen
Annual Revenue	14,500 million yen (fiscal year ended March 2023)
Employees	273 people
Representative	Akira Kasuga, CEO & Representative Director
Street address	6-17-7 Nagayama, Tama-shi, Tokyo 206-0025, Japan
Listing	Tokyo Stock Exchange Standard Market

## Global Network



Subsidiaries	KEL Taiwan Co., Ltd.	2F, Building A006 No.1 Weiwang St. Shulin Dist., New Taipei City 238032, Taiwan Tel. +886-2-8686-9200 Fax. +866-2-8686-6925
	KEL (Shanghai) Corporation	Room 1203, Zhaofeng Plaza, 1027 Changning Rd., Changning Dist., Shanghai 200050, P.R. China Tel. +86-21-64400051 Fax. +86-21-64400053
	KEL Electronics (Hong Kong) Limited	Room 1805, 18/F, 1 Hung To Road, Kowloon, Hong Kong Tel. +852-35905813 Fax. +852-35909059
	KEL Europe GmbH	Am Seestern 4, 40547 Düsseldorf, Germany Tel. +49-211-542368-0
Representative Office	KEL Connectors, Incorporated	830 Stewart Drive #179, Sunnyvale, CA 94085-4513, U.S.A. Tel. +1-408-720-9044 Fax. +1-408-720-1989



Contact us for product information, pricing, lead times,  
quotes, orders, and samples.

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