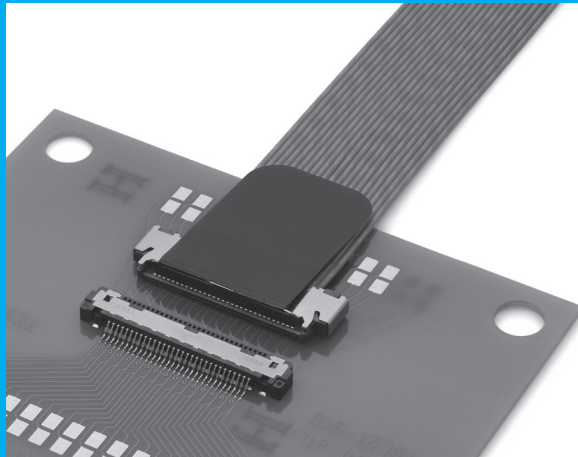


TSL SERIES

0.55mm PITCH HIGH-PERFORMANCE COAXIAL HARNESS

RoHS
Compliant



FEATURES

- ▶ It supports high-speed differential transmission of up to 32 Gbps.
- ▶ In addition to impedance control by adjusting the material, shape, and dimensions of the connector, the ground connection point and transmission path are made gentle to prevent resonance and improve the amount of attenuation.
- ▶ The effective mating length related to contact reliability is designed to be 0.5 mm, and the amount of insert penetration is reduced and the stub length design related to transmission characteristics is optimized to improve attenuation.
- ▶ Noise suppression is strengthened by a structure that surrounds the entire connector with a multi-point ground mechanism and a metal shell cover.
- ▶ Low loss and low skew are realized by combining with the high performance coaxial cable "RUOTA" * of Totoku Electric Co., Ltd.
- * "RUOTA" is a registered trademark of Totoku Electric Co., Ltd. No.5594596
- ▶ KEL guarantee the quality as a harness product. If the length of RUOTA AWG # 32 is up to 1,000mm, the skew in the pair is guaranteed to be 10ps.
- ▶ Uses a good lock structure with a click feeling.
- ▶ The connector lock can be released easily and simply by pulling the tape mounted on the connector.
- ▶ A nickel barrier is provided on the contact to prevent the solder from entering the connector on the board side.
- ▶ The connection method supports horizontal connection and vertical connection.

ORDER CODE

TSL00-31  **-A**

① ② ③ ④

*Please order in the unit of packaging.

- ① **[Type]** TSL00 : Receptacle (PCB side connector)
- ② **[Number of contacts]** 31 : 31 pin
- ③ **[Contact tail style]** L : Right angle S : Straight
- ④ **[Number of packaging]** A : 500 pcs. per reel

ORDER CODE

TSL21-31S

① ② ③

- ① **[Type]** TSL21 : Plug (Cable side connector)
- ② **[Number of contacts]** 31 : 31 pin
- ③ **[Cable exit style]** S : Straight

TSL21-31S connector cannot be sold separately as it provides a complete harness.

SPECIFICATIONS

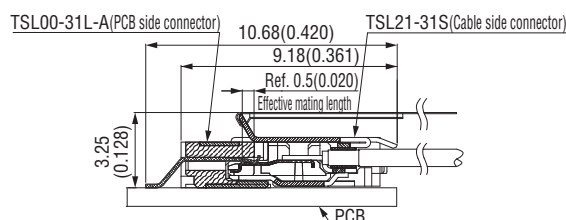
Material and plating		Electrical characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Rated current	#32 AWG : 0.9A per contact (when using RUOTA) #36 AWG : 0.6A per contact (when using RUOTA)
Contact material	Copper alloy	Contact resistance	100mΩ max.
Contact plating	Gold over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Shell material	[TSL00] Copper alloy [TSL21] Stainless	Insulation resistance	100MΩ min.at 250V DC
Shell plating	Gold over Nickel	Operating temperature	-40°C to +85°C
Ground bar material	Copper alloy	Durability of insertion and withdrawal	100 times
Ground bar plating	Tin over Nickel	Applicable cable*	#32 / 36 AWG Micro coaxial cable

*Please contact our sales representative for the cable specifications to be used.

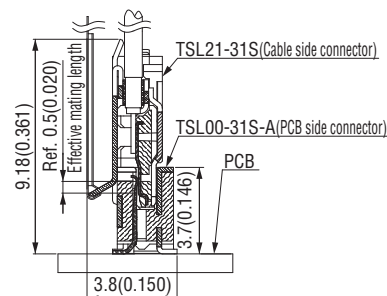
Mating drawing

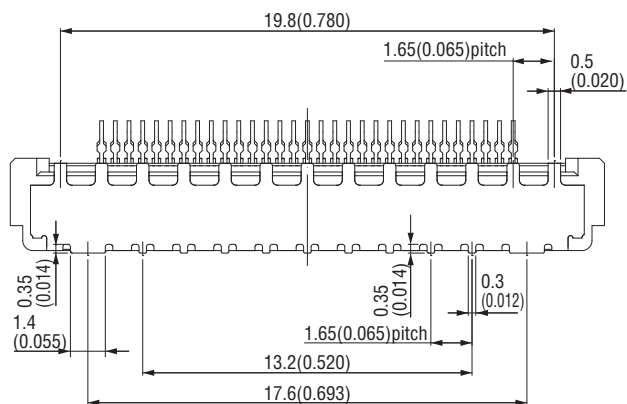
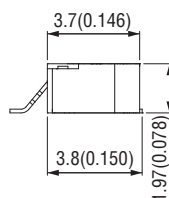
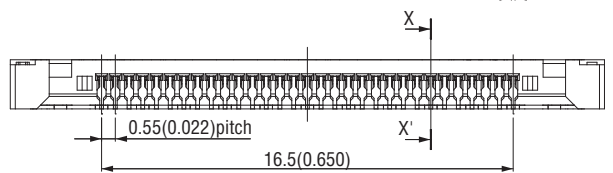
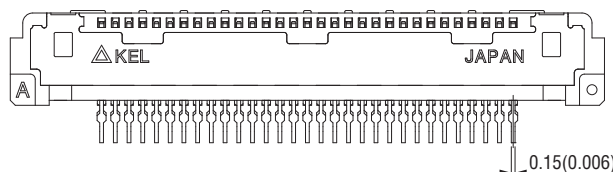
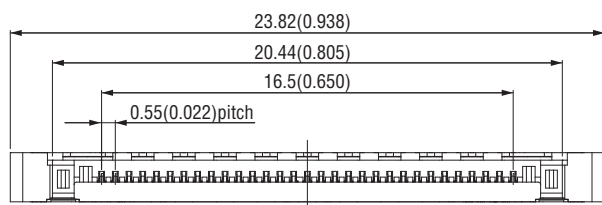
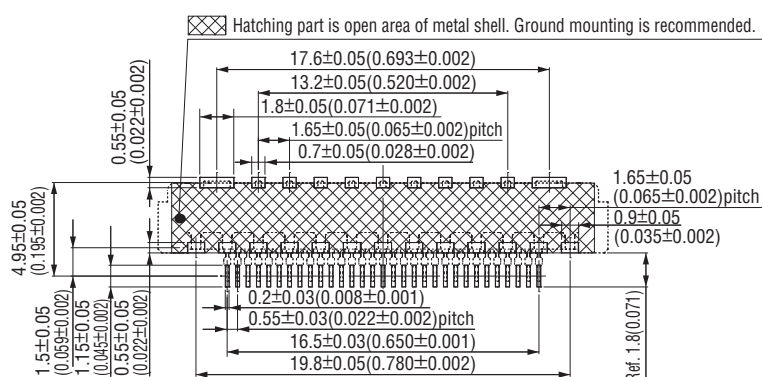
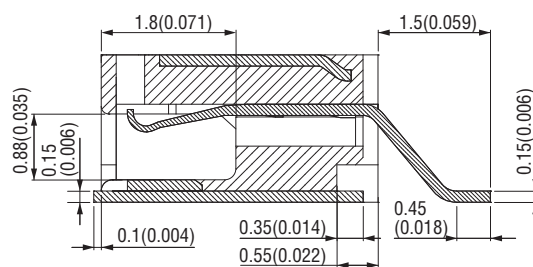
Unit : mm (inch)

◆ Horizontal mating (Plug: Straight / Receptacle: Right angle)



◆ Vertical mating (Plug: Straight / Receptacle: Straight)



Printed Circuit Board layout (Component side view)

X-X' Cross section


Packaging style
Embossed tape

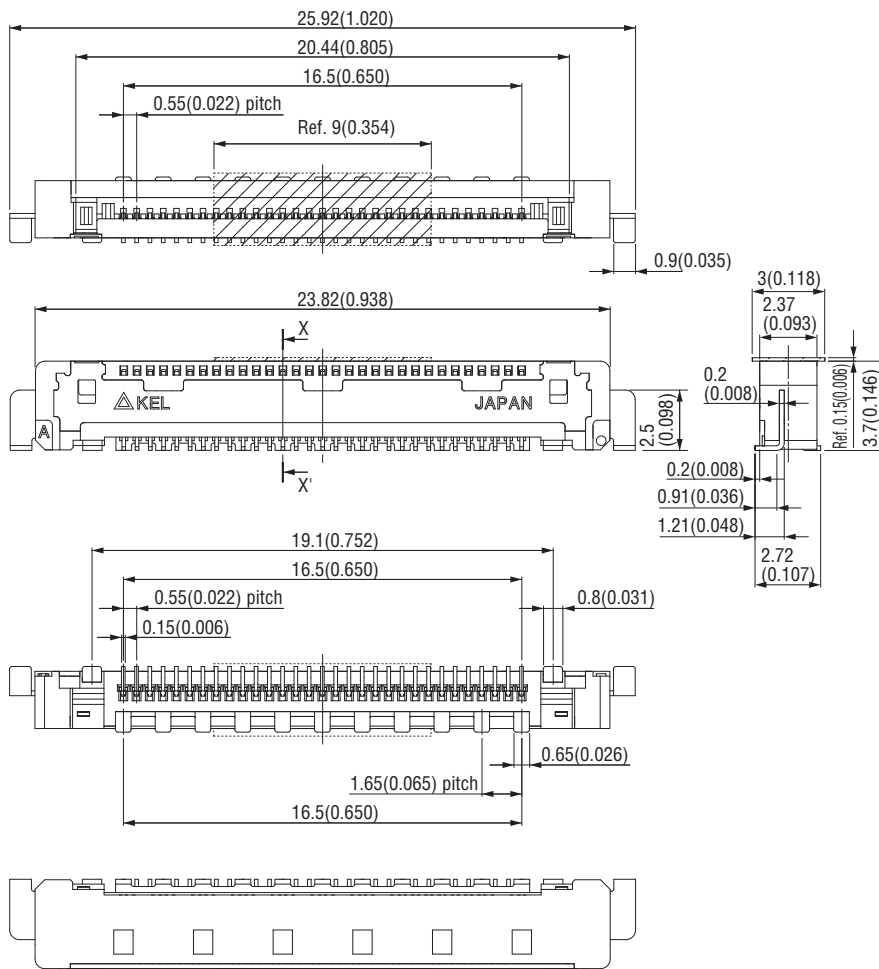
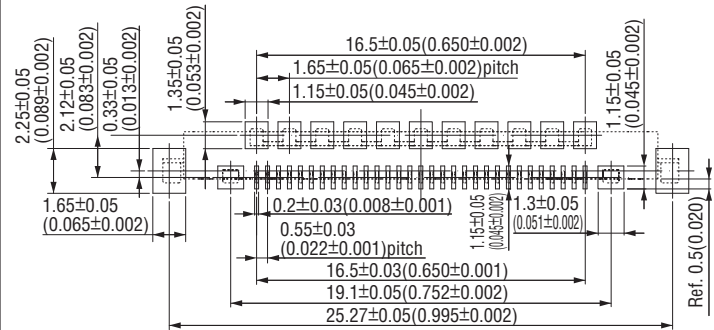
Product table

Part number	Number of packaging
TSL00-31L-A	500

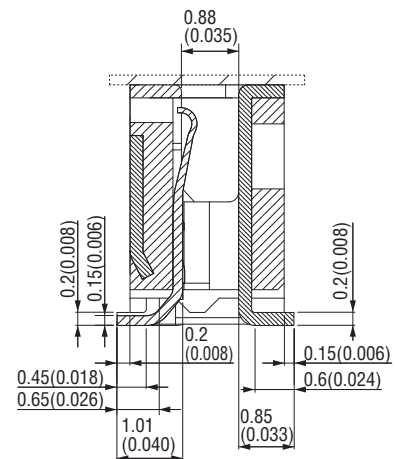
TSL00-31S-A (Receptacle, PCB side connector, Straight)

Unit : mm (inch)

Printed Circuit Board layout (Component side view)



X-X' Cross section



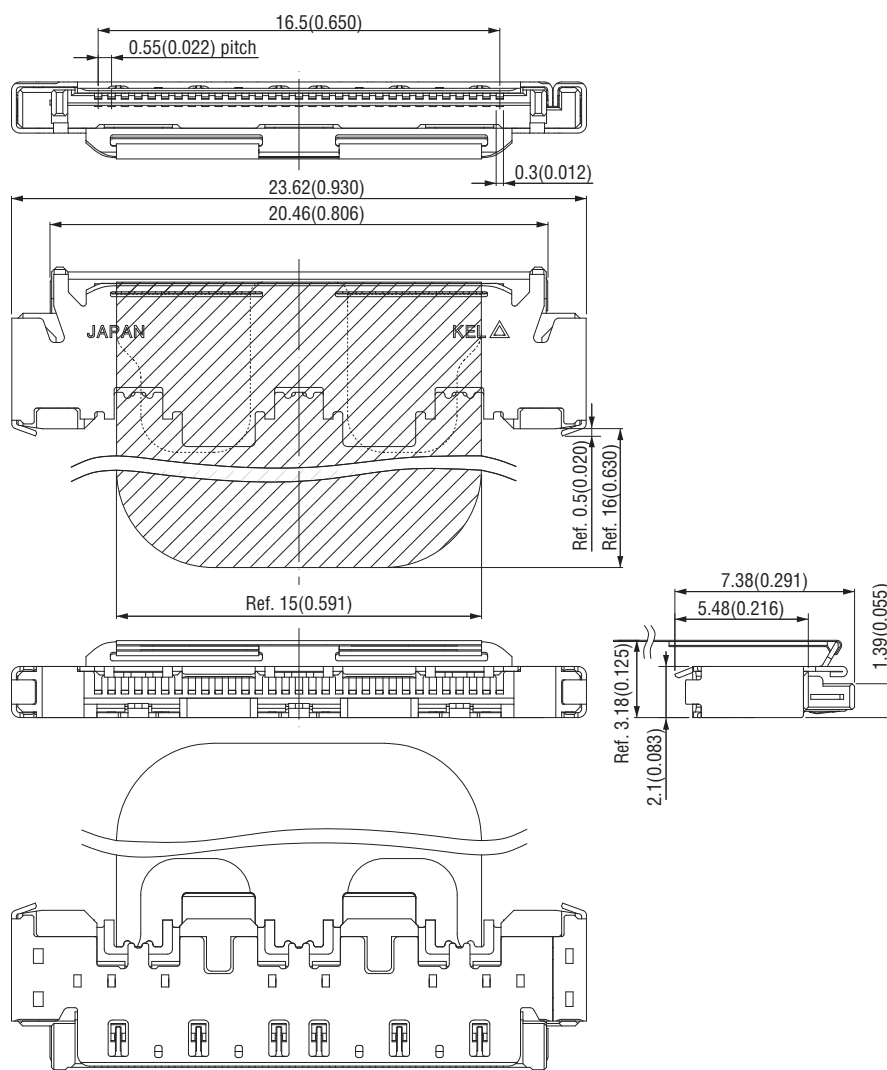
Packaging style
Embossed tape

Product table

Part number	Number of packaging
TSL00-31S-A	500

TSL21-31S (Plug, Cable side connector, Straight)

Unit : mm (inch)



*"TSL21-31S" connector cannot be sold separately as it provides a complete harness.
Please contact our sales representative for specifications of cables and harnesses to be used.