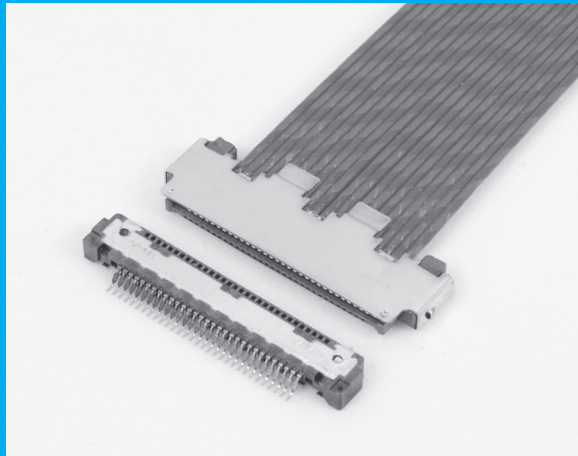


TSL-NM2 SERIES

0.55mm PITCH HIGH-PERFORMANCE COAXIAL HARNESS / NON MAGNETIC TYPE



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.
- ▶ Lock mechanism with tactile click is employed.
- ▶ Non-magnetic realization that is not affected by magnetic field.
- ▶ A nickel barrier is provided on the contact to prevent the solder from entering the connector on the board side.
- ▶ Horizontal mating is available (Mated height : 2.17mm)

*Specially designed withdrawal jig is available. Please contact your local KEL sales office.

ORDER CODE

TSL00 NM2 - 31 L - A

① ② ③ ④ ⑤

*Please order in the unit of packaging.

- ① **[Type]** TSL00 : Receptacle (PCB side connector)
- ② **[Style]** NM2 : Non-magnetic, Low profile type
- ③ **[Number of contacts]** 31 : 31pin
- ④ **[Contact tail style]** L : Right angle
- ⑤ **[Number of packaging]** A : 500 pcs. per reel

ORDER CODE

TSL21 NM2 - 31 S - 1

① ② ③ ④ ⑤

- ① **[Type]** TSL21 : Plug (Cable side connector)
- ② **[Style]** NM2 : Non-magnetic, Low profile type
- ③ **[Number of contacts]** 31 : 31pin
- ④ **[Cable exit style]** S : Straight
- ⑤ **[Protective shape of fingertips]** 1 : With protective shape of fingertips

*"TSL21NM2-31S-1" connector cannot be sold separately as it provides a complete harness.

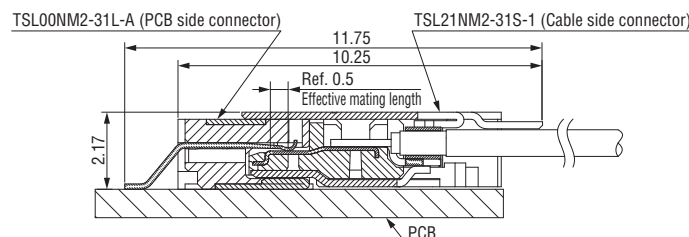
SPECIFICATIONS

Material and plating		Electrical characteristics	
Insulator material	Glass-filled LCP(UL94V-0), Black	Rated current	#30 AWG : 1.0A per contact (when using RUOTA)
Contact material	Copper alloy		#32 AWG : 0.9A per contact (when using RUOTA)
Contact plating	(Contact area) Gold over Nickel (Terminal area) Gold over Nickel		#36 AWG : 0.6A per contact (when using HIRAKAWA Cable)
Shell material	Copper alloy	Contact resistance	100mΩ max.
Shell plating	Tin silver copper over Nickel	Dielectric withstanding voltage	200V AC for 1 minute
Ground bar material	Copper alloy	Insulation resistance	100MΩ min. at 250V DC
Ground bar plating	Tin silver copper over Nickel	Operating temperature	-40°C to +85°C
		Durability of insertion and withdrawal	100 times
		Applicable cable	#30 / 32 AWG Coaxial cable #36 AWG Micro coaxial cable

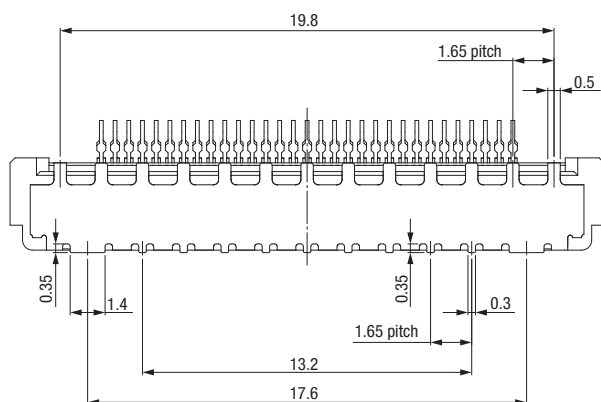
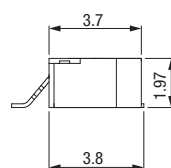
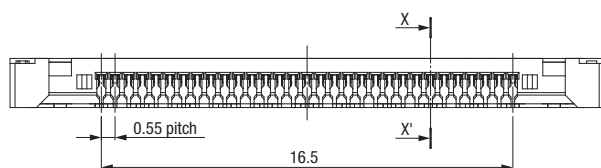
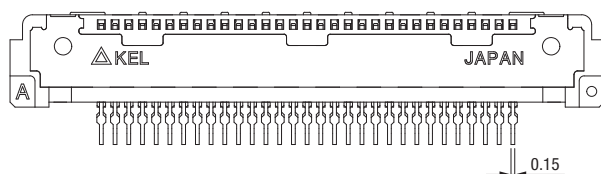
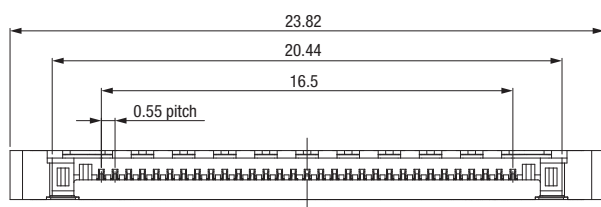
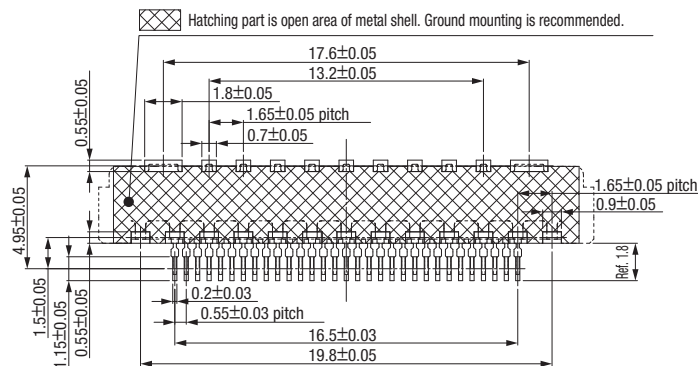
Mating drawing

Unit : mm

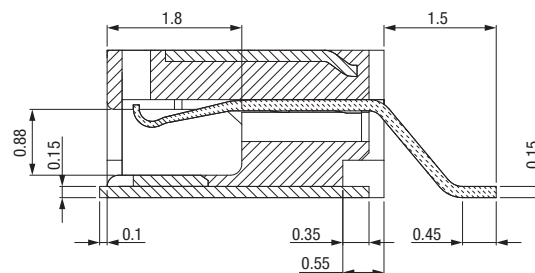
◆ Horizontal mating (Plug: Straight / Receptacle: Right angle)



Printed Circuit Board layout (Component side view)



X-X' Cross section



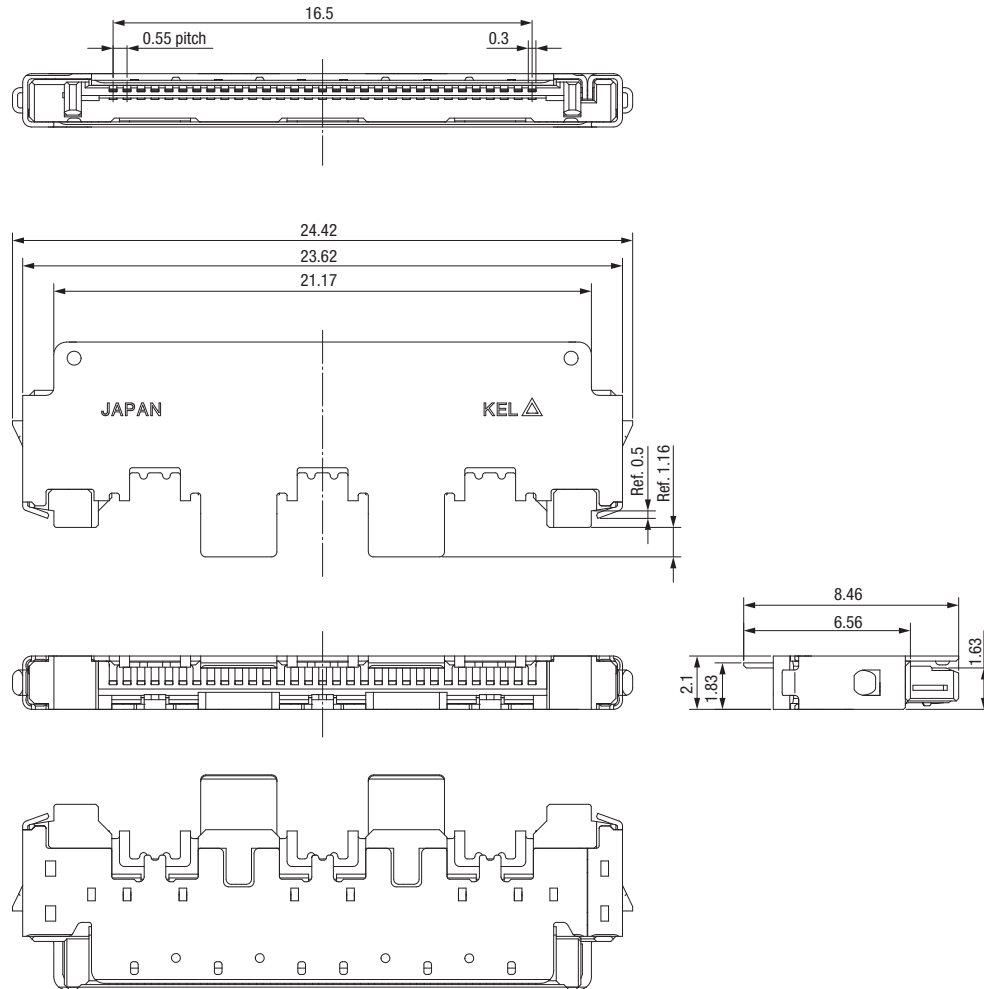
Packaging style
Embossed tape

Product table

Part number	Number of packaging
TSL00NM2-31L-A	500

TSL21NM2-31S-1 (Plug, Cable side connector, Straight)

Unit : mm



*"TSL21NM2-31S-1" 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.