HD Series Board-to-Cable Connector

Connector Training Module

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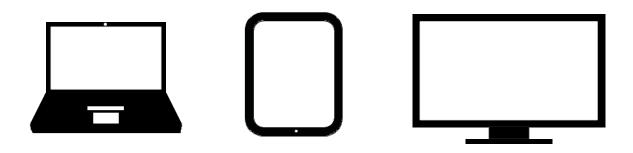
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Application Examples

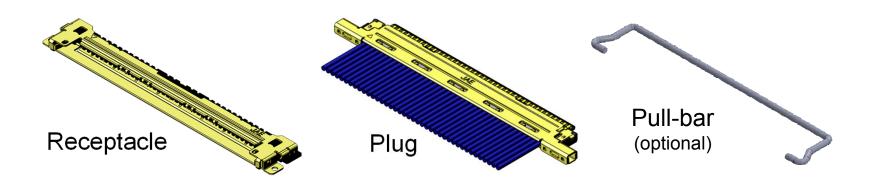
- Laptops
- Tablets
- Medical Equipment
- Other LCD applications





HD Series Overview

LED backlighting generates less heat, uses less power, and allows the panel to be thinner. JAE has developed the HD Series for laptop/LCD applications. This series is compatible with LVDS transmission and LED backlight as standardized in the VESA® 16:9 Wide Notebook Panel Standard. They are also licensed products for the Dai-ichi Seiko Co., Ltd. (I-PEX) CABLINE®-VS*.

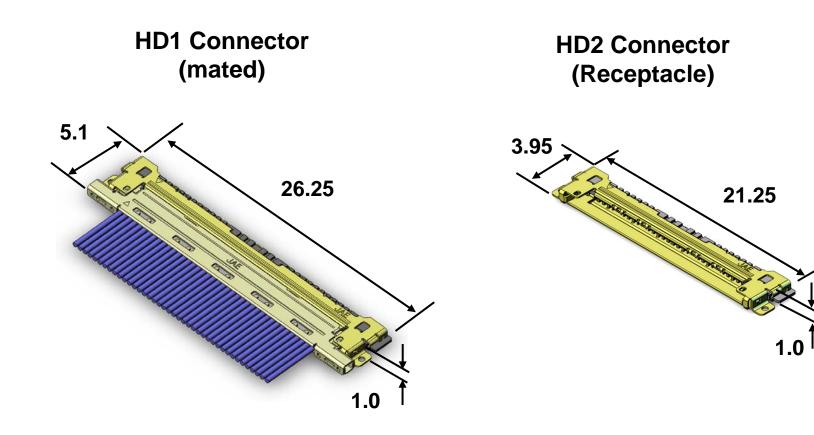


^{*}Note: CABLINE®-VS is a registered trademark of Dai-ichi Seiko Co., Ltd. (I-PEX)



Basic Dimensions

*All units in mm



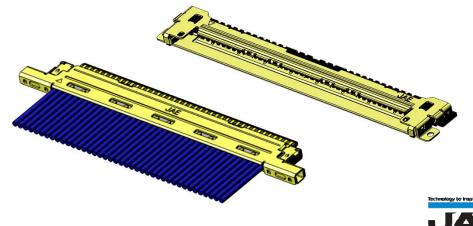


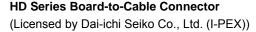
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HD Series Features

Ideal for high-speed transmission applications

- The HD series is a new low profile board to cable connector that can be used as an LCD panel interface.
- Fully compatible with the Dai-ichi Seiko Co., Ltd. (I-PEX) CABLINE®-VS
- High-speed video signals such as LVDS, and next generation DisplayPort (eDP) can be transmitted through the HD1 connector.
- These connectors will be found on LED backlit LCD's which are commonly found in laptops and tablets.
- The cable plug is designed for solder termination rather than crimp. It is compatible with both coax and discrete wires.
- Optional pull-bar available that can be used as a mechanical lock.
- Pb and Halogen-free





General Specifications

Number of Positions	40 (HD1 Series), 30 (HD2 Series)
Pitch	0.5mm
Applicable Cable	32 to 36 AWG (Discrete cable) 36 to 44 AWG (Micro-coaxial cable)
Contact resistance*	AWG#32: 140m Ω max. AWG#34: 180m Ω max. AWG#36: 275m Ω max. AWG#40: 600m Ω max. AWG#42: 700m Ω max. AWG#44: 1080m Ω max.
Insulation Resistance	1000M Ω min.
Dielectric Withstanding Voltage	AC 250 V r.m.s per minute
Operating Temperature Range	-40°C to +85°C
Current Rating	1.0A per contact AC/DC [AWG#32] 1.0A per contact AC/DC [AWG#34] 0.8A per contact AC/DC [AWG#36] 0.3A per contact AC/DC [AWG#40] 0.24A per contact AC/DC [AWG#42] 0.1A per contact AC/DC [AWG#44]
Voltage Rating	100V per contact AC, DC each

*Values include the following conductor resistance of a 100mm cable:

AWG#32: 60m Ω max. AWG#34: 100m Ω max. AWG#36: 160m to 195m Ω max. AWG#40: 485m to 520m Ω max. AWG#42: 585m to 620m Ω max. AWG#44: 1000m Ω max.



Materials and Finishes

Receptacle (HD1S040HA1, HD2S030HA1)

	Component	Material / Finish
	Contact	Copper alloy / Au over Ni plating (contact area)
	Insulator	Heat resistance plastic / No finish
	Shell	Copper alloy / Au over Ni plating

Plug (HD1P040MA1)

	Component	Material / Finish
	Contact	Copper alloy / Au over Ni plating
	Insulator	Heat resistant plastic / No finish
	Shell	Copper alloy / Au over Ni plating

Cover Shell for Plug (HD1P040-CSH1-10000, HD1P040-CSH2-10000)

	Component	Material / Finish
	Cover Shell	Copper alloy / Au over Ni plating

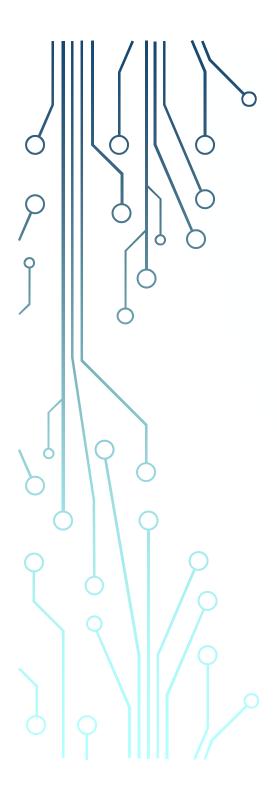
Pull Bar for Plug (HD1P040-PB1)

	Component	Material / Finish
	Pull Bar	Stainless steel / No finish



Summary

- Fully compatible with the Dai-ichi Seiko Co., Ltd. (I-PEX) CABLINE®-VS
- Compatible with LVDS transmission
- HD1: 40 position (receptacle and plug); HD2: 30 position (receptacle)
- Pb and Halogen-free



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