



AOC (Active Optical Cable) RP04 Series

CONNECTOR

MB-0312-1

August 2016



Outline

RP04 Series is an AOC (Active Optical Cable), which has an electrical connector interface, but converts electrical signals to optical inside the plug and transmits data through an optical fiber.

It can be used as a high-speed transmission solution for various markets and devices, blending the easy handling of an electrical connection with the high-speed, long distance and noise resistance capability of an optical transmission.

Features

- JAE proprietary connector for high-speed transmission which enables a standard-agnostic interface.
- Realizes high-speed transmission (Optical)+low-speed signal (Copper)+Power Supply using one hybrid cable.
- Compact receptacle connector saves board mounting space.
- Friction or mechanical lock type plug, which mates with the same receptacle connector, are available.

Applications

Markets and devices that require high-speed transmission of high-definition graphics and high-capacity communications.

- Audio visual devices like HMD (Head Mount Display), communication devices, medical equipment, industrial devices.

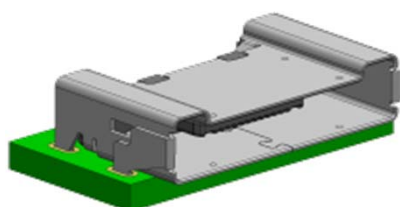
General Specifications

High-speed Signal (Optical)	Transmission Speed	10Gbps / Lane
	Number of Lanes	4 Lanes
	Interface	CML Signal
	AOC Driving Voltage	3.3V
	Fiber Optical	GOF (Wavelength 850nm)
Low-speed Signal (Copper)	Number of Lines	6 Lines
Power Supply	Number Lines	4 Lines
	Rated Current	2A (Total)
Transmission Distance		100m (Only transmission of fiber optic is prescribed)
Power Consumption		0.3W (per side)
Plug Lock Type		1) Friction Lock 2) Mechanical Lock (Both plugs mates with the same receptacle connector)
Operating Temperature Range		0 Deg. C to + 60 Deg. C (Non-condensing)
RoHS		Compliant

Ordering Information

Type		Part Number	SJ Drawing
Receptacle		RP04R026JA1	SJ116710
AOC	Friction Lock	*Please contact us for more details.	
	Mechanical Lock	*Please contact us for more details.	

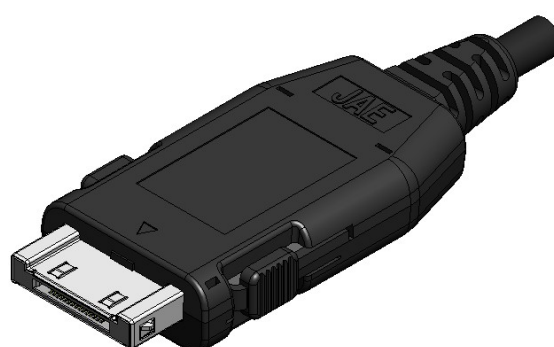
Receptacle



AOC (Friction Lock Type)



AOC (Mechanical Lock Type)



- No. of Contacts: 26 pos.
- Pitch: 0.5mm pitch, 2 row
- Mounting: SMT compatible
- Sequence Connection:
3-step sequence, First-Mate-Last-Break structure
- Cable Dia.: $\Phi 4.3\text{mm}$

Materials / Finishes

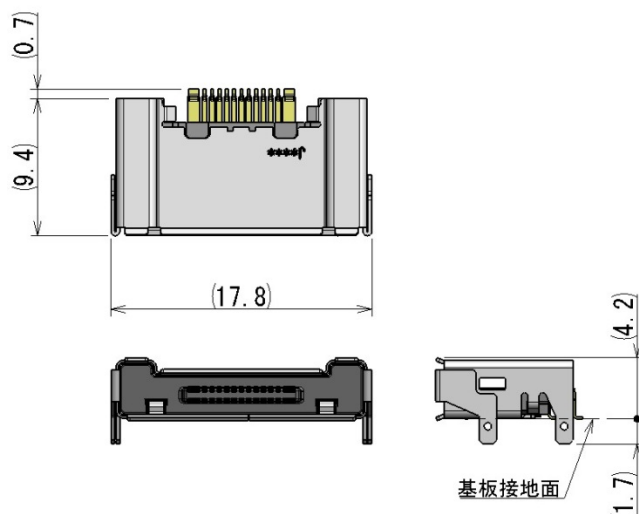
■ Receptacle

No.	Component	Pcs.	Material	Finish
1	SHELL	1	Stainless Steel	(Pb Free) Tin / Tin alloy
2	INSULATOR	1	Synthetic Resin	—
3	PWR CONTACT	4	Copper Alloy	Contact area: Au plating over Ni Solder area: Au flash plating over Ni
4	SIG CONTACT	22	Copper Alloy	

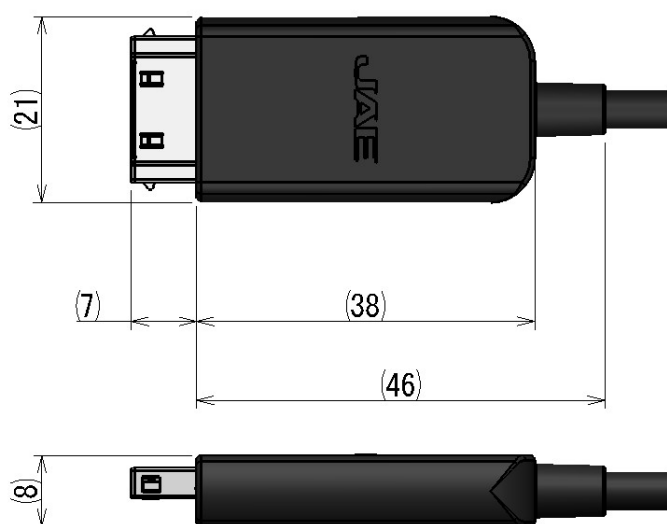
Outer Diameter

Note) Please refer to drawing for details.

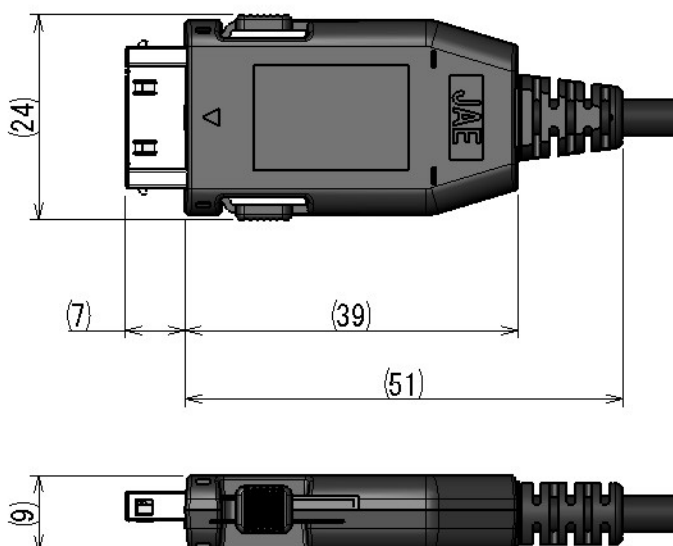
■ Receptacle: RP04R026JA1



■ AOC (Friction Lock Type)



■ AOC (Mechanical Lock Type)



Notice:

1. The values specified in this brochure are only for reference. The products and their specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.

2. Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.

3. The products presented in this brochure are designed for the uses recommended below. We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1) Applications that require consultation:

(i) Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:

Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii) We may separately give you our support with a quality assurance program that you specify, when you think of a use such as :

Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2) Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

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