

# AKX series

**Connectors for SFP transceivers  
(Conforms to MSA standard)**

## Outline

AKX series provide connectors for Small Form Factor Pluggable (SFP), which support optical communications. The connector consists of a connector body and a cage, the body is the host connector for SFP transceivers, which is a connector for high-speed transmission designed for differential transmission. Further, there are two ways of mounting the cage on PCB, solder type and press-in type. Furthermore, both the connector and the cage conform to Multi-Source Agreement (MSA).

## Features

### Connector (Part No. AKX-20LFY)

- Provides 0.8 mm pitch, 20 contacts
- Utilizing roll-surface contact improves and maintains high reliability and high durability.
- Achieves high-speed transmission
- Achieves a low insertion loss due to impedance matching
- Achieves a low reflection attenuation

### Cage (Part No. AKX-CG/AKX-CGP)

- The cage consists of an upper cage and an lower cage. The press-in type cage is factory-shipped after assembling and soldering the cage halves. The solder type cage can be factory-shipped after either way of assembling and soldering, or cages can be provided disassembled.
- Factory-shipped assembly of the cage maintains the strength of the cage due to soldering at 6 points.
- Because the solder type cage has a half-lock structure with PCB, the assurance of workability is given.
- Ensure popping out of transceiver

## Principal Applications

Communications equipment

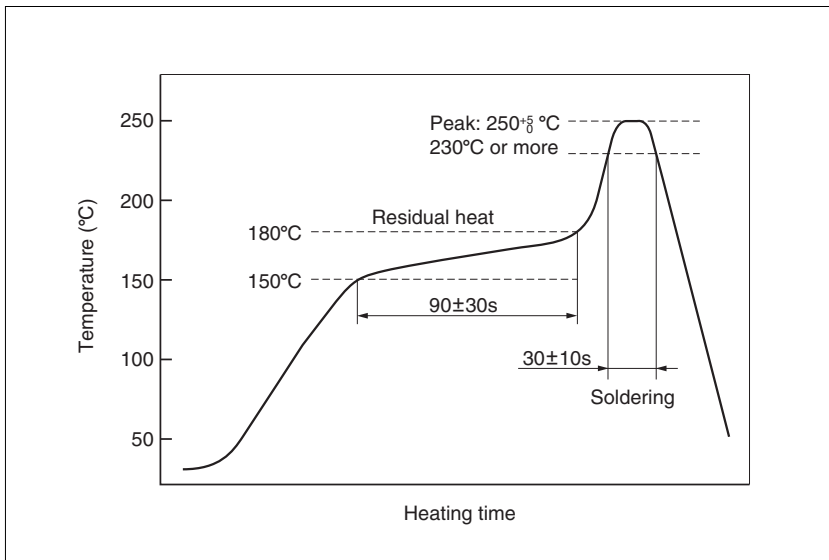
## Electrical Characteristics

Rated voltage	30V AC (r.m.s.)
Rated current	0.5A or less/contact
Temperature range	-40 to +85°C
Humidity	85% RH, or less

### Document Disclaimer

- When placing orders with us, minimum order quantities are set for every product.
- Be sure to contact us before starting preliminary design of PCBs using our connectors.
- The specifications and information shown in the catalog are subject to change without notice.

## Reflow temperature profile (for reference purposes)



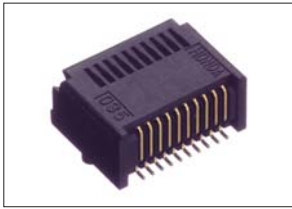
The reflow temperature profile shown in this drawing is for reference purposes. This profile depends on requirements such as reflow equipment, soldering paste, and PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own reflow temperature profile.

### ●Applicable products

AKX-20LFY( )

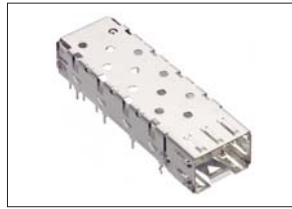
The profile shown in this drawing is applicable only for those products shown above.

## Product List



Right-angle SMT type  
female connector  
for SFP transceivers  
AKX-20LFY( )

**J-76**  
AKX series...4



Right-angle through hole type  
cage for SFP transceivers  
AKX-CG

**J-77**  
AKX series...5



Right-angle through hole type  
lower cage for SFP transceivers  
AKX-CG-01

**J-78**  
AKX series...6



Right-angle through hole type  
upper cage for SFP transceivers  
AKX-CGP-02

**J-79**  
AKX series...7



Right-angle Press-in type  
cage for SFP transceivers  
AKX-CGP

**J-80**  
AKX series...8

# Right-angle SMT type female connector for SFP transceivers AKX-20LFY( )

For PCB

Right-angle SMT

MSA standard

RoHS



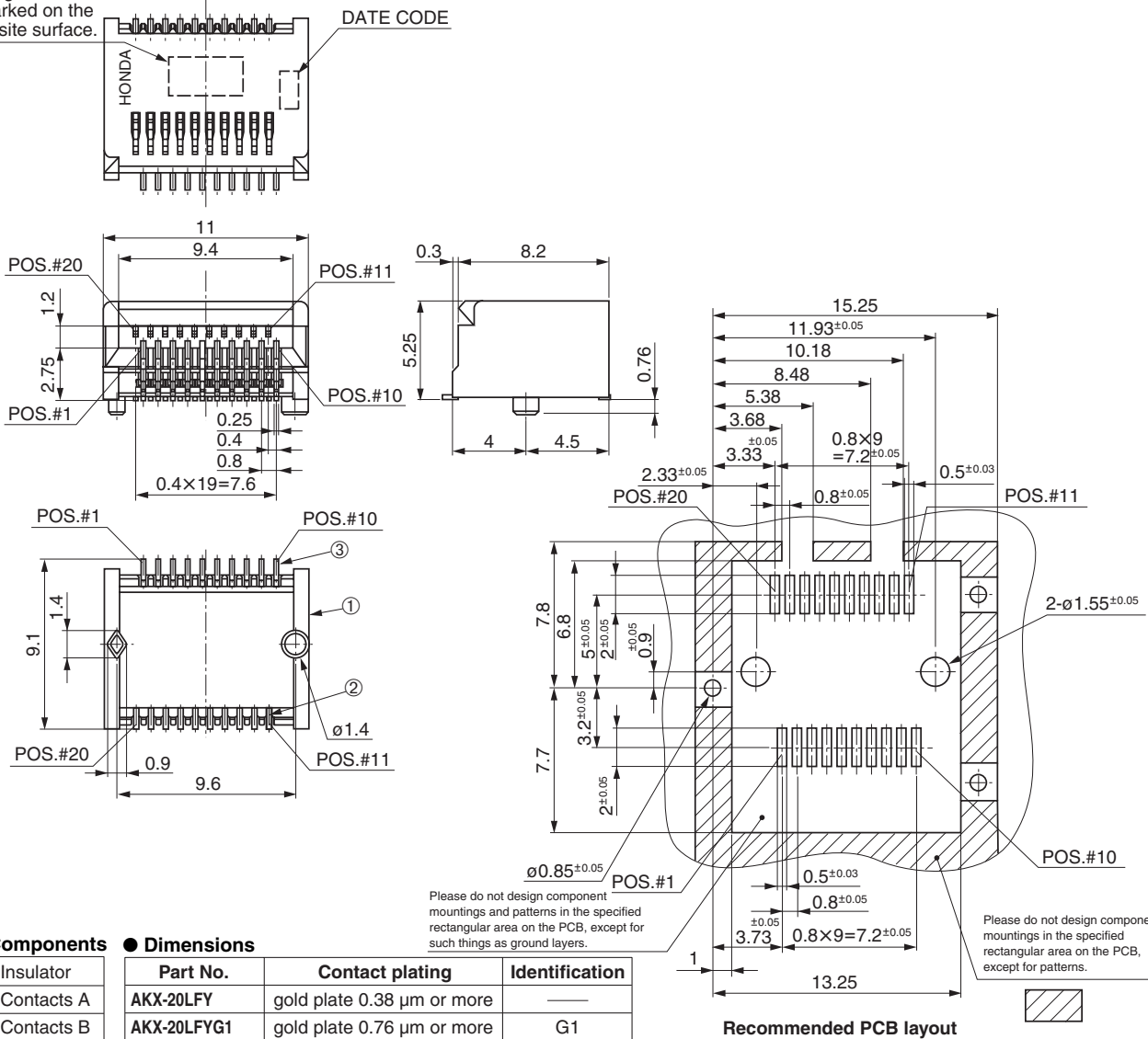
● Configuration of product Part No.

## AKX- 20 LFY ( )

① ② ③ ④

- ① Series name
- ② No. of contacts: 20
- ③ Right-angle SMT type, female
- ④ Contact plating  
Blank : Gold plate, 0.38 μm or more  
G1 : Gold plate, 0.76 μm or more

Plating identification is marked on the opposite surface.



● Components

①	Insulator
②	Contacts A
③	Contacts B

● Dimensions

Part No.	Contact plating	Identification
AKX-20LFY	gold plate 0.38 μm or more	—
AKX-20LFYG1	gold plate 0.76 μm or more	G1

Mating connector: SFP transceivers

# Right-angle through hole type cage for SFP transceivers AKX-CG

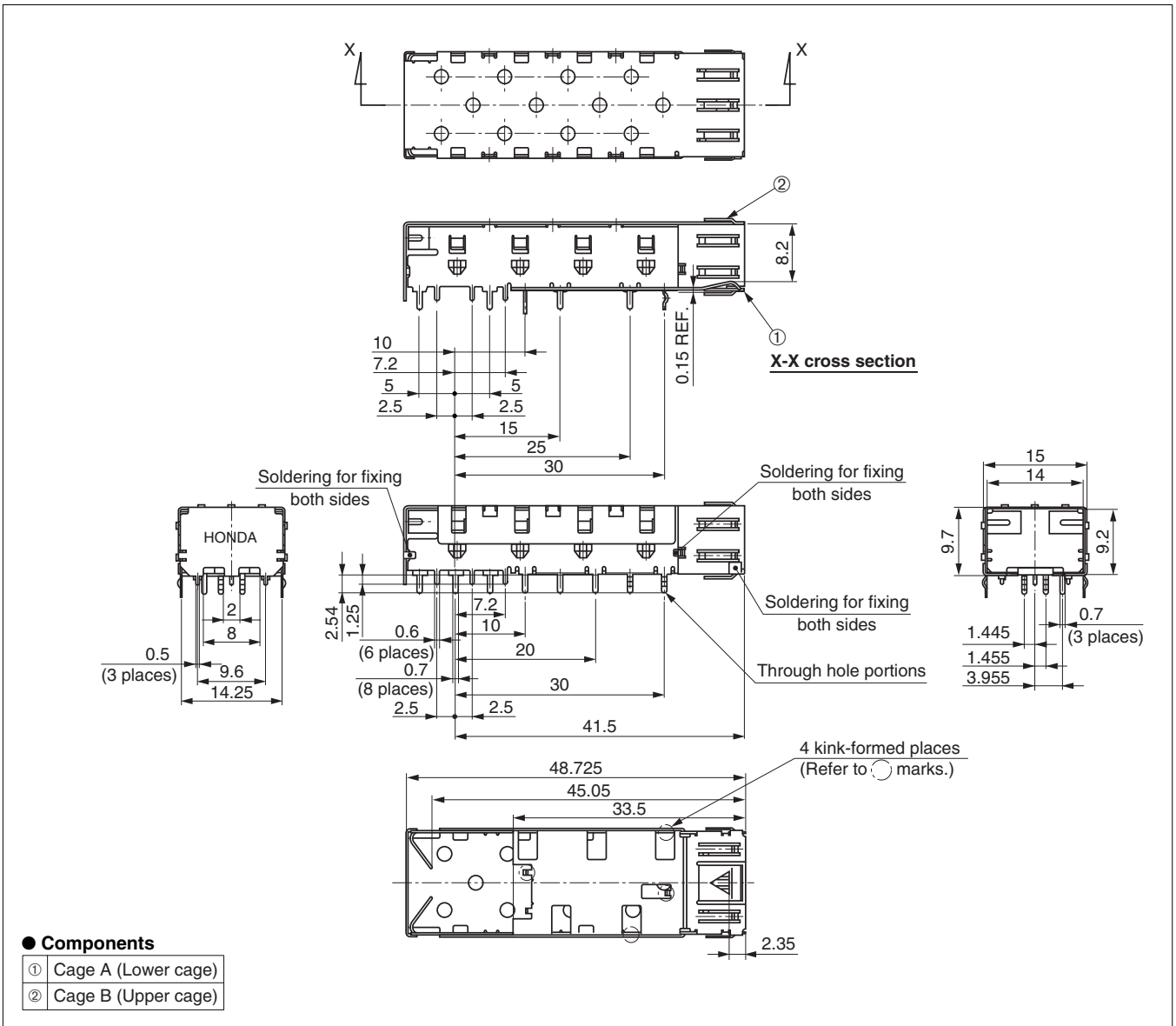
RoHS



● Configuration of product Part No.

**AKX-CG**

- ① Series name
- ② Cages



Mating connector: SFP transceivers

Right-angle through hole type lower cage  
for SFP transceivers

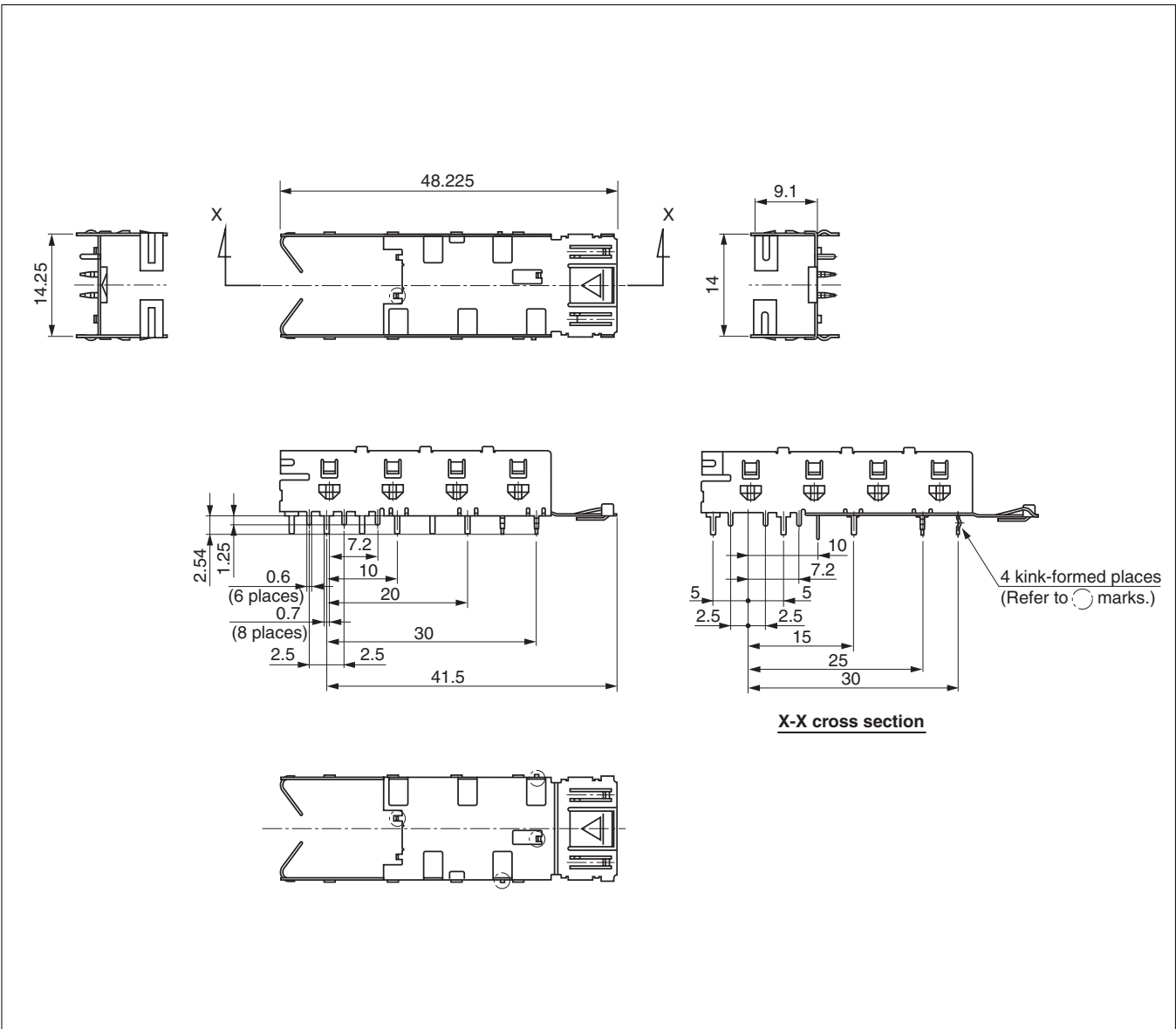
AKX-CG-01



● Configuration of product Part No.

**AKX- CG-01**

- ① Series name
- ② Lower cage



Mating connector: SFP transceivers

**Right-angle through hole type upper cage  
for SFP transceivers  
AKX-CGP-02**

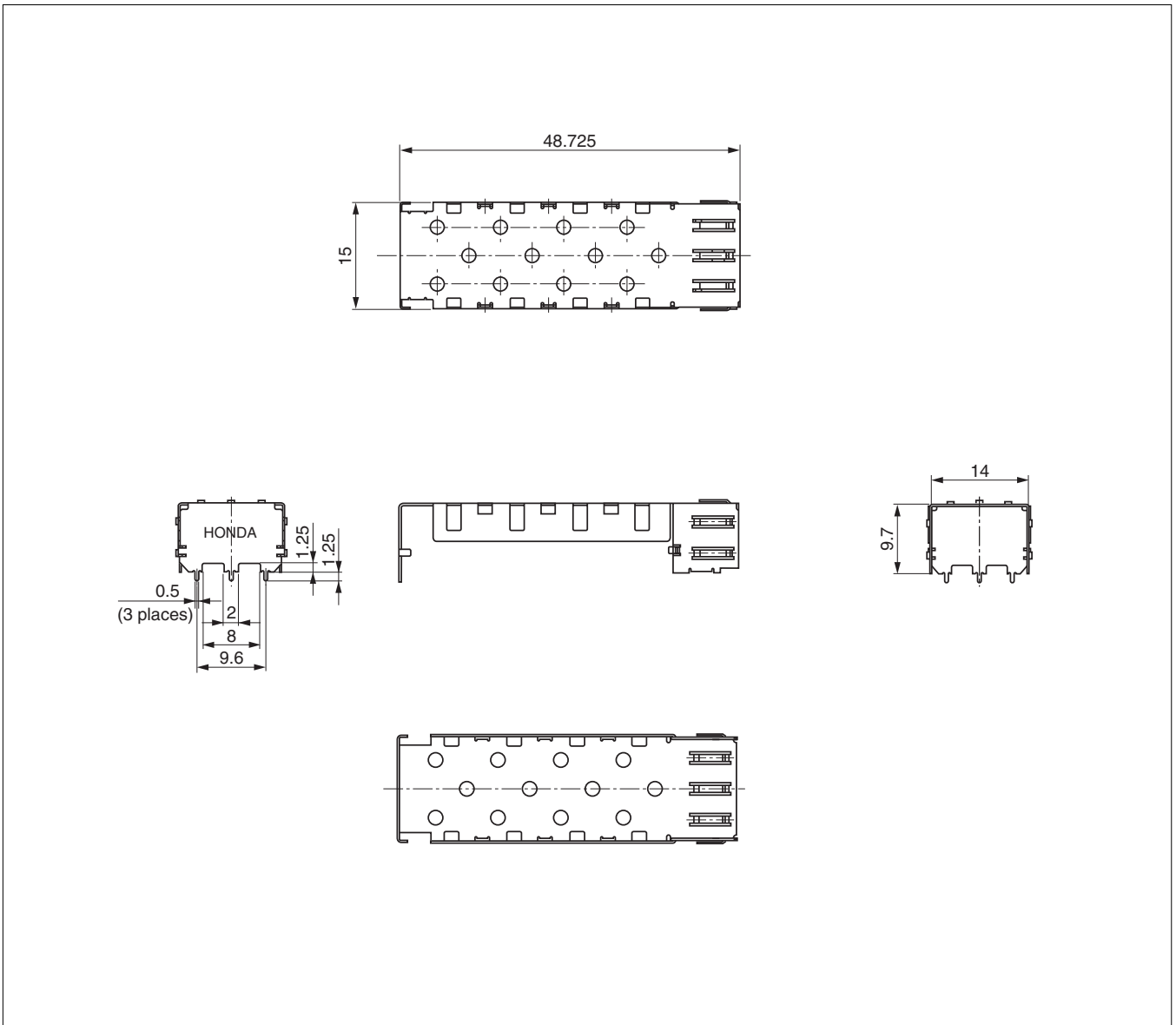
RoHS



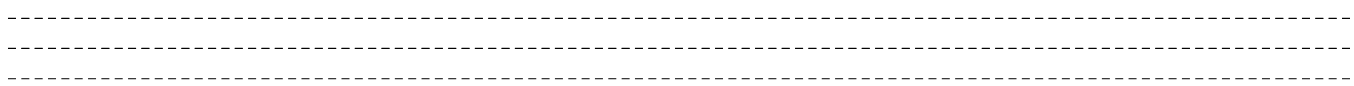
● Configuration of product Part No.

**AKX- CGP-02**

- ① Series name
- ② Upper cage



Mating connector: SFP transceivers



# Right-angle Press-in type cage for SFP transceivers AKX-CGP

For PCB

Right-angle press-in

RoHS

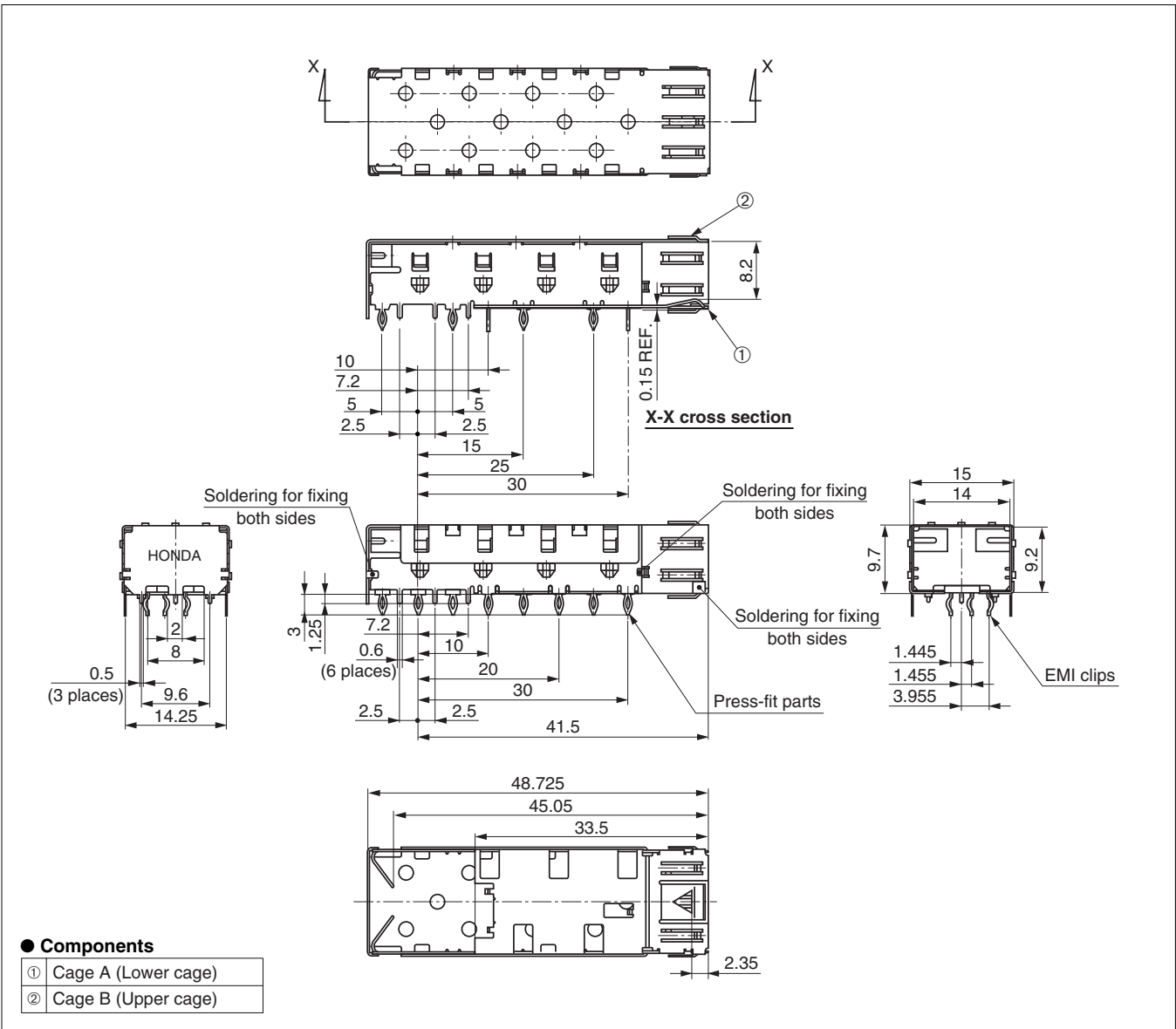
MSA standard



● Configuration of product Part No.

## AKX-CGP

- ① Series name
- ② Press-in type cage



Mating connector: SFP transceivers