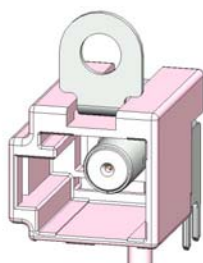**JAE**

NEW

Compact Coaxial Connectors for Digital Radio
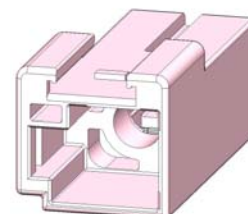# CE2 Series (50Ω)

CONNECTOR
MB-0258-1
April 2013

**RoHS Compliant**



Board Connector      Cable Connector      Relay Connector

JAE has developed the CE2 Series (50Ω) connector for digital radio as an addition to the existing CE2 Series (75Ω) coaxial connector for automotive antenna applications.

Digital radio popularity is primarily in Europe and the United States, but the CE2 Series (50 Ω) can also be used for terrestrial digital television broadcast applications.

The CE2 Series is now available in three developed pin count variations: coaxial 1 position, coaxial 2 position, and coaxial 1 position with terminal 1 position.

Having equivalent performance with the existing CE2 Series and enhanced terminal pulling endurance and noise resistance, this product was made to satisfy a wide range of requirements.

## Features

- Applicable frequency range is up to 1.5 GHz.
- Compact type available in three developed pin count variations. Board type has brackets for screw fixing to panel. (Not available for coaxial 2 position type.)
- Noise resistance enhanced by an outer terminal structure that covers entire cable core area.
- Meets the performance requirements for an automotive connector.

## General Specifications

- No. of Contacts:
coaxial 1 pos., coaxial 2 pos.,
coaxial 1 pos.+ power terminal 1 pos.
- Applicable Frequency: DC to 1.5GHz
- Characteristic Impedance: 50 Ω
- VSWR: 1.8 max.

- Insertion Loss: 1.0 dB max.
- Dielectric Withstanding Voltage: AC1000Vr.m.s. (per minute)
- Insulation Resistance: 100M Ω min.
- Applicable Cable: 1.5DS-QEHV or 1.5D-2V equivalent coaxial wire
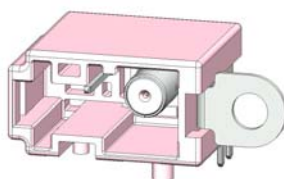
# ■ Ordering Information (Connector, Housing)

C E 2 ＊ ＊ ＊ ＊ ＊ ＊ ＊

Series

Connector and
Housing Shape
 A: Cable Housing
 G: Relay Housing
 S: Board Connector

Coaxial Terminal
 1: 1 Contact
 2: 2 Contacts

Terminal for Power
 0: No
 1: 1 Contact

Mating Key Modification Code
 1 ~

C: 75 Ω
D: 50 Ω
Z: Other

Modification Code
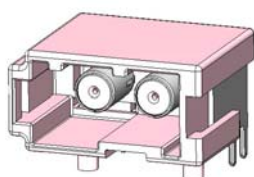00 ~

# ■ Connector Configuration
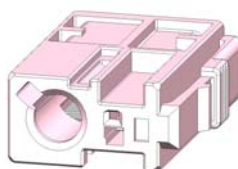
**Board Connector**
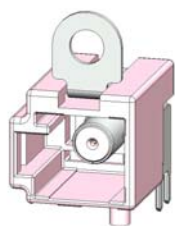
CE2S102D02

CE2S112D01

CE2S202DM3

**Cable Connector**
(Coaxial 1 pos., Power 1 Pos.)

**Housing**
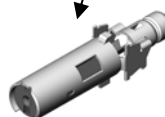CE2A112Z00

**Sleeve**
CE2Z22HC01

**Coaxial Terminal**
CE2A001D01

**Power Terminal**
CE2C28HC01

**Relay Connector**
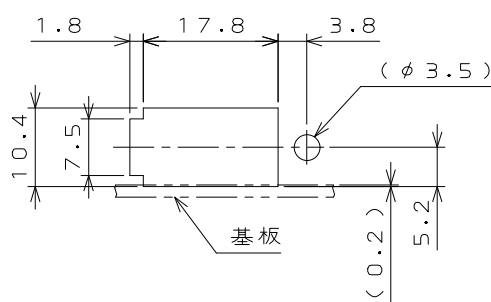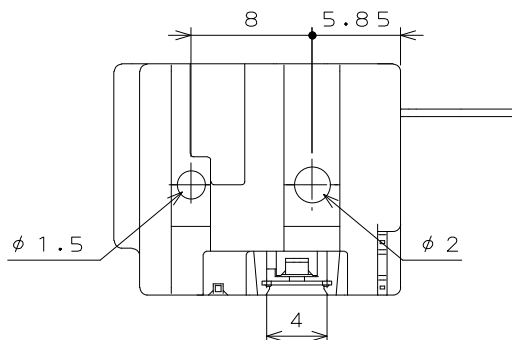(Coaxial 1 pos.)

**Relay Housing**
CE2G102Z00

**Coaxial Terminal**
CE2G001D01

**Sleeve**
CE2Z22HC01

# Board Connector

## ■ CE2S112D01 (Coaxial 1 pos., Power Terminal 1 pos., With Side Bracket)

| Component | Material / Finish |
|---|---|
| Housing | 30% GF PBT (Color: Light pink) |
| Inner Terminal (Coaxial) | Copper alloy / Contact area: Au plating over Ni Solder area: Sn plating over Ni |
| Outer Terminal (Coaxial) | Copper alloy / Sn plating |
| Power Terminal | Copper alloy / Sn plating |
| Bracket | Copper alloy / Sn plating |
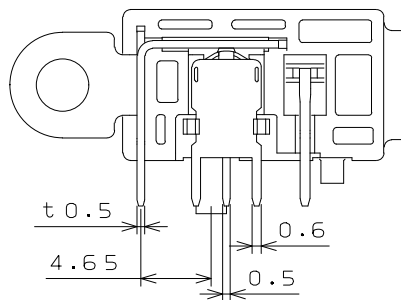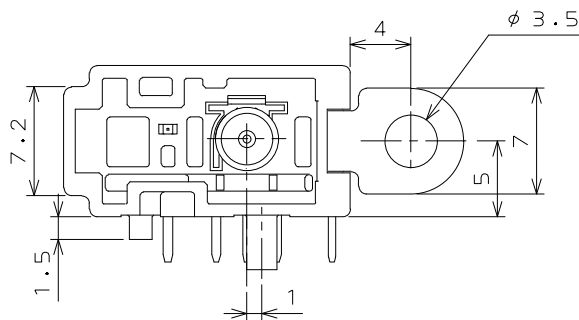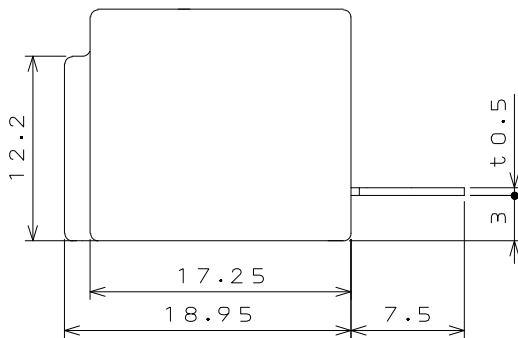
PANEL HOLE PATTERNS(REF.)
パネル取付穴寸法(参考)
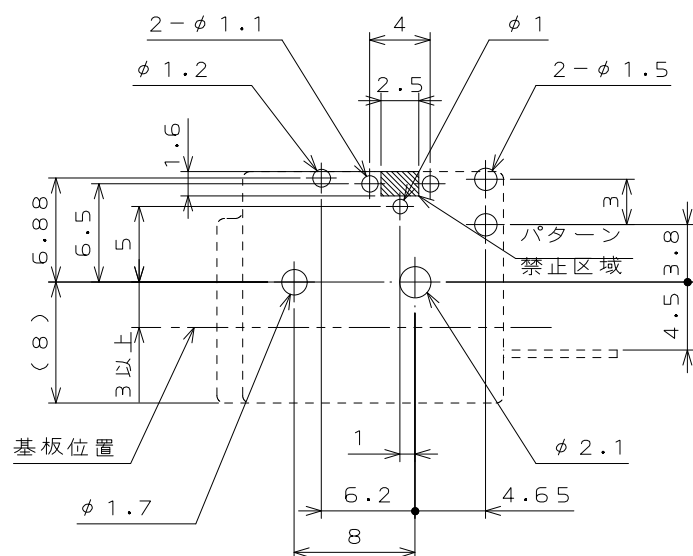
P.C.B. LAYOUT·MOUNTING SIDE(REF.)
基板取付穴寸法(参考·装着面)

パターン
禁止区域

基板位置

基板

# Housing

## ■ CE2A112Z00 (Coaxial 1 pos., Power Terminal 1pos.)

| Component | Material / Finish |
|-----------|-------------------|
| Housing | PBT (Color: Light pink) |
| Retainer | PBT (Color: Gray) |
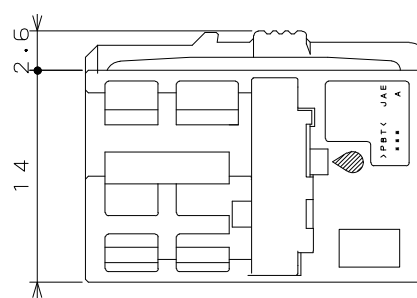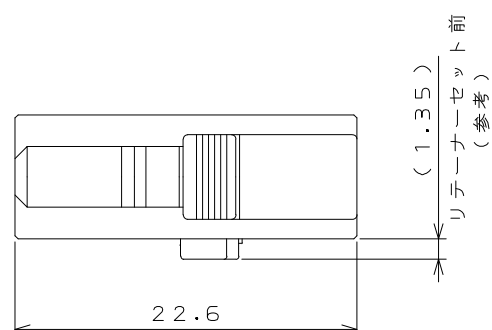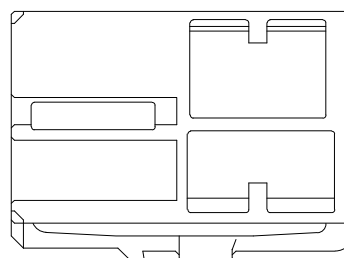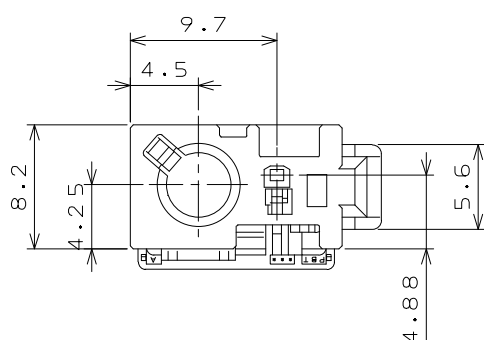
# Relay Housing

## ■ CE2G202Z00 (Coaxial 2 pos.)

| Component | Material / Finish |
|---|---|
| Housing | PBT (Color: Light pink) |
| Retainer | PBT (Color: Gray) |

10

(1.35)
リテーナーセット前
(参考)

12.2

28.7

2.2

17

10.75

4.55

8.3

4.3

15.3

PBT

>PBT<

JAE
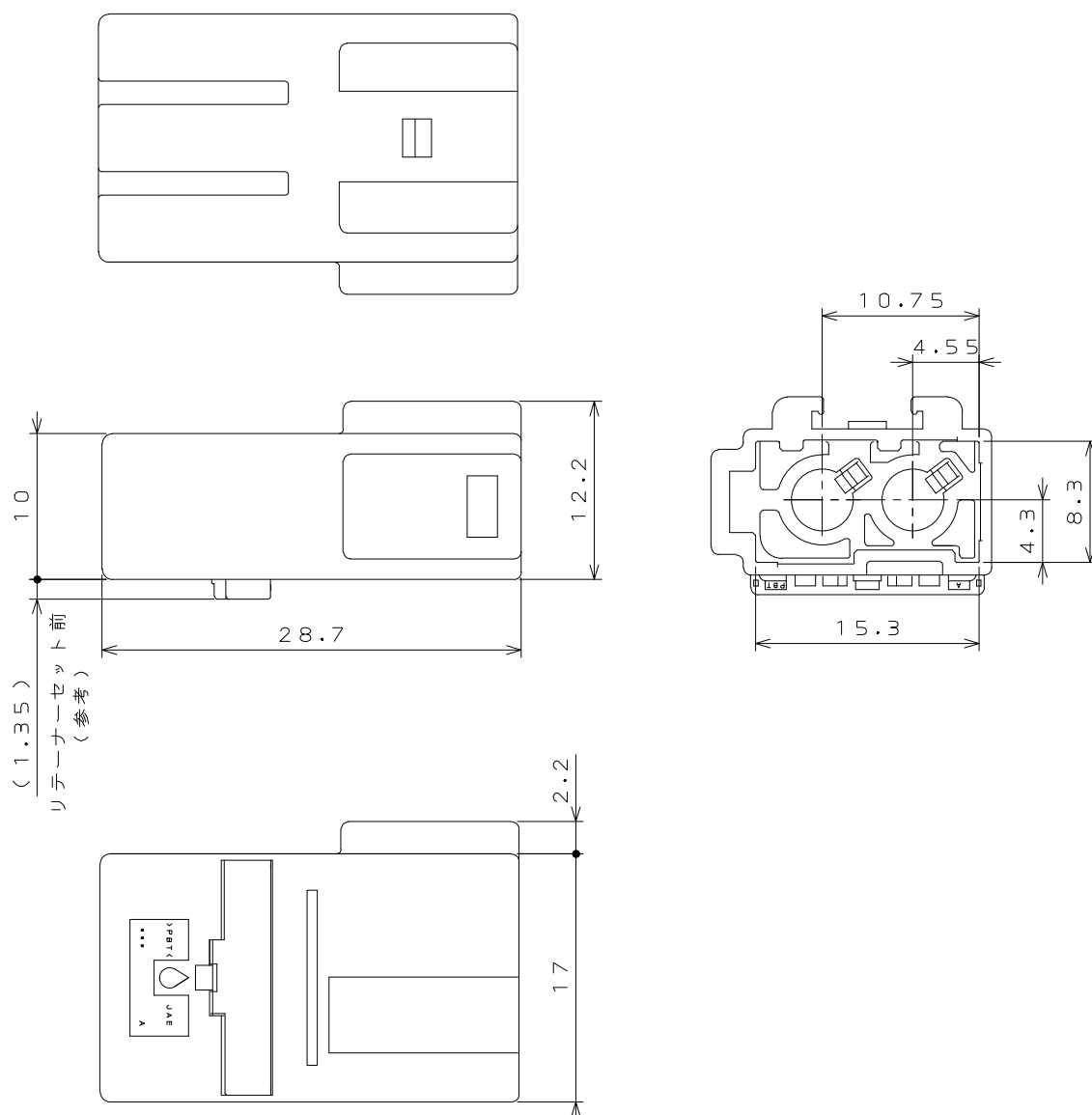
# Terminal

## ■ CE2A001D01 Coaxial Terminal (for Cable)

| Component | Material / Finish |
|---|---|
| Inner Housing | 30% GF SPS (Color: Light blue) |
| Inner Terminal | Copper alloy / Contact area: Au plating over Ni<br>Terminal area: Reflow Sn plating over Ni |
| Outer Terminal | Copper alloy / Sn plating |

## ■ CE2G001D01 Coaxial Terminal (for Relay)

| Component | Material / Finish |
|---|---|
| Inner Housing | 30%GF SPS (Color: Light blue) |
| Inner Terminal | Copper alloy / Contact area: Au plating over Ni<br>Terminal area: Reflow Sn plating over Ni |
| Outer Terminal | Copper alloy / Sn plating |
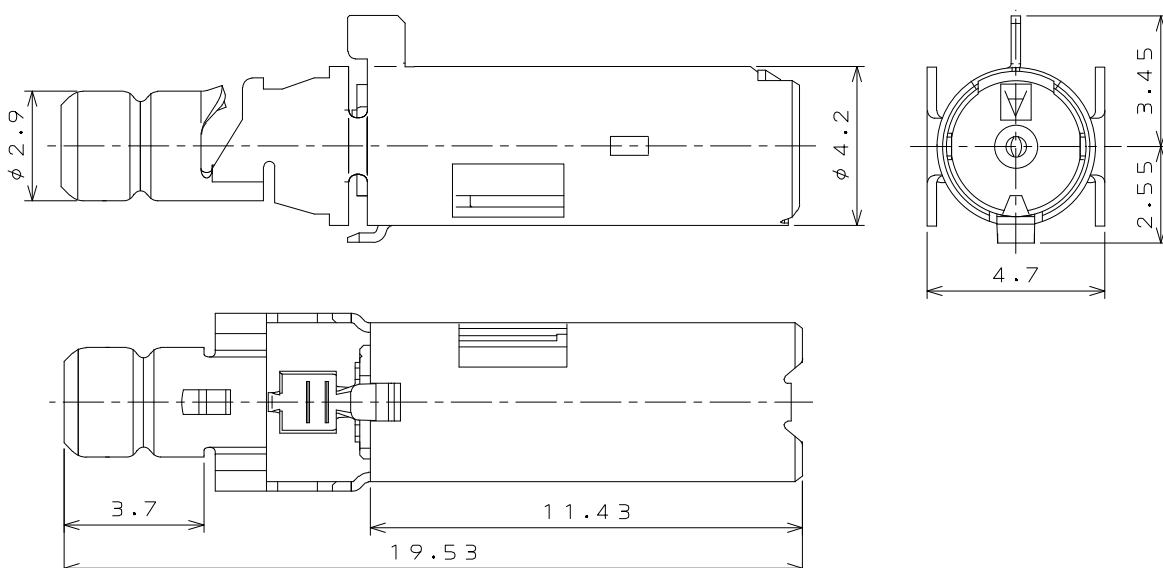
# ■ CE2C28HC01 Power Terminal (for Cable)

| Component | Material / Finish |
|---|---|
| Power Terminal | Copper alloy / Sn plating |

17.05

5.1

1.3

1.75

8.2

2.5

2.55

2

1.5

t 0.25

4.65

MAX.0.2
(CUT OFF AREA)

21.05
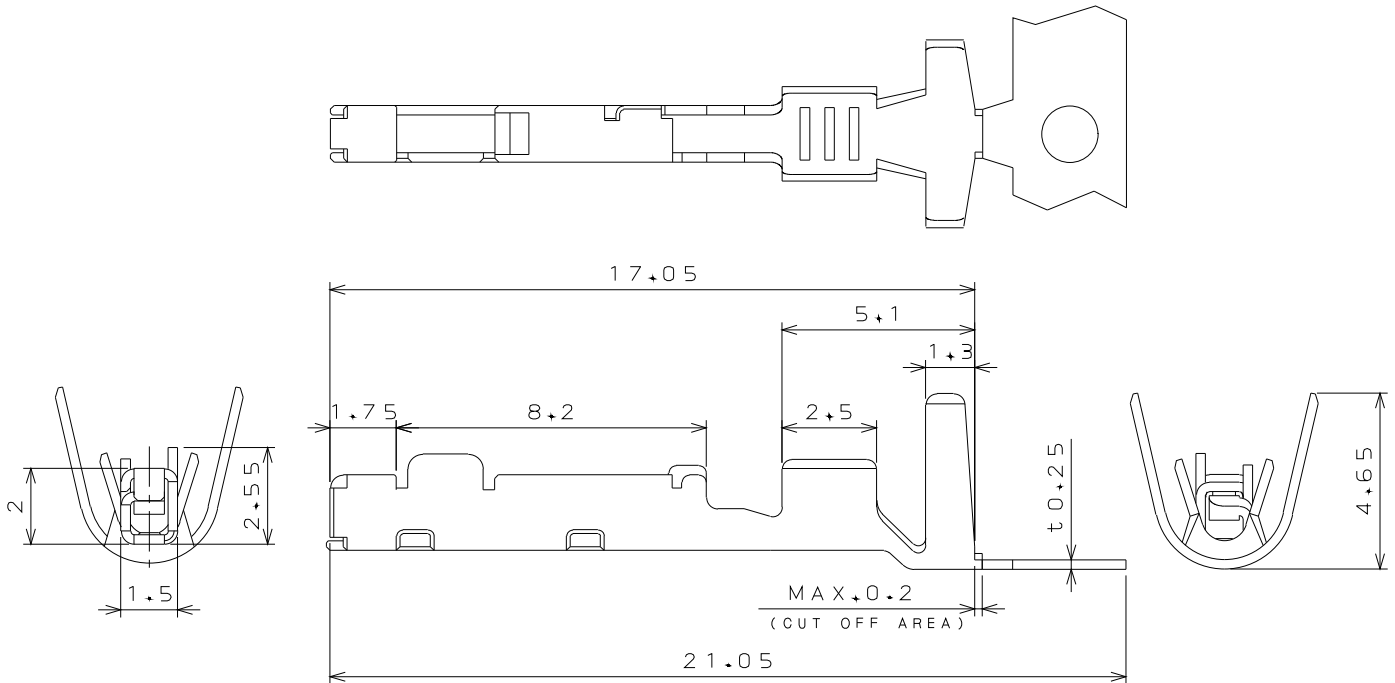
# ■ CE2Z22HC01 (Sleeve)

| Component | Material / Finish |
|---|---|
| Sleeve | Copper alloy / Sn plating |

Φ3.6

3.7

1.2 1.7

5.9

4.8

6X

3.6

11.3
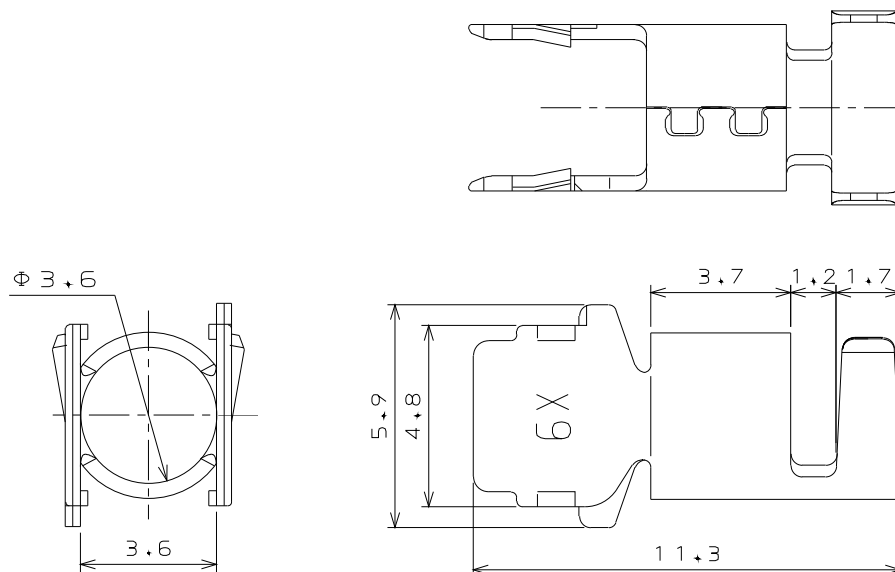
# Product Line-up

| Configuration | Part Number | SJ Drawing | Features |
|---|---|---|---|
| Board Connector | CE2S102D02 | SJ111024 | Coaxial 1 pos., Bracket (Upward) |
| | CE2S112D01 | SJ111025 | Coaxial 1 pos., Power 1 pos., Bracket (Sideway) |
| | CE2S202DM3 | SJ112959 | Coaxial 2 pos., Without bracket |
| Housing | CE2A102Z00 | SJ111022 | Coaxial 1 pos. |
| | CE2A112Z00 | SJ111023 | Coaxial 1 pos., Power 1 pos. |
| | CE2A202Z00 | SJ112958 | Coaxial 2 pos. |
| Relay Housing | CE2G102Z00 | SJ113866 | Coaxial 1 pos. |
| | CE2G202Z00 | SJ112960 | Coaxial 2 pos. |
| Terminal | CE2A001D01 | SJ111021 | Coaxial Terminal (for Cable) |
| | CE2G001D01 | SJ112285 | Coaxial Terminal (for Relay) |
| | CE2Z22HC01 | SJ107216 | Sleeve (for Coaxial Terminal), 2200 pcs. / Reel |
| | CE2C28HC01 | SJ107335 | Power Terminal (for Cable), 2800 pcs. / Reel |

# Crimp Tool Line-up

| Terminal P/N | Applicable Cable | Semi-Automatic Crimp Applicator |
|---|---|---|
| CE2A001D01 Coaxial Terminal (for Cable) | 1.5DS-QEHV | 350-CE2F3-2C |
| CE2G001D01 Coaxial Terminal (for Relay) | 1.5DS-QEHV | 350-CE2M3-2C |
| CE2Z22HC01 (Sleeve) | 1.5DS-QEHV | HC-CE2F-2C (for CE2A001D01) |
| | | HC-CE2M-2C (for CE2G001D01) |
| CE2C28HC01 Power Terminal (for Cable) | HAV 0.5sq | 3502-CE2D-2 |

# Others

| Specification | JACS-20111 |
|---|---|

| Handling Instruction | JAHL-20084-5 |
|---|---|

**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. Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry. Also contact us regarding the details of use, usage, specification before considering or ordering any of our products.

3. 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.

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