



Board-to-Board Floating Coaxial Connector

CONNECTOR

CP2 Series

MB-0239-1

November 2011

The CP2 Series is a board-to-board connection coaxial connector.

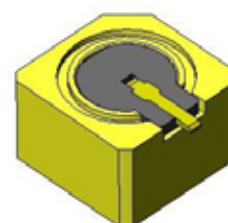
It is a compact connector yet features a floating structure that absorbs up to a 5 degree position misalignment horizontally, enabling multiple and different pitch coaxial connections on same board.

It is cable-less and ideal for connection of devices requiring space savings.

RoHS Compliant

Features

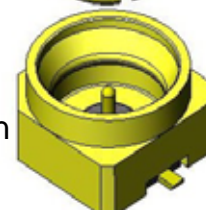
- Cable-less connection (minimum board clearance: 6mm) achieves high-density and space-saving board-to-board connection.
- Floating structure enables easy multiple board-to-board connections by allowing misalignment of up to 0.34mm (5 degrees) in the horizontal direction and up to 0.4mm axially.
- Applicable DC frequency band up to 5GHz, and maintains an excellent connection characteristic even under misaligned conditions.
- 4.5mm² outer shell mounting area of external conductor achieves minimization and space savings.



Receptacle Plug
(without lock)
CP2M002D00



Relay Jack
CP2CP2FF01



Receptacle Plug (with lock)
CP2M001D00

Applications

Mobile phones / PHS base stations, wireless communication devices, security cameras, broad casting devices and related devices, measuring equipment, high-frequency modules, wire-less power amplifiers, and transmission characteristic tests, etc.

General Specifications

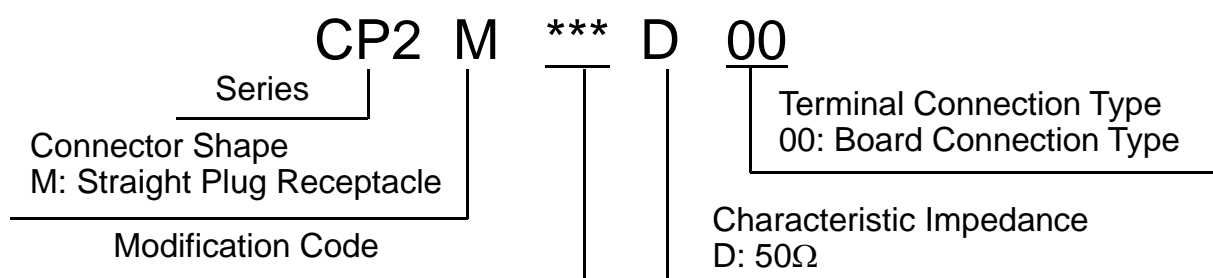
| | | |
|--|--------------------|-----------------------------------|
| Characteristic Impedance | | 50Ω |
| Applicable Frequency Band | | DC up to 5GHz |
| Voltage Standing Wave Ratio (V.S.W.R.) | | Less than 1.2 (up to 5GHz) |
| Insertion Loss | | Less than 0.3dB / (up to 3GHz) |
| Contact Resistance | Center Conductor | 10mΩ (initial), 15mΩ (after test) |
| | External Conductor | 3mΩ (initial), 8mΩ (after test) |
| Dielectric Withstanding Voltage | | 500V r.m.s |
| Insulation Resistance | | 500MΩ (DC500V) |
| Mating Method | | Push-on |
| Mating Durability | | 100 times |

Materials and Finishes

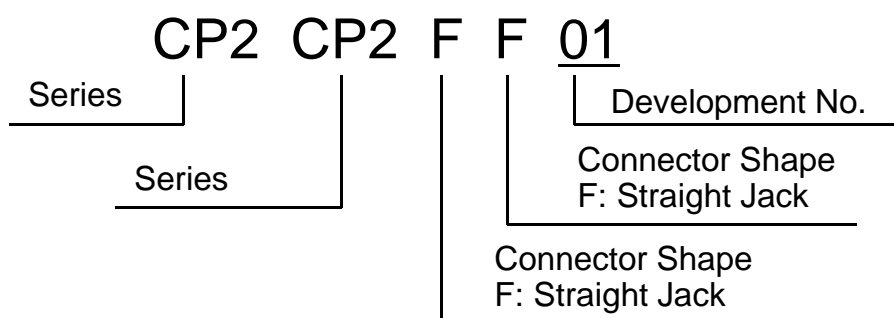
| SMT Type | Component | Material | Finish |
|---|------------------|--------------------------|--------------------|
| Receptacle Plug CP2M001D00 CP2M002D00 | Center Contact | Copper alloy | Au plating over Ni |
| | Shell | Copper alloy | Au plating over Ni |
| | Insulator | Glass filled LCP (black) | - |
| Relay Jack CP2CP2FF01 | Center Contact | Copper alloy | Au plating over Ni |
| | External Contact | Copper alloy | Au plating over Ni |
| | Insulator | 4 Ethylene fluoride | - |
| | Ring Spring | Copper alloy | Ni plating |

Ordering Information

■Receptacle Plug (board side)



■Relay Jack

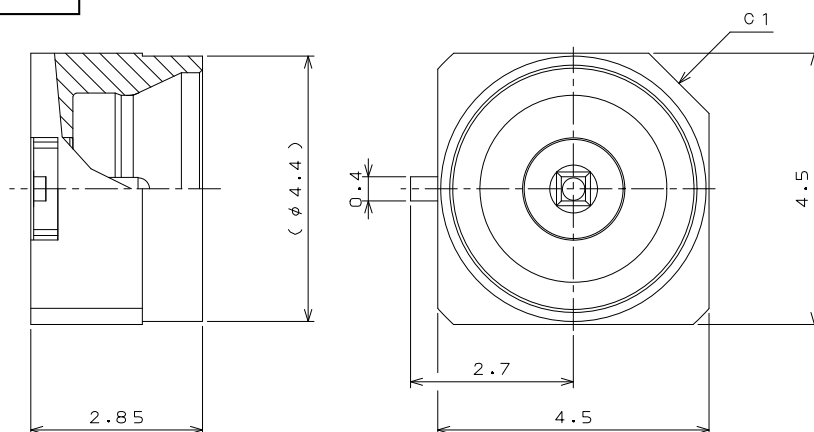


Technical Documents

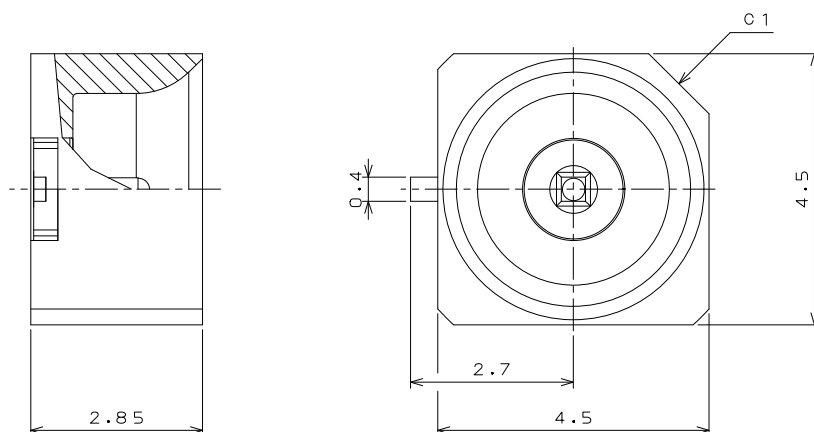
| | Receptacle Plug | | Relay Jack |
|---------------|-----------------|--------------|------------|
| | With Lock | Without Lock | |
| Part Number | CP2M001D00 | CP2M002D00 | CP2CP2FF01 |
| Drawing | SJ109280 | SJ109281 | SJ109282 |
| Specification | JACS-20103 | | |

Dimensions

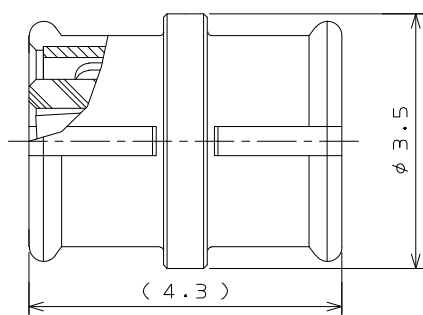
CP2M001D00



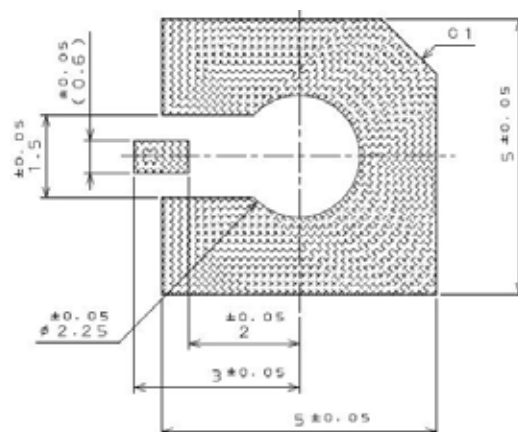
CP2M002D00



CP2CP2FF01



Board Pattern Layout (for reference)



Notice: Products shown in this brochure are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.

Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.

Japan Aviation Electronics Industry, Limited

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.