NEW

Board-to-Board Floating Coaxial Connector

CP2 Series

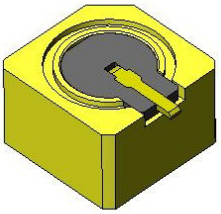
CONNECTOR
MB-0239-1
November 2011

RoHS Compliant

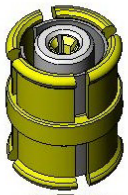
The CP2 Series is a board-to-board connection coaxial connector.

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.

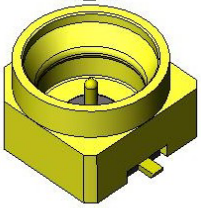
It is cable-less and ideal for connection of devices requiring space savings.



Receptacle
Plug
(without lock)
CP2M002D00



Relay Jack
CP2CP2FF01



Receptacle
Plug (with lock)
CP2M001D00

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.
- 4.5mm^2 outer shell mounting area of external conductor achieves minimization and space savings.

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

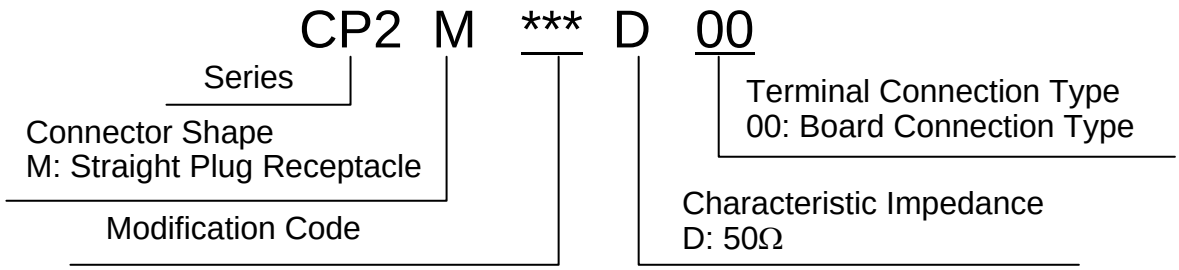
Characteristic Impedance		500Ω
Applicable Frequency Band		DC up to 5GHz
Voltage Standing Wave Ratio (V.S.W.R.)		Less than 1.2 (up to 5GHz)
Insertion Loss		Less than 0.3dB / (up to 3GHz)
Contact Resistance	Center Conductor	10mΩ (initial), 15mΩ (after test)
	External Conductor	3mΩ (initial), 8mΩ (after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

Materials and Finishes

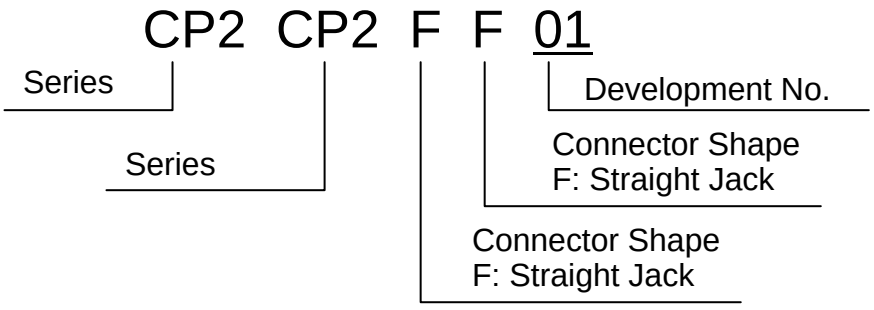
SMT Type	Component	Material	Finish
Receptacle Plug CP2M001D00 CP2M002D00	Center Contact	Copper alloy	Au plating over Ni
	Shell	Copper alloy	Au plating over Ni
	Insulator	Glass filled LCP (black)	-
Relay Jack CP2CP2FF01	Center Contact	Copper alloy	Au plating over Ni
	External Contact	Copper alloy	Au plating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

Ordering Information

■Receptacle Plug (board side)



■Relay Jack

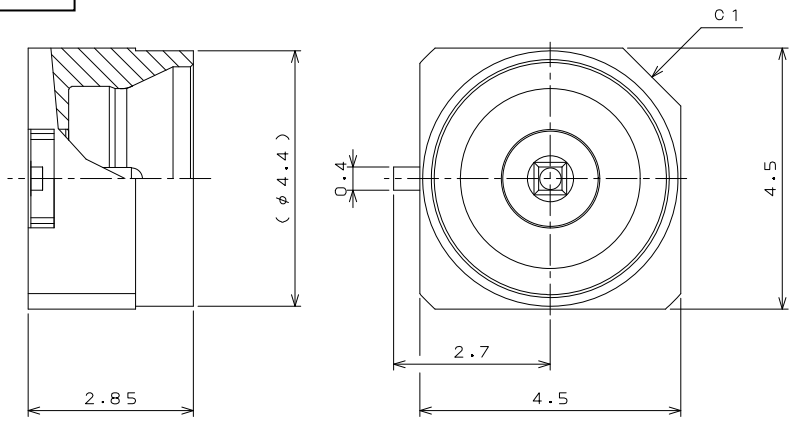


Technical Documents

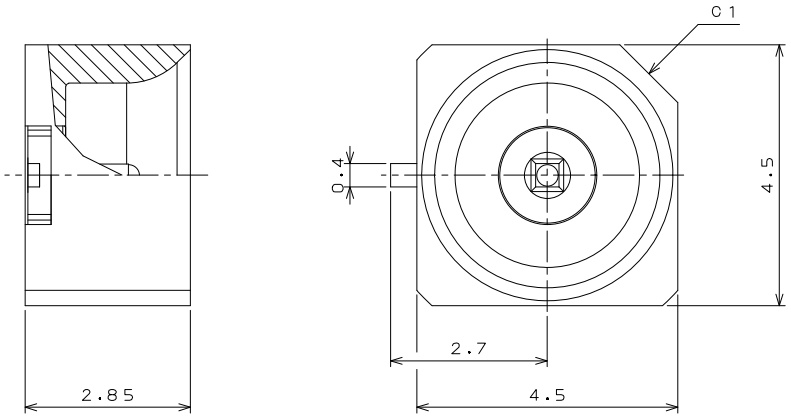
	Receptacle Plug		Relay Jack
	With Lock	Without Lock	
Part Number	CP2M001D00	CP2M002D00	CP2CP2FF01
Drawing	SJ109280	SJ109281	SJ109282
Specification	JACS-20103		

Dimensions

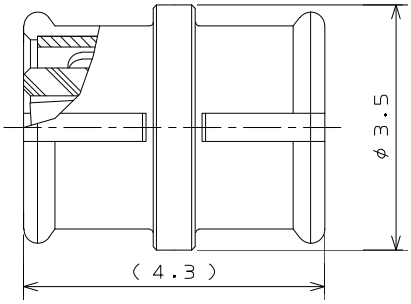
CP2M001D00



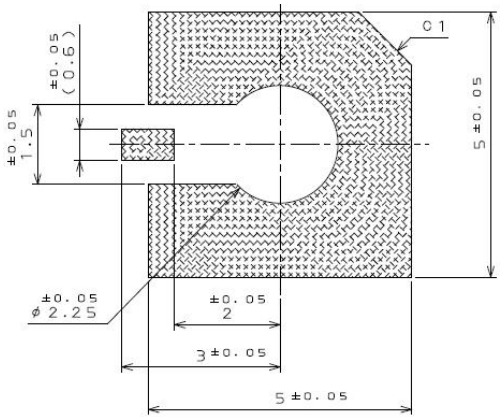
CP2M002D00



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
Product Marketing Division
Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539
Phone: +81-3-3780-2787 FAX: +81-3-3780-2946

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