



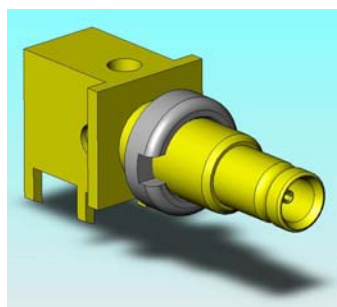
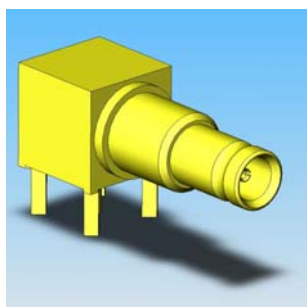
IEC60169-29(Type 0.1/2.3) Standard Compatible Coaxial Connector

CONNECTOR

MB-0132-3

November 2006

CB1 Series



**RoHS
Compliant**

Board side receptacle

Cable side plug (mass production under study)

The CB1 series are compact coaxial connectors compatible to IEC60169-29(type 1.0/2.3) standard for wireless communication devices and various radio frequency wave devices such as mobile phones, PHSs, wireless LAN base stations, access points, etc. CB1 series are space saving and are suitable for multiple use on devices as an I/O connector.

Existing Lineup

Receptacle(board side): Angle Bulk type(75 ohm type)

Mass production under study

Receptacle(board side): Angle type (75, 50 ohm type), Multiple pos. (multiple pin) type

Plug(cable side): Straight type, Angle type

Plug side mating style: Screw type, Snap on push pull type

**Items and cables that are not in the above are under consideration. Please contact us. **

Features

- Compact coaxial connector compatible to IEC60169-29(Type 0.1/2.3) standard
- Receptacle side angel type suitable for narrow-pitch multiple mounting because of small size --7mm x 7mm for occupied PCB dimension and 4.1mm dia. outer dimension at mating portion
- Low profile receptacle, 7.2mm height from PCB
- Screw lock mating is possible and the size is equivalent to Type SMB(IEC60169-10)
- Floating in axial direction with approximately 3mm mating stroke (effective length)
- Three types of lock mechanism is standardized for cable side, which are intermatable with this receptacle.
 - Screw type: outer diameter 6.5 mm max. extremely compact as a screw type
 - Snap-on, Push-Pull type: compatible to friction lock and complete lock
 - Slide in type: compatible to rack and panel type mating (without lock)
- 50 ohm and 75 ohm are standardized. Applicable frequency are as below
50 ohm: DC to 10GHz, 75 ohm: DC to 2GHz
- High environmental durability with surface finishes in gold plating
- Compliant to RoHS directive

Applications

Mobile phone base stations, PHS base stations, wireless LAN Access points, wireless communication devices, broadcasting devices, measuring devices, RFID(IC tag, automatic recognition) high frequency module, wireless power amplifiers, etc.

General Specifications

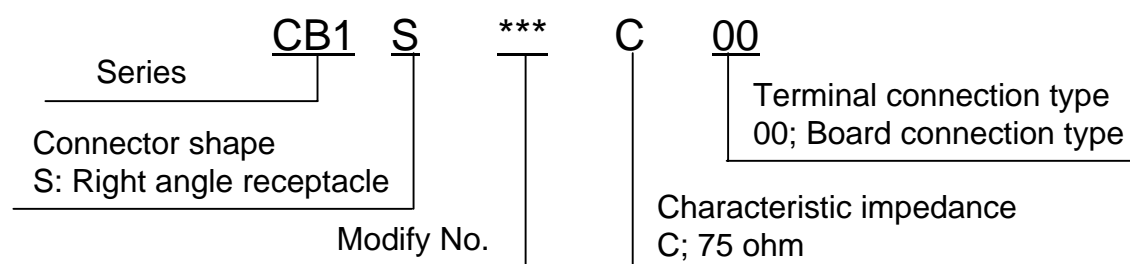
- Characteristic Impedance: 75 ohm
- Applicable frequency: DC to 2GHz
- V.S.W.R.: 1.2 max. (DC to 1GHz)
- Insertion loss 0.3dB (DC to 1GHz)
- Rated current: DC0.5A
- Rated voltage: AC250Vr.m.s.
- Operating temperature:
-40 deg. C to +85 deg. C
- Contact resistance:
Signal contact; 4m ohm max.
(after test: 10m ohm max.)
Grand contact; 2.5m ohm max.
(after test: 7.5m ohm max.)
- Dielectric withstanding voltage:
AC750Vr.m.s, per minute
- Insulation resistance: 1000M ohm min.(DC500V)

Materials/ Finishes

| Part Number | CB1S001C00 | CB1S002C00 |
|-------------------------------------|---|--|
| Componets | Materials/ Finishes | Materials/ Finishes |
| Insulator | Ethlene tetrafloride | Ethlene tetrafloride |
| Single contact (inner conductor) | Copper alloy/ Au plating over Ni (0.5 um max.) | Copper alloy/ Au plating over Ni (0.5 um max.) |
| Earth contact (outer conductor) | Copper alloy/ Au plating over Ni (0.3 um max.) | Contact area: Copper alloy/ Au plating over Ni (0.3 um max.) Terminal area: Copper alloy/ Ni plating |
| Nut | - | Copper alloy/ Ni plating |

Ordering Information

■Receptacle(board side)



Technical Information

- Please contact us concerning item other than the following.
- Cable products are available in other various, connector types and cable types. Please consult us.

| | Zo | Part Number | SJ Drawing | Specifications | Note |
|--|------------------------------|------------------------------|------------|----------------|---|
| Receptacle connector | 75 ohm | CB1S001C00 | SJ102929 | JACS-20052 | Right angle type- mass production under study |
| | | CB1S002C00 | SJ106901 | | Right angle bulk type-started mass production |
| | 50 ohm | Mass production(under study) | | | |
| Cable side plug connector and Harness assembly | Mass production(under study) | | | | |

Technical drawing of a 4-pin connector. The drawing includes a side view, a front view, and a detail view of the pin contacts.

Side View Dimensions:

- Overall length: 16
- Pin length: 10 以上
- Pin diameter: $\phi 4.1$
- Pin pitch: 6.5
- Overall width: 7
- Pin diameter: $\phi 0.9$
- Pin length: 3.2
- Pin diameter: $\phi 0.9$
- Pin length: 3.7
- Pin diameter: $\phi 0.9$

Front View Dimensions:

- Overall width: 7
- Pin pitch: 6.5
- Pin diameter: $\phi 4.1$
- Pin length: 10 以上
- Pin diameter: $\phi 0.9$
- Pin length: 3.2
- Pin diameter: $\phi 0.9$
- Pin length: 3.7
- Pin diameter: $\phi 0.9$

Detail View Dimensions:

- Pin pitch: 5.08
- Pin diameter: $\phi 0.9$
- Pin length: 3.2
- Pin diameter: $\phi 0.9$
- Pin length: 3.7
- Pin diameter: $\phi 0.9$
- Pin length: 3.2
- Pin diameter: $\phi 0.9$
- Pin length: 3.7
- Pin diameter: $\phi 0.9$

Technical drawing of a 1000 Series Panel Mounting Bracket. The drawing includes three views: a front view (top), a side view (middle), and a top view (bottom). Dimensions are provided in millimeters.

Front View (Top): Shows the bracket's profile. Dimensions include a total width of 15, a mounting hole diameter of $\phi 1.1$ with a tolerance of ± 0.05 , and a mounting hole offset of 3.7 from the center. The bracket has a base thickness of 1 and a mounting flange thickness of 1. The mounting hole is labeled M5.5 x 0.5.

Side View (Middle): Shows the bracket's side profile. Dimensions include a total height of 5.9, a mounting hole diameter of $\phi 1.5$ with a tolerance of ± 0.05 , and a mounting hole offset of 4.4 from the center. The bracket has a base thickness of 1 and a mounting flange thickness of 1. The mounting hole is labeled M5.5 x 0.5.

Top View (Bottom): Shows the bracket's top profile. Dimensions include a total width of 9, a mounting hole diameter of $\phi 1.1$ with a tolerance of ± 0.05 , and a mounting hole offset of 3.7 from the center. The bracket has a base thickness of 1 and a mounting flange thickness of 1. The mounting hole is labeled M5.5 x 0.5.

Panel Thickness: The panel thickness is indicated as 1.

Notice: Products shown in this drawing are made for the applications listed below. If the above-mentioned products are used in aerospace devices, marine

Applicable
through hole
dimensions

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Recommended applications: computers, office machines, measuring devices, telecommunication devices (terminals, mobile devices), AV devices, household applications, FA devices, etc.