



BCL series

Connectors for Mobile Equipment

Outline

The BCL series are connectors for cradles, which have been designed for small sized mobile peripherals (PDAs). They are 1 mm pitch connectors, which save on board space and are low in cost.

Features

- These male connectors are one-piece molded units with gasket, making these connectors waterproof.
- Since the contacts of these female connectors are cleaned by a wiping effect, these contact surfaces become stable, and 10,000 insertion and extraction cycles are ensured.
- Polarity key location can be changed.
- These cable mount connectors are solder type, which can be attached to cables such as USB serial bus cables.

Principal Applications

PDA, etc.

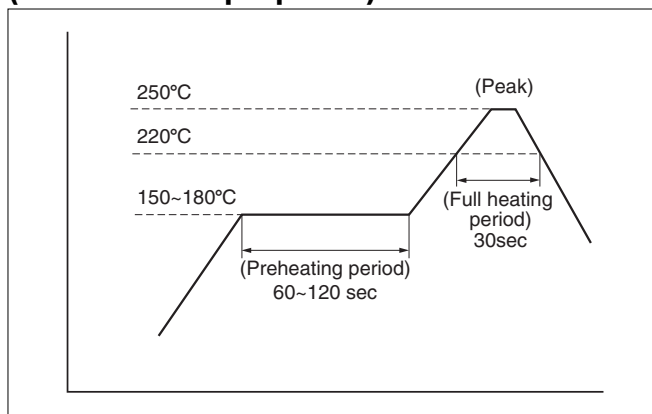
Electrical Characteristics

	BCL-C Series
Rated voltage	21V
Rated current	Signal contacts : 0.7A Power-supply contacts : 2.8A
Insulation resistance	500 megohms MIN. at 500V DC
Dielectric withstanding voltage	300V AC (r.m.s.) for one minute

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)

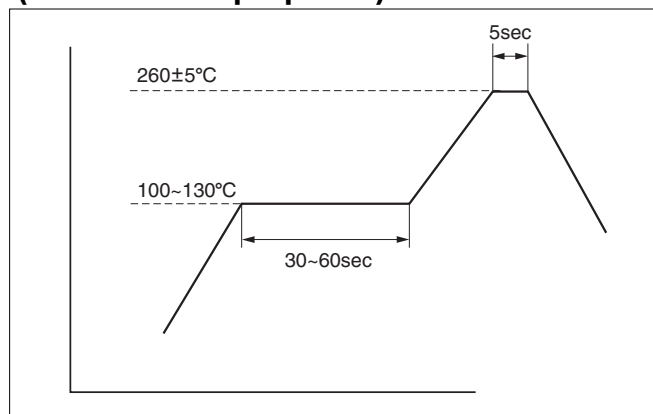


The reflow temperature profile shown in this drawing is for reference purposes. This profile depends on requirements such as reflow equipment, soldering paste, and PCB size. Thus, this profile may not meet with your specific situation. Please evaluate your PCB-mounting soldering and set your own reflow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

●Applicable products

BCL-C18LMYG

Flow temperature profile (for reference purposes)



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

●Applicable products

BCL-C18LFDG1

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

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Product List



Right-angle SMT type
male connector
for mobile equipment
BCL-C18LMYG
G-18
BCL series...4



Cradle-side right-angle
through hole type female connector
for mobile equipment
BCL-C18LFDG1
G-19
BCL series...5



Cable-side straight soldering type
female connector
for mobile equipment
BCL-C18SPFSG1
G-20
BCL series...6



Cable mount female connector
with plastic hood
for mobile equipment
BCL-C18SP
G-21
BCL series...7

Right-angle SMT type male connector for mobile equipment BCL-C18LMYG

For mobile equipment

For PCB

Right-angle SMT

RoHS

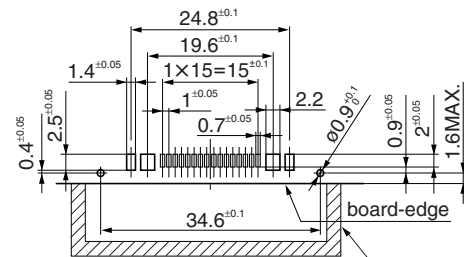
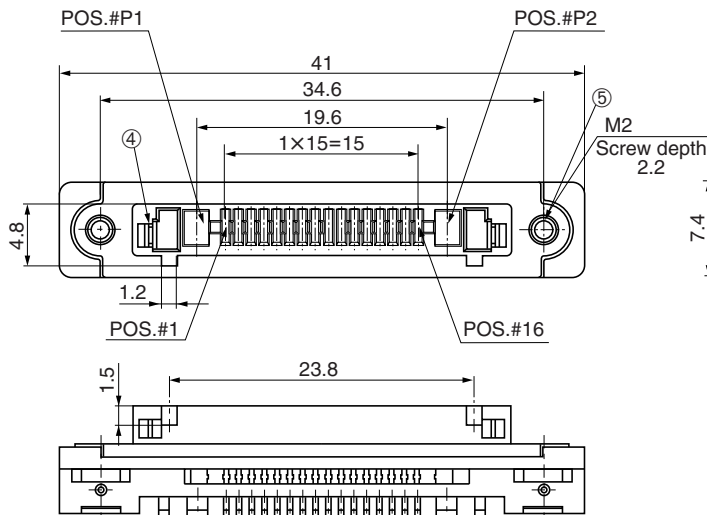
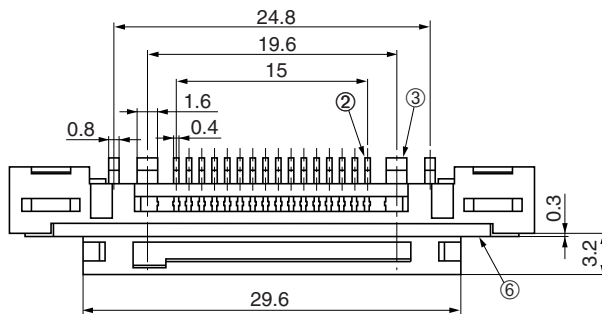


● Configuration of product Part No.

BCL-C 18 LMY G

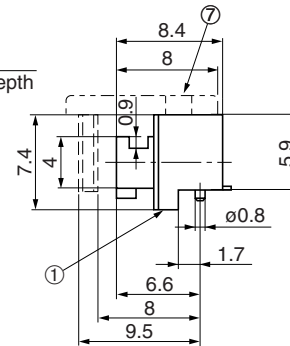
① ② ③ ④

- ① Series name
- ② No. of contacts: 18
- ③ Type of contact
LMY: Right-angle SMT type, male
- ④ Contact plating
G: Gold plate



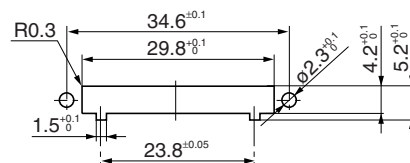
Recommended PCB layout
t = 1.0 mm

Area (See Note #2)



● Components

①	Insulator
②	Signal contacts
③	Power-supply contacts
④	Latch
⑤	Screw
⑥	Gasket
⑦	Vacuum cap



Recommended panel cut-out dimensions
t = 1.4 mm MAX.

Note 1: These products are one-piece units with molded-in contacts and gasket, making these connectors waterproof (IPX5 or equivalent).

Note 2: Area indicates support for 18 pos. Connector during soldering assembly process. Design to breakaway after assembly.

Mating connectors: BCL-C18LFDG1, BCL-C18SP (BCL-C18SPFSG1)

Cradle-side right-angle through hole type female connector for mobile equipment BCL-C18LFDG1

RoHS

For mobile equipment

Cradle side

For PCB

Right-angle Through hole

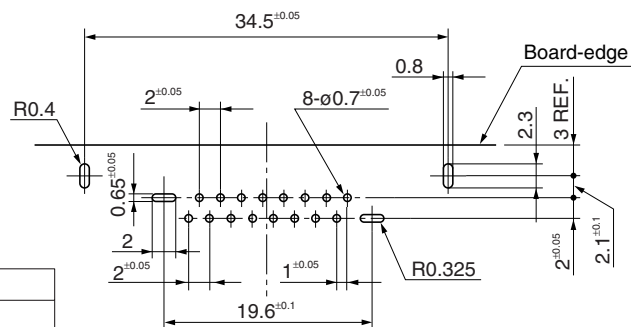
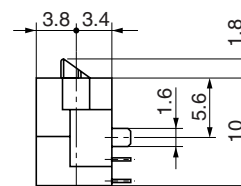
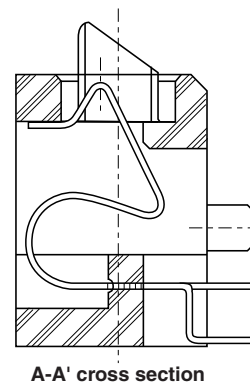
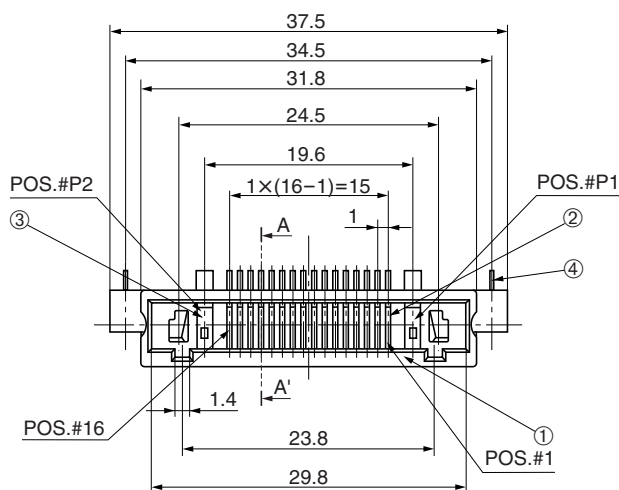


● Configuration of product Part No.

BCL-C 18 LFD G1

① ② ③ ④

- ① Series name
- ② No. of contacts: 18
- ③ Type of contact
LFD: Right-angle through hole type, female
- ④ Contact plating
G1: Gold plate



● Components

①	Insulator
②	Signal contacts
③	Power-supply contacts
④	Metal locating pin

Recommended PCB layout
t = 1.0 mm

Mating connectors: BCL-C18LMYG

Cable-side straight soldering type female connector for mobile equipment BCL-C18SPFSG1

RoHS

For mobile equipment

Cable side

Soldering

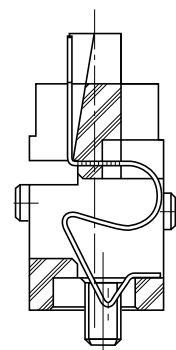
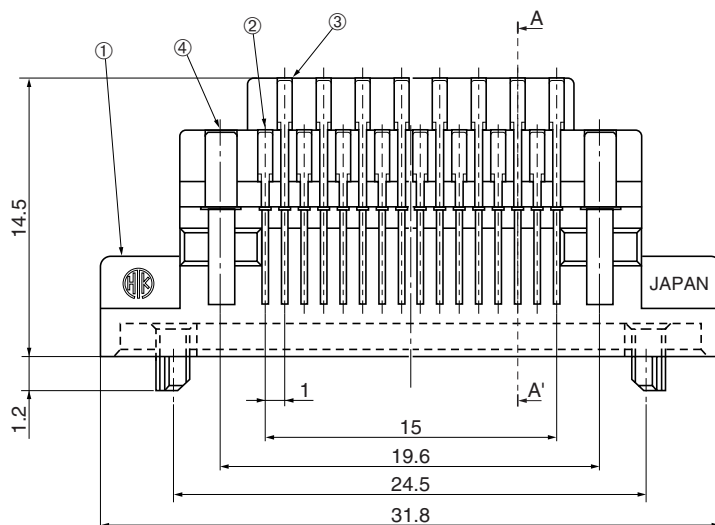


● Configuration of product Part No.

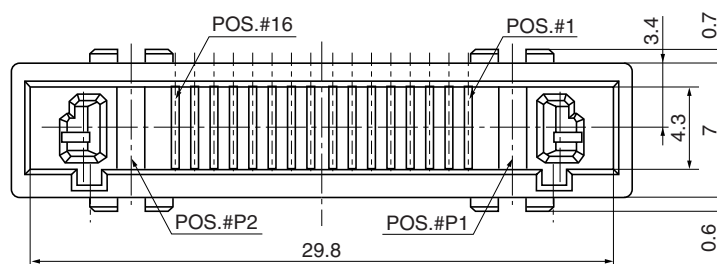
BCL-C 18 SPFS G1

① ② ③ ④

- ① Series name
- ② No. of contacts: 18
- ③ Type of contact
SPFS: Straight soldering type, female
- ④ Contact plating
G1: Gold plate



A-A' cross section



● Components

①	Insulator
②	Shorter signal contacts
③	Longer signal contacts
④	Power-supply contacts

Mating connectors: BCL-C18LMYG

Cable mount female connector with plastic hood for mobile equipment
BCL-C18SP

RoHS

For mobile equipment

Cable side

Female connector with plastic hood

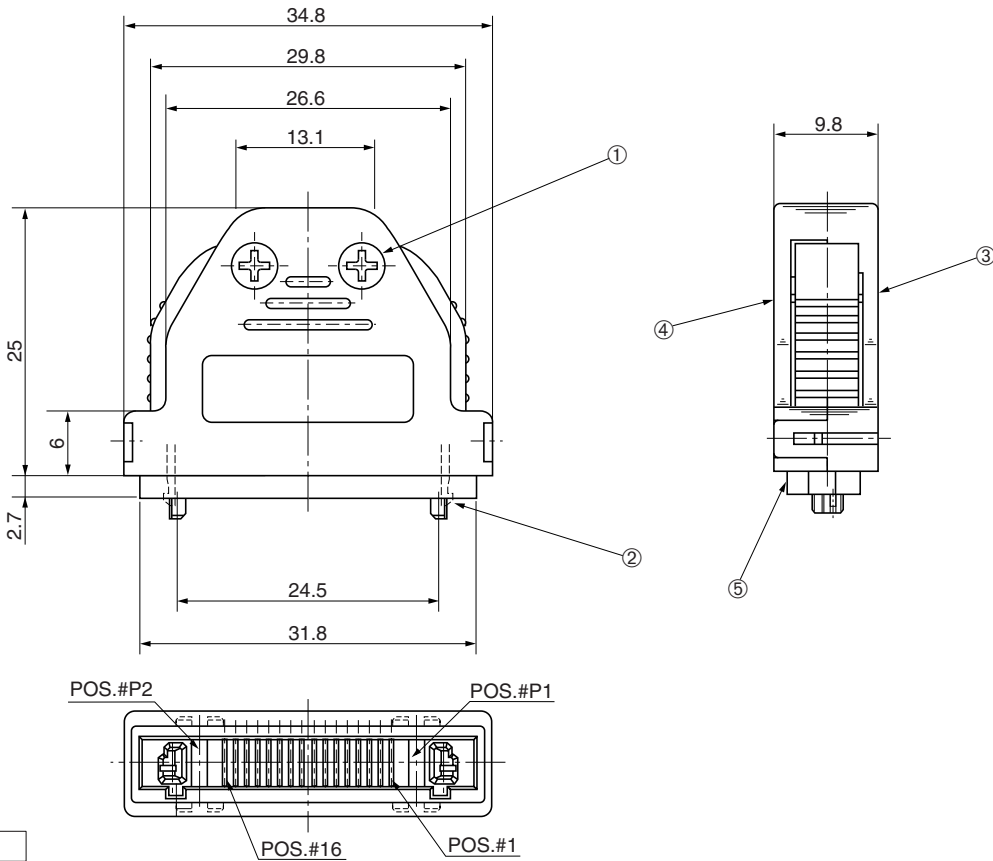


● Configuration of product Part No.

BCL-C 18 SP

① ② ③

- ① Series name
② No. of contacts: 18
③ BCL-C18SPFSG1 with plastic hood



● Components

①	Screw
②	Latch
③	Plastic hood A
④	Plastic hood B
⑤	Connector

Note: These products consist of a connector
BCL-C18SPFSG1 and plastic hood.

Mating Connector: BCL-C18LMYG