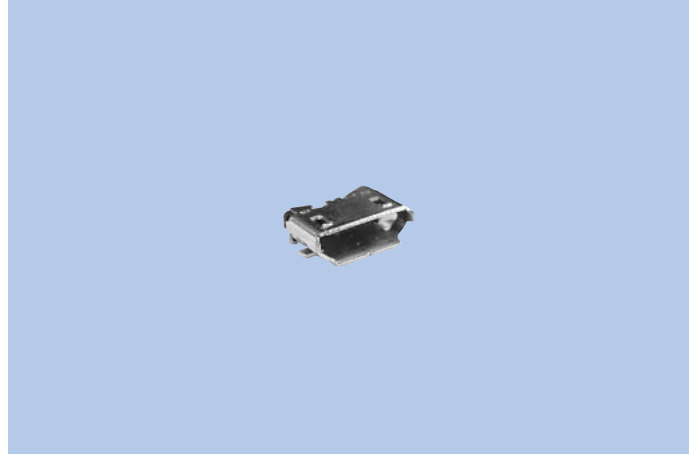


# Micro-USB Connectors "Micro-B Series" CAM-H48 Series

## FEATURES

1. Compatible with Micro-USB standards. (USB2.0)
2. Small and more durable than Mini-USB connectors.
3. Soldering area to make connectors more reliable.



## CAM-H48 Series LIST

Model	Receptacle	Connector Type
CAM-H48N	Normal type	Type B
CAM-H48ML	Mid-mount type	
CAM-H48R	Reverse type	
CAM-H48ND	Normal DIP type	
CAM-H48RD	Reverse DIP type	

## HOW TO ORDER

### 1. CAM-H48N

**H48N-005-21 0-A C G M A**  
 1 2 3 4 5 6 7 8 9

- 1 Series No. (H48N)
- 2 No. of contacts (005 : 5pins)
- 3 Housing material (21 : LCP resin)
- 4 UL grade (0 : UL94V-0)
- 5 Contact plating (A : Gold)
- 6 Contact plating thickness (C : 0.76µm)
- 7 Contact style (G : Angle SMT)  
(E : Straight SMT)
- 8 Coupling side accessories (M : Shield Case)
- 9 Board side accessories (A : None)

### 2. CAM-H48ML

**H48ML-005-21 0-A C E M A**  
 1 2 3 4 5 6 7 8 9

- 1 Series No. (H48ML)
- 2 No. of contacts (005 : 5pins)
- 3 Housing material (21 : LCP resin)
- 4 UL grade (0 : UL94V-0)
- 5 Contact plating (A : Gold)
- 6 Contact plating thickness (C : 0.76µm)
- 7 Contact style (G : Angle SMT)  
(E : Straight SMT)
- 8 Coupling side accessories (M : Shield Case)
- 9 Board side accessories (A : None)

3. CAM-H48R

**H48R-005-21 0-A C G M A**  
1 2 3 4 5 6 7 8 9

- 1 Series No. (H48R)
- 2 No. of contacts (005 : 5pins)
- 3 Housing material (21 : LCP resin)
- 4 UL grade (0 : UL94V-0)
- 5 Contact plating (A : Gold)
- 6 Contact plating thickness (C : 0.76μm)
- 7 Contact style (G : Angle SMT)  
(E : Straight SMT)
- 8 Coupling side accessories (M : Shield Case)
- 9 Board side accessories (A : None)

4. CAM-H48ND

**H48ND-005-21 0-A C G M A**  
1 2 3 4 5 6 7 8 9

- 1 Series No. (H48ND)
- 2 No. of contacts (005 : 5pins)
- 3 Housing material (21 : LCP resin)
- 4 UL grade (0 : UL94V-0)
- 5 Contact plating (A : Gold)
- 6 Contact plating thickness (C : 0.76μm)
- 7 Contact style (G : Angle SMT)  
(E : Straight SMT)
- 8 Coupling side accessories (M : Shield Case)
- 9 Board side accessories (A : None)

5. CAM-H48RD

**H48RD-005-21 0-A C G M A**  
1 2 3 4 5 6 7 8 9

- 1 Series No. (H48RD)
- 2 No. of contacts (005 : 5pins)
- 3 Housing material (21 : LCP resin)
- 4 UL grade (0 : UL94V-0)
- 5 Contact plating (A : Gold)
- 6 Contact plating thickness (C : 0.76μm)
- 7 Contact style (G : Angle SMT)  
(E : Straight SMT)
- 8 Coupling side accessories (M : Shield Case)
- 9 Board side accessories (A : None)

## SPECIFICATIONS

### ELECTRICAL CHARACTERISTICS

Rated Voltage	5V AC (rms)
Rated Current	When power is being applied on the power supply terminal; 1.8A/1 contact (No. 1&5 pin) When power is being applied on the signal terminal; 1A/1 contact (No. 2&3&4 pin)
Withstanding Voltage	100V AC (rms) 1minute
Contact Resistance	30mΩ max.

### MECHANICAL CHARACTERISTICS

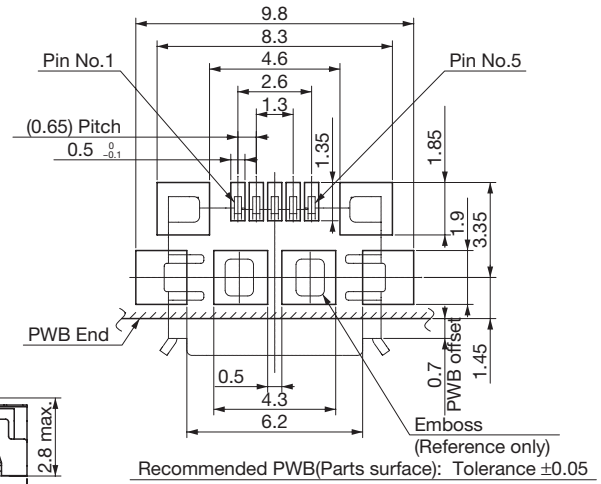
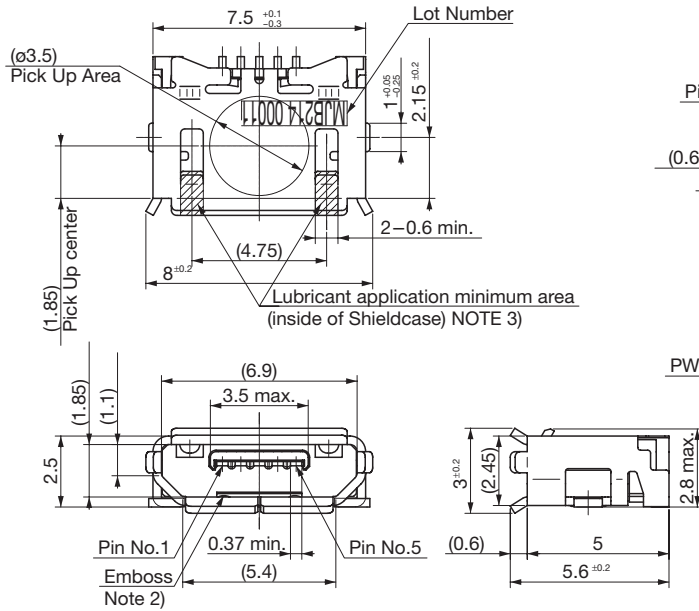
Life (Matching Cycle)	10,000times
Total Insertion Force	35N (3.57kgf) max.
Total Withdrawal Force	Beginning 8N (0.82kgf) min. After 10,000 times 8~20N (0.82~2.04kgf)

## MATERIAL & FINISH

Component parts		Material	Finish
CAM-H48 Series	Housing	LCP	Black
	Contact	Copper alloy	Gold plating
	Shield Case	SUS	Ni+Sn reflow

# DIMENSIONS

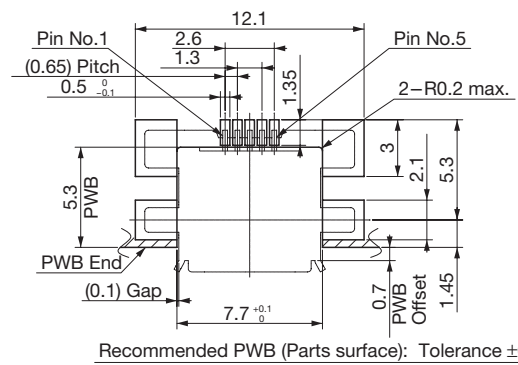
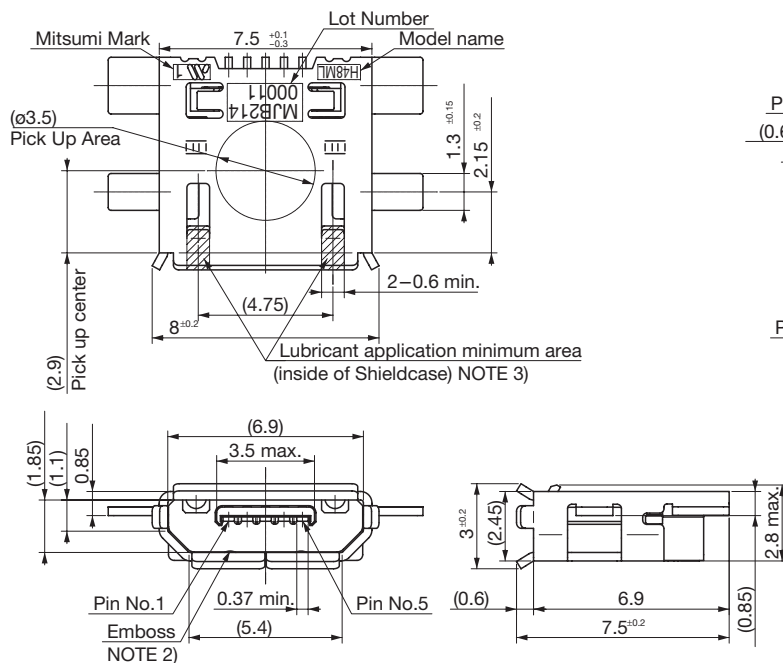
## CAM-H48N



- Notes
- 1) Correspond to Micro-USB specification.
  - 2) Provides an emboss shape and shield tail shape.
  - 3) It applies a fluorinated lubricant to the illustration range.

## CAM-H48ML

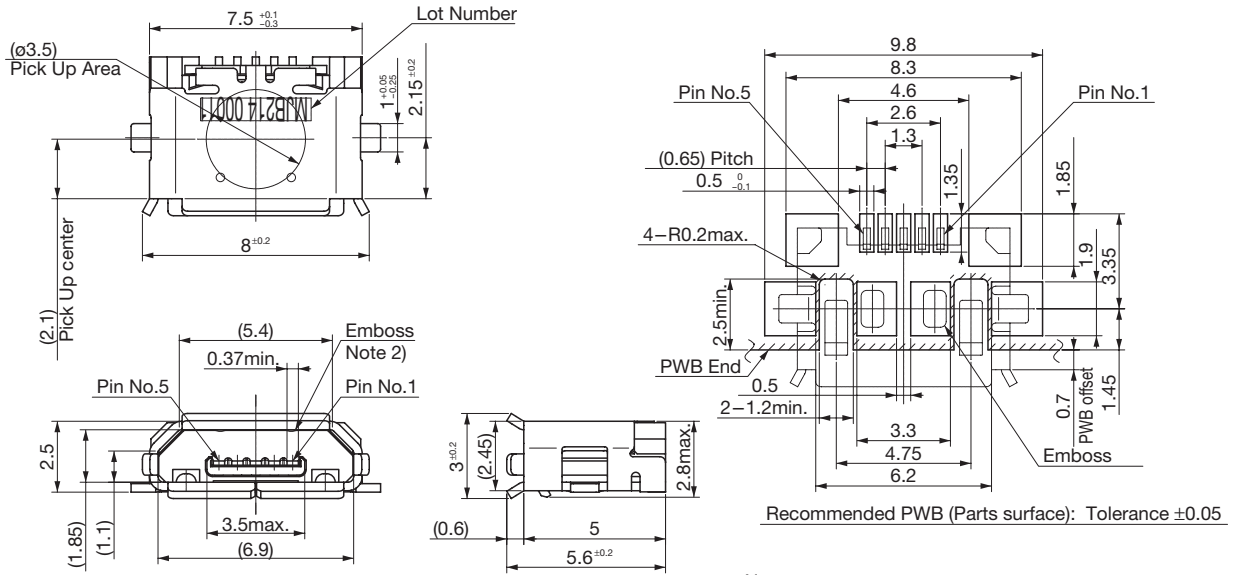
Unit: mm



- NOTES
- 1) Correspond to Micro-USB specification.
  - 2) Provides an emboss shape. Purpose for peeling strength up, provides 4 portion of wing shape and total length is 7.5mm.
  - 3) It applies a fluorinated lubricant to the illustration range.

Unit: mm

**CAM-H48R**

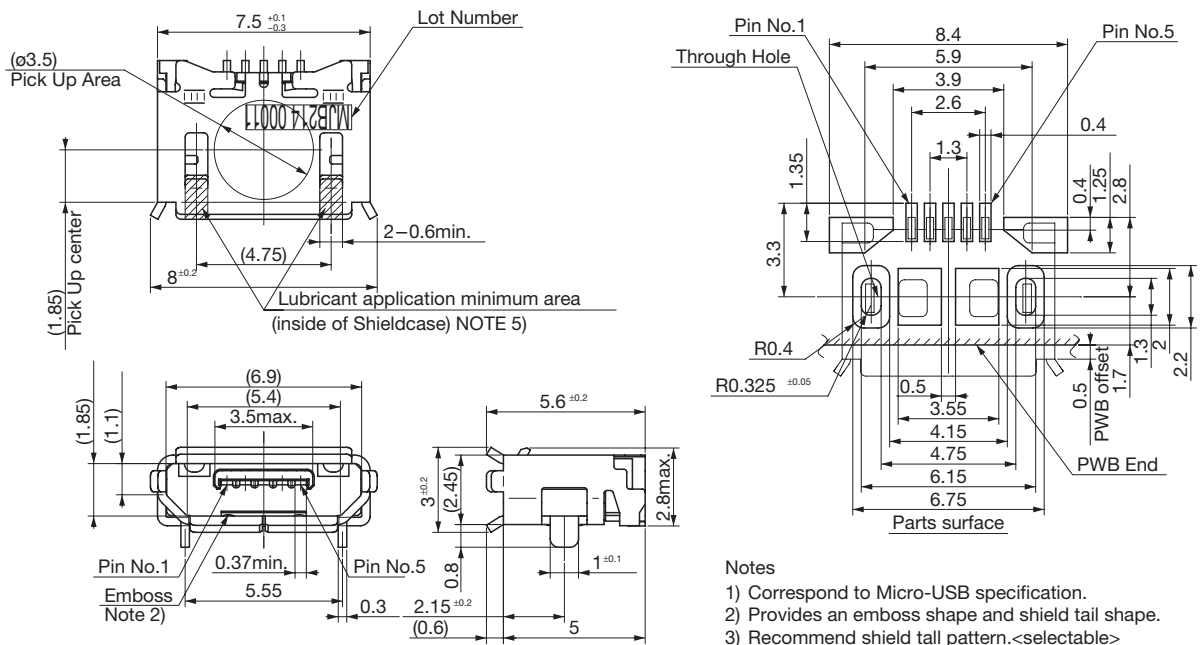


**Notes**

- 1) Correspond to Micro-USB specification.
- 2) Provides an emboss shape and shield tail shape.
- 3) It applies a fluorinated lubricant to the illustration range.

**CAM-H48ND**

Unit: mm

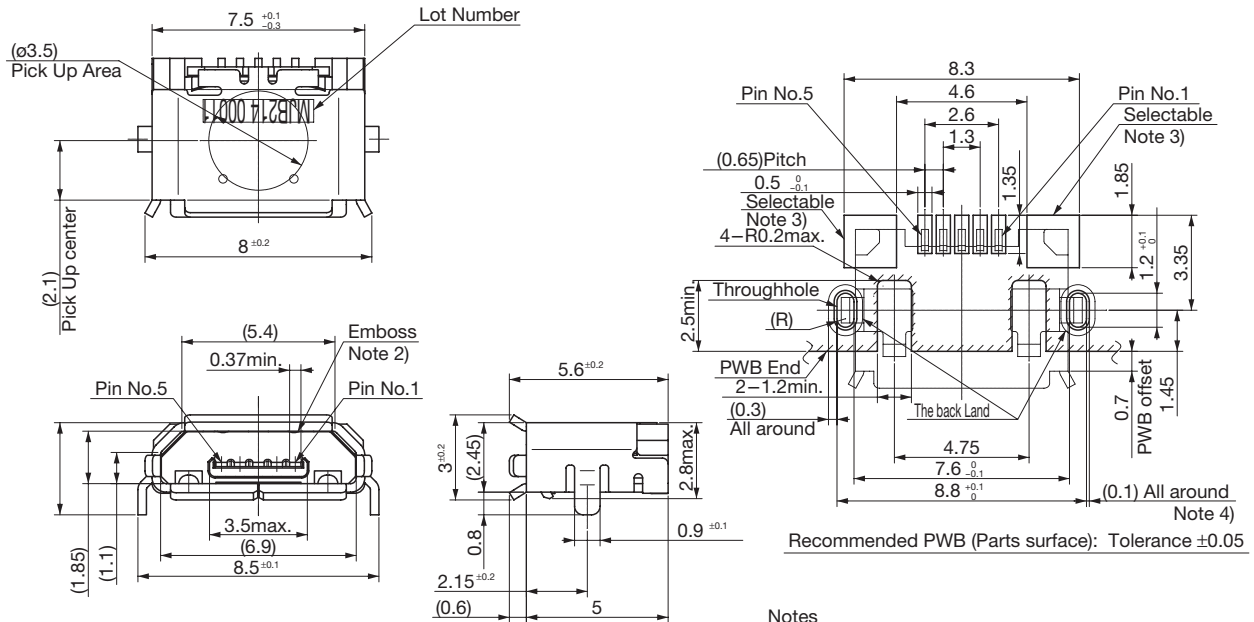


**Notes**

- 1) Correspond to Micro-USB specification.
- 2) Provides an emboss shape and shield tail shape.
- 3) Recommend shield tall pattern.<selectable>
- 4) The product is made for reflow mounting.  
The soldering area of the dip part is reduced to prevent the solder from going up to the connector.
- 5) It applies a fluorinated lubricant to the illustration range.

Unit: mm

CAM-H48RD



Notes

- 1) Correspond to Micro-USB specification.
- 2) Provides an emboss shape and shield tail shape.
- 3) Recommend shield tall pattern.<selectable>
- 4) The product is made for reflow mounting.  
The soldering area of the dip part is reduced to prevent the solder from going up to the connector.
- 5) It applies a fluorinated lubricant to the illustration range.

Unit: mm