

GT8E Series

2.0mm Pitch, Wire-to-Board, Wire-to-Wire Connector



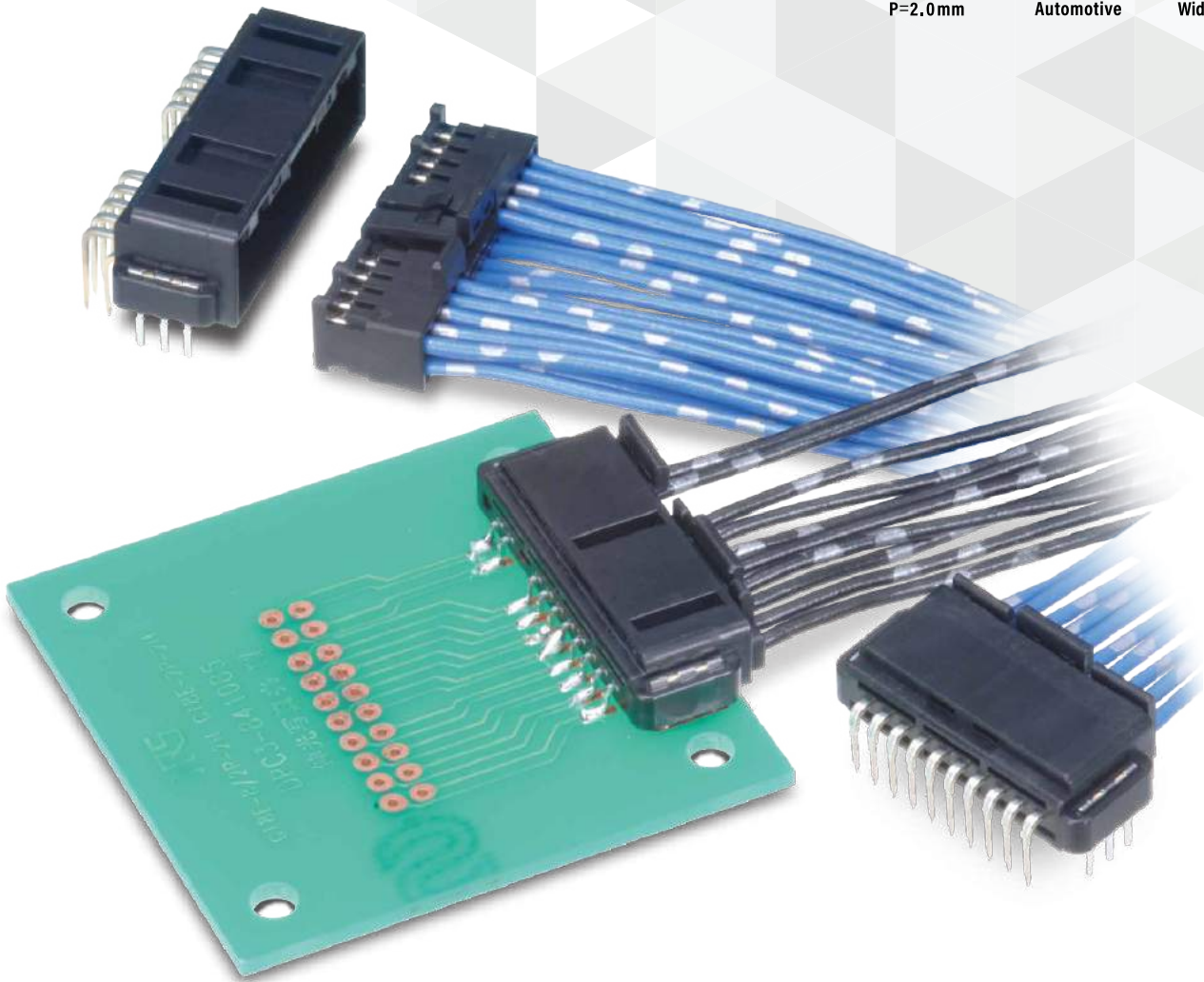
P=2.0mm



Automotive



Wide Variation



Features

1. Contact portion oxidation prevention

Air-tight dimple design prevents oxidation of the contact portion.

2. Mis-insertion prevention design

3. Prying prevention

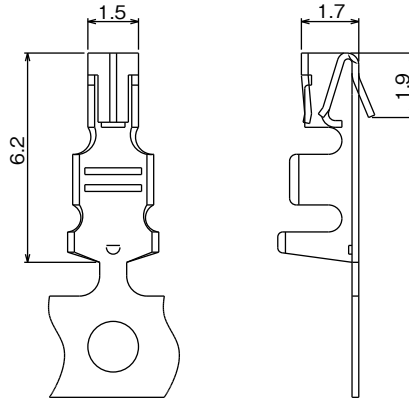
4. Ensures high peeling strength

The SMT type pin header uses a lead reflow retention tab to ensure high peeling strength.

Applications

For use inside automotive and industrial equipment.

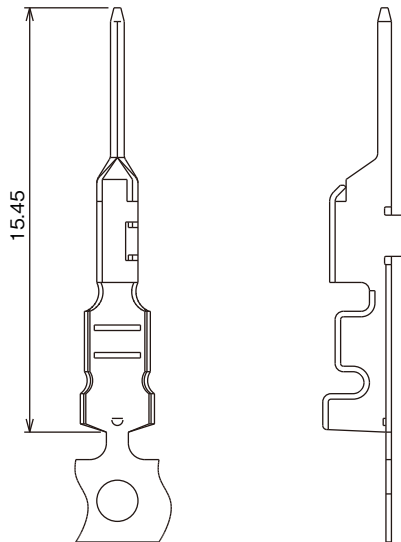
Female Connector Terminal



| Part No. | HRS No. | Material | Finish | Wire Size | Jacket Outer Diameter | Purchase Unit |
|--------------------|------------------|-----------------|--------------|-----------|-----------------------|--------------------|
| GT8E-2022SCF | CL0758-0033-4-00 | Phosphor Bronze | Tin Plating | 20-22 AWG | φ 1.3-1.5 | 10,000pcs per reel |
| GT8E-2022SCF(01) | CL0758-0033-4-01 | | Gold Plating | | | |
| GT8B-2428SCF | CL0758-0055-7-00 | | Tin Plating | 24-28 AWG | φ 0.9-1.1 | |
| GT8B-2428SCF(01) | CL0758-0055-7-01 | | Gold Plating | | | |
| GT8E-2022SC (Note) | CL0758-0101-2-00 | | Tin Plating | 20-22 AWG | φ 1.3-1.5 | 100pcs per bag |

Note : Product packaged in bag for use with hand tool.

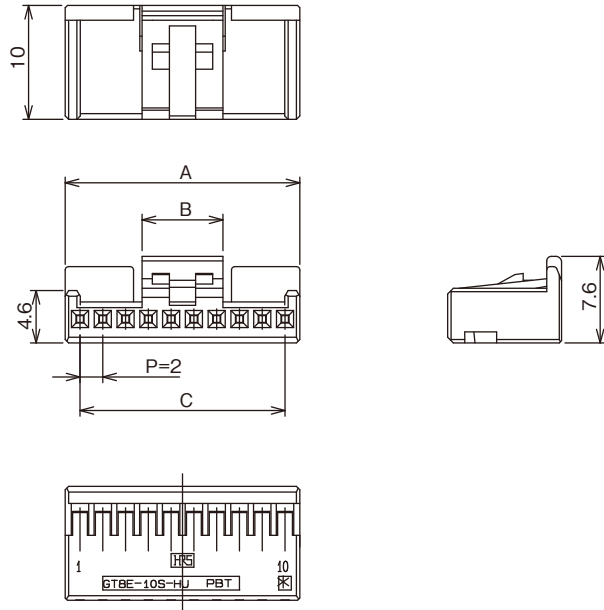
Male Connector Terminal



| Part No. | HRS No. | Material | Finish | Wire Size | Jacket Outer Diameter | Purchase Unit |
|---------------|------------------|----------|--------------|-----------|-----------------------|--------------------|
| GT8E-2022PCF | CL0758-0039-0-00 | Brass | Tin Plating | 20-22 AWG | φ 1.3-1.5 | 10,000pcs per reel |
| GT8EF-2022PCF | CL0758-0111-6-00 | | Gold Plating | | | 8,000pcs per reel |
| GT8E-2428PCF | CL0758-0067-6-00 | | Tin Plating | 24-28 AWG | φ 0.9-1.1 | 10,000pcs per reel |
| GT8EF-2428PCF | CL0758-0106-6-00 | | Gold Plating | | | 8,000pcs per reel |

Female Connector Housing (1 Row Type)

● GT8E-#S-HU

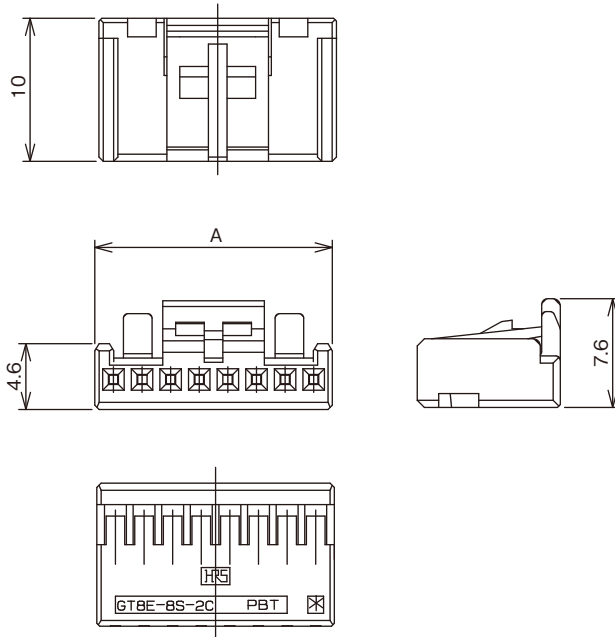


Unit : mm

| Part No. | HRS No. | Material | Color | No. of Pos. | A | B | C | Purchase Unit |
|-------------|------------------|----------|-------|-------------|-----|------|-----|----------------|
| GT8E-3S-HU | CL0758-0061-0-00 | PBT | Black | 3 | 7.9 | 7.9 | 4.0 | 100pcs per bag |
| GT8E-4S-HU | CL0758-0047-9-00 | | | 4 | 8.6 | 8.6 | 6.0 | |
| GT8E-5S-HU | CL0758-0062-2-00 | | | 5 | 7.1 | 8.0 | | |
| GT8E-6S-HU | CL0758-0048-1-00 | | | 6 | | 10.0 | | |
| GT8E-7S-HU | CL0758-0063-5-00 | | | 7 | | 12.0 | | |
| GT8E-8S-HU | CL0758-0049-4-00 | | | 8 | | 14.0 | | |
| GT8E-10S-HU | CL0758-0050-3-00 | | | 10 | | 18.0 | | |

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
 The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

● GT8E-#S-2C



Unit : mm

| Part No. | HRS No. | Material | Color | No. of Pos. | A | Purchase Unit |
|------------|------------------|----------|-------|-------------|------|-------------------|
| GT8E-2S-2C | CL0758-0030-6-00 | PBT | Black | 2 | 7.1 | 100pcs per bag |
| GT8E-8S-2C | CL0758-0029-7-00 | | | 8 | 16.6 | |

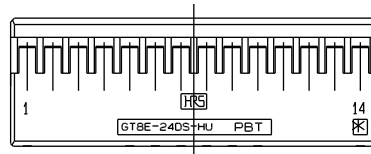
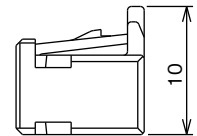
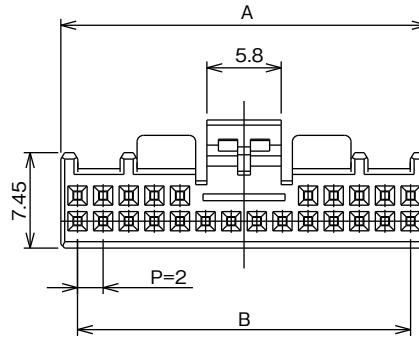
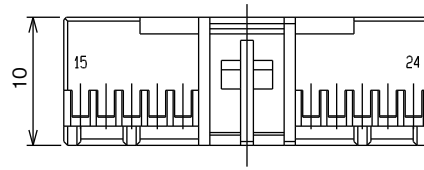
Note 1 : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.

The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

Note 2 : Socket GT8E-2S-2C mates with GT8E-2P-2H(57), GT8E-8/2P-2H(56) and GT8E-2P-DS(55).

Socket GT8E-8S-2C mates with GT8E-8/2P-2H(56) and GT8E-8/5P-2H(55).

Female Connector Housing (2 Row Type)

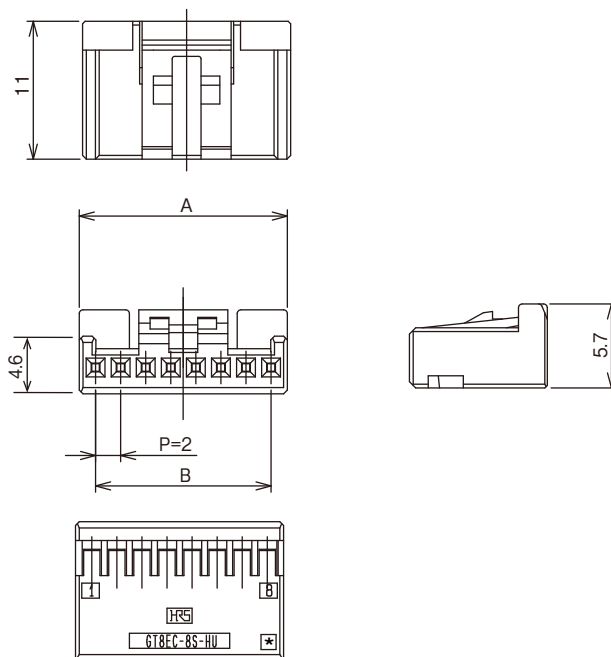


Unit : mm

| Part No. | HRS No. | Material | Color | No. of Pos. | A | B | Purchase Unit |
|--------------|------------------|----------|-------|-------------|-------|------|----------------|
| GT8E-12DS-HU | CL0758-0051-6-00 | PBT | Black | 12 | 16.6 | 14.0 | 100pcs per bag |
| GT8E-16DS-HU | CL0758-0064-8-00 | | | 16 | 21.85 | 18.0 | |
| GT8E-20DS-HU | CL0758-0052-9-00 | | | 20 | 24.6 | 22.0 | |
| GT8E-24DS-HU | CL0758-0054-4-00 | | | 24 | 28.6 | 26.0 | |

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
 The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

Female Connector Housing (Low Height Type)



Unit : mm

| Part No. | HRS No. | Material | Color | No. of Pos. | A | B | Purchase Unit |
|--------------|------------------|----------|-------|-------------|------|------|----------------|
| GT8EC-3S-HU | CL0758-1017-3-00 | PBT | Black | 3 | 7.9 | 4.0 | 100pcs per bag |
| GT8EC-5S-HU | CL0758-0074-1-00 | | | 5 | 12.0 | 8.0 | |
| GT8EC-8S-HU | CL0758-1018-6-00 | | | 8 | 16.6 | 14.0 | |
| GT8EC-14S-HU | CL0758-0224-2-00 | | | 14 | 28.4 | 26.0 | |

Note : The compatible terminals for tin plating are GT8E-2022SCF, GT8B-2428SCF, and GT8E-2022SC.
 The compatible terminals for gold plating are GT8E-2022SCF(01) and GT8B-2428SCF(01).

In-line Type

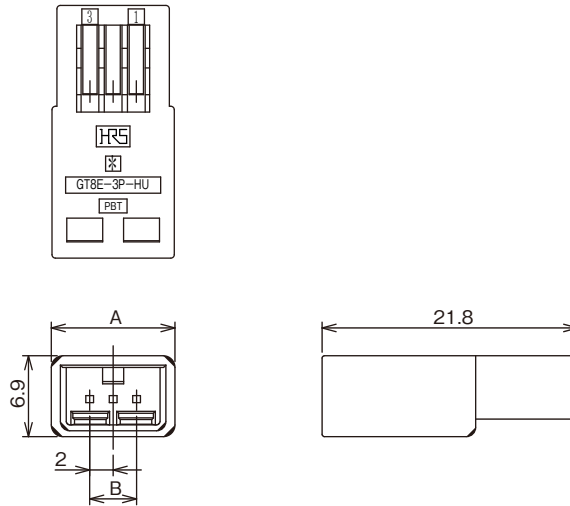
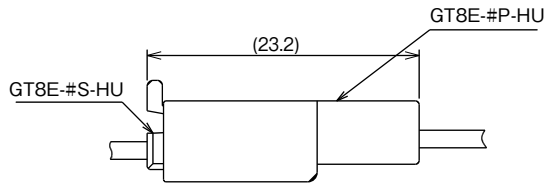


Diagram of Mating Condition During Use



Unit : mm

| Part No. | HRS No. | Material | Color | No. of Pos. | A | B | Purchase Unit |
|------------|------------------|----------|-------|-------------|-------|------|----------------|
| GT8E-3P-HU | CL0758-0084-5-00 | PBT | Black | 3 | 10.55 | 4.0 | 100pcs per bag |
| GT8E-4P-HU | CL0758-0082-0-00 | | | 4 | | 6.0 | |
| GT8E-8P-HU | CL0758-0038-8-00 | | | 8 | | 14.0 | |

Note 1 : The compatible terminals for tin plating are GT8E-2022PCF and GT8E-2428PCF.

The compatible terminals for gold plating are GT8EF-2022PCF and GT8EF-2428PCF.

Note 2 : GT8E-3P-HU mates with GT-8E-3S-HU. GT8E-4P-HU mates with GT8E-4S-HU. GT8E-8P-HU mates with GT8E-8S-2C.

Note 3 : GT8E-8P-HU can mate with GT8E-8S-HU, but if mated at a diagonal can interfere with the male terminal.

Right Angle Pin Header (1 Row SMT Type)

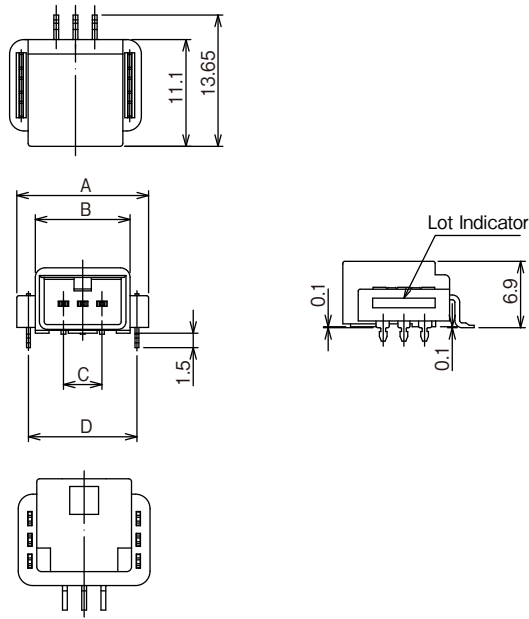
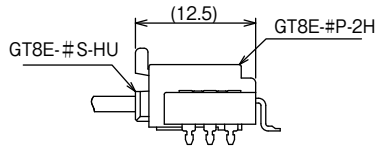
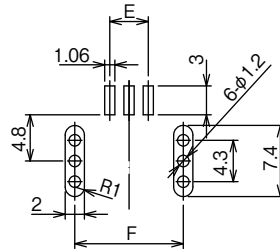


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | E | F | Purchase Unit | |
|-----------------|------------------|---------------------------------|--|-------------|------|------|-------|-------|-------|-------|-----------------|-----------------|
| GT8EA-2P-2H(55) | CL0758-0113-1-55 | Material : PPS Color : Black | Tin Plating | 2 | 12.9 | 9.05 | 2.0 | 10.58 | 2.0 | 10.58 | 450pcs per reel | |
| GT8E-3P-2H(55) | CL0758-0096-4-55 | | | | | | | | | | | |
| GT8E-3P-2H(56) | CL0758-0096-4-56 | | Contact Area : Gold Plating Mounting Area : Tin Plating | 3 | 13.7 | 9.85 | 4.0 | 11.28 | 4.0 | 11.28 | 400pcs per reel | |
| GT8E-4P-2H(55) | CL0758-0079-5-55 | | Tin Plating | | 4 | 14.4 | 10.55 | 6.0 | 11.98 | 6.0 | 11.98 | 450pcs per reel |
| GT8E-5P-2H(55) | CL0758-1004-1-55 | | | | 5 | 17.8 | 13.95 | 8.0 | 15.38 | 8.0 | 15.38 | |
| GT8E-6P-2H(55) | CL0758-1005-4-55 | | | | 6 | 18.4 | 14.55 | 10.0 | 15.98 | 10.0 | 15.98 | |
| GT8E-7P-2H(55) | CL0758-0126-3-55 | | | | 7 | 21.4 | 17.55 | 12.0 | 18.98 | 12.0 | 18.98 | |
| GT8E-8P-2H(55) | CL0758-1006-7-55 | | | | 8 | 22.4 | 18.55 | 14.0 | 19.98 | 14.0 | 19.98 | |
| GT8E-10P-2H(55) | CL0758-1007-0-55 | | | | 10 | 26.4 | 22.55 | 18.0 | 23.98 | 18.0 | 23.98 | |
| GT8E-14P-2H(55) | CL0758-0223-0-55 | | | | 14 | 36.4 | 30.55 | 26.0 | 31.78 | 26.0 | 31.78 | |

Right Angle Pin Header (2 Row SMT Type)

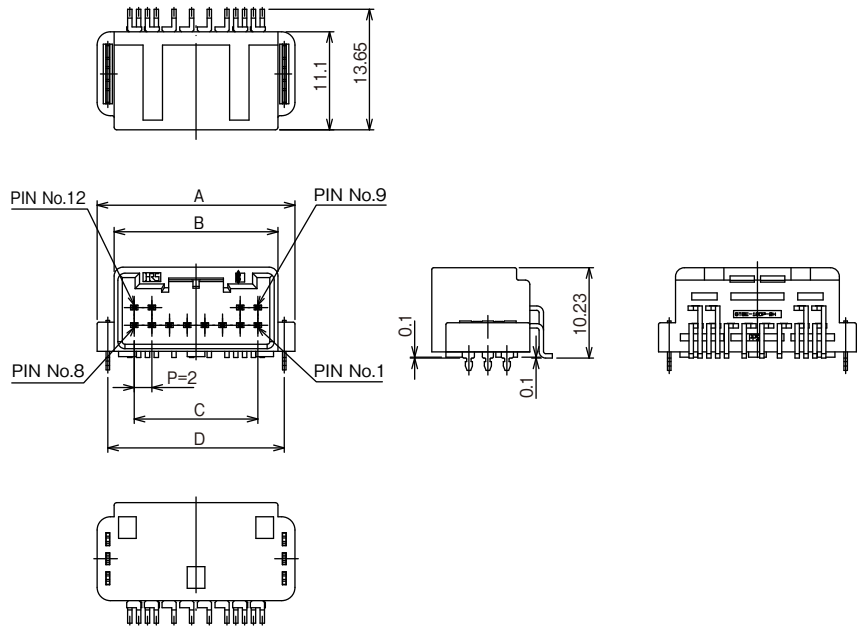
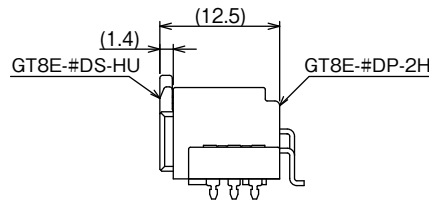
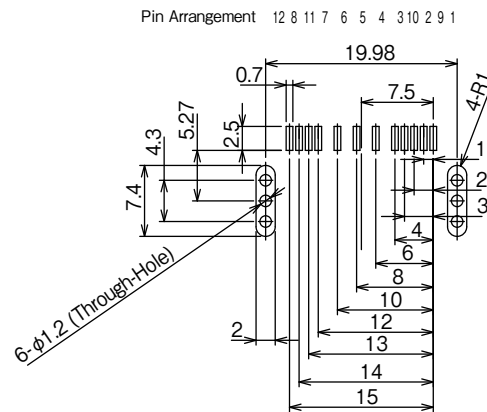


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | Purchase Unit |
|------------------|------------------|---------------------------------|-------------------|-------------|-------|-------|------|-------|-----------------|
| GT8E-12DP-2H(55) | CL0758-1008-2-55 | Material : PPS Color : Black | Tin Plating | 12 | 22.4 | 18.55 | 14.0 | 19.98 | 300pcs per reel |
| GT8E-16DP-2H(55) | CL0758-1009-5-55 | | | 16 | 27.45 | 23.6 | 18.0 | 25.03 | |
| GT8E-20DP-2H(55) | CL0758-1010-4-55 | | | 20 | 30.2 | 26.35 | 22.0 | 27.78 | |
| GT8E-24DP-2H(55) | CL0758-1011-7-55 | | | 24 | 34.2 | 30.35 | 26.0 | 31.78 | |

Straight Pin Header (1 Row SMT Type)

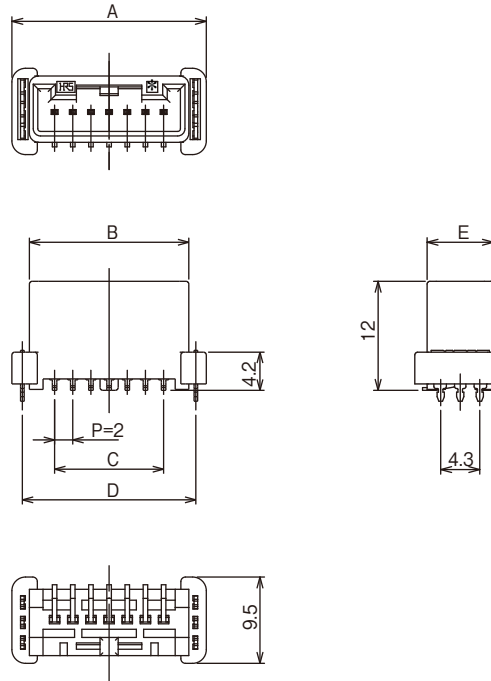
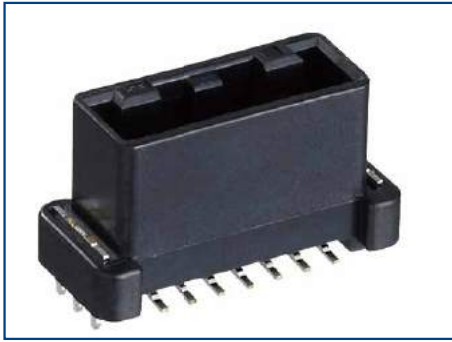
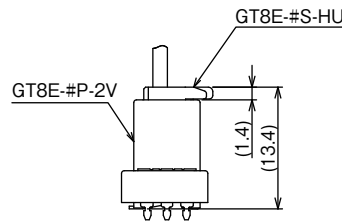
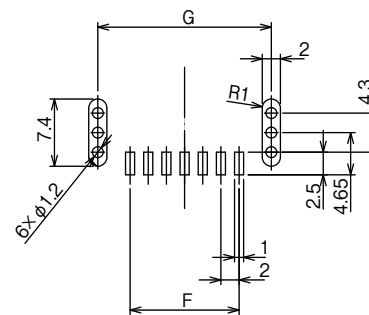


Diagram of Mating Condition During Use



Recommended PCB Dimensions (Connector Side)



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | E | F | G | Purchase Unit |
|-----------------|------------------|---------------------------------|-------------------|-------------|------|-------|------|-------|------|------|-------|-----------------|
| GT8E-2P-2V(55) | CL0758-0202-0-55 | Material : PPS Color : Black | Tin Plating | 2 | 13.0 | 9.15 | 2.0 | 10.6 | 6.85 | 2.0 | 10.6 | 300pcs per reel |
| GT8E-4P-2V(55) | CL0758-0121-0-55 | | | 4 | 14.4 | 10.55 | 6.0 | 11.98 | 7.3 | 6.0 | 11.98 | |
| GT8E-7P-2V(55) | CL0758-0227-0-55 | | | 7 | 21.4 | 17.55 | 12.0 | 19.1 | 7.3 | 12.0 | 19.1 | |
| GT8E-10P-2V(55) | CL0758-0232-0-55 | | | 10 | 26.4 | 22.55 | 18.0 | 24.1 | 7.3 | 18 | 24.1 | |

Straight Pin Header (1 Row SMT with L-shaped Retention Tabs)

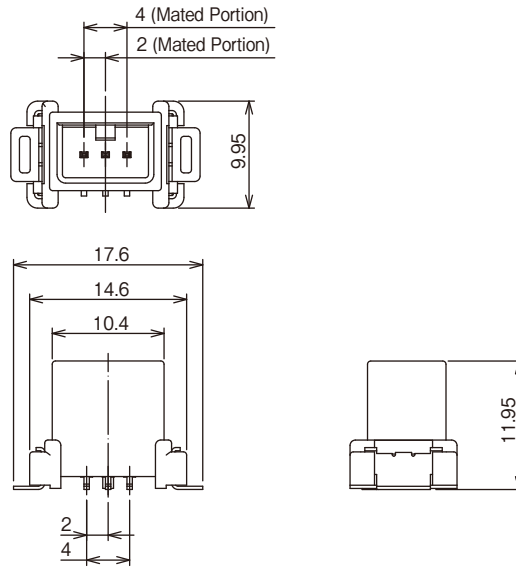
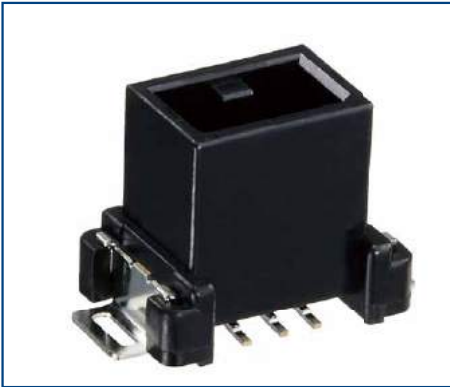
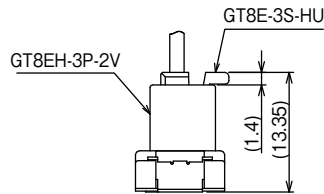
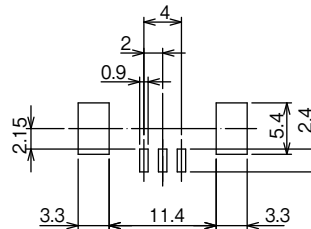


Diagram of Mating Condition During Use

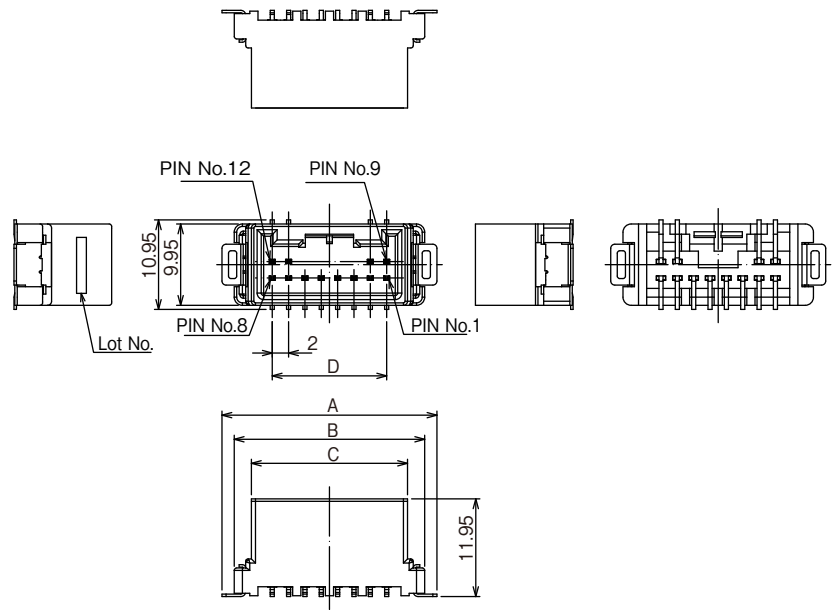
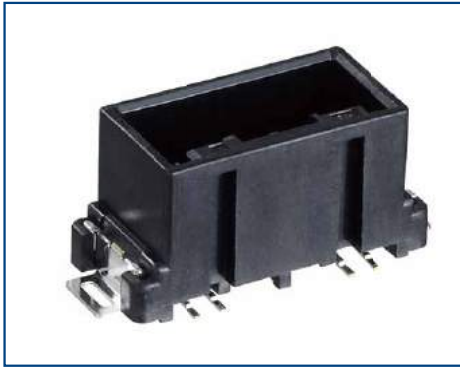


Recommended PCB Dimensions

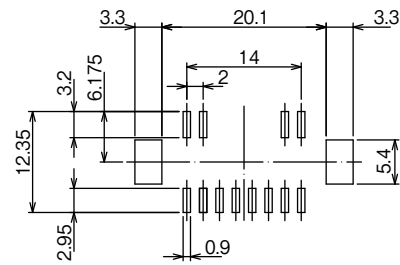


| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | Purchase Unit |
|-----------------|------------------|---------------------------------|-------------------|-------------|-----------------|
| GT8EH-3P-2V(55) | CL0758-1016-0-55 | Material : PPS Color : Black | Tin Plating | 3 | 200pcs per reel |

Straight Pin Header (2 Row SMT with L-shaped Retention Tabs)



Recommended PCB Dimensions



Note : Drawing of GT8EH-12DP-2V(58)

Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | Purchase Unit |
|-------------------|------------------|---------------------------------|--------------------------------|-------------|------|------|------|------|-----------------|
| GT8EH-12DP-2V(58) | CL0758-1019-9-58 | Material : PPS Color : Black | Tin Plating | 12 | 26.3 | 23.3 | 19.1 | 14.0 | 200pcs per reel |
| GT8EH-14DP-2V(56) | CL0758-0225-5-56 | | Contact Area : Gold Plating | 14 | 28.3 | 25.3 | 21.1 | 16 | |
| GT8EH-24DP-2V(57) | CL0758-1020-8-57 | | Mounting Area : Tin Plating | 24 | 38.3 | 35.3 | 31.1 | 26 | |

Right Angle Pin Header (1 Row SMT, Low Profile Type)

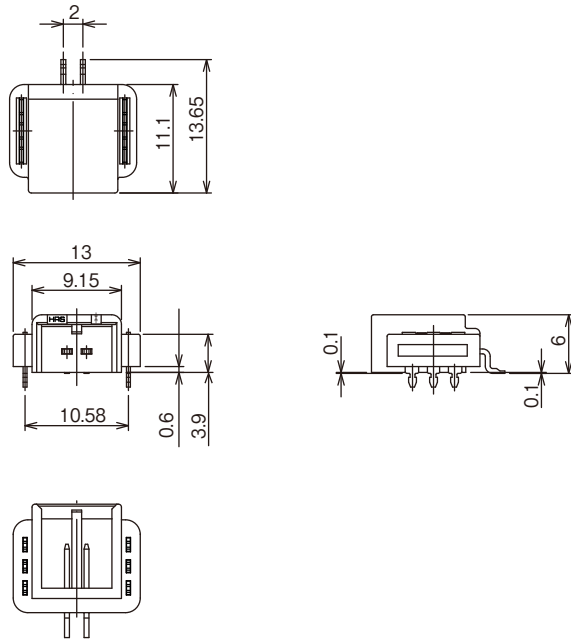
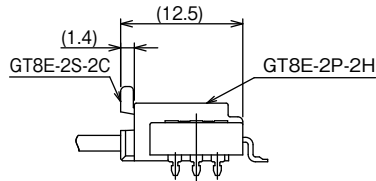
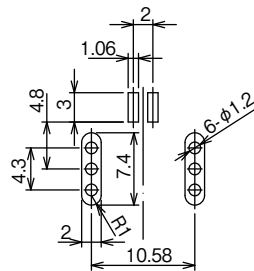


Diagram of Mating Condition During Use



Recommended PCB Dimensions



| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | Purchase Unit |
|----------------|------------------|---------------------------------|-------------------|-------------|-----------------|
| GT8E-2P-2H(57) | CL0758-0032-1-57 | Material : PPS Color : Black | Tin Plating | 2 | 500pcs per reel |

Note : This product mates with GT8E-2S-2C.

Right Angle Pin Header (1 Row SMT, Low Profile Hybrid Type)

● 8 pin / 2 pin Hybrid Type

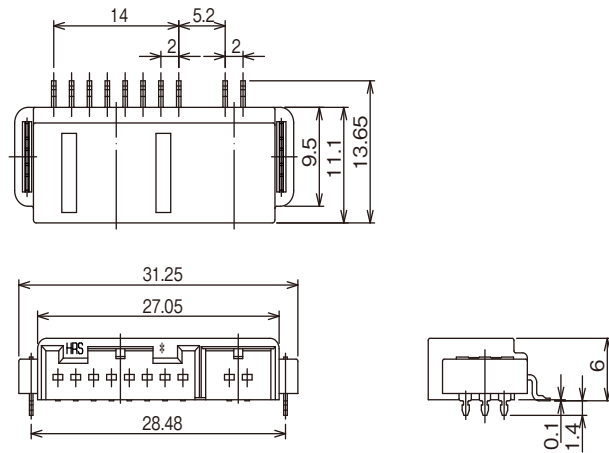
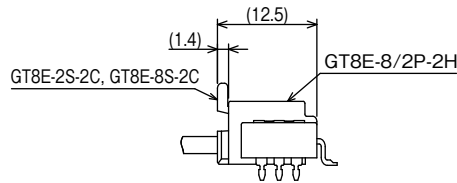
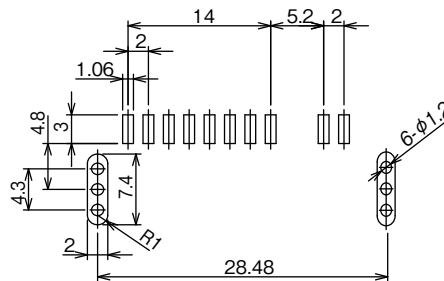


Diagram of Mating Condition During Use



Recommended PCB Dimensions



| Part No. | HRS No. | Housing | Terminal (Finish) | Purchase Unit |
|------------------|------------------|---------------------------------|-------------------|-----------------|
| GT8E-8/2P-2H(56) | CL0758-0031-9-56 | Material : PPS Color : Black | Tin Plating | 500pcs per reel |

Note : This product mates with GT8E-2S-2C and GT8E-8S-2C.

● 8 pin / 5 pin Hybrid Type

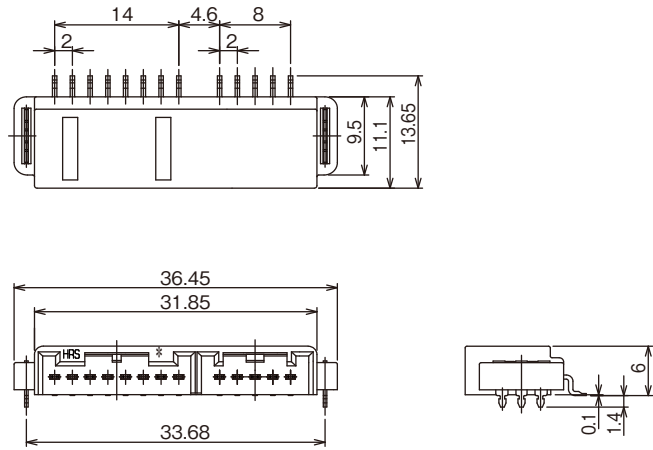
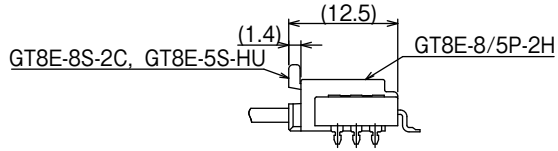
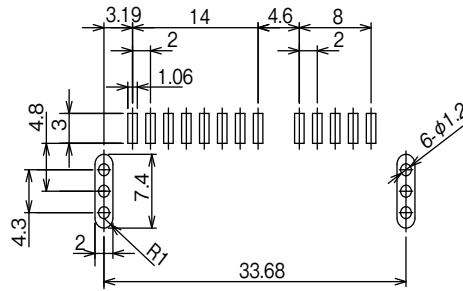


Diagram of Mating Condition During Use



Recommended PCB Dimensions



| Part No. | HRS No. | Housing | Terminal (Finish) | Purchase Unit |
|------------------|------------------|---------------------------------|-------------------|-----------------|
| GT8E-8/5P-2H(55) | CL0758-0073-9-55 | Material : PPS Color : Black | Tin Plating | 500pcs per reel |

Note : This product mates with GT8E-5S-HU and GT8E-8S-2C.

Right Angle Pin Header (1 Row Through-Hole Type)

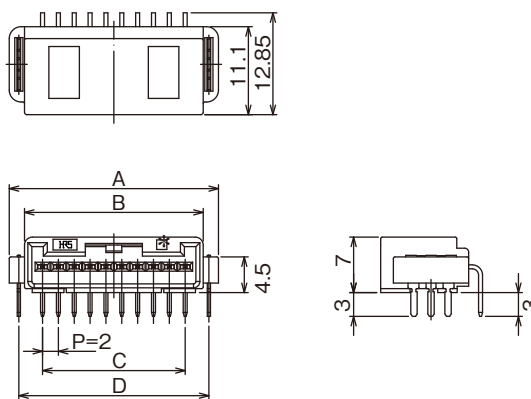
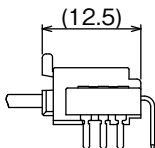
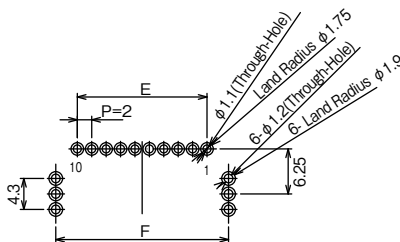


Diagram of Mating Condition During Use



Connector Side Recommended PCB Dimensions and Pin No.



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | E | F | Purchase Unit |
|-----------------|------------------|---------------------------------|-------------------|-------------|------|-------|------|-------|------|-------|-----------------|
| GT8E-2P-DS(55) | CL0758-0040-0-55 | Material : PPS Color : Black | Tin Plating | 2 | 13.0 | 9.15 | 2.0 | 10.58 | 2.0 | 10.58 | 192pcs per tray |
| GT8E-3P-DS(55) | CL0758-0057-2-55 | | | 3 | 13.7 | 9.85 | 4.0 | 11.28 | 4.0 | 11.28 | 184pcs per tray |
| GT8E-4P-DS(55) | CL0758-0041-2-55 | | | 4 | 14.4 | 10.55 | 6.0 | 11.98 | 6.0 | 11.98 | 176pcs per tray |
| GT8E-5P-DS(55) | CL0758-0058-5-55 | | | 5 | 17.8 | 13.95 | 8.0 | 15.38 | 8.0 | 15.38 | 144pcs per tray |
| GT8E-6P-DS(55) | CL0758-0042-5-55 | | | 6 | 18.4 | 14.55 | 10.0 | 15.98 | 10.0 | 15.98 | 136pcs per tray |
| GT8E-7P-DS(55) | CL0758-0059-8-55 | | | 7 | 21.4 | 17.55 | 12.0 | 18.98 | 12.0 | 18.98 | 120pcs per tray |
| GT8E-8P-DS(55) | CL0758-0043-8-55 | | | 8 | 22.4 | 18.55 | 14.0 | 19.98 | 14.0 | 19.98 | 112pcs per tray |
| GT8E-10P-DS(55) | CL0758-0044-0-55 | | | 10 | 26.4 | 22.55 | 18.0 | 23.98 | 18.0 | 23.98 | 96pcs per tray |

Note 1 : This product mates with GT8E-#S-HU.
 Note 2 : Only GT8E-2P-DS mates with GT8E-2S-2C.

Right Angle Pin Header (2 Row Through-Hole Type)

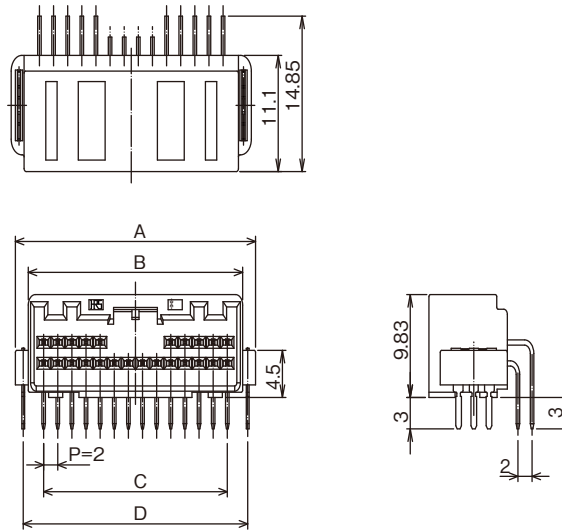
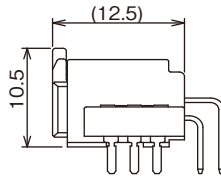
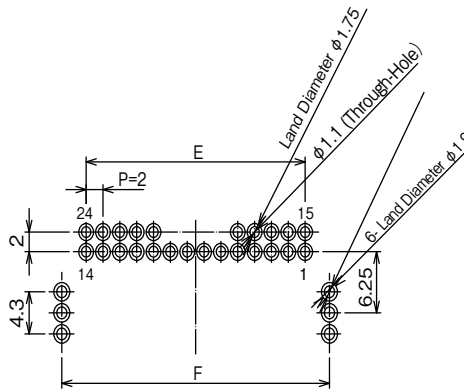


Diagram of Mating Condition During Use



Connector Side Recommended PCB Dimensions and Pin No.



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | D | E | F | Purchase Unit |
|------------------|------------------|---------------------------------|-------------------|-------------|-------|-------|------|-------|------|-------|-----------------|
| GT8E-12DP-DS(55) | CL0758-0045-3-55 | Material : PPS Color : Black | Tin Plating | 12 | 22.4 | 18.55 | 14.0 | 19.98 | 14.0 | 19.98 | 104pcs per tray |
| GT8E-16DP-DS(55) | CL0758-0060-7-55 | | | 16 | 27.25 | 23.6 | 18.0 | 25.03 | 18.0 | 25.03 | 88pcs per tray |
| GT8E-20DP-DS(55) | CL0758-0046-6-55 | | | 20 | 30.0 | 26.35 | 22.0 | 27.78 | 22.0 | 27.78 | 80pcs per tray |
| GT8E-24DP-DS(55) | CL0758-0053-1-55 | | | 24 | 34.0 | 30.35 | 26.0 | 31.78 | 26.0 | 31.78 | 72pcs per tray |

Note : This product mates with GT8E-#DS-HU.

Male Connector Straight Pin Header (Through-Hole Type)

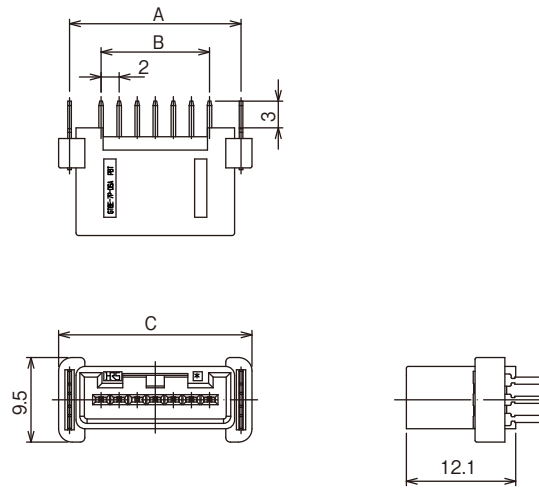
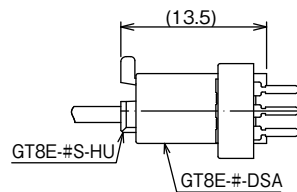
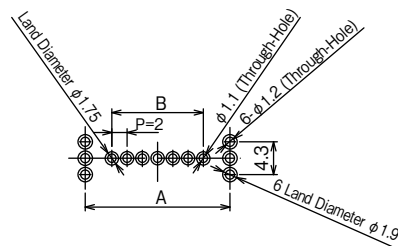


Diagram of Mating Condition During Use



Recommended PCB Dimensions



Unit : mm

| Part No. | HRS No. | Housing | Terminal (Finish) | No. of Pos. | A | B | C | Purchase Unit |
|-----------------|------------------|---------------------------------|-------------------|-------------|-------|------|------|-----------------|
| GT8E-2P-DSA(55) | CL0758-0204-5-55 | Material : PA Color : Black | Tin Plating | 2 | 10.58 | 2.0 | 13.0 | 160pcs per tray |
| GT8E-3P-DSA(55) | CL0758-0112-9-55 | | | 3 | 11.28 | 4.0 | 13.7 | 150pcs per tray |
| GT8E-4P-DSA(55) | CL0758-0065-0-55 | Material : PBT Color : Black | | 4 | 12.0 | 6.0 | 14.4 | 150pcs per tray |
| GT8E-5P-DSA(55) | CL0758-0205-8-55 | Material : PA Color : Black | | 5 | 16.4 | 8.0 | 18.8 | 110pcs per tray |
| GT8E-6P-DSA(55) | CL0758-0201-7-55 | Material : PA Color : Black | | 6 | 16.98 | 10.0 | 19.4 | 110pcs per tray |
| GT8E-7P-DSA(55) | CL0758-0066-3-55 | Material : PBT Color : Black | | 7 | 18.98 | 12.0 | 21.4 | 100pcs per tray |

Termination Tools

Instruction manuals are available for each termination tool. Please contact a Hirose sales representative.

Automatic Crimp Machine



Product No. : CM-105C

The picture is an example. There may be changes.

Specifications

| Item | Specification | Reference |
|-------------------|----------------------|--------------|
| Press Capacity | 1.5ton | |
| Stroke Length | 30mm | |
| Number of Strokes | 200spm(50Hz) | 240spm(60Hz) |
| Weight | 75kg | |
| Motor | 0.2kw | 100V AC |
| Crimping Speed | 2,000 to 4,000pcs./h | |

| Terminal Part No. | Terminal HRS No. | Applicator Part No. | Applicator HRS No. |
|-------------------|------------------|---------------------|--------------------|
| | | CM-105C | CL0901-0001-0-00 |
| GT8B-2428SCF | CL0758-0055-7-00 | AP105-GT8B-2428S | CL0901-5172-3-00 |
| GT8B-2428SCF(01) | CL0758-0055-7-01 | | |
| GT8E-2428PCF | CL0758-0067-6-00 | AP105-GT8E-2428P | CL0901-5192-0-00 |
| GT8EF-2428PCF | CL0758-0106-6-00 | AP105-GT8EF-2428P | CL0901-5194-6-00 |
| GT8E-2022SCF | CL0758-0033-4-00 | AP105-GT8-2022S | CL0901-5144-8-00 |
| GT8E-2022SCF(01) | CL0758-0033-4-01 | | |
| GT8E-2022PCF | CL0758-0039-0-00 | AP105-GT8E-2022P | CL0901-5161-7-00 |
| GT8EF-2022PCF | CL0758-0111-6-00 | | |

The crimp height of the terminal must be set for each cable type. Please contact your sales representative. Please note that a new cable requires a new crimp height setting and evaluation requires a few days.

Hand Tool



The picture is an example. There may be changes.

| Terminal Part No. | Terminal HRS No. | Hand Tool Part No. | Hand Tool HRS No. |
|-------------------|------------------|--------------------|-------------------|
| GT8B-2428SCF | CL0758-0055-7-00 | HT102/GT8-2428S | CL0780-0019-4-00 |
| GT8B-2428SCF(01) | CL0758-0055-7-01 | | |
| GT8E-2022SCF | CL0758-0033-4-00 | HT304/GT8E-2022S | CL0780-0042-6-00 |
| GT8E-2022SC | CL0758-0101-2-00 | | |
| GT8E-2022SCF(01) | CL0758-0033-4-01 | | |

- HT304/GT8E-2022S is compatible with 0.3SQ (22 AWG equivalent)
- HT304/GT8E-2022S is not compatible with 0.5SQ (20 AWG equivalent).
- Use HT304/GT8E-2022S by cutting the reels into loose terminals.

While Taking into Consideration

Specifications mentioned in this catalog are reference values.

When considering to order or use this product, please confirm the Drawing and Product Specifications sheets.

Use an appropriate cable when using the connector in combination with cables.

If considering usage of a non-specified cable, please contact your sales representative.

If assembly process is done by jigs & tools which are not identified by Hirose, assurance will not be given.

If considering usage for below mentioned applications, please contact your sales representative.

In cases where the application will demand a high level of reliability, such as automotive, medical instruments, public infrastructure, aerospace/ defense etc. Hirose must review before assurance of reliability can be given.