

GT25 Series

# 0.64mm Terminal, 2.2mm Pitch, Wire-to-Board Connector



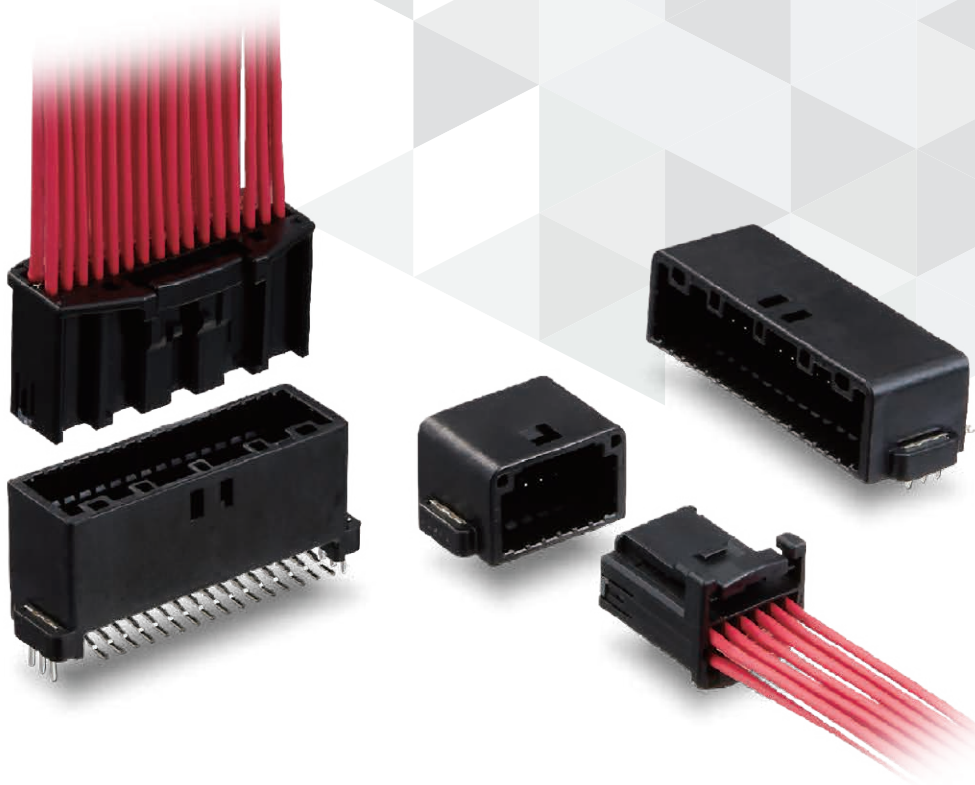
Space Saving



Wide Variation



Contact Reliability



## Features

1. Reduces PCB Mounting Space (0.64mm Terminal Tab Size / 2.2mm Pitch)
2. Wide Product Line-up
3. Prying Force : 98N Min.
4. Heat Resistant Up to 105°C
5. Clear Tactile Click
6. Can Be Mated with Other Manufacturers' Products

## Application

Various ECU, ADAS and automated driving equipment, infotainment, etc.

## Product Specifications

|                              |               |
|------------------------------|---------------|
| Rated Current                | 3A            |
| Rated Voltage                | 250V AC       |
| Operating Temperature (Note) | -40 to +105°C |

Note : Includes temperature rise due to current flow.

## Material / Finish

| Component  |               | Material         | Color / Finish      |
|------------|---------------|------------------|---------------------|
| Receptacle | Housing       | Right Angle : PA | Black               |
|            |               | Straight : PPS   | Black or Light Gray |
|            | Contact       | Brass            | Tin Plating         |
|            | Retention Tab | Brass            | Tin Plating         |
| Plug       | Housing       | PPE              | Black               |
|            | Crimp Contact | Copper Alloy     | Tin Plating         |
|            | Retainer      | PBT              | Dark Gray           |

## Product Number Structure

Refer to the chart below when determining the product specifications from the product number.  
Please select from the product numbers listed in this catalog when placing orders.

### ■ Receptacle / Plug / Retainer

#### GT25 H2 - 24 D P - 2.2 H (10)

①                      ②   ③   ④                      ⑤   ⑥

|               |                               |                  |   |
|---------------|-------------------------------|------------------|---|
| ① Series Name | GT25                          | ④ Connector Type | P : Receptacle<br>S : Plug                                      |
| ② No. of Pos. | 8, 12, 16, 20, 24, 32, 40pos. | ⑤ Contact Pitch  | 2.2mm   |
| ③ Columns     | D : 2 Rows (Note)             | ⑥ Component Type | V : Straight<br>H : Right Angle<br>HU : Housing<br>R : Retainer |

Note : There is no single row variation.

### ■ Crimp Contact

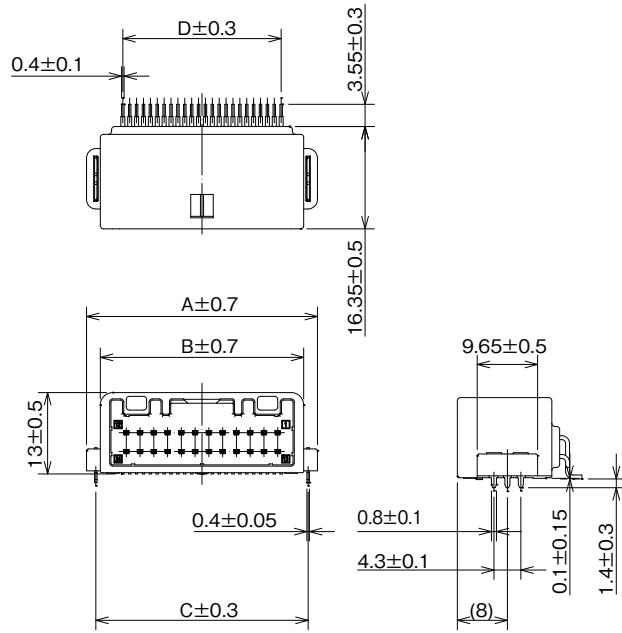
#### GT25 H - 2024 SCF

①                      ②                      ③

|                    |  |                  |                      |
|--------------------|--|------------------|----------------------|
| ① Series Name      | GT25                                       | ③ Contact Gender | SCF : Female Contact |
| ② Applicable Cable | 2024 : 20 to 22 AWG<br>2428 : 24 to 26 AWG |                  |                      |

# Receptacle

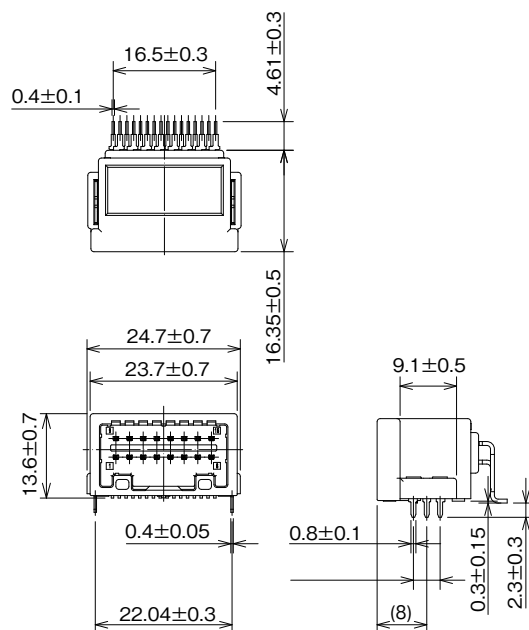
## Right Angle THT Retention Tab



Unit : mm

| Part No.             | HRS No.          | No. of Pos. | A    | B    | C     | D    | Purchase Unit   |
|----------------------|------------------|-------------|------|------|-------|------|-----------------|
| GT25H2-8DP-2.2H(10)  | CL0775-0047-4-10 | 8           | 19.3 | 14.9 | 16.33 | 7.7  | 200pcs per reel |
| GT25H2-12DP-2.2H(10) | CL0775-0092-9-10 | 12          | 23.7 | 19.3 | 20.73 | 12.1 |                 |
| GT25H2-16DP-2.2H(10) | CL0775-0089-4-10 | 16          | 28.1 | 23.7 | 25.13 | 16.5 |                 |
| GT25H2-20DP-2.2H(10) | CL0775-0080-0-10 | 20          | 32.5 | 28.1 | 29.53 | 20.9 |                 |
| GT25H2-24DP-2.2H(10) | CL0775-0081-2-10 | 24          | 36.9 | 32.5 | 33.93 | 25.3 |                 |
| GT25H2-32DP-2.2H(10) | CL0775-0086-6-10 | 32          | 45.7 | 41.3 | 42.73 | 34.1 |                 |
| GT25H2-40DP-2.2H(10) | CL0775-0090-3-10 | 40          | 54.5 | 50.1 | 51.53 | 42.9 |                 |

## Right Angle THT Retention Tab, Reverse Lock Type

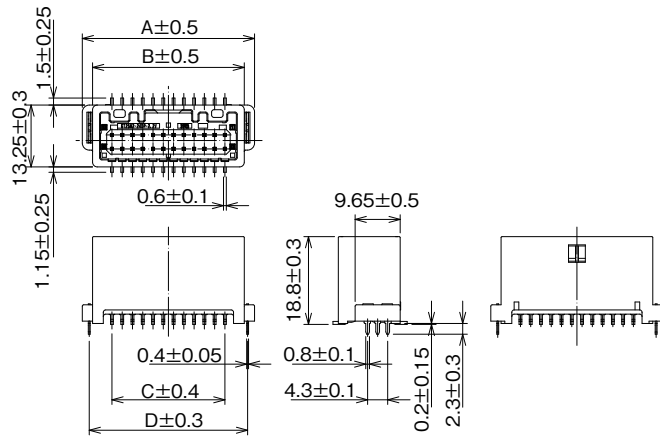
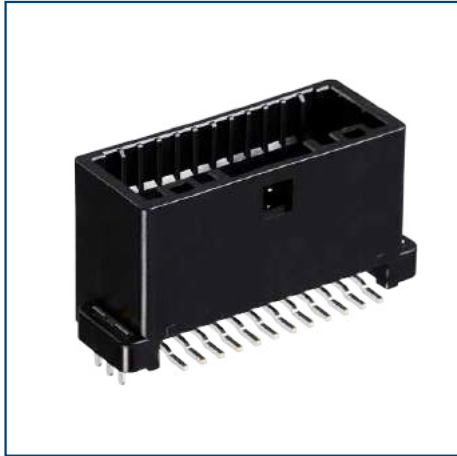


Unit : mm

| Part No.        | HRS No.          | No. of Pos. | Purchase Unit   |
|-----------------|------------------|-------------|-----------------|
| GT25R-16DP-2.2H | CL0775-0130-0-00 | 16          | 180pcs per reel |

Note : This receptacle is for reverse insertion of the plug.

## Straight THT Retention Tab



Unit : mm

| Part No.                  | HRS No.          | No. of Pos. | A     | B    | C    | D     | Purchase Unit  |
|---------------------------|------------------|-------------|-------|------|------|-------|----------------|
| GT25-16DP-2.2V(56) (Note) | CL0775-0020-8-56 | 16          | 26.75 | 22.3 | 15.4 | 23.73 | 28pcs per tray |

Note : The color is light gray for this connector only.

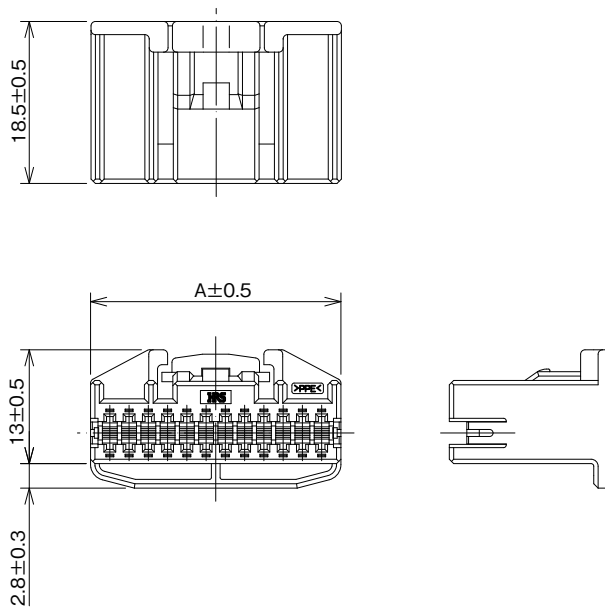
Unit : mm

| Part No.            | HRS No.          | No. of Pos. | A    | B    | C    | D     | Purchase Unit  |
|---------------------|------------------|-------------|------|------|------|-------|----------------|
| GT25H-12DP-2.2V(60) | CL0775-0050-9-60 | 12          | 23.7 | 19.3 | 11.0 | 20.73 | 32pcs per tray |
| GT25H-32DP-2.2V(60) | CL0775-0053-7-60 | 32          | 45.7 | 41.3 | 33.0 | 42.73 | 20pcs per tray |

Unit : mm

| Part No.         | HRS No.          | No. of Pos. | A    | B    | C    | D     | Purchase Unit  |
|------------------|------------------|-------------|------|------|------|-------|----------------|
| GT25H2-8DP-2.2V  | CL0775-0094-0-00 | 8           | 19.3 | 14.9 | 6.6  | 16.33 | 56pcs per tray |
| GT25H2-24DP-2.2V | CL0775-0083-8-00 | 24          | 36.9 | 32.5 | 24.2 | 33.93 | 35pcs per tray |
| GT25H2-40DP-2.2V | CL0775-0085-3-00 | 40          | 54.5 | 50.1 | 41.8 | 51.53 | 28pcs per tray |

## Plug Housing

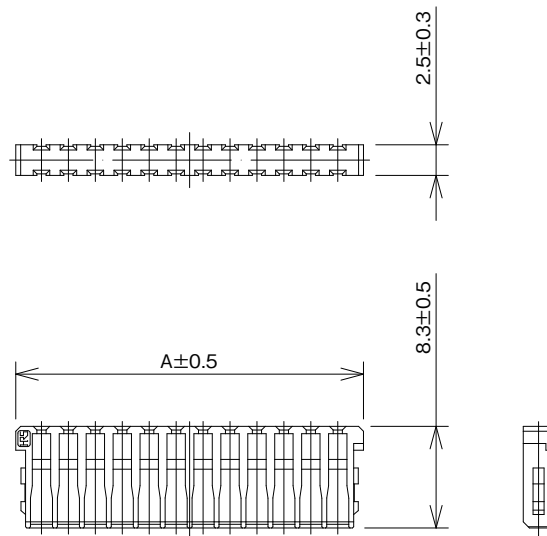


Unit : mm

| Part No.         | HRS No.          | No. of Pos. | A    | Purchase Unit  |
|------------------|------------------|-------------|------|----------------|
| GT25-8DS-HU      | CL0775-0064-3-00 | 8           | 11.0 | 100pcs per bag |
| GT25-12DS-HU(50) | CL0775-0037-0-50 | 12          | 15.4 |                |
| GT25-16DS-HU     | CL0775-0066-9-00 | 16          | 19.8 |                |
| GT25-20DS-HU     | CL0775-0075-0-00 | 20          | 24.2 |                |
| GT25-24DS-HU     | CL0775-0068-4-00 | 24          | 28.6 |                |
| GT25-32DS-HU     | CL0775-0042-0-00 | 32          | 37.4 |                |
| GT25-40DS-HU     | CL0775-0023-0-00 | 40          | 46.2 |                |

Note : Use with the retainer (GT25 -##DS-R), sold separately.

## Retainer

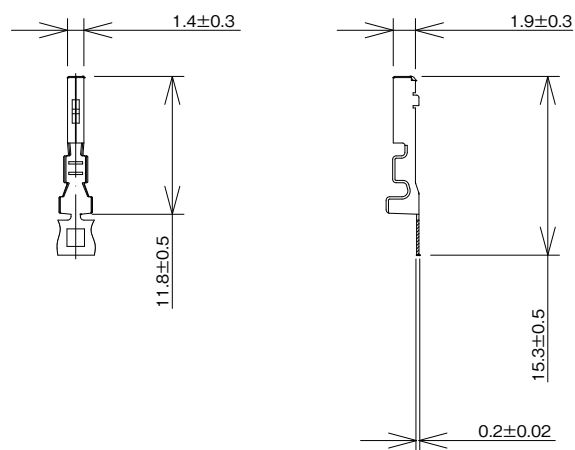


Unit : mm

| Part No.    | HRS No.          | No. of Pos. | A    | Purchase Unit  |
|-------------|------------------|-------------|------|----------------|
| GT25-8DS-R  | CL0775-0065-6-00 | 8           | 10.8 | 100pcs per bag |
| GT25-12DS-R | CL0775-0041-8-00 | 12          | 15.2 |                |
| GT25-16DS-R | CL0775-0067-1-00 | 16          | 19.6 |                |
| GT25-20DS-R | CL0775-0076-2-00 | 20          | 24.0 |                |
| GT25-24DS-R | CL0775-0069-7-00 | 24          | 28.4 |                |
| GT25-32DS-R | CL0775-0043-3-00 | 32          | 37.2 |                |
| GT25-40DS-R | CL0775-0028-0-00 | 40          | 46.0 |                |

Note : Attach to the plug housing (GT25-##DS-HU) sold separately.

## Plug Crimp Contact



| Part No.       | HRS No.          | Applicable Cable  | Purchase Unit      |
|----------------|------------------|---|--------------------|
| GT25H-2024SCF  | CL0775-0039-6-00 | Wire Size : 20 to 22 AWG<br>Cable Jacket Outer Diameter : $\phi$ 1.0 to 1.7 | 10,000pcs per reel |
| GT25HB-2428SCF | CL0775-0070-6-00 | Wire Size : 24 to 26 AWG<br>Cable Jacket Outer Diameter : $\phi$ 0.5 to 1.0 |                    |



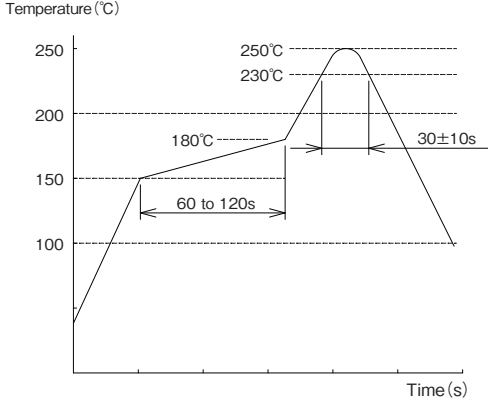
## Applicable Crimping Tool

| Type             | Part No.           | HRS No.          | Applicable Contact |
|------------------|--------------------|------------------|--------------------|
| Crimping Machine | CM-105C            | CL0901-0001-0-00 | -                  |
| Applicator       | AP105-GT25H-2024S  | CL0901-5206-3-00 | GT25H-2024SCF      |
|                  | AP105-GT25HB-2428S | CL0901-5230-8-00 | GT25HB-2428SCF     |

Note 1 : Conduct crimping based on the "Crimping Standards" and "Crimping Conditions Table".

Note 2 : Problems with tools not specified by Hirose are outside the scope of warranty.

## Usage Precautions

|   |  |   |
|---|--|---|
| Recommended Temperature Profile         |  <p>Temperature (°C)</p> <p>250<br/>230<br/>200<br/>180<br/>150<br/>100</p> <p>Time (s)</p> <p>60 to 120s<br/>30±10s</p> <p>250°C<br/>230°C<br/>180°C</p>  | <p><b>【Conditions】</b></p> <ol style="list-style-type: none"> <li>1. Reflow Heating Method Used :<br/>Far infrared, air atmosphere or nitrogen</li> <li>2. Peak Temperature : 250°C Peak</li> <li>3. Heated part : 230°C Min. 20-40 sec.</li> <li>4. Preheat Temperature : 150 to 180°C 90±30 sec.</li> <li>5. Cycles : 2 times Max.</li> <li>6. Recommended Solder Thickness : 0.15mm</li> </ol> |
| Recommended Manual Soldering Conditions | Soldering iron temperature : 280 to 300°C , Soldering time : within 2 seconds  |   |
| Precautions                             | <ol style="list-style-type: none"> <li>1. Excessive pull force during unmating may damage the connector. If it is difficult to remove, push in lightly once and then release the lock.</li> <li>2. Always make sure to turn off the power before reinserting the connector.</li> <li>3. Do not directly touch the terminal when electricity is flowing since it is extremely dangerous.</li> <li>4. Contact a Hirose representative for harness procedures or handling manuals.</li> </ol> |   |

## 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.