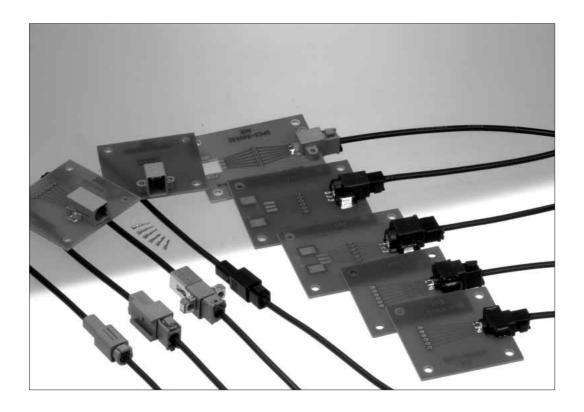
# **GT16 Series**

# — Subminiature Connectors for coaxial cables —

<In-line and board mounted.>



# **Features**

- Space-saving design
  - Compact and light comparing to HRS GT5 series.
- Excellent high frequency performance
  - Refer to V.S.W.R. data on the following pages.

# Applications

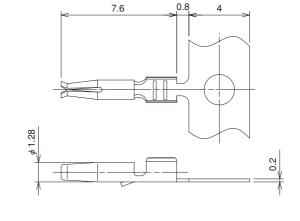
In-car communication, car sensors(temperature, pressure), automotive audio systems, GPS antenna systems, RACS antenna audio/video antenna systems, CRT displays, medical and measuring instrumentation LAN systems.

# **GT16 Series**

# **■** F Connectors (Common Use)

#### Center terminal



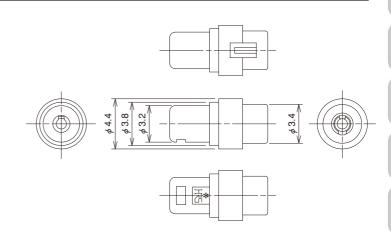


| Part No.     | HRS No.    | Material/Plating | Conductor Size | Packaging       | RoHS |
|--------------|------------|------------------|----------------|-----------------|------|
| GT16-2428SCF | 766-0001-2 | Phosphor bronze/ | 24 to 28 AWG   | 10,000 pcs/reel | YES  |
| GT16-30SCF   | 766-0055-1 | Tin plating      | 30 AWG         | 10,000 pcs/reel | TES  |

## ● Insulator (Common Use)

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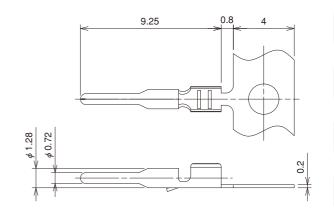


| Part No. | HRS No.    | Material | Color | Packaging | RoHS |
|----------|------------|----------|-------|-----------|------|
| GT16-SC  | 766-0002-5 | PBT      | White | 1         | YES  |

# **■** M Connectors (Common Use)

# Center Terminals

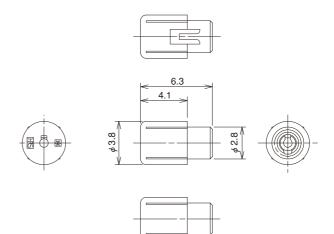




| Part No.     | HRS No.    | Material/Plating  | Conductor Size | Packaging       | RoHS |
|--------------|------------|-------------------|----------------|-----------------|------|
| GT16-2428PCF | 766-0006-6 | Dunce/Tip plating | 24 to 28 AWG   | 10,000 pcs/reel | YES  |
| GT16-30PCF   | 766-0015-7 | Brass/Tin plating | 30 AWG         |                 | TES  |

# ● Insulator (Common Use)



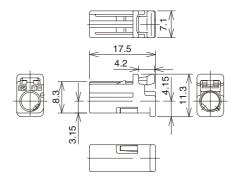


| Part No. | HRS No.    | Material | Color | Packaging | RoHS |
|----------|------------|----------|-------|-----------|------|
| GT16-PC  | 766-0007-9 | PBT      | White | 1         | YES  |

# **■** Without retainer type (F Connector)

## Housing

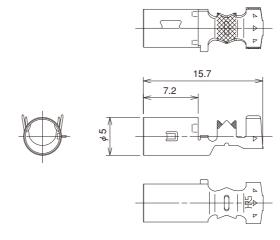




| Part No.       | HRS No.    | Material | Color | Packaging | RoHS |
|----------------|------------|----------|-------|-----------|------|
| GT16F-1S-HU(A) | 766-0082-4 | PBT      | Brown | 1         | YES  |
| GT16F-1S-HU(B) | 766-0083-7 | FDI      | Green | ı         | TES  |

#### Outer terminal



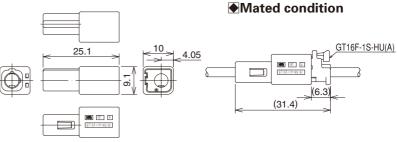


| Part No.        | HRS No.    | Material/Plating | Insulator Diameter  | Outer Diameter | Packaging | RoHS |
|-----------------|------------|------------------|---------------------|----------------|-----------|------|
| GT16-/1.6-2.9SC | 766-0003-8 | Phosphor bronze/ | φ1.5 to 2.0         | φ2.6 to 3.4    | 1         | YES  |
| GT16-/0.7-1.5SC | 766-0056-4 | Tin plating      | <i>ϕ</i> 0.6 to 0.9 | φ1.4 to 1.8    | ı         | TES  |

# Without retainer type (M Connector)

# Housing



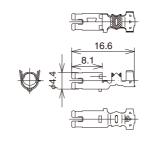


| Part No.       | HRS No.    | Material | Color | Packaging | RoHS |
|----------------|------------|----------|-------|-----------|------|
| GT16F-1P-HU(A) | 766-0086-5 | PBT      | Brown | 1         | VEC  |
| GT16F-1P-HU(B) | 766-0087-8 | PDI      | Green | '         | YES  |

#### Outer terminals

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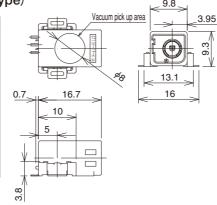




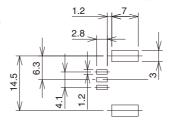
| Part No.         | HRS No.    | Material | Plating     | Insulator Diameter | Outer Diameter | Packaging | RoHS |
|------------------|------------|----------|-------------|--------------------|----------------|-----------|------|
| GT16C-/1.6-2.9PC | 766-0019-8 | Phosphor | Tin plating | φ1.5 to 2.0        | φ2.6 to 3.4    | 1         | YES  |
| GT16C-/0.7-1.5PC | 766-0018-5 | bronze   | Tin plating | φ0.6 to 0.9        | φ1.4 to 1.8    | '         | TES  |

# ● Printed Circuit Board Type (SMT Type)

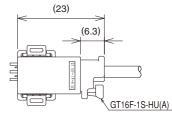




# **●**Recommended PCB pattern



## **Mated condition**

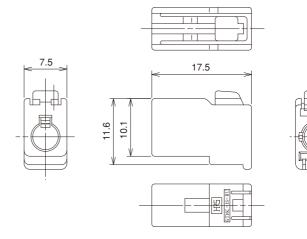


| D (N          | LIDON      | M I/DI .:   | 0.1   | D 1 1     | D 110 |
|---------------|------------|---|-------|-----------|-------|
| Part No.      | HRS No.    | Material/Plating  | Color | Packaging | RoHS  |
| GT16F-1P-H(A) | 766-0078-7 | Housing : PPS<br>Inner Terminal : Phosphor bronze/Tin plating<br>Outer Terminal : Phosphor bronze/Tin plating | Brown | 1         | YFS   |
| GT16F-1P-H(B) | 766-0079-0 | Insulator: PPS/Natural Shield plate: Phosphor bronze/Tin plating Metal reinforcement: Brass/Tin plating       | Green | l         | 163   |

# **Genuine Market Parts F Connectors**

# Housing (Retainer Stopper Specification)



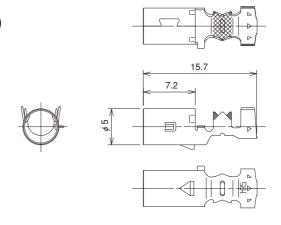


| Part No.       | HRS No.    | Material | Color      | Packaging | RoHS |
|----------------|------------|----------|------------|-----------|------|
| GT16C-1S-HU    | 766-0010-3 |          | Light Gray |           |      |
| GT16C-1S-HU(A) | 766-0060-1 | PBT      | Brown      | 1         | YES  |
| GT16C-1S-HU(B) | 766-0061-4 |          | Green      |           |      |

Note: This product is used in conjunction with retainer GT16C-1P/S-R (CL766-0011-6) which is a separate item.

# Outer terminal (Retainer Stopper Specification)

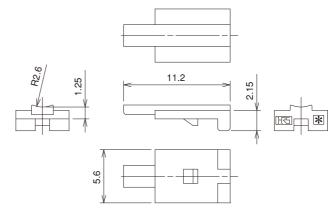




| Part No.         | HRS No.    | Material/Plating | Insulator Diameter  | Outer Diameter | Packaging | RoHS |
|------------------|------------|------------------|---------------------|----------------|-----------|------|
| GT16C-/1.6-2.9SC | 766-0012-9 | Phosphor bronze/ | φ1.5 to 2.0         | φ2.6 to 3.4    | 1         | YES  |
| GT16C-/0.7-1.5SC | 766-0057-7 | Tin plating      | <i>ϕ</i> 0.6 to 0.9 | φ1.4 to 1.8    | ı         | YES  |

#### Retainer

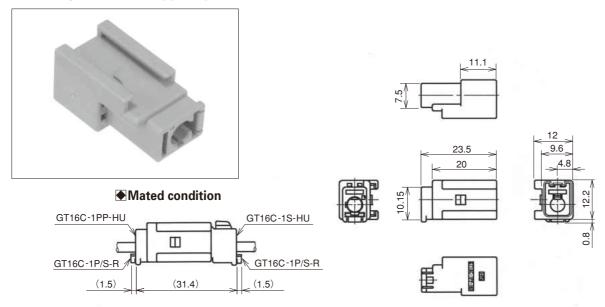




| Part No.     | HRS No.    | Material | Color     | Packaging | RoHS |
|--------------|------------|----------|-----------|-----------|------|
| GT16C-1P/S-R | 766-0011-6 | PBT      | Dark Gray | 1         | YES  |

# ■ Genuine Market Parts M Connectors

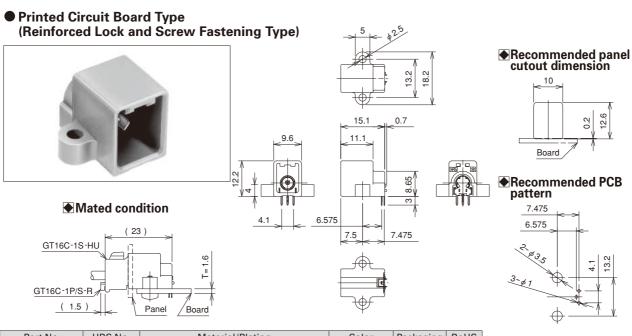
#### Housing (Retainer Stopper Specification)



| Part No.        | HRS No.    | Material | Color      | Packaging | RoHS |
|-----------------|------------|----------|------------|-----------|------|
| GT16C-1PP-HU    | 766-0029-1 |          | Light Gray |           |      |
| GT16C-1PP-HU(A) | 766-0064-2 | PBT      | Brown      | 1         | YES  |
| GT16C-1PP-HU(B) | 766-0065-5 |          | Green      |           |      |

Note: Use this product with separate retainer part  ${\sf GT16C-1P/S-R(CL766-0011-6)}$ .

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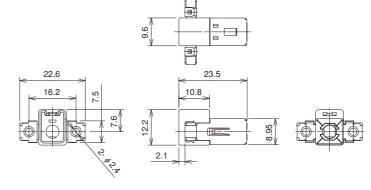


| Part No.       | HRS No.    | Material/Plating   | Color      | Packaging | RoHS |
|----------------|------------|--|------------|-----------|------|
| GT16C-1P-DS    | 766-0013-1 | Housing: PBT Inner Terminal: Phosphor bronze/Tin plating         | Light Gray |           |      |
| GT16C-1P-DS(A) | 766-0062-7 | Insulator: Phosphor bronze/Tin plating                           | Brown      | 1         | YES  |
| GT16C-1P-DS(B) | 766-0063-0 | Insulator: PPS/Natural Shield plate: Phosphor bronze/Tin plating | Green      |           |      |

Note : Use mounting screws of M3 with nominal diameter 3L-6.

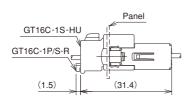
# Panel Mounting Type

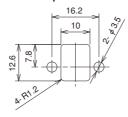




#### **●**Mated condition

**●**Recommended panel cutout dimension







| Part No.      | HRS No.    | Material/Plating or Color                 | Packaging | RoHS |
|---------------|------------|---|-----------|------|
| GT16CB-1PP-HU | 766-0017-2 | Housing: PBT/Light Gray                   | 1         | YES  |
|               | 700-0017-2 | Ground terminal: Copper alloy/Tin plating | '         | TES  |

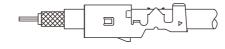
Note: Use mounting screws of M3 with nominal diameter 3L-6.

# **◆GT16C** Wiring Method

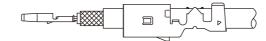
1. Pass the cable through the outside tube.



2. Strip the cable.



3. Crimp the center terminal.

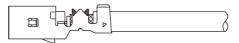


4. Insert the crimped terminal into the Insulator.

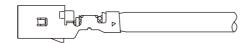


5. Insert the insulator into the outside tube.

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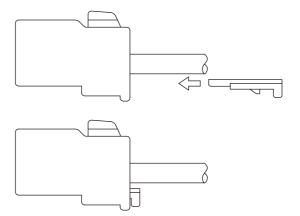
6. Crimp the outside tube.



7. Insert outer terminal block into the housing.



8. Insert the retainer into the housing.



#### Inner Terminal Insulator Outer Terminal Housing Retainer GT16-/1.6-2.9SC GT16F-1S-HU (A) Not Used GT16-/0.7-1.5SC GT16F-1S-HU (B) GT16-2428SCF GT16-SC GT16C-1S-HU GT16-30SCF GT16C-/1.6-2.9SC GT16C-1S-HU (A) GT16C-1P/S-R GT16C-/0.7-1.5SC GT16C-1S-HU (B)

# **◆ Mating Table**

| F Connectors | M Connectors  |
|--------------|---------------|
|              | GT16CB-1PP-HU |
| GT16C-1S-HU  | GT16C-1PP-HU  |
|              | GT16C-1P-DS   |

# **►** M Connector Components Table

**▼ F Connector Components Table**

| Inner Terminal             | Insulator | Outer Terminal                       | Housing          | Retainer     |  |
|----------------------------|-----------|--------------------------------------|------------------|--------------|--|
|                            |           |                                      | GT16CB-1PP-HU    |              |  |
|                            |           |                                      | GT16F-1P-HU (A)  | Not Used     |  |
| GT16-2428PCF<br>GT16-30PCF | GT16-PC   | GT16C-/1.6-2.9PC<br>GT16C-/0.7-1.5PC | GT16F-1P-HU (B)  |              |  |
|                            |           |                                      | GT16C-1PP-HU     | GT16C-1P/S-R |  |
|                            |           |                                      | GT16C-1PP-HU (A) |              |  |
|                            |           |                                      | GT16C-1PP-HU (B) |              |  |

| Printed Circuit Board Type |
|----------------------------|
| GT16F-1P-H (A)             |
| GT16F-1P-H (B)             |
| GT16C-1P-DS                |
| GT16C-1P-DS (A)            |
| GT16C-1P-DS (B)            |

# **◆** Key Variation

| F Connectors     | M Connectors   |
|------------------|----------------|
| GT16F-1S-HU (A)  | GT16F-1P-HU(A) |
| G116F-15-HU (A)  | GT16F-1P-H(A)  |
| GT16F-1S-HU (B)  | GT16F-1P-HU(B) |
|                  | GT16F-1P-H(B)  |
| GT16C-1S-HU (A)  | GT16C-1P-HU(A) |
| G116C-15-HU (A)  | GT16C-1P-DS(A) |
| GT16C-1S-HU (B)  | GT16C-1P-HU(B) |
| G1 10C-13-HU (B) | GT16C-1P-DS(B) |

# Crimping tools

User's manuals are available. Please ask your Hirose Electric account representative.

## **Automatic Crimping Machine**



Picture reference only

Part No. CM-105C

\* See the table below for the product number of the applicator.

#### **Specifications**

| Item              | Specification | Remarks       |
|-------------------|---------------|---------------|
| Press capacity    | 1.5ton        |               |
| Stroke Length     | 30mm          |               |
| Number of strokes | 200spm (50Hz) | 240spm (60Hz) |
| Weight            | 75kg          |               |
| Motor             | 0.2kW         | AC100V        |
| Crimping speed    | 2,000~4,000/H |               |

#### **Hand Press**



## Harness Tool

| Terminal Product No. | minal Product No. Terminal HRS No. |                    | Tool HRS No. |
|----------------------|------------------------------------|--------------------|--------------|
| GT16-2428SCF         | 766-0001-2                         | AP105-GT16-2428    | 901-5108-4   |
| GT16-2428PCF         | GT16-2428PCF 766-0006-6            |                    | 901-3106-4   |
| GT16-30SCF           | 766-0055-1                         | AP105-GT16-30      | 901-5124-0   |
| GT16-30PCF           | 766-0015-7                         | AF105-0116-30      | 901-3124-0   |
| GT16-/1.6-2.9SC      | 766-0003-8                         |                    |              |
| GT16C-/1.6-2.9SC     | 766-0012-9                         | GT16-1.6-2.9/CK-MP | 902-5058-4   |
| GT16C-/1.6-2.9PC     | 766-0019-8                         |                    |              |
| GT16-/0.7-1.5SC      | 766-0056-4                         |                    |              |
| GT16C-/0.7-1.5SC     | 766-0057-7                         | GT16-0.7-1.5/CK-MP | 902-5064-7   |
| GT16C-/0.7-1.5PC     | 766-0018-5                         |                    |              |

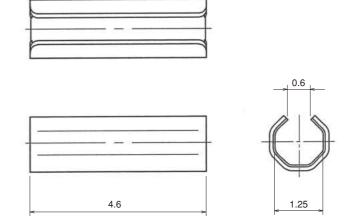
<sup>\*</sup> Crimp height setting tables are available for each cable type. Please contact your nearest Hirose Electric account representative. Different cables will require different crimp height settings.

# **GT16G Series**

# F and M Common Parts

# ● Terminal Ferrule





| Part No. | HRS No.    | Material        | Plating     | Packaging | RoHS |
|----------|------------|-----------------|-------------|-----------|------|
| GT16G-FR | 766-0028-9 | Phosphor bronze | Tin plating | 1         | YES  |

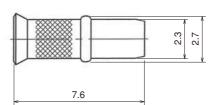
# **F and M Common Parts**

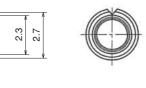
## Outer Ferrule

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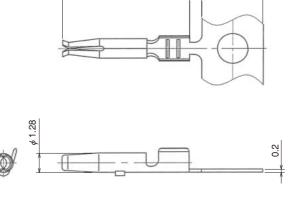


| Part No.      | HRS No.    | Material        | Plating     | Packaging | RoHS |
|---------------|------------|-----------------|-------------|-----------|------|
| GT16G-1.5DHQS | 766-0027-6 | Phosphor bronze | Tin plating | 1         | YES  |

# **F Common Parts**

#### Center Terminal

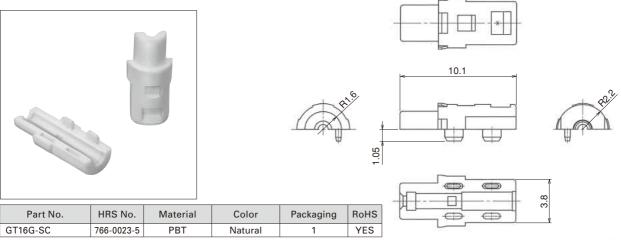




8.3

| Part No.      | HRS No.    | Material        | Plating     | Conductor Size | Packaging       | RoHS |
|---------------|------------|-----------------|-------------|----------------|-----------------|------|
| GT16G-2428SCF | 766-0022-2 | Phosphor bronze | Tin plating | 24 to 28 AWG   | 10,000 pcs/reel | YES  |

#### Insulator

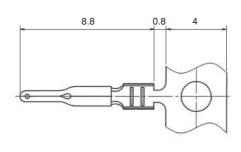


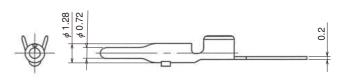
Note: Two of these products are used per connection.

# **M Common Parts**

# Center Terminal



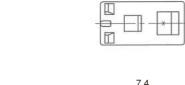


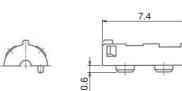


| Part No.      | HRS No.    | Material | Plating     | Conductor Size(AWG) | Packaging       | RoHS |
|---------------|------------|----------|-------------|---------------------|-----------------|------|
| GT16G-2428PCF | 766-0046-0 | Brass    | Tin plating | 24 to 28 AWG        | 10,000 pcs/reel | YES  |

#### Insulator

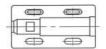






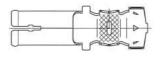


|   | Part No. | HRS No.    | Material | Color   | Packaging | RoHS |
|---|----------|------------|----------|---------|-----------|------|
|   | GT16G-PC | 766-0047-3 | PBT      | Natural | 1         | YES  |
| _ |          |            |          |         |           |      |

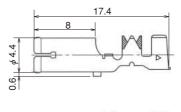


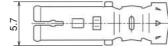
## Outer Terminal











| Part No.         | HRS No.    | Material        | Plating     | Applicabie cable      | Packaging | RoHS |
|------------------|------------|-----------------|-------------|-----------------------|-----------|------|
| GT16G-/1.6-2.9PC | 766-0048-6 | Phosphor bronze | Tin plating | 1.5D-2W or equivalent | 1         | YES  |

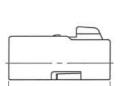
# ■ F Connector (No retainer required type)

# Housing

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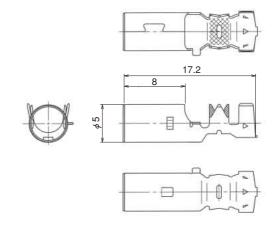
19.1



| Part No.     | HRS No.    | Material | Color | Packaging | RoHS |
|--------------|------------|----------|-------|-----------|------|
| GT16GM-1S-HU | 766-0033-9 | PBT      | Black | 1         | YES  |

## Outer Terminal



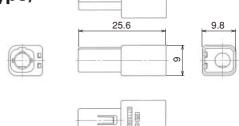


| Part No.          | HRS No.    | Material        | Plating     | Applicabie cable      | Packaging | RoHS |
|-------------------|------------|-----------------|-------------|-----------------------|-----------|------|
| GT16GM-/1.6-2.9SC | 766-0025-0 | Phosphor bronze | Tin plating | 1.5D-2W or equivalent | 1         | YES  |

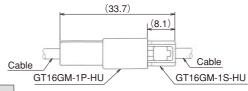
# M Connector (No retainer required type)

## Housing





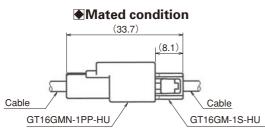
#### Mated condition

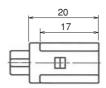


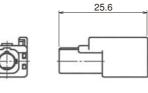
| Part No.     | HRS No.    | Material | Color | Packaging | RoHS |
|--------------|------------|----------|-------|-----------|------|
| GT16GM-1P-HU | 766-0050-8 | PBT      | Black | 1         | YES  |

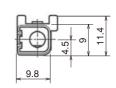
# Housing (Bracket mounting type)











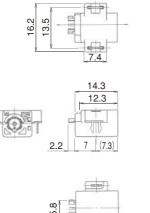


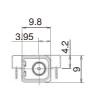
| Part No.       | HRS No.    | Material | Color | Packaging | RoHS |
|----------------|------------|----------|-------|-----------|------|
| GT16GMN-1PP-HU | 766-0051-0 | PBT      | Black | 1         | YES  |
|                |            |          |       |           |      |

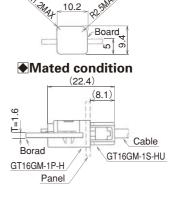
# GTo GT

#### Board Type (Lock Pin Type)



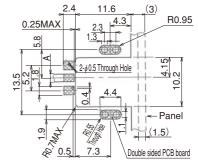






◆Recommended panel cutout dimension

# **●**Recommended PCB pattern



| Part No.    | HRS No.    | Material/Plating or Color                   | Packaging | RoHS |
|-------------|------------|---|-----------|------|
|             |            | Housing: PBT/Black                          |           |      |
|             |            | Inner Terminal: Phosphor bronze/Tin plating |           |      |
| GT16GM-1P-H | 766-0032-6 | Outer Terminal: Phosphor bronze/Tin plating | 1         | YES  |
|             |            | Insulator: PBT/Natural                      |           |      |
|             |            | Lock pin: Phosphor bronze/Tin plating       |           |      |

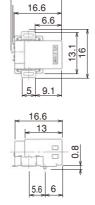
 $^{\ast}$  Use micro strip line and set so that dimension A has a characteristic impedance of 50  $\!\Omega.$ 

# ● Board Type (SMT Type)

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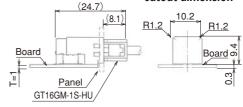




17.6

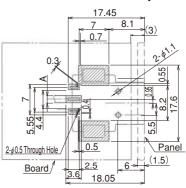


# 





#### **●**Recommended PCB pattern



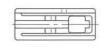
\* Use micro strip line and set so that dimension A has a characteristic impedance of  $50\Omega$ .

| Part No.     | HRS No.    | Material/Plating or Color   | Packaging    | RoHS |
|--------------|------------|---|--------------|------|
| GT16GMP-1P-H | 766-0052-3 | Housing: PPS/Black Inner Terminal: Phosphor bronze/Tin plating Outer Terminal: Phosphor bronze/Tin plating Insulator L,R: PPS/Natural Shield plate: Phosphor bronze/Tin plating Metal fittings: Brass/Tin plating | 200 pcs/reel | YES  |

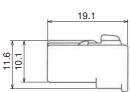
# **■** F Connector (Retainer required type)

# Housings











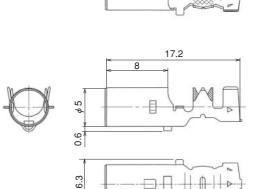
| Part No.        | HRS No.       | Material | Color      | Packaging | RoHS |
|-----------------|---------------|----------|------------|-----------|------|
| GT16G-1S-HU     | 766-0026-3    | PBT      | Light Gray | 1         | YES  |
| GT16G-1S-HU(24) | 766-0026-3 24 | ГВІ      | Black      | '         | TES  |



Note : Use this product with separate retainer part GT16C-1P/S-R (CL766-0011-6).

# Outer Terminal



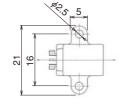


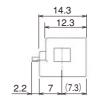
| Part No.         | HRS No.    | Material        | Plating     | Applicable cable      | Packaging | RoHS |
|------------------|------------|-----------------|-------------|-----------------------|-----------|------|
| GT16G-/1.6-2.9SC | 766-0024-8 | Phosphor bronze | Tin plating | 1.5D-2W or equivalent | 1         | YES  |

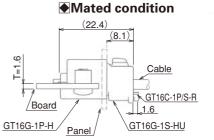
# ■ Genuine Market Parts M Connectors

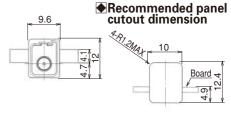
# ■ Board Type (Screw Fastening Type)



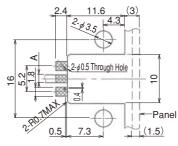








# 



Note 1: Suitable mounting screws are JIS B 1122 pan head tapping screws class 2, nominal diameter 3, length 6.

Note 2: Use micro strip line and set so that dimension A has a characteristic impedance of  $50\Omega$ .

GT16GD-1P-H

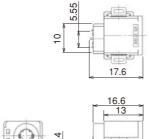
Board

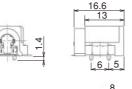
# Part No. HRS No. Material/Plating or Color Packaging RoHS Housing: PBT/Light Gray Inner Terminal: Phosphor bronze/Tin plating Outer Terminal: Phosphor bronze/Tin plating Insulator: PBT/Natural

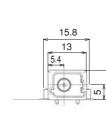
#### Board Type (SMT Type)

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GT16GD-1S-HU

**Mated condition**

(24.7

Panel

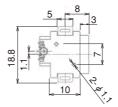
(1.6)

GT16C-1P/Ş-R

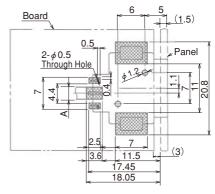
# Recommended PCB pattern

◆Recommended panel cutout dimension

2-R1.2MAX



| Part No.    | HRS No.    | Material/Plating or Color   | Packaging    | RoHS |
|-------------|------------|---|--------------|------|
| GT16GD-1P-H | 766-0044-5 | Housing: PPS/Black Inner Terminal: Phosphor bronze/Tin plating Outer Terminal: Phosphor bronze/Tin plating InsulatorL,R: PPS/Natural Shield plate: Phosphor bronze/Tin plating Metal reinforcement: Brass/Tin plating | 200 pcs/reel | YES  |

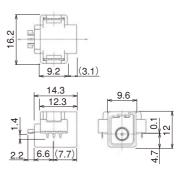


Note : Use micro strip line and set so that dimension A has a characteristic impedance of  $50\Omega$ .

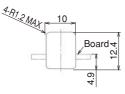
# Board Type (Lead Reflow Type)

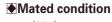


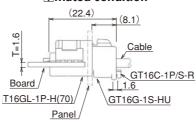




Recommended panel cutout dimension

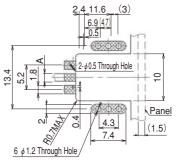






| Part No.        | HRS No.       | Material/Plating   | Color      | Packaging    | RoHS |
|-----------------|---------------|--|------------|--------------|------|
| GT16GL-1P-H(70) | 766-0043-2 70 | Housing: PPS<br>Inner Terminal:<br>Phosphor bronze/Tin plating<br>Outer Terminal:                  | Light Gray | 200 mag/magl | VEC  |
| GT16GL-1P-H(71) | 766-0043-2 71 | Phosphor bronze/Tin plating<br>Insulator: PBT/Natural<br>Metal reinforcement:<br>Brass/Tin plating | Black      | 200 pcs/reel | YES  |

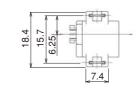
◆Recommended PCB pattern

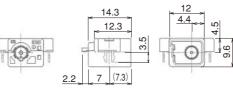


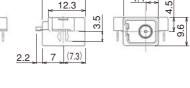
Note: Use micro strip line and set so that dimension A has a characteristic impedance of  $50\Omega$ .

#### Board Type (Lock Pin Type)

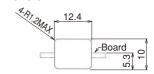




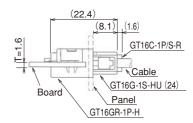




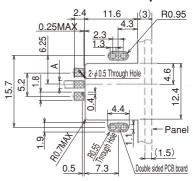
# ◆Recommended panel cutout dimension



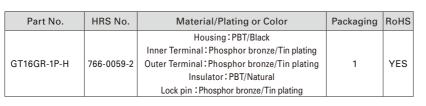
# Mated condition



## ◆Recommended PCB pattern



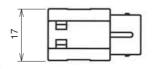
Note: Use micro strip line and set so that dimension A has a characteristic impedance of  $50\Omega$ .



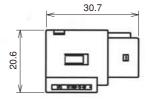
# **■** F Connector (Waterproof type)

# Housing



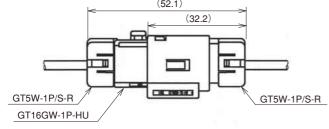








# **Mated condition** (52.1)



|   | ш | - 1 |         |
|---|---|-----|---------|
| _ |   | -   | 1       |
|   |   |     | $\perp$ |

| Part No.     | HRS No.    | Material       | Color | Packaging | RoHS |
|--------------|------------|----------------|-------|-----------|------|
| GT16GW-1S-HU | 766-0076-1 | PBT            | Black | 1         | YES  |
| G110GW-15-HU | 766-0076-1 | Silicon rubber | White | '         | 150  |

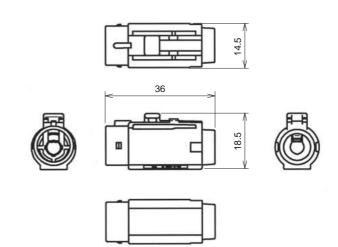
Note: Assemble main parts with separated retainer part GT5W-1P/S-R (CL755-0028-5).

# **■** M Connector (Waterproof type)

## Housing

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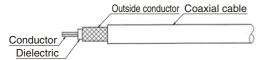
| Part No.     | HRS No.    | Material | Color | Packaging | RoHS |
|--------------|------------|----------|-------|-----------|------|
| GT16GW-1P-HU | 766-0077-4 | PBT      | Black | 1         | YES  |

Note: Assemble main parts with separate retainer part GT5W-1P/S-R (CL755-0028-5).

# GT16G Wiring Method

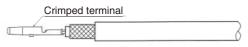
①Strip the cable.

- Note 1. See "Crimping Quality Standards Manual" for information about the end processing dimensions.
- Note 2. Before performing end processing, arrange cable ends to be perpendicular. (There shall be no cable crushing.)
- Note 3. Care must be taken so as not to damage the various cut portions of the center conductor, dielectric, and outer conductor.



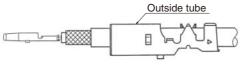
2 Crimp the center terminal with the special jig.

- Note 1. See "Crimping Conditions Table" for information about the crimp height.
- Note 2. See "Crimping Quality Standards Manual" for information about crimping standards.



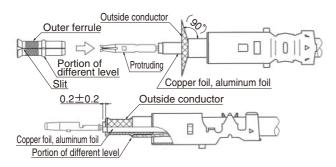
③Place the outside tube over the cable.

Note 1. Pay attention to the placement direction of the outside tube.



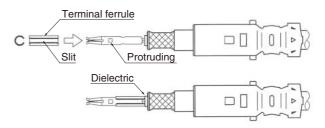
4) Widen the external conductor with the special tool, place the outer ferrule, and return the external conductor over the outer ferrule.

- Note 1. Spread only the outer conductor without unravelling. Copper foil or aluminum foil shall not be spread, but shall be on the inside of the outer ferrule.
- Note 2. The orientation of the outer ferrule shall be as indicated in the diagram. Align the slit of the outer ferrule with the protruding portion of the crimp terminal and insert.
- Note 3. The outer ferrule shall be placed so that the portion of different level is inserted as far as the sheath end.
- Note 4. Pay attention to pinching of the external conductor (i.e., biting into the sheath) during the placement.



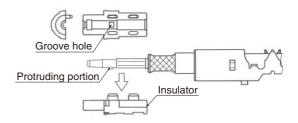
⑤Using the special jig, insert the terminal ferrule from the coupling side of the crimp terminal until it reaches the end.

Note 1. Orient the terminal ferrule as illustrated in the diagram, align the slit portion of the terminal ferrule with the protruding portion of the crimp terminal, and then insert.



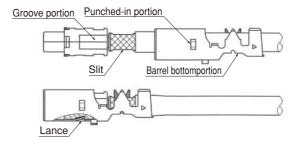
6 Set the aforementioned terminal block onto the insulator and enclose it from the top with one more insulator.

- Note 1. Set the protruding portion of the crimp terminal in the groove hole of the insulator.
- Note 2. Pull the cable with a force on the order of 4.9 N and check that the terminal block does note come out.



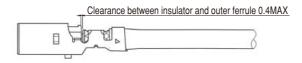
Tuse the special tool to cover the insulator with the outside tube, which was previously inserted.

- Note 1. Orient the outside tube as illustrated in the diagram, align the punched-in portion of the outside tube with the groove portion of the insulator (so that at both left and right, the split of the outer ferrule is aligned with the barrel bottom portion of the outside tube), and then insert.
- Note 2. Insert until the insulator stops at the lance of the outside tube.



#### 8 Use the special jig to crimp the crimp terminal.

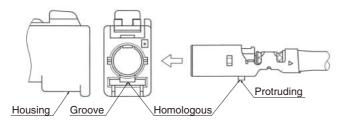
- Note 1. See "Crimping Conditions Table" for information about the crimping height.
- Note 2. See "Crimping Quality Standards Manual" for information about crimping standards.



Insert the aforementioned outside tube block into the housing.

Note 1. Align the protruding portion of the outside tube with the groove portion of the housing, and then insert.

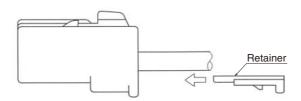
Note 2. Insert until the outside tube stops at the lance of the housing.



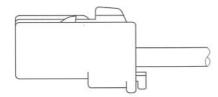
#### ®Insert the retainer into the housing.

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Note 1. Insert until the retainer stops at the housing.



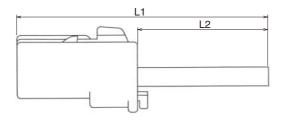
①Inspect and complete the wiring.



Note: The length (L) dimension after wiring and the cut cable length are described below.

Cut cable length: L1 – 8.1

L2 + 11.0



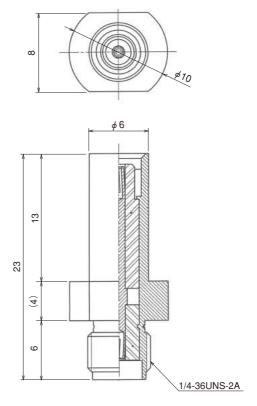
# ■ Conversion Adapter

# ● SMA Conversion Adapter (Coupling portion: GT16G side jack - SMA side jack)



Note: The adapter does not have a lock portion and thus can only be used for performance measurements.

| Part No.    | HRS No.    | Packaging | RoHS |
|-------------|------------|-----------|------|
| GT16GS-HRMJ | 766-0031-3 | 1         | YES  |

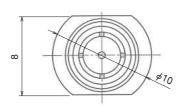


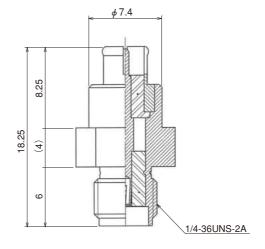
## ● SMA Conversion Adapter (Coupling portion: GT16G side plug - SMA side jack)



Note: The adapter does not have a lock portion and thus can only be used for performance measurements.

| Part No.    | HRS No.    | Packaging | RoHS |
|-------------|------------|-----------|------|
| GT16GP-HRMJ | 766-0030-0 | 1         | YES  |





# **●** F Connector Composition Table

| Terminal Ferrule | Outer Ferrule                     | Inner Terminal | Insulator | Outer Terminal    | Housing          | Retainer     |  |  |  |  |                  |              |  |
|------------------|-----------------------------------|----------------|-----------|-------------------|------------------|--------------|--|--|--|--|------------------|--------------|--|
|                  |                                   |                |           | GT16GM-/1.6-2.9SC | GT16GM-1S-HU     | _            |  |  |  |  |                  |              |  |
|                  |                                   |                |           |                   | GT16G-1S-HU      |              |  |  |  |  |                  |              |  |
| GT16G-FR         | GT16G-FR GT16G-1.5DHQS GT16G-2428 | GT16G-2428SCF  | GT16G-SC  | GT16G-/1.6-2.9SC  | GT16G-1S-HU (24) | GT16C-1P/S-R |  |  |  |  |                  |              |  |
|                  |                                   |                |           |                   |                  |              |  |  |  |  | G110G-/1.6-2.93C | GT16GD-1S-HU |  |
|                  |                                   |                |           |                   | GT16GW-1S-HU     | GT5W-1P/S-R  |  |  |  |  |                  |              |  |

# **▶** M Connector Composition Table

| Terminal Ferrule | Outer Ferrule | Inner Terminal | Insulator | Outer Terminal   | Housing        | Retainer    |
|------------------|---------------|----------------|-----------|------------------|----------------|-------------|
|                  |               |                |           |                  | GT16GM-1P-HU   |             |
| GT16G-FR         | GT16G-1.5DHQS | GT16G-2428PCF  | GT16G-PC  | GT16G-/1.6-2.9PC | GT16GMN-1PP-HU | _           |
|                  |               |                |           |                  | GT16GW-1P-HU   | GT5W-1P/S-R |

Wiring Tools

| Printed Circuit Board Type |
|----------------------------|
| GT16GM-1P-H                |
| GT16GMP-1P-H               |
| GT16G-1P-H                 |
| GT16GL-1P-H (70)           |
| GT16GL-1P-H (71)           |
| GT16GR-1P-H                |
| GT16GD-1P-H                |

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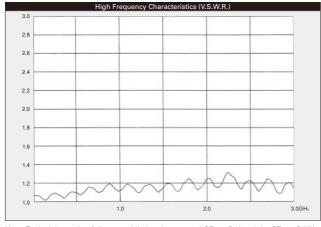
| ,          | Applicable Connectors            | GT16G-1S-HU<br>GT16G-1S-HU (24)<br>GT16GD-1S-HU  | GT16GM-1P-HU<br>GT16GMN-1PP-HU   |
|------------|----------------------------------|--|--|
| Process 1  | Cable strip processing           | Schleuniger MP257, etc. (Commercial product)   | Schleuniger MP257, etc. (Commercial product)   |
| Process 2  | Center terminal crimping         | Crimping machine body type 105<br>+<br>AP105-GT16G-2428P   | Crimping machine body type 105<br>+<br>AP105-GT16G-2428P   |
| Process 3  | Cable forming                    | Shield forming tool<br>GT16G-1.5DHQS/CF-MD   | Shield forming tool<br>GT16G-1.5DHQS/CF-MD   |
| Process 4  | Outside ferrule insertion        | Outside ferrule insertion tool<br>GT16G-1.5DHQS/PR-MD  | Outside ferrule insertion tool<br>GT16G-1.5DHQS/PR-MD  |
| Process 5  | Terminal ferrule insertion       | Terminal ferrule insertion tool GT16G-FR/PR-MD   | Terminal ferrule insertion tool<br>GT16G-FR/PR-MD  |
| Process 6  | Insulated washer assembly        | Manual task  | Manual task  |
| Process 7  | Outside tube insertion           | Insulated washer press tool<br>GT16G-SC/PR-MD  | -  |
| Process 8  | Outside tube tightening          | Hand press MOS-7<br>+<br>GT16G-1.6-2.9S/CK-MP  | Hand press MOS-7<br>+<br>GT16G-1.6-2.9P/CK-MP  |
| Process 9  | Housing, (retainer) installation | Manual task  | Manual task  |
| Process 10 | Inspection                       | High frequency characteristics test (Complete)<br>Continuity / Withstand voltage test<br>Inspection of external appearance | High frequency characteristics test (Complete)<br>Continuity / Withstand voltage test<br>Inspection of external appearance |

GT16GM-1S-HU

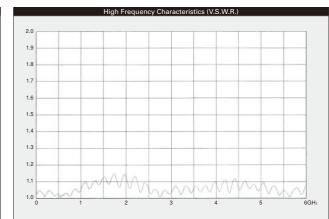
# **◆** Mating Table

| F Connectors      | M Connectors     |
|-------------------|------------------|
|                   | GT16GM-1P-H      |
| GT16GM-1S-HU      | GT16GMP-1P-H     |
| G1 1001VI-13-HU   | GT16GM-1P-HU     |
|                   | GT16GMN-1PP-HU   |
|                   | GT16G-1P-H       |
| GT16G-1S-HU       | GT16GL-1P-H (70) |
|                   | GT16GB-1PP-HU    |
| GT16G-1S-HU (24)  | GT16GL-1P-H (71) |
| G1 10G-13-HU (24) | GT16GR-1P-H      |
| GT16GD-1S-HU      | GT16GD-1P-H      |

# **●** Test Data (Using 1.5D-2W Type cable)







Note: The measurement data shown above were obtained using the GT16G-1P-H and GT16G-1S-HU.