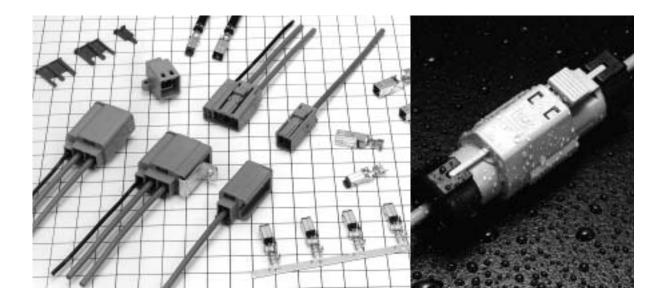
SAE/USCAR-19

Termination of coaxial cables in automotive, medical and instrumentation applications utilizes a single motion to crimp the center conductor, shield and outer insulation.

GT5 Series

— Connectors for coaxial cables —

Several types and configurations: In-line, board mounted, combinations of coaxial cable with signal/power, Multi-position and color/ keying variations.>



Features

- USCAR Standard titled "Square Outer Conductor (SAE/USCAR-19)" excludes Water Proof type (GT5W)
- Cost efficient termination

Highly efficient and reliable single motion "Twin Crimp" termination allows high volume production with semi-automatic equipment.

- Space-saving Design
- Lock-release latching system
- Shock / vibration resistant electrical connections
- Verification of the full contact insertion
- Color and polarizing variations
- Excellent High Frequency Performance

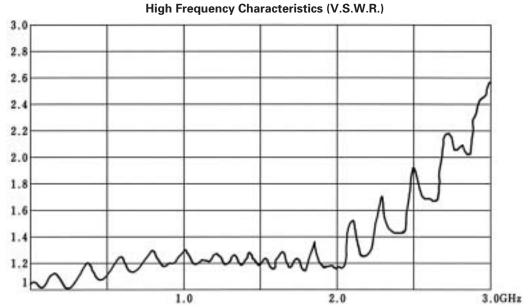
Refer to V.S.W.R. data on the following pages.

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, variety of communication equipment, office automation equipment, LAN systems.

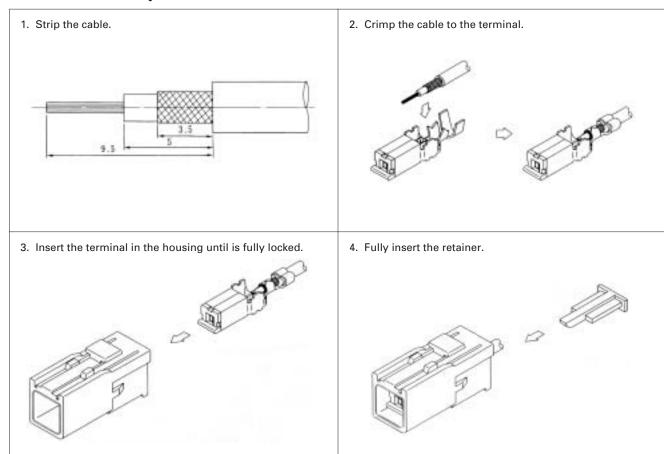
^{*&}quot;Twin Crimp"is a registered trade mark of Hirose Electric.

Test Data (Using 1.5D-2V Type cable)



Note: Typical data using fully assemblied and connected GT5-1S-HU and the GT5-1PP-HU.

Termination sequence



Terminals for coaxial shielded cable

F Connector Terminals



	Part Number	CL No.	Conductor Size (AWG)	Inner Insulation Diameter	Outer Diameter	Packaging
	GT5-30/0.7-1.5SCF	755-0065-1	#30 or equivalent	0.6 to 0.9mm	1.4 to 1.8mm	1,300 pcs. per reel
	GT5-2428/1.6-2.5SCF	755-0078-3	#30 or equivalent	1.5 to 2.0mm	2.3 to 2.7mm	1,300 pcs. per reel
	GT5-30/1.6-2.9SCF	755-0022-9	#24 to 28 or equivalent			
	GT5-2428/1.6-2.9SCF	755-0002-1	#24 to 28 or equivalent	1.5 to 2.0mm	2.6 to 3.4mm	1,300 pcs. per reel
	GT5-2022/1.6-2.9SCF	755-0071-4	#20 to 22 or equivalent			
	GT5-2022/F2.7-3.5SCF	755-0077-0	#20 to 22 or equivalent	2.4 to 2.9mm	3.3 to 3.7mm	1,100 pcs. per reel
*	GT5-2022/F3.3-3.8SCF	755-0054-5	#20 to 22 or equivalent	2.5 to 2.9mm	3.6 to 4.0mm	1,100 pcs. per reel
*	GT5-30/3.3-5SCF	755-0016-6	#30 or equivalent			
*	GT5-2428/F3.3-5SCF	755-0012-5	#24 to 28 or equivalent	2.5 to 2.9mm	4.6 to 5.0mm	1,100 pcs. per reel
*	GT5-2022/F3.3-5SCF	755-0034-8	#20 to 22 or equivalent			
*	GT5-30/F4-5SCF	755-0020-3	#30 or equivalent			
*	GT5-2428/F4-5SCF	755-0024-4	#24 to 28 or equivalent	3.0 to 3.6mm	4.6 to 5.0mm	1,100 pcs. per reel
*	GT5-2022/F4-5SCF	755-0036-3	#20 to 22 or equivalent			
Nic	to: Producte marked	with an acto	rick (*) indicate poly	othylono foor	m inculation	

Γ		11.7	1
22	1		
1 0	<u> </u>	F V	II.
			喔

Part	Material	Finish
Insulator	PBT	Color: Dark gray
Crimp terminals	Phosphor bronze	Tin plating
Outer terminals	Brass	Tin plating

Note: Products marked with an asterisk (*) indicate polyethylene foam insulation.

M Connector Terminals



	Part Number	CL No.	Conductor Size (AWG)	Inner Insulation Diameter	Outer Diameter	Packaging
	GT5-30/0.7-1.5PCF	755-0017-9	#30 or equivalent	0.6 to 0.9mm	1.4 to 1.8mm	900 pcs. per reel
	GT5-30/1.6-2.9PCF	755-0021-6	#30 or equivalent			
	GT5-2428/1.6-2.9PCF	755-0001-9	#24 to 28 or equivalent	1.5 to 2.0mm	2.6 to 3.4mm	900 pcs. per reel
	GT5-2022/1.6-2.9PCF	755-0094-0	#20 to 22 or equivalent			
	GT5-2022/F2.7-3.5PCF	755-0076-8	#20 to 22 or equivalent	2.4 to 2.9mm	3.3 to 3.7mm	900 pcs. per reel
*	GT5-2022/F3.3-3.8PCF	755-0053-2	#20 to 22 or equivalent	2.5 to 2.9mm	3.6 to 4.0mm	900 pcs. per reel
*	GT5-30/F3.3-5PCF	755-0015-3	#30 or equivalent			
*	GT5-2428/F3.3-5PCF	755-0011-2	#24 to 28 or equivalent	2.5 to 2.9mm	4.6 to 5.0mm	900 pcs. per reel
*	GT5-2022/F3.3-5PCF	755-0033-5	#20 to 22 or equivalent			
*	GT5-30/F4-5PCF	755-0019-4	#30 or equivalent			
*	GT5-2428/F4-5PCF	755-0023-1	#24 to 28 or equivalent	3.0 to 3.6mm	4.6 to 5.0mm	900 pcs. per reel
*	GT5-2022/F4-5PCF	755-0035-0	#20 to 22 or equivalent			

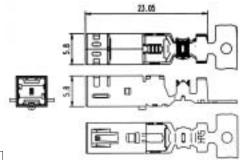
Part	Material	Finish
Insulator	PBT	Color: Dark gray
Crimp terminals	Brass	Tin plating
Outer terminals	Brass	Tin plating

Note: Products marked with an asterisk (*) indicate polyethylene foam insulation.

Low-insertion M Connector Terminals



Part Number	HRS No.	Conductor Size (AWG)	Inner Insulation Diameter	Outer Diameter	Packaging
GT5L-30/0.7-1.5PCF	755-0068-0	#30 or equivalent	0.6 to 0.9mm	1.4 to 1.8mm	900 pcs. per reel
GT5L-30/1.6-2.9PCF	755-0067-7	#30 or equivalent			
GT5L-2428/1.6-2.9PCF	755-0066-4	#24 to 28 or equivalent	1.5 to 2.0mm	2.6 to 3.4mm	900 pcs. per reel
GT5L-2428/1.6-2.5PCF	755-0079-6	#24 to 28 or equivalent			



Material	Finish
PBT	Color: Dark gray
Brass	Tin plating
Brass	Tin plating
	PBT Brass

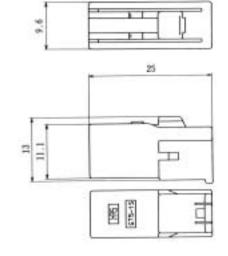
For Single-Conductor coaxial shielded cable

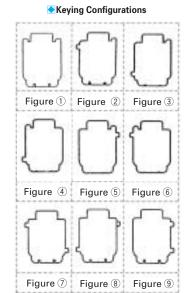
F Connectors

Housing



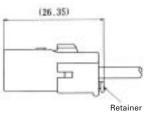
GT5-1S-HU



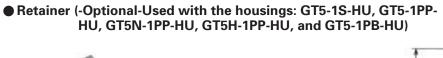


Part Number	CL No.	Material	Color	Key polarizing code	Corresponding M Connector Housing- In-line	Corresponding M Connector Assembly- Board Mounting	USCAR-19 Coding
GT5-1S-HU	755-0004-7		Light gray	Figure ①	GT5-1PP-HU	GT5-1P-DS	_
GT5-1S-HU(A)	755-0037-6		Brown	Figure 2	GT5-1PP-HU(A)	GT5-1P-DS(A)	Α
GT5-1S-HU(B)	755-0038-9		Green	Figure 3	GT5-1PP-HU(B)	GT5-1P-DS(B)	В
GT5-1S-HU(C)	755-0080-5		Blue	Figure 4	GT5-1PP-HU(C)	GT5-1P-DS(C)	С
GT5-1S-HU(D)	755-0081-8	PBT	Purple	Figure 5	GT5-1PP-HU(D)	GT5-1P-DS(D)	D
GT5-1S-HU(E)	755-0082-0		Pink	Figure 6	GT5-1PP-HU(E)	GT5-1P-DS(E)	E
GT5-1S-HU(I)	Note 1		Black	Figure 7	GT5-1PP-HU(I)	GT5-1P-DS(I)	I
GT5-1S-HU(J)	Note 1		Cream white	Figure ®	GT5-1PP-HU(J)	GT5-1P-DS(J)	J
GT5-1S-HU(K)	Note 1		Pastel orange	Figure 9	GT5-1PP-HU(K)	GT5-1P-DS(K)	К

Shown with inserted retainer.

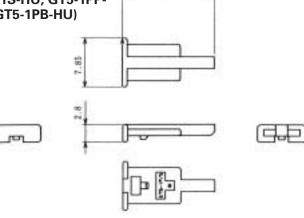


Terminal extraction tool: GT-PO(A), Note 1: concept only





Part Number	CL No.	Material	Color
GT5-1P/S-R	755-0006-2	PBT	Dark gray



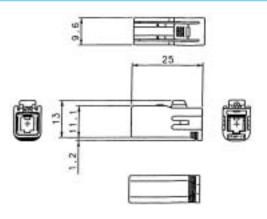
Housing (Not requiring use of the retainer)



GT5R-1S/HU

Part Number	CL No.	Material	Color
GT5R-1S-HU	755-0047-0	PBT	Light gray

Terminal extraction tool: GT-PO(A)



M Connectors

Housing

Part Number

GT5-1PP-HU

GT5-1PP-HU(A)

GT5-1PP-HU(B)

GT5-1PP-HU(C)



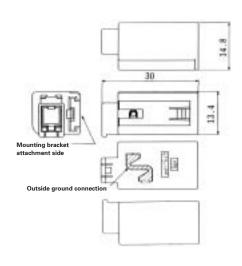
CL No.

755-0005-0

755-0039-1

755-0040-0

755-0103-9



USCAR-19

Coding

В

С

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Key polarizing

Figure ①

Figure 2

Figure 3

Figure 4

Color

Light Gray

Brown

Green

Blue

•	Keying Configurations			
6				
Figure ①	Figure ②	Figure ③		
Figure ④	Figure ⑤	Figure ⑥		
٦				
Figure ⑦	Figure ®	Figure 9		

Shown with inserted retainer.

	(31.35)		
	A	-	
Retainer			

GT5-1PP-HU(D) 755-0104-1 GT5-1S-HU(D) Purple Figure 5 GT5-1PP-HU(E) 755-0105-4 GT5-1S-HU(E) Pink Figure 6 GT5-1PP-HU(I) Note 1 GT5-1S-HU(I) Black $\mathbf{Figure} \ 7)$ GT5-1PP-HU(J) Note 1 GT5-1S-HU(J) Cream white Figure ® GT5-1PP-HU(K) Note 1 GT5-1S-HU(K) Figure 9

GT5-1S-HU

GT5-1S-HU(A)

GT5-1S-HU(B)

GT5-1S-HU(C)

Corresponding F Connector

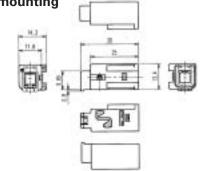
Housing

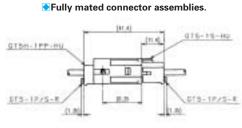
- * Refer to pages 32 and 34 for panel brackets used with in-line connectors.

* Terminal extraction tool: GT-PO(A) Note 1: concept only

Part	Material	Finish
Housing	PBT	Color: Dark gray
Ground terminal	Phosphor bronze	Tin plating



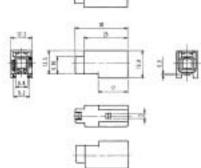




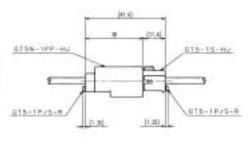
Part Number	CL No.	Color	Corresponding F Connector Housing
GT5H-1PP-HU (10)	755-0093-7 10	Light Gray	GT5-1S-HU
GT5H-1PP-HU (41)	755-0093-7 41	Blue	GT5R-1S-HU

Housing (For use with N type mounting bracket)





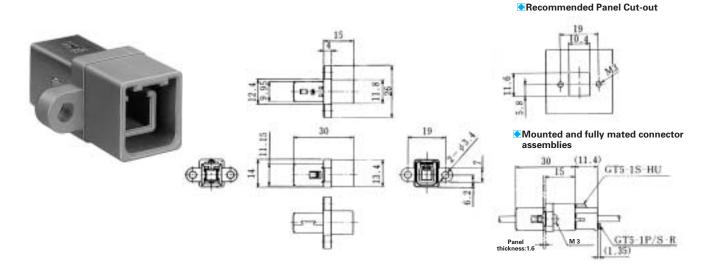
Fully mated connector assemblies.



Part Number	CL No.	Color	Corresponding F Connector Housing
GT5N-1PP-HU	755-0090-9 Light Gray	GT5-1S-HU	
G15N-1FF-HO	755-0090-9	Light Gray	GT5R-1S-HU

Housings

[Panel mounting, enhanced] shielding configuration

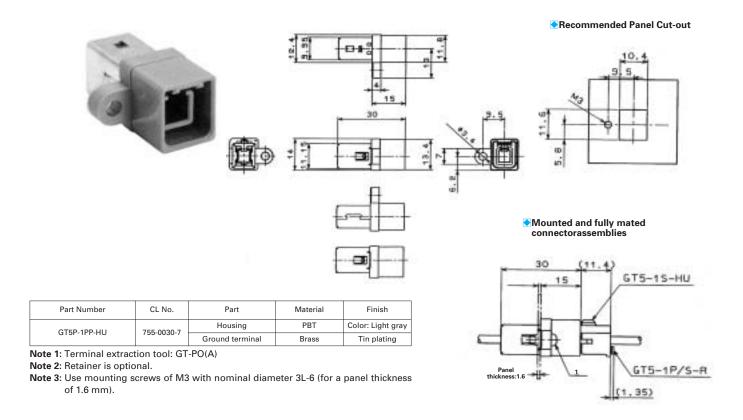


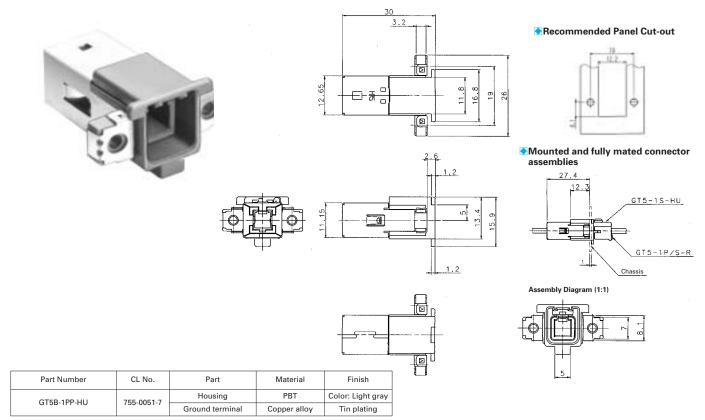
Part Number	CL No.	Part	Material	Finish
GT5A-1PP-HU	755-0025-7	Housing	PBT	Color: Light gray
GT5A-TFT-HO	G15A-1PP-HU /55-0025-/		Brass	Tin plating

Note 1: Terminal extraction tool: GT-PO(A)

Note 2: Retainer is optional.

Note 3: Use mounting screws of M3 with nominal diameter 3L-6 (for a panel thickness of 1.6 mm).

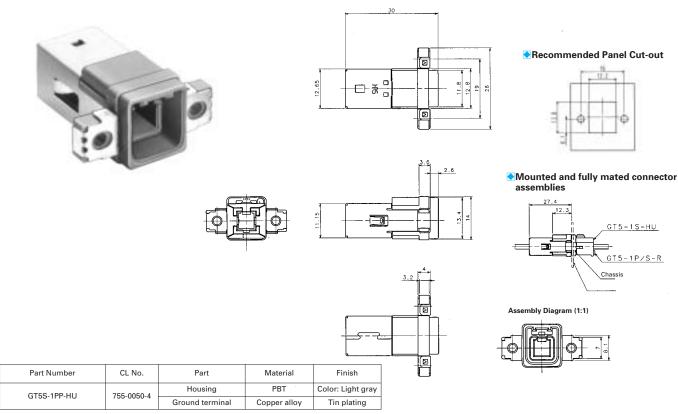




Note 1: Terminal extraction tool: GT-PO(A) with nominal diameter 3L-6 (for a board thickness of 1.6 mm).

Note 2: Retainer is optional.

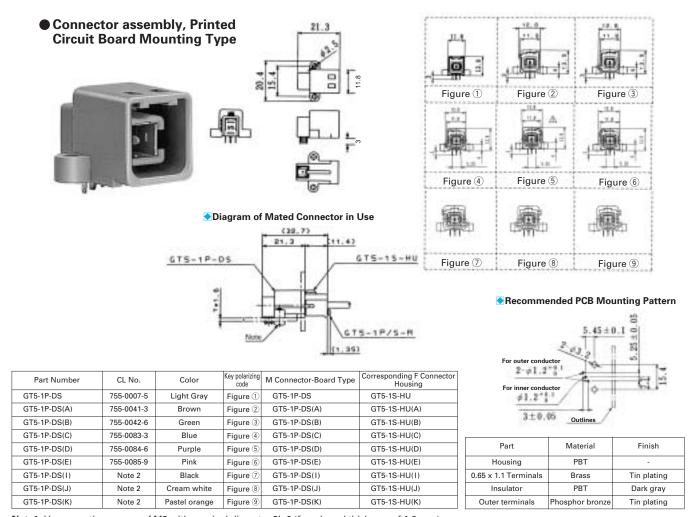
Note 3: Use mounting screws of M3 with nominal diameter 3L-6 (for a panel thickness of 1.6 mm).



Note 1: Terminal extraction tool: GT-PO(A) with nominal diameter 3L-6 (for a board thickness of 1.6 mm).

Note 2: Retainer is optional.

Note 3: Use mounting screws of M3 with nominal diameter 3L-6 (for a panel thickness of 1.6 mm).



Note1: Use mounting screws of M3 with nominal diameter 3L-6 (for a board thickness of 1.6 mm).

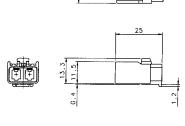
Note2: concept only

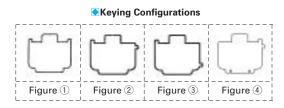
Two-position type-Each Single-Conductor coaxial cable

F Connectors

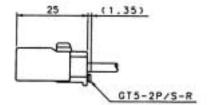
Housing











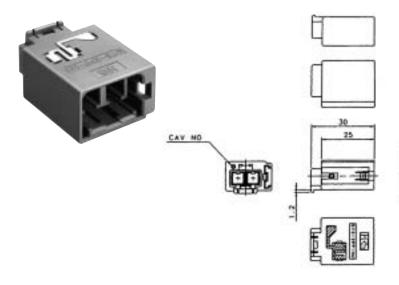
Part Number	CL No.	Material	Color	Key polarizing code	USCAR-19 Coding
GT5-2S-HU	755-0044-1		Light Gray	Figure ①	D2
GT5-2S-HU(A)	755-0059-9	PBT	Brown	Figure 2	A2
GT5-2S-HU(B)	755-0060-8	FBI	Green	Figure 3	B2
GT5-2S-HU(C)	755-0097-8		Blue	Figure 4	C2

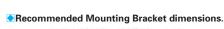
Note 1: Terminal extraction tool: GT-PO(A)

Note 2: Used with separate retainer (GT-5-2P/S-R).

M Connectors

Housing[Panel Mounted Housing]





Shown with inserted retainer.

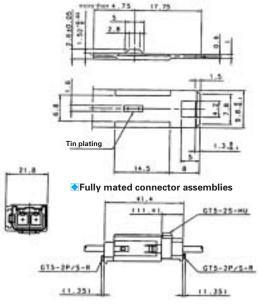
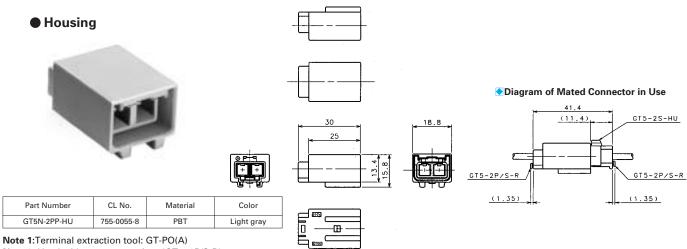


Figure ① Figure ② Figure ③ Figure ④

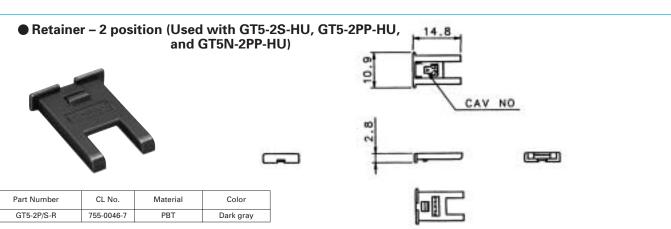
	Part Number	CL No.	Color	Key polarizing code
	GT5-2PP-HU	755-0045-4	Light Gray	Figure ①
	GT5-2PP-HU(A)	755-0063-6	Brown	Figure ②
ĺ	GT5-2PP-HU(B)	755-0064-9	Green	Figure 3
Ī	GT5-2PP-HU(C)	_	Blue	Figure (4)

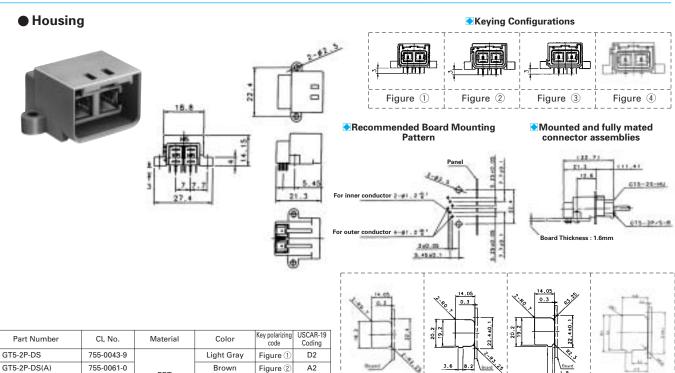
Part	Material	Finish
Housing	PBT	-
Ground terminal	Phosphor bronze	Tin plating

Note: Used with separate retainer (GT-5-2P/S-R). Coding D2 at USCAR-19 is GT5-2PP-HU.



Note 2: Used with separate retainer (GT-5-2P/S-R).





Note: Use mounting screws of M3 with nominal diameter 3L-6 (for a board thickness of 1.6 mm). Coding D2 at USCAR-19 is GT5-2P-DS.

755-0062-3

PBT

Green

Blue

Figure 3

Figure 4

B2

C2

GT5-2P-DS (D)

GT5-2P-DS (C)

GT5-2P-DS (B)

GT5-2P-DS (A)

Recommended Panel Cut-out

GT5-2P-DS(B)

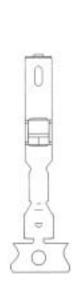
GT5-2P-DS(C)

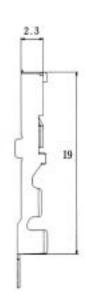
Power Supply Terminals

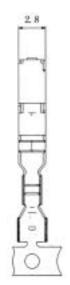
(For use with combination type assemblies: GT5-2/1S-HU, GT5-2/1P-DS, GT5-2/1PP-HU, GT5N-2/1PP-HU)

F Connector Terminals







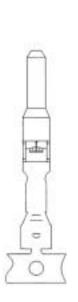


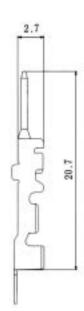
Part Number	CL No.	Material	Finish	Conductor Size (AWG)	Outer Diameter	Packaging
GT7-2022SCF	757-0001-1	Coppor alloy	Copper alloy Tin plating -	#20 to 22	1.4 to 2.4mm	5,000
GT7A-2022SCF	757-0003-7	сорры апоу		#20 to 22	2.6 to 3.1mm	3,000

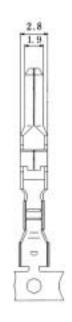
Note 1: Sold by the reel. (See above table for number of Packaging.)
Note 2: This component is used only with applicable HRS housings.

M Connector Terminals









Part Number	CL No.	Material	Finish	Outer Diameter	Packaging
GT7-2022PCF	757-0002-4	Brass Tin	Tip plating	1.4 to 2.4mm	5,000
GT7A-2022PCF	757-0004-0	Diass	Brass Tin plating	2.6 to 3.1mm	3,000

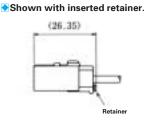
Combinaton Type (Two Single-Conductor Coaxial Cables + One Power contact)

F Connectors

Housing



25



Part Number	CL No.	Material	Color
GT5-2/1S-HU	755-0009-0	PBT	Light gray

Note 1:Terminal extraction tool: GT-PO(A)

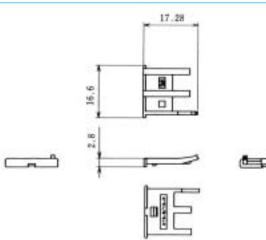
Note 2: Used with separate retainer (GT5-2/1S-R).



Retainer (exclusively for GT5-2/1S-HU)



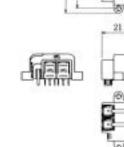
Part Number	CL No.	Material	Color
GT5-2/1S-R	755-0003-4	PBT	Dark gray

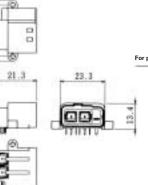


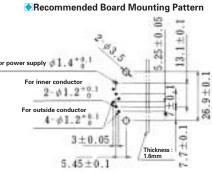
M Connectors

Connector assembly, Printed **Circuit Board mounting**





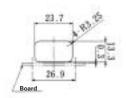




● Recommended Panel Cut-out

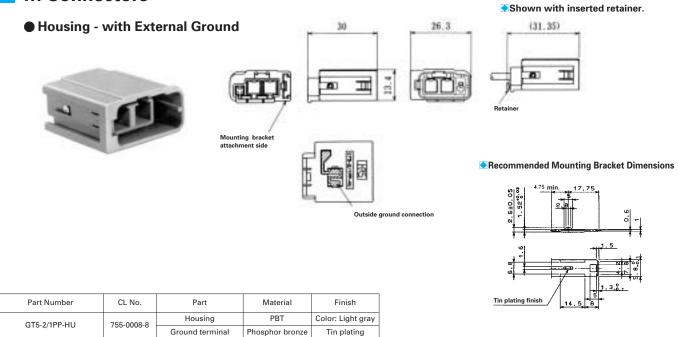
	Part	Material	Finish
	Housing	PBT	Color: Light gray
	0. 64x1.1 Terminal	Brass	Tin plating
	Insulator	PBT	Dark gray
CL No.	Outer terminal	Phosphor bronze	Tin plating
55-0014-0	Tub terminal for DS 070	Brass	Tin plating

		Outer terminar	1 Hospitor Bronze	I III plating
GT5-2/1P-DS	755-0014-0	Tub terminal for DS 070	Brass	Tin plating
Note: Use mounting	screws of N	13 with nominal diameter	3L-6 (for a board	d thickness of 1



Part Number

M Connectors



Note 1: Terminal extraction tool: GT-PO(A)

Note 2: Used with separate retainer (GT5-2/1PP-R).

Housing - without External Ground





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Part Number	CL No.	Material	Color
GT5N-2/1PP-HU	755-0013-8	PBT	Light gray

Note 1: Terminal extraction tool: GT-PO(A)

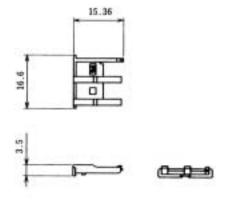
Note 2: Used with separate retainer GT5-2/1PP-R and mounting bracket GT-BK or GT-BK (01).

● Retainer (Used with GT5N-2/1PP-HU and GT5-2/1PP-HU)



GT5-2/1PP-R

Part Number	CL No.	Material	Color
GT5-2/1PP-R	755-0010-0	PBT	Dark gray

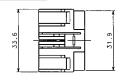


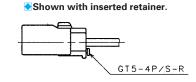


4-Position – Single conductor Coaxial cable

F Connectors















Part Number	CL No.	Material	Color	USCAR-19 Coding
GT5-4S-HU	755-0056-0	PBT	Light gray	D4

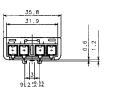
Note: Used with separate retainer (GT-5-4P/S-R).



M Connectors











Part Number	CL No.	Material	Color	USCAR-19 Coding
GT5N-4PP-HU	755-0057-3	PBT	Light gray	D4

Note 1: The product should be used with a low-force insertion/withdrawal M connector terminal.

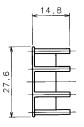
Note 2: Used with separate retainer GT-5-4P/S-R.



● Retainer (Used with GT5-4S-HU and GT5N-4PP-HU)











Part Number	CL No.	Material	Color
GT5-4P/S-R	755-0058-6	PBT	Dark gray



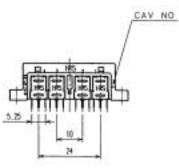
M Connectors

Part Number

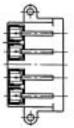
GT5-4P-DS

Connector assembly, Printed Circuit Board Mounting





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s F		57	6565	
-	3	50	- Truttituti	P

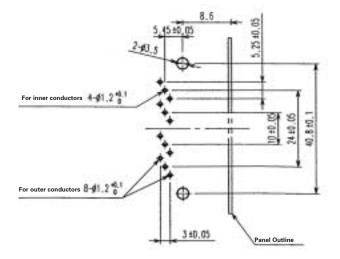


0

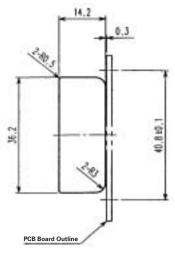
USCAR-19 Coding

CL No.

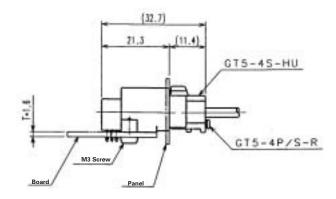
755-0087-4



Recommended Panel Cut-out



▶ Recommended Board and Panel installation



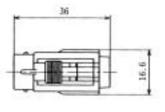
Single Conductor Coaxial Cable - Waterproof Type

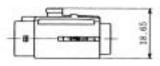
F Connectors

Housing









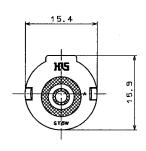


Part Number	CL No.	Material	Color
GT5W-1S-HU	755-0027-2	PBT	Light gray

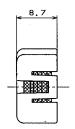
Note: Specific retainer is determined by the type of the cable used.

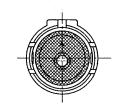
● Retainer (Used with GT5W-1P-HU, GT5JW-1PP-HU, GT5W-1S-HU and GT5W-1P-HU)











Part Number	CL No.	Material	Color
GT5W-1P/S-R	755-0028-5	PBT	Dark gray
G13VV-11/3-11		Silicon rubber Compound	Dark gray

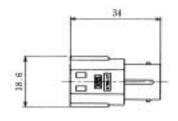
Note: Outer diameter of the cable must be within 2.9 to 3.4 mm. Consult nearest HRS representative for other diameters.

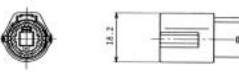


M Connectors

Housing







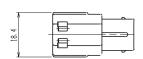


Part Number	CL No.	Part	Material	Color
GT5W-1P-HU	755-0026-0	Housing	PBT	Light gray
G15W-11-110	755-0020-0	Connector seal	Silicon rubber	White

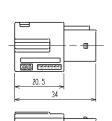
Note: Use correct retainer.

Housing - Bracket Mounting



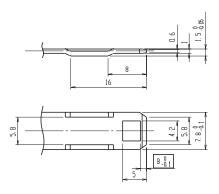




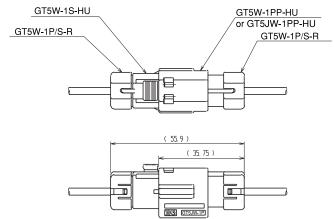




▶Recommended Bracket Dimensions



Mounted and fully mated connector assemblies

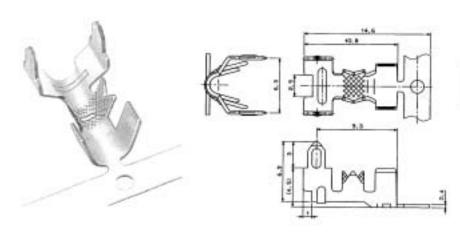


Part Number	CL No.	А	В
GT5W-1PP-HU	755-0070-1	1.5	1.3
GT5JW-1PP-HU	755-0069-2	3.2	3.0

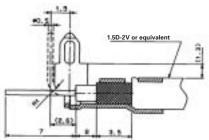
Part	Material	Color
Housing	PBT	Light gray
Connector seal	Silicon rubber Compound	White

G Terminals

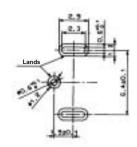
For Direct Coaxial Cable Termination

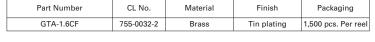


○Completed Termination cross section

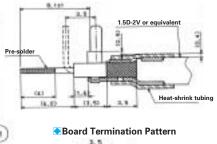


●Board Termination Pattern



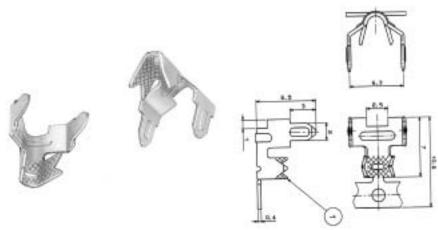


○Completed Termination cross section



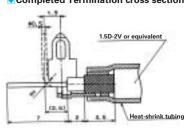
Part Number	CL No.	Material	Finish	Packaging
GTB-1.6CF	755-0049-5	Brass	Tin plating	1,500 pcs. Per reel

Board Termination Patro

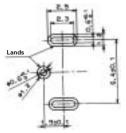


Part Number	CL No.	Material	Finish	Packaging
G-1.6PCF	755-0029-8	Brass	Tin plating	1,500 pcs. Per reel

●Completed Termination cross section



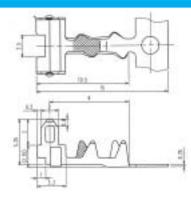
●Board Termination Pattern

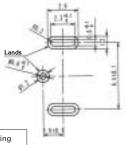


For Direct Coaxial Cable Termination

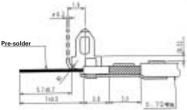


◆Recommended Board Termination Pattern
Terrimation Fattern







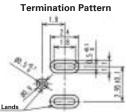


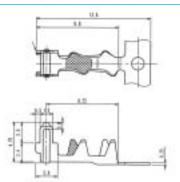
Part Number	CL No.	Material	Finish	Packaging
GTA-0.7CF	755-0074-2	Brass	Tin plating	1,500 pcs. Per reel



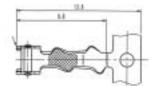








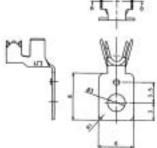
Recommended Completed Termination cross section

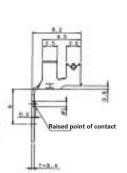


Part Number	CL No.	Material	Finish	Packaging
GTB-0.7CF	755-0075-5	Brass	Tin plating	1,500 pcs. Per ree

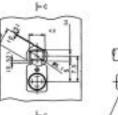
For Mid-Cable Termination



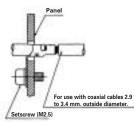










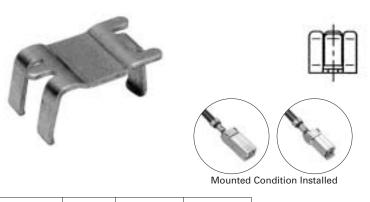


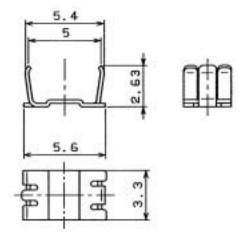
C-C

Part Number	CL No.	Material	Finish	Packaging
GT-1.6PG-C	755-0031-0	Brass	Tin plating	1

Bottom Shield cover







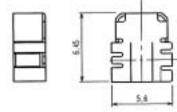
Part Number	CL No.	Material	Finish
GT5-1P/S-CSB	755-0048-2	Brass	Tin plating

Top Shield covers









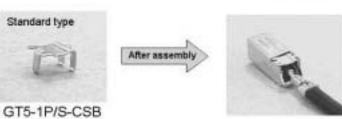


Part Number CL No.

GT5C-1P-CSB 755-0088-7

GT5 with New Shielding Cover



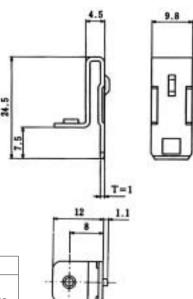


Panel Mounting In-line Bracket



GT-BK





Termination Tools

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

Automatic crimping machine



Specifications

Item	Specification	Remarks
Specification	1.5tons	
Stroke length	30mm	
Number of strokes	200spm(50Hz)	200spm(60Hz)
Weight	75kg	
Motor	0.2kW	AC100V
Crimping speed	2000 to 4000pcs. Per day	

^{*} 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.