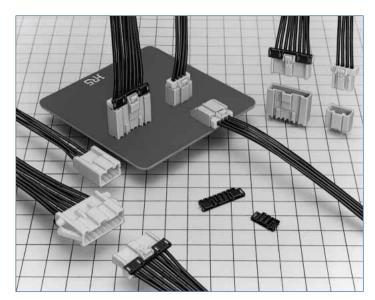
# 2.5mm Pitch Connectors for Full Lock and Discrete Wire Connection

#### **DF1E Series**



#### ■Features

#### 1. Full Lock Function Added

The inner lock system adopts a full lock mechanism. This mechanism prevents disengagement to occur due to an unexpected external shock. (Fig.1)

#### 2. Increase in Crimping Contact Fixation Force and **Semi-insertion Prevention**

The double lock is activated for the use method to give a stress to the cable, to increase crimping contact fixation force, and to prevent the semi-insertion of the crimping contact. (Fig.2)

#### 3. Mold Lance Adopted

Since the contact lance may be deformed involving in the contact after the crimping process, the mold lance has been adopted.

#### 4. Mis-insertion Prevention

Equipped with the mechanism to completely prevent reverse insertion and insertion between dissimilar contacts. (Fig.1)

#### 5. Means to Prevent Solder Crack

The glass enforcement resin is adopted for the pin header to prevent a solder crack to occur due to heat compression.

#### 6. Correspond to Potting

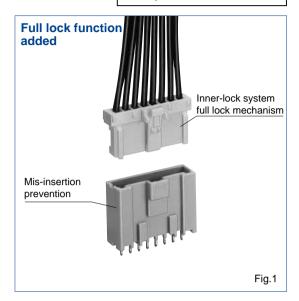
Corresponding to potting, the pin header is provided for product variations.

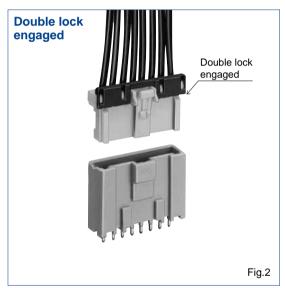
Corresponding to potting up to 8mm and mounting height 19.8mm (no retainer), the low profile is achieved.

#### 7. Production Facility Cost Reduction

The female crimping contact uses the DF1B series crimping contact, which has been conventionally marketed. Investment for new facilities isn't needed. However, if the retainer is installed in the cable with 22 AWG or more wire, use the DF1E crimping contact. The female crimping contact for in-line is used together with the DF1B applicator. Therefore, no investment is needed for new facilities.

UL. C-UL Listed





#### 8. Various Applications

With the same series, various applications can be used for the board solder dip type and inline.

#### 9. Listed by UL, C-UL

## **■**Products Specifications

Rating

Rating

Current rating Note 1.

AWG#20 to 24: 3A

26 : 2A 28 : 1A Operating Temperature Range: -35 to +85℃ Note 2.

Operating Moisture Range: 40 to 80%

Storage Temperature Range : -10 to +60°C Note 3. Storage Moisture Range : 40 to 70% Note 3.

30: 0.5A Voltage rating 250VAC

UL, C-UL Rating				
	20 to 22 AWG : 3A			
Current rating	24 to 28 AWG : 1A			
	30 AWG : 0.5A			
Voltage rating	29.9V AC			

■UL/C-UL File No. and Recognition No.

UL : E52653 C-UL : E52653

Item	Specification	Condition			
1. Contact Resistance	30m Ω max.	Measured at 20mV max. and 1mA			
2. Insulation Resistance	1000M Ω min.	500V DC			
Withstanding voltage No flashover or insulation breakdown.		650V AC/1 minute			
4. Single Insertor/Extraction Forth MIN 0.29N, MAX 4.41N		Measured at the square steel pin with 0.635±0.002			
5. Durability (Mating/un-mating) 30m Ω max		Tin plated : 30 cycles, Gold plated : 50 cycles			
6. Vibration	No electrical discontinuity of 1 $\mu$ s or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions			
7. Shock	No electrical discontinuity of 1 $\mu$ s or more	Acceleration of 490 m/s², 11 ms duration, sine half-wave waveform, 3 cycles in each of the 3 axis			
8. Humidity (Steady state)	30mΩ max	96 hours at temperature of 40±2°C and humidity of 90% to 95%			
9. Temperature Cycle	30m Ω max.	(-55°C: 30 minutes-> 5 to 35°C: 5 minutes-> 85°C: 30 minutes-> 5 to 35°C: 5 minutes) 5 cicles			
10. Resistance to Soldering heat	No deformation of components affecting performance.	Flow: 260℃ for 10 seconds			
		Manual soldering : 300℃ for 3 seconds			

Note 1: Current rating of header is 3A.

Note 2: Includes temperature rise caused by current flow.

Note 3: The term "storage" refers to products stored for long period of time prior to mounting and use. Operating Temperature Range and Humidity range covers non conducting condition of installed connectors in storage, shipment or during transportation.

### **■**Materials / Finish

Product	Part	Material	Finish	Remarks
Socket	Insulator	Polyamide	White	UL94V-0
Header	Insulator	Polyamide	Beige	UL94V-0
пеацеі	Contact	Brass	Tin plated or Gold plated	
In-line Plug	Insulator	Polyamide	White	UL94V-0
retainer	Insulator	Polyamide	Black	UL94V-0
Crimping contact	Contact	Phosphor copper	Tin plated or Gold plated	

### **■**Product Number Structure

●Pin Header

DF1E	C	-	*	Р	-	2.5	<b>DSA</b>
0	2		3	4		<u> </u>	6

Socket

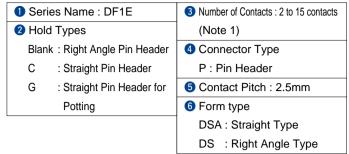
$$\frac{\mathsf{DF1E}}{\bullet} - \frac{*}{\bullet} \frac{\mathsf{S}}{\bullet} - \frac{2.5}{\bullet} \frac{\mathsf{C}}{\bullet}$$

#### ●In-line Plug

#### Crimping Contact

Retainer

$$\frac{\mathsf{DF1E}}{\bullet} - \frac{*}{2} \frac{\mathsf{RS/P}}{\bullet} - \frac{2.5}{\bullet}$$



Note 1: Straight pin header for potting has 2 to 11 contacts.

Series Name : DF1E	3 Connector type
2 Number of Contacts : 2 to 15 contacts	S : Socket
	4 Contact Pitch : 2.5mm
	<b>5</b> Form Type
	C : Crimping socket

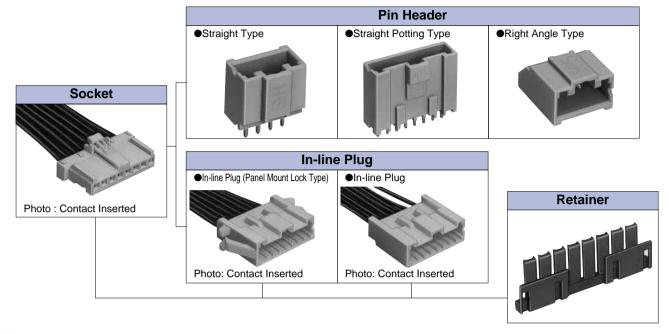
Series Name : DF1E	3 Number of Contacts : 2 to 10 contacts			
2 In-line Plug type	4 EP : In-line plug			
Blank : With Panel mount Lock	5 Contact Pitch : 2.5mm			
A : Without Panel mount Lock	6 Form Type			
	C : Crimping socket			

Series Name	<b>:</b>	2 Applicable Cable Size
Socket side	: DF1B (Note 1)	2022 : 20 to 22 AWG
	DF1E (Note 1)	2428 : 24 to 28 AWG
Plug side	: DF1E	30 : 30 AWG
		3 Packaging Type SCF: Female contact/reel/Tin plated SCFA: Female contact/reel/Gold plated SC: Female contact/pack/Tin plated SCA: Female contact/pack/Gold plated PCF: Male contact/reel/Tin plated PCFA: Male contact/reel/Gold plated PC: Male contact/pack/Tin plated PCA: Male contact/pack/Gold plated PCA: Male contact/pack/Gold plated

Note 1: When the retainer is used, use DF1E-2022SC(F)(A), DF1B-2428SC(F)(A), and DF1B-30SC(F)(A) contacts. When no retainer is used, all DF1B-\*\*SC(F)(A) and DF1E-2022SC(F)(A) contacts can be used.

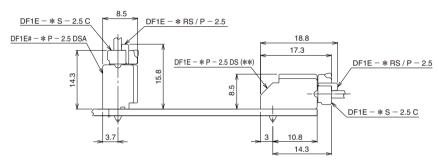
Series Name : DF1E	3 Connector Type
2 Number of Contacts : 2 to 10 contacts	RS/P : Retainer
	Commonly used for socket and in-line plug
	4 Contacts Pitch : 2.5mm

### **●** Application Pattern

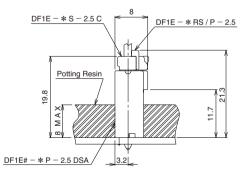


### **Mated Dimensions**

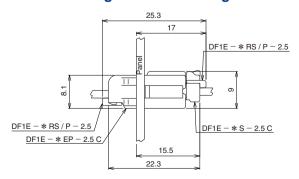
#### Standard Header



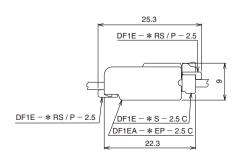
#### Header for Potting



#### ●Panel Mounting Lock In-line Plug

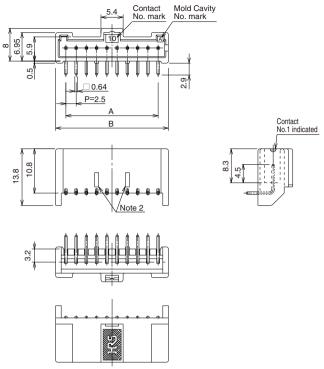


#### ●In-line Plug



## ■Right Angle Pin Header





Part No.	HRS No.	No. of Contacts	Α	В	RoHS
DF1E- 2P-2.5DS(**)	541-0985-0 **	2	2.5	7.5	
DF1E- 3P-2.5DS(**)	541-0986-3 **	3	5.0	10.0	
DF1E- 4P-2.5DS(**)	541-0987-6 **	4	7.5	12.5	
DF1E- 5P-2.5DS(**)	541-0988-9 **	5	10.0	15.0	
DF1E- 6P-2.5DS(**)	541-0989-1 **	6	12.5	17.5	
DF1E- 7P-2.5DS(**)	541-0990-0 **	7	15.0	20.0	
DF1E- 8P-2.5DS(**)	541-0991-3 **	8	17.5	22.5	
DF1E- 9P-2.5DS(**)	541-0992-6 **	9	20.0	25.0	Yes
DF1E-10P-2.5DS(**)	541-0993-9 **	10	22.5	27.5	
DF1E-11P-2.5DS(**)	541-0994-1 **	11	25.0	30.0	
DF1E-12P-2.5DS(**)	541-0995-4 **	12	27.5	32.5	
DF1E-13P-2.5DS(**)	541-0996-7 **	13	30.0	35.0	
DF1E-14P-2.5DS(**)	541-0997-0 **	14	32.5	37.5	
DF1E-15P-2.5DS(**)	541-0998-2 **	15	35.0	40.0	

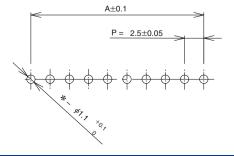
[Specific No.] -\* \*, (\* \*) (36): Gold plated (35): Tin plated

Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

Note 2: The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 4 contact connector is contained in the center at one point.

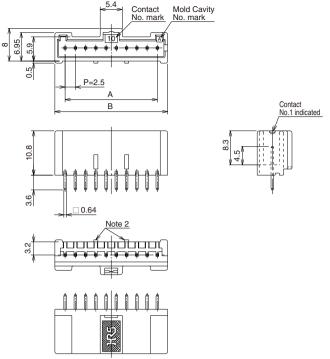
Note 3: Styles of 2 to 4 contact connectors partially differ from those in above figures.

## **PCB** mounting pattern (Board Thickness $t = 1.6 \pm 0.1$ )



## **■**Straight Pin Header



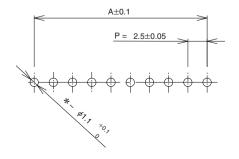


Part No.	HRS No.	No. of Contacts	Α	В	RoHS
DF1EC- 2P-2.5DSA(**)	541-0867-4 **	2	2.5	7.5	
DF1EC- 3P-2.5DSA(**)	541-0868-7 **	3	5.0	10.0	
DF1EC- 4P-2.5DSA(**)	541-0869-0 **	4	7.5	12.5	
DF1EC- 5P-2.5DSA(**)	541-0870-9 **	5	10.0	15.0	
DF1EC- 6P-2.5DSA(**)	541-0871-1 **	6	12.5	17.5	
DF1EC- 7P-2.5DSA(**)	541-0872-4 **	7	15.0	20.0	
DF1EC- 8P-2.5DSA(**)	541-0873-7 **	8	17.5	22.5	
DF1EC- 9P-2.5DSA(**)	541-0874-0 **	9	20.0	25.0	Yes
DF1EC-10P-2.5DSA(**)	541-0875-2 **	10	22.5	27.5	
DF1EC-11P-2.5DSA(**)	541-0876-5 **	11	25.0	30.0	
DF1EC-12P-2.5DSA(**)	541-0877-8 **	12	27.5	32.5	
DF1EC-13P-2.5DSA(**)	541-0878-0 **	13	30.0	35.0	
DF1EC-14P-2.5DSA(**)	541-0879-3 **	14	32.5	37.5	
DF1EC-15P-2.5DSA(**)	541-0880-2 **	15	35.0	40.0	

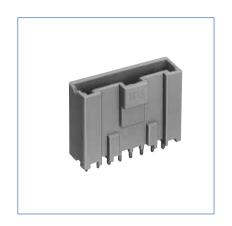
[Specific No.] -\* \*, (\* \*) (36) : Gold plated (35) : Tin plated

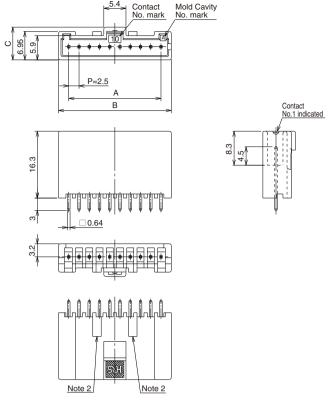
- Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.
- Note 2: The 2 to 4 contacts differ in two convex portions from those in above figures. The 2 and 3 contacts are not contained, but the 2 and 3 contacts are not contained, and 4 contact is in the center at one point.
- Note 3: Styles of 2 to 4 contacts partially differ from those in above figures.

## **PCB** mounting pattern (Board Thickness $t = 1.6 \pm 0.1$ )



## **■**Straight Pin Header for Potting



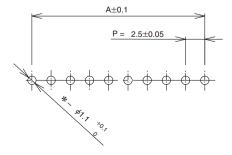


Part No.	HRS No.	No. of Contacts	Α	В	С	RoHS
DF1EG- 2P-2.5DSA(**)	541-0923-3 **	2	2.5	7.5	8.0	
DF1EG- 3P-2.5DSA(**)	541-0924-6 <b>**</b>	3	5.0	10.0	8.0	
DF1EG- 4P-2.5DSA(**)	541-0925-9 **	4	7.5	12.5	8.0	
DF1EG- 5P-2.5DSA(**)	541-0926-1 **	5	10.0	15.0	7.8	
DF1EG- 6P-2.5DSA(**)	541-0927-4 **	6	12.5	17.5	7.8	
DF1EG- 7P-2.5DSA(**)	541-0928-7 **	7	15.0	20.0	7.8	Yes
DF1EG- 8P-2.5DSA(**)	541-0929-0 **	8	17.5	22.5	7.8	
DF1EG- 9P-2.5DSA(**)	541-0930-9 **	9	20.0	25.0	7.8	
DF1EG-10P-2.5DSA(**)	541-0931-1 **	10	22.5	27.5	7.8	
DF1EG-11P-2.5DSA(**)	541-0932-4 **	11	25.0	30.0	7.8	

[Specific No.] -\* \*, (\* \*) (35): Tin plated

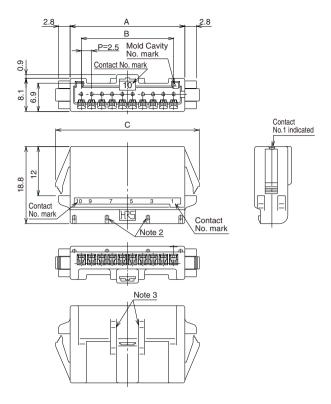
- Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the product per bag. However, the quantity for delivery will be changed according to spec number.
- Note 2: The 2 to 6 and 9 to 10 contact connectors differ in two convex portions from those in above figures. The 2 to 5 and 9 to 10 contacts are not contained, but the 6 contact is bonded to the convex portion at both ends.
- Note 3: Styles of 2 to 4 contact may partially differ from the above figures.

## PCB mounting pattern (Board Thickness t = 1.6 $\pm$ 0.1)



## ■In-line Plug (Panel Mount Lock Type)





Part No.	HRS No.	No. of Contacts	А	В	С	D	Е	RoHS
DF1E- 2EP-2.5C	541-0943-0	2	8.0	2.5	15.0	8.4	11.9	
DF1E- 3EP-2.5C	541-0944-3	3	10.5	5.0	17.5	10.9	14.4	
DF1E- 4EP-2.5C	541-0945-6	4	13.0	7.5	20.0	13.4	16.9	
DF1E- 5EP-2.5C	541-0946-9	5	15.5	10.0	22.5	15.9	19.4	
DF1E- 6EP-2.5C	541-0947-1	6	18.0	12.5	25.0	18.4	21.9	Yes
DF1E- 7EP-2.5C	541-0948-4	7	20.5	15.0	27.5	20.9	24.4	
DF1E- 8EP-2.5C	541-0949-7	8	23.0	17.5	30.0	23.4	26.9	
DF1E- 9EP-2.5C	541-0950-6	9	25.5	20.0	32.5	25.9	29.4	
DF1E-10EP-2.5C	541-0951-9	10	28.0	22.5	35.0	28.4	31.9	

Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

Note 2: In regard to 2 to 5 contacts, the retainer fixed convex portions are located at both ends.

Note 3: In regard to 2 to 7 contacts, 2 convex portions are different from those in the above figures.

Note 4: Use the no radius side at the panel edge in the looking area.

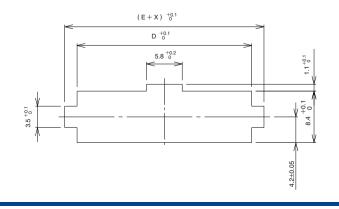
Note 5: Panel fixation is loosened. (May be enlarged according to the panel board thickness.)

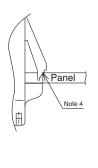
Note 6: Styles of 2 to 4 contact partially differ from those in the above figures.

\* Refer to page B156 for the retainer.

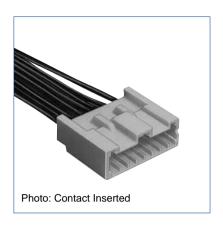
### Panel Cutout

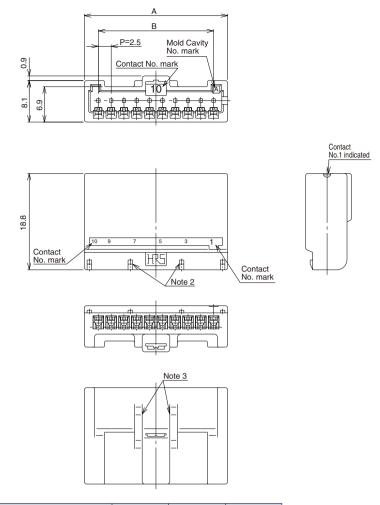
Panel Thickness	Х
1.7 to 2.0	1.5
1.3 to 1.6	1.0
0.9 to 1.2	0.5
0.7 to 0.8	0.0





# ■In-line Plug





Part No.	HRS No.	No. of Contacts	А	В	RoHS
DF1EA- 2EP-2.5C	541-0957-5	2	8.0	2.5	
DF1EA- 3EP-2.5C	541-0958-8	3	10.5	5.0	
DF1EA- 4EP-2.5C	541-0959-0	4	13.0	7.5	
DF1EA- 5EP-2.5C	541-0960-0	5	15.5	10.0	
DF1EA- 6EP-2.5C	541-0961-2	6	18.0	12.5	Yes
DF1EA- 7EP-2.5C	541-0962-5	7	20.5	15.0	
DF1EA- 8EP-2.5C	541-0963-8	8	23.0	17.5	
DF1EA- 9EP-2.5C	541-0964-0	9	25.5	20.0	
DF1EA-10EP-2.5C	541-0965-3	10	28.0	22.5	

Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to the Specific No.

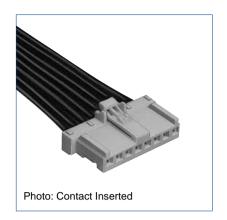
Note 2: In regard to 2 to 5 contacts, the retainer fixed convex portions are located at both ends.

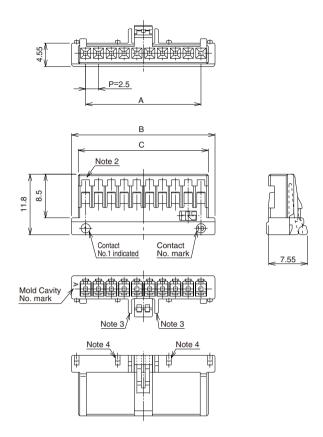
Note 3:2 to 7 contacts do not contain two convex portions, which is different from the above figure.

Note 4: Styles of 2 to 4 contacts partially differ from the above figures.

\* Refer to page B156 for retainer.

## **■Socket**





Part No.	HRS No.	No. of Contacts	А	В	С	RoHS
DF1E- 2S-2.5C	541-0811-0	2	2.5	8.0	5.4	
DF1E- 3S-2.5C	541-0812-2	3	5.0	10.5	7.9	
DF1E- 4S-2.5C	541-0813-5	4	7.5	13.0	10.4	
DF1E- 5S-2.5C	541-0814-8	5	10.0	15.5	12.9	
DF1E- 6S-2.5C	541-0815-0	6	12.5	18.0	15.4	
DF1E- 7S-2.5C	541-0816-3	7	15.0	20.5	17.9	
DF1E- 8S-2.5C	541-0817-6	8	17.5	23.0	20.4	
DF1E- 9S-2.5C	541-0818-9	9	20.0	25.5	22.9	Yes
DF1E-10S-2.5C	541-0819-1	10	22.5	28.0	25.4	
DF1E-11S-2.5C	541-0820-0	11	25.0	30.5	27.9	
DF1E-12S-2.5C	541-0821-3	12	27.5	33.0	30.4	
DF1E-13S-2.5C	541-0822-6	13	30.0	35.5	32.9	
DF1E-14S-2.5C	541-0823-9	14	32.5	38.0	35.4	
DF1E-15S-2.5C	541-0824-1	15	35.0	40.5	37.9	

Note 1 : A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to spec number.

Note 2: The 2 contact connector is equipped with the convex portion to prevent false-insertion.

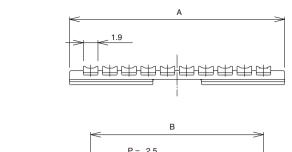
Note 3: The 2 consult Has no wall on the locking side

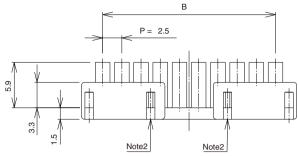
Note 4 : The 2 to 5 contacts contain the retainer fixed convex portions at both ends.

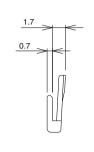
\* Refer to page B156 for the retainer.

### **■**Retainer

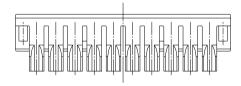












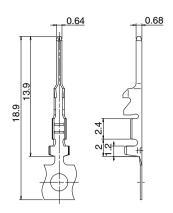
Part No.	HRS No.	No. of Contacts	А	В	RoHS
DF1E- 2RS/P-2.5	541-0971-6	2	8.0	2.5	
DF1E- 3RS/P-2.5	541-0972-9	3	10.5	5.0	
DF1E- 4RS/P-2.5	541-0973-1	4	13.0	7.5	
DF1E- 5RS/P-2.5	541-0974-4	5	15.5	10.0	
DF1E- 6RS/P-2.5	541-0975-7	6	18.0	12.5	Yes
DF1E- 7RS/P-2.5	541-0976-0	7	20.5	15.0	
DF1E- 8RS/P-2.5	541-0977-2	8	23.0	17.5	
DF1E- 9RS/P-2.5	541-0978-5	9	25.5	20.0	
DF1E-10RS/P-2.5	541-0979-8	10	28.0	22.5	

Note 1: A packaging quantity is delivered by the bag unit (100 pcs.). If needed, please order the products per bag. However, the quantity for delivery will be changed according to spec number.

Note 2: The 2 to 4 contacts contain socket and plug fixed holes at both ends.

\* This retainer can be used together with the socket and In-line plug.

# **■Plug Crimping Contact**



Part No.	HRS No.		Applicable Cable		Packaging	Finish	RoHS				
Fait No.	HRS NO.	UL Style	Jacket Diameter	Wire Size	Stranded Wire Conductor	rackaging	FIIIISII	Копо			
DF1E-2022PCF	541-0937-8	1007	φ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel					
DI IL 2022I OI	341 0337 0	1061		22 AWG	17/0.16	10,00071661					
DF1E-2022PC	PC 541-0938-0		<i>ϕ</i> 1.8mm	20 AWG	21/0.18	100 / pack					
DI 1L 20221 0	341 0330 0	1007	<i>ϕ</i> 1.6mm	22 AWG	17/0.16	100 / pack					
		1007		24 AWG	11/0.16		Tin plated				
DF1E-2428PCF	541-0939-3	1061	<i>ϕ</i> 0.9 to 1.5mm	26 AWG	7/0.16	10,000 / reel	Till plated				
		1001		28 AWG	7/0.127						
			<i>ϕ</i> 1.5mm	24 AWG	11/0.16						
DF1E-2428PC	DF1E-2428PC 541-0940-2	541-0940-2	1007	1007	1007	<i>ϕ</i> 1.3mm	26 AWG	7/0.16	100 / pack		
			<i>ϕ</i> 1.2mm	28 AWG	7/0.127			Yes			
DF1E-2022PCFA	541-1003-0	1007	φ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel		103			
DI IL 2022I OI A		1061	φ1.2 to 1.911111	22 AWG	17/0.16	10,00071661					
DF1E-2022PCA	541-1004-3	1007	<i>ϕ</i> 1.8mm	20 AWG	21/0.18	100 / pack					
DI TE ZOZZI OA	341 1004 0	1007	<i>ϕ</i> 1.6mm	22 AWG	17/0.16	100 / pack					
	1007	1007		24 AWG	11/0.16		. Gold plated				
DF1E-2428PCFA 541-1005-6			1061		<i>ϕ</i> 0.9 to 1.5mm	26 AWG	7/0.16	10,000 / reel	dola platea		
	1001		28 AWG	7/0.127							
			<i>ϕ</i> 1.5mm	24 AWG	11/0.16						
DF1E-2428PCA	541-1006-9 1007	1007	<i>ϕ</i> 1.3mm	26 AWG	7/0.16	100 / pack					
		<i>ϕ</i> 1.2mm	28 AWG	7/0.127							

Note 1: Crimping Contact Extraction Tool DF-C-PO(B)

Note 2 : Applicable wire with tin plated solid soft conductor.

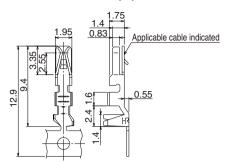
Note 3 : When using other than the recommended wire, contact your nearest Hirose representative.

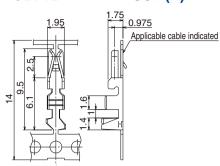
Note 4: Strip length: 3.0 to 3.7mm

## **■**Socket Crimping Contact

### ●DF1E-2022SCF (A)

#### ●DF1B - \* \* \* \* SCF (A)





Dort No	HRS No.		Applicable Cable			Dooksains	Einiah	RoHS		
Part No.	HRS NO.	UL Style	Jacket Diameter	Wire Size	Stranded Wire Conductor	Packaging	Finish	Rons		
DF1E-2022SCF	541-0999-5	1007	φ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel				
DI 1L 2022301	341 0999 3	1061	φ1.2 (0 1.9)	22 AWG	17/0.16	10,000 / 1661				
DF1E-2022SC	541-1000-2	1007	<i>ϕ</i> 1.8mm	20 AWG	21/0.18	100 / pack				
DI 1L 202250	341 1000 2	1007	<i>ϕ</i> 1.6mm	22 AWG	17/0.16	1007 pack				
DF1B-2022SCF	541-0223-1	1007	φ1.2 to 1.9mm	20 AWG	21/0.18	10,000 / reel				
DI 10 2022301	341 0223 1	1061	φ1.2 (0 1.911111	22 AWG	17/0.16					
DF1B-2022SC	541-0224-4	1007	<i>φ</i> 1.8mm	20 AWG	21/0.18	100 / pack				
DI 1D 202250	341 0224 4	1007	<i>ϕ</i> 1.6mm	22 AWG	17/0.16	1007 pack				
		1007		24 AWG	11/0.16		Tin plated			
DF1B-2428SCF	541-0678-1	1061	φ0.9 to 1.5mm	26 AWG	7/0.16	10,000 / reel	Till plated	i		
		1001		28 AWG	7/0.127					
			φ1.5mm	24 AWG	11/0.16					
DF1B-2428SC	541-0679-4	1007	φ1.3mm	26 AWG	7/0.16	100 / pack 10,000 / reel 100 / pack				
			φ1.2mm	28 AWG	7/0.127					
DF1B-30SCF	541-0682-9	1007 1061	<i>ϕ</i> 0.6 to 1.2mm	30 AWG	7/0.1					
DF1B-30SC	541-0683-1	1007	φ1.1mm	30 AWG	7/0.1		V			
DE4E 000000EA	544 4004 F	1007	// 0 / / 0 / /	20 AWG	21/0.18	40.000 /!	1	Yes		
DF1E-2022SCFA	541-1001-5	1061	φ1.2 to 1.9mm	22 AWG	17/0.16	10,000 / reel				
DF1E-2022SCA	E41 1000 0	1007	<i>ϕ</i> 1.8mm	20 AWG	21/0.18	100 / pack				
DF1E-20225CA	541-1002-8	1007	<i>ϕ</i> 1.6mm	22 AWG	17/0.16	100 / pack				
DE1D 000000EA	E41 0000 1	1007	/1 0 to 1 0mm	20 AWG	21/0.18	10,000 / reel				
DF1B-2022SCFA	541-0662-1	1061	φ1.2 to 1.9mm	22 AWG	17/0.16	10,000 / 1661				
DF1B-2022SCA	541-0663-4	1007	φ1.8mm	20 AWG	21/0.18	100 / pack				
DF16-20225CA	341-0003-4	1007	φ1.6mm	22 AWG	17/0.16	100 / pack				
		1007		24 AWG	11/0.16		Cold plated			
DF1B-2428SCFA	3-2428SCFA 541-0680-3	1007	<i>ϕ</i> 0.9 to 1.5mm	26 AWG	7/0.16	10,000 / reel	Gold plated			
	1001		28 AWG	7/0.127						
	Φ1.5mm       DF1B-2428SCA     541-0681-6     1007     Φ1.3mm       Φ1.2mm		φ1.5mm	24 AWG	11/0.16					
DF1B-2428SCA 541-0681-6		1007		1007	1007	26 AWG	7/0.16	100 / pack		
				φ1.2mm	28 AWG	7/0.127	.7			
DF1B-30SCFA	541-0684-4	1007 1061	φ0.6 to 1.2mm	30 AWG	7/0.1	10,000 / reel				
DF1B-30SCA	541-0685-7	1007	φ1.1mm	30 AWG	7/0.1	100 / pack				

Note 1: Crimping Contact Extraction Tool DF-C-PO(B)

Note 2: Applicable wire with tin plated solid soft conductor.

Note 3: When using other than the recommended wire, contact your nearest Hirose representative.

Note 4 : Strip length : 2.0 to 2.5mm

## Crimping Tools

Item	Part No.	HRS No.	Applicable Contact
	AP105-DF1E-2022S	901-4561-0	DF1E-2022SCF DF1E-2022SCFA
	AP105-DF1B-2022S ©	901-4510-9	DF1B-2022SCF DF1B-2022SCFA
Applicator	AP105-DF1B-2428S	901-4518-0	DF1B-2428SCF DF1B-2428SCFA
Арріісатої	AP105-DF1B-30S ◎	901-4517-8	DF1B-30SCF DF1B-30SCFA
	AP105-DF1B-2022P ◎	901-4509-0	DF1E-2022PCF DF1E-2022PCFA
	AP105-DF1B-2428P ◎	901-4521-5	DF1E-2428PCF DF1E-2428PCFA
Main Press Unit	CM-105C	901-0001-0	
	HT102/DF1E-2022S	550-0277-1	DF1E-2022SC DF1E-2022SCA
	DF1B-TA2022SHC	550-0182-7	DF1B-2022SC DF1B-2022SCA
Manual Crimping Tool	DF1B-TA2428SHC ◎	550-0209-1	DF1B-2428SC DF1B-2428SCA
Maridai Crimping 100i	DF1B-TA30SHC ◎	550-0211-3	DF1B-30SC DF1B-30SCA
	HT102/DF1BE-2022P	550-0278-4	DF1E-2022PC
	HT102/DF1BE-2428P	550-0279-7	DF1E-2428PC
Contact Extraction Tool	DF-C-PO (B)	550-0179-2	DF1E-2022SC (F) (A) DF1B-****SC (F) (A) DF1E-****PC (F) (A)

Note 1 : Add "O" to the last number of the product, in order to use DF1B series tools, which have been conventionally merchandized.

Note 2: If any trouble has occurred due to other tools, which are not designated by Hirose, Hirose won't guarantee any products.

Note 3: For the crimping process, refer to "crimping quality standards" and "crimping condition".

## **● Precautions**

1. Recommended Soldering Condition	Flow: 260℃ for 10 seconds
	Manual soldering : 300°C for 3 seconds
2. Cleaning Condition	Refer to Wire-to-Board Connector Use Hand book.
	However, if the connector is cleaned by the potting header, the detergent remains within the
	connector, which will cause malfunction.
3. Connection Condition	Refer to Wire-to-Board Connector Use Hand book.
4. Cautions	● To remove the connector, if the connector is forcedly removed, it will cause connector
	damage. If the connector is hardly removed, slightly push the connector once, and then
	remove it using the lock.
	● In some method for laying the cable within equipment, a tension may be applied to the
	cable so as to remove the contact. In this case, it is recommended to use the retainer.
	● Incomplete insertion of the contact can be prevented by mounting a retainer; however,
	mounting of a retainer might not be possible when the contact protrudes beyond the
	socket. Insert the contact securely and then mount the retainer.
	● If the potting process is implemented, it is desirable to fill the connector with resin,
	considering the resin surface tensile force.
	● The color phase of this product may be slightly different from that of the forming product
	according to the manufacturing lot and future storage conditions, however the difference
	doesn't affect the performance.
5. Precautions	Refer to Wire-to-Board Connector Use Hand book.