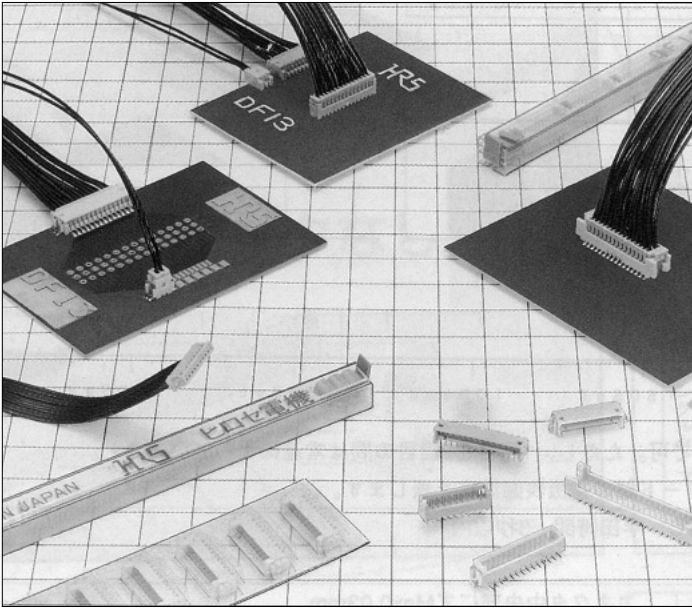


# 1.25mm Pitch Miniature Crimping Connector

## DF13 Series



	Type	Mounting Type	Mounting Height
Straight Type	DIP		5.3mm
	SMT		5.8mm
Right Angle Type	DIP		3.6mm
	SMT		

### ■Features

#### 1. Miniature Size

Designed in the low profile at mounting height 5.8mm.  
(SMT mounting straight type)  
(For DIP type, the mounting height is to 5.3mm to the straight and 3.6mm at the right angle)

#### 2. Multi-contact

The double row type achieves the multi-contact up to 40 contacts, and secures 30% higher density in the mounting area, compared with the single row type.

#### 3. Correspond to Automatic Mounting

The header provides the grade with the vacuum absorption area, and secures automatic mounting by the embossed tape packaging.  
In addition, the tube packaging can be selected.

#### 4. Integral Basic Function Despite Miniature Size

The header is designed in a scoop-proof box structure, and completely prevents mis-insertion.  
In addition, the surface mounting (SMT) header is equipped with the metal fitting to prevent solder peeling.

### ■Applications

Note PC, mobile terminal, miniature type business equipment, and other various consumer equipment, including video camera

Correspond to Automatic Mounting  
Secure the automatic plain area for the absorption type automatic mounting machine.

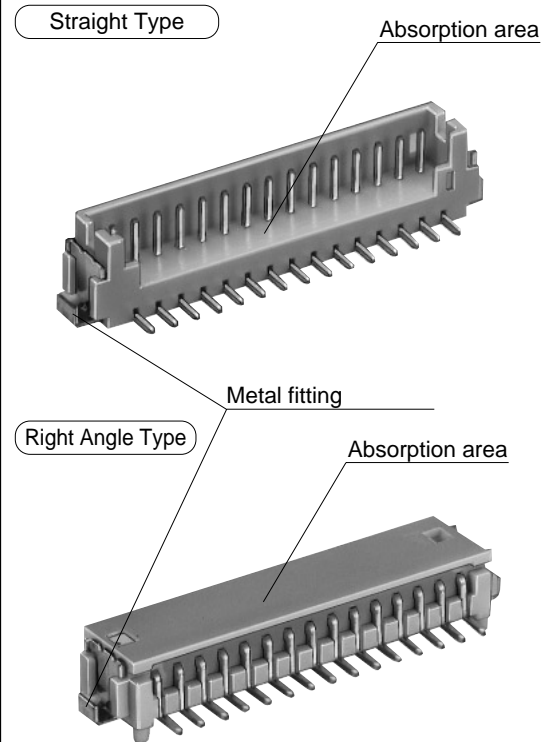


Figure 1

## ■Product Specifications

Rating	Current rating 1A	Operating Temperature Range: -35 to +85°C (Note 1)	Storage Temperature Range: -10 to +60°C (Note 2)
	Voltage rating 150V AC	Operating Moisture Range: 40 to 80%	Storage Moisture Range: 40 to 70% (Note 2)

Item	Specification	Condition
1. Insulation Resistance	500M ohms min.	100V DC
2. Withstanding voltage	No flashover or insulation breakdown.	500V AC/1 minute
3. Contact Resistance	30m ohms max.	100mA
4. Single Insertion/Extraction Force	0.3N (30gf) min., 3N (300gf) max.	Measured at the square steel pin of 0.35±0.002mm
5. Vibration	No electrical discontinuity of 1μs or more	Frequency: 10 to 55 Hz, single amplitude of 0.75 mm, 2 hours in each of the 3 directions.
6. Humidity (Steady state)	Contact resistance: 30m ohms max. Insulation resistance: 500M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
7. Temperature Cycle	Contact resistance: 30m ohms max. Insulation resistance: 500M ohms min.	(-55°C: 30 minutes → 5 to 35°C: 10 minutes → 85°C: 30 minutes → 5 to 35°C: 10 minutes) 5 cycles
8. Durability (Mating/un-mating)	Contact resistance: 30m ohms max.	Tin plating: 30 cycles Gold plating: 50 cycles
9. Resistance to Soldering heat	No deformation of components affecting performance.	Flow: 250°C for 10 seconds
		Manual soldering: 300°C for 3 seconds
		Reflow: At the recommended temperature profile
		Manual soldering: 300°C for 3 seconds

Note 1: Includes temperature rise caused by current flow.

Note 2: 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.

## ■Material

Product	Part	Material	Finish	Remarks
Crimping Socket	Insulator	Polyamide	Beige	UL94V-0
Crimping Contact for Socket	Contact	Phosphor copper	Tin plated or gold plated	———
Pin Header (Through hole)	Insulator	Polyamide	Beige	UL94V-0
	Contact	Brass	Tin plated	———
Pin Header (SMT)	Insulator	Polyamide	Beige	UL94V-0
	Contact	Brass	Tin plated or gold plated	———
	Metal Fitting	Phosphor copper	Tin plated	———

## ■Ordering Information

### ●Connector

DF13
#
-
\*
S
-
1.25
C

①
②
③
④
⑤
⑥

① Series Name : DF13	③ Number of Contacts Single row: 2 to 12, 14, 15 Double row: 10, 20, 30, 40	⑤ Contact Pitch: 1.25mm
② Style Symbol : Blank: With boss A: Without boss V Type — B: Without boss, embossed tape type — C: Without boss, embossed tape type	④ Connector Type S: Single row socket / P: Single row pin header DS: Double row socket / DP: Double row pin header	⑥ Contact Type C : Crimping socket / DSA : Straight through hole DS : Right angle through hole / V : Straight SMT H : Right angle SMT

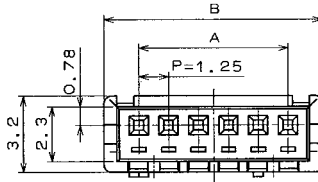
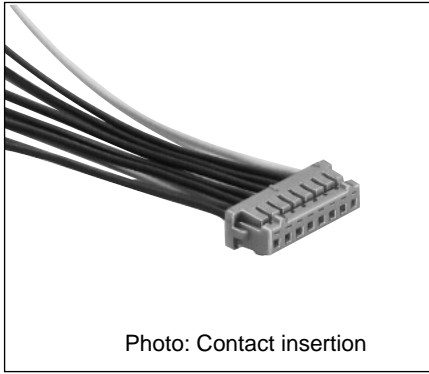
### ●Contact

DF 13
-
2630
SCF
A

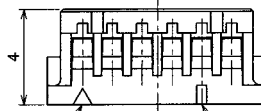
①
②
③

① Applicable Cable Size 2630: AWG26 to 30	③ Plating Type Blank: Tin plated A : Gold plated
② Packaging Type SCF: Socket Contact/Reel	

## Single Row Socket



[Specific No.] - \*\*, (\*\*)  
Blank: 1 bag: 100 pcs.



Contact No.1 mark

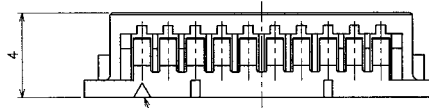
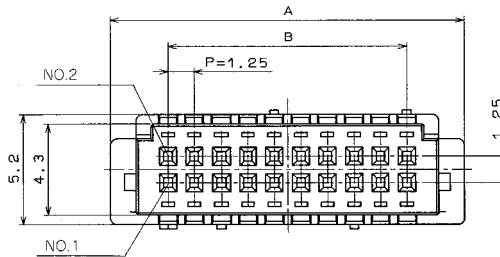
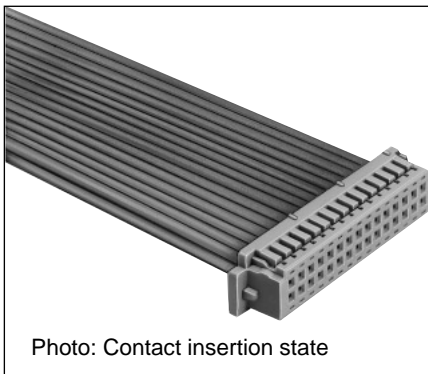
Marking per 5 contacts

Unit: mm

Part Number	CL No.	Number of Contacts	A	B	Part Number	CL No.	Number of Contacts	A	B
DF13-2S-1.25C(**)	536-0001-4-**	2	1.25	4.15	DF13- 9S-1.25C(**)	536-0008-3-**	9	10.00	12.90
DF13-3S-1.25C(**)	536-0002-7-**	3	2.50	5.40	DF13-10S-1.25C(**)	536-0009-6-**	10	11.25	14.15
DF13-4S-1.25C(**)	536-0003-0-**	4	3.75	6.65	DF13-11S-1.25C(**)	536-0010-5-**	11	12.50	15.40
DF13-5S-1.25C(**)	536-0004-2-**	5	5.00	7.90	DF13-12S-1.25C(**)	536-0011-8-**	12	13.75	16.65
DF13-6S-1.25C(**)	536-0005-5-**	6	6.25	9.15	DF13-14S-1.25C(**)	536-0013-3-**	14	16.25	19.15
DF13-7S-1.25C(**)	536-0006-8-**	7	7.50	10.40	DF13-15S-1.25C(**)	536-0014-6-**	15	17.50	20.40
DF13-8S-1.25C(**)	536-0007-0-**	8	8.75	11.65					

Note 1. The quantity at the specific No. "None" is delivered per bag (100 pcs.). If needed, please select and order the products per bag.

## Double Row Socket



Contact No.1 mark

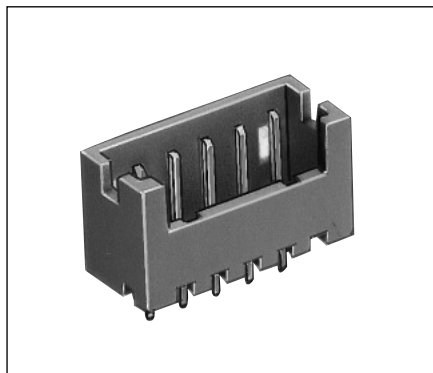
Unit: mm

Part Number	CL No.	Number of Contacts	A	B
DF13-10DS-1.25C(**)	536-0550-2-**	10	10.40	5.00
DF13-20DS-1.25C(**)	536-0555-6-**	20	16.65	11.25
DF13-30DS-1.25C(**)	536-0560-6-**	30	22.90	17.50
DF13-40DS-1.25C(**)	536-0565-0-**	40	29.15	23.75

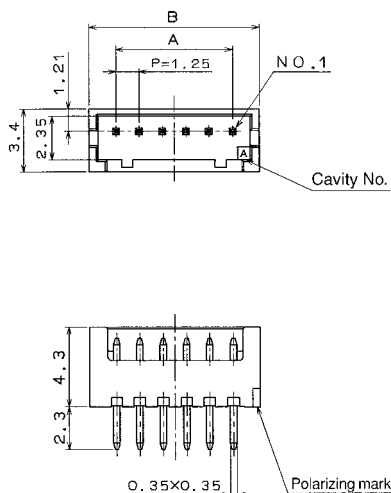
[Specific No.] - \*\*, (\*\*)  
Blank: 1 bag: 100 pcs.

Note: The quantity at the specific No. "Blank" is delivered per bag (100 pcs.). If needed, please select and order the products per bag.

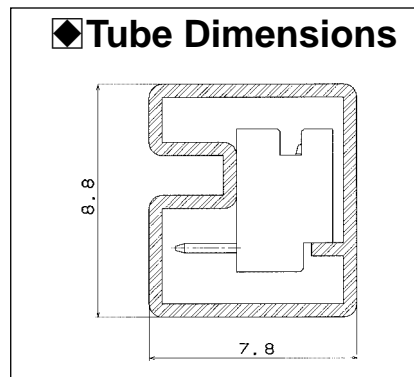
## Single Row Straight Pin Header (Through hole)



●Board Through-hole Diameter:  $\phi 0.6 \pm 0.03$



[Specific No.] – \*\*, (\*\*)  
Blank: Tin plated  
20: Tin plated, tube packaging

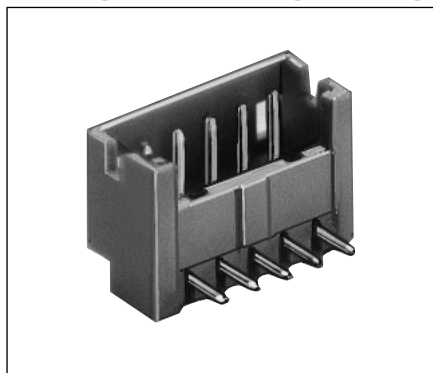


Unit: mm

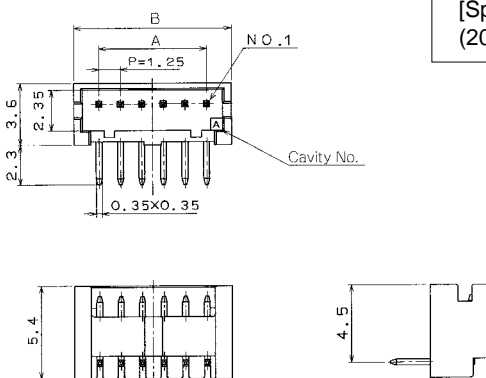
Part Number	CL No.	Number of Contacts	A	B	Part Number	CL No.	Number of Contacts	A	B
DF13-2P-1.25DSA(**)	536-0101-9-**-	2	1.25	4.15	DF13- 9P-1.25DSA(**)	536-0108-8-**-	9	10.00	12.90
DF13-3P-1.25DSA(**)	536-0102-1-**-	3	2.50	5.40	DF13-10P-1.25DSA(**)	536-0109-0-**-	10	11.25	14.15
DF13-4P-1.25DSA(**)	536-0103-4-**-	4	3.75	6.65	DF13-11P-1.25DSA(**)	536-0110-0-**-	11	12.50	15.40
DF13-5P-1.25DSA(**)	536-0104-7-**-	5	5.00	7.90	DF13-12P-1.25DSA(**)	536-0111-2-**-	12	13.75	16.65
DF13-6P-1.25DSA(**)	536-0105-0-**-	6	6.25	9.15	DF13-13P-1.25DSA(**)	536-0112-5-**-	13	15.00	17.90
DF13-7P-1.25DSA(**)	536-0106-2-**-	7	7.50	10.40	DF13-14P-1.25DSA(**)	536-0113-8-**-	14	16.25	19.15
DF13-8P-1.25DSA(**)	536-0107-5-**-	8	8.75	11.65	DF13-15P-1.25DSA(**)	536-0114-0-**-	15	17.50	20.40

Note 1. The quantity at the specific No. "None" is delivered per bag (100 pcs.). If needed, please select and order the products per bag.

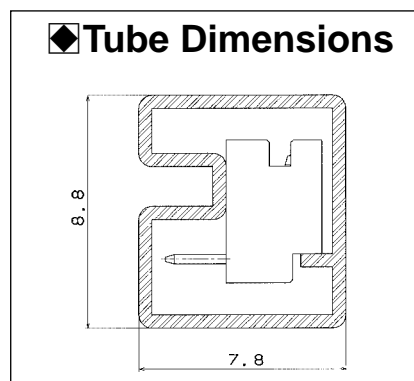
## Single Row Right Angle Pin Header (Through hole)



●Board Through-hole Diameter:  $\phi 0.6 \pm 0.03$



[Specific No.] – \*\*, (\*\*\*)  
(20): Tin plated tube packaging

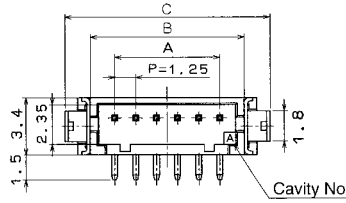
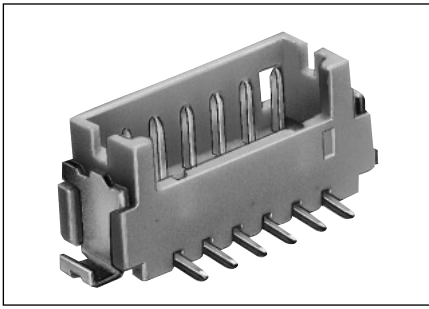


Unit: mm

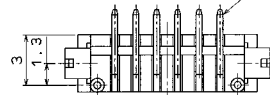
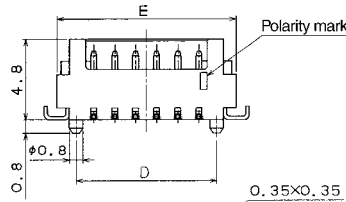
Part Number	CL No.	Number of Contacts	A	B	Tube Packaging Quantity	Part Number	CL No.	Number of Contacts	A	B	Tube Packaging Quantity
DF13-2P-1.25DS(**)	536-0151-7-**-	2	1.25	4.15	115	DF13- 9P-1.25DS(**)	536-0158-6-**-	9	10.00	12.90	37
DF13-3P-1.25DS(**)	536-0152-0-**-	3	2.50	5.40	89	DF13-10P-1.25DS(**)	536-0159-9-**-	10	11.25	14.15	34
DF13-4P-1.25DS(**)	536-0153-2-**-	4	3.75	6.65	72	DF13-11P-1.25DS(**)	536-0160-8-**-	11	12.50	15.40	31
DF13-5P-1.25DS(**)	536-0154-5-**-	5	5.00	7.90	61	DF13-12P-1.25DS(**)	536-0161-0-**-	12	13.75	16.65	29
DF13-6P-1.25DS(**)	536-0155-8-**-	6	6.25	9.15	52	DF13-14P-1.25DS(**)	536-0163-6-**-	14	16.25	19.15	25
DF13-7P-1.25DS(**)	536-0156-0-**-	7	7.50	10.40	46	DF13-15P-1.25DS(**)	536-0164-9-**-	15	17.50	20.40	23
DF13-8P-1.25DS(**)	536-0157-3-**-	8	8.75	11.65	41						

Note 1. Order the tube packaging product, multiplying the tube packaging quantity.

## ◆ Single Row Straight Pin Header (SMT)



[Specific No.] – \*\*, (\*\*\*)  
 (20): Tin plated tube package  
 (50): Gold plated tube package



This pin header is a box type style. Therefore, the header has neither vacuum absorption face nor embossed tape packaging specification.

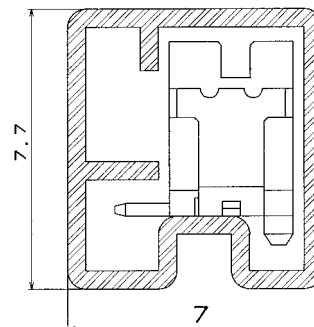
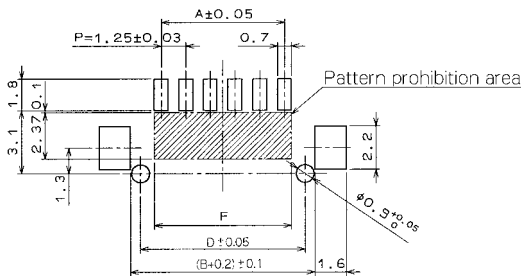
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	Tube Package Quantity	Remark
DF13- 2P-1.25V(**)	536-0201-3-**-	2	1.25	4.15	7.15	3.35	5.65	1.95	67	Guide post
DF13- 3P-1.25V(**)	536-0202-6-**-	3	2.50	5.40	8.40	4.60	6.90	3.20	57	
DF13- 4P-1.25V(**)	536-0203-9-**-	4	3.75	6.65	9.65	5.85	8.15	4.45	49	
DF13- 5P-1.25V(**)	536-0204-1-**-	5	5.00	7.90	10.90	7.10	9.40	5.70	44	
DF13- 6P-1.25V(**)	536-0205-4-**-	6	6.25	9.15	12.15	8.35	10.65	6.95	39	
DF13- 7P-1.25V(**)	536-0206-7-**-	7	7.50	10.40	13.40	9.60	11.90	8.20	36	
DF13- 8P-1.25V(**)	536-0207-0-**-	8	8.75	11.65	14.65	10.85	13.15	9.45	33	
DF13- 9P-1.25V(**)	536-0208-2-**-	9	10.00	12.90	15.90	12.10	14.40	10.70	30	
DF13-10P-1.25V(**)	536-0209-5-**-	10	11.25	14.15	17.15	13.35	15.65	11.95	28	
DF13-11P-1.25V(**)	536-0210-4-**-	11	12.50	15.40	18.40	14.60	16.90	13.20	26	
DF13-12P-1.25V(**)	536-0211-7-**-	12	13.75	16.65	19.65	15.85	18.15	14.45	24	
DF13-14P-1.25V(**)	536-0213-2-**-	14	16.25	19.15	22.15	18.35	20.65	16.95	21	
DF13-15P-1.25V(**)	536-0214-5-**-	15	17.50	20.40	23.40	19.60	21.90	18.20	20	

Note: Please order the tube packaging products, multiplying the tube packaging quantity.

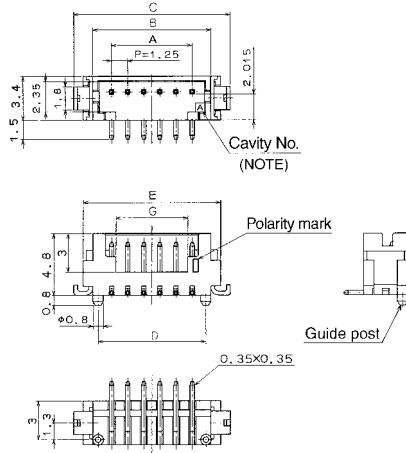
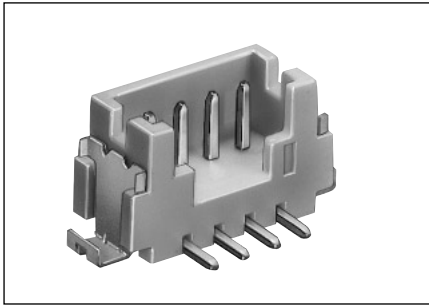
## ◆ PCB mounting pattern

## ◆ Tube Dimensions



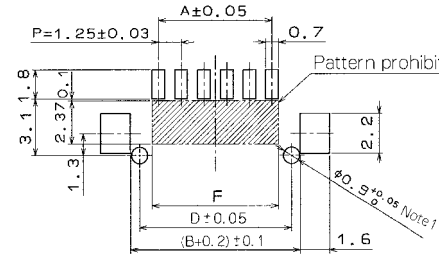
Note: If the pattern exists in the shaded area, and isn't treated with resist, it could touch the connector contact.

# Single Row Straight Pin Header (SMT) (Three-Wall/Correspond to Vacuum Absorption)



Note: "No guide post" indicates the style with no boss.

## PCB mounting pattern



Note 1. This hole isn't needed for "No guide post".  
Note 2. If the pattern exists in the shaded area, and isn't treated with resist, it could touch the connector contact.

[Specific No.] – \*\*, (\*\*)  
(20): Tin plated tube packaging  
(21): Tin plated embossed tape packaging  
(50): Gold plated tube packaging  
(51): Gold plated embossed tape packaging

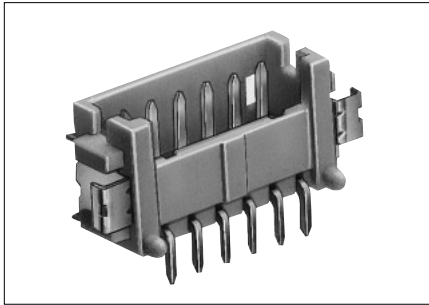
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	G	Tube Packaging Quantity	Emboss Width	Remarks	
DF13B- 2P-1.25V(**)	536-0051-2**	2	1.25	4.15	7.15	3.35	5.65	1.95	2.20	67pcs	16	With boss	
DF13B- 3P-1.25V(**)	536-0052-5**	3	2.50	5.40	8.40	4.60	6.90	3.20	3.45	57	16		
DF13B- 4P-1.25V(**)	536-0053-8**	4	3.75	6.65	9.65	5.85	8.15	4.45	3.10	49	24		
DF13B- 5P-1.25V(**)	536-0054-0**	5	5.00	7.90	10.90	7.10	9.40	5.70	4.35	44	24		
DF13B- 6P-1.25V(**)	536-0055-3**	6	6.25	9.15	12.15	8.35	10.65	6.95	5.60	39	24		
DF13B- 7P-1.25V(**)	536-0056-6**	7	7.50	10.40	13.40	9.60	11.90	8.20	6.85	36	24		
DF13B- 8P-1.25V(**)	536-0057-9**	8	8.75	11.65	14.65	10.85	13.15	9.45	8.10	33	24		
DF13B- 9P-1.25V(**)	536-0058-1**	9	10.00	12.90	15.90	12.10	14.40	10.70	9.35	30	24		
DF13B-10P-1.25V(**)	536-0059-4**	10	11.25	14.15	17.15	13.35	15.65	11.95	10.60	28	24		
DF13B-11P-1.25V(**)	536-0060-3**	11	12.50	15.40	18.40	14.60	16.90	13.20	11.85	26	32		
DF13B-12P-1.25V(**)	536-0061-6**	12	13.75	16.65	19.65	15.85	18.15	14.45	13.10	24	32		
DF13B-14P-1.25V(**)	536-0063-1**	14	16.25	19.15	22.15	18.35	20.65	16.95	15.60	21	32		
DF13B-15P-1.25V(**)	536-0064-4**	15	17.50	20.40	23.40	19.60	21.90	18.20	16.85	20	44		
DF13C- 2P-1.25V(**)	536-0401-2**	2	1.25	4.15	7.15	–	5.65	1.95	2.20	67pcs	16		Without boss
DF13C- 3P-1.25V(**)	536-0402-5**	3	2.50	5.40	8.40	–	6.90	3.20	3.45	57	16		
DF13C- 4P-1.25V(**)	536-0403-8**	4	3.75	6.65	9.65	–	8.15	4.45	3.10	49	24		
DF13C- 5P-1.25V(**)	536-0404-0**	5	5.00	7.90	10.90	–	9.40	5.70	4.35	44	24		
DF13C- 6P-1.25V(**)	536-0405-3**	6	6.25	9.15	12.15	–	10.65	6.95	5.60	39	24		
DF13C- 7P-1.25V(**)	536-0406-6**	7	7.50	10.40	13.40	–	11.90	8.20	6.85	36	24		
DF13C- 8P-1.25V(**)	536-0407-9**	8	8.75	11.65	14.65	–	13.15	9.45	8.10	33	24		
DF13C- 9P-1.25V(**)	536-0408-1**	9	10.00	12.90	15.90	–	14.40	10.70	9.35	30	24		
DF13C-10P-1.25V(**)	536-0409-4**	10	11.25	14.15	17.15	–	15.65	11.95	10.60	28	24		
DF13C-11P-1.25V(**)	536-0410-3**	11	12.50	15.40	18.40	–	16.90	13.20	11.85	26	32		
DF13C-12P-1.25V(**)	536-0411-6**	12	13.75	16.65	19.65	–	18.15	14.45	13.10	24	32		
DF13C-14P-1.25V(**)	536-0413-1**	14	16.25	19.15	22.15	–	20.65	16.95	15.60	21	32		
DF13C-15P-1.25V(**)	536-0414-4**	15	17.50	20.40	23.40	–	21.90	18.20	16.85	20	44		

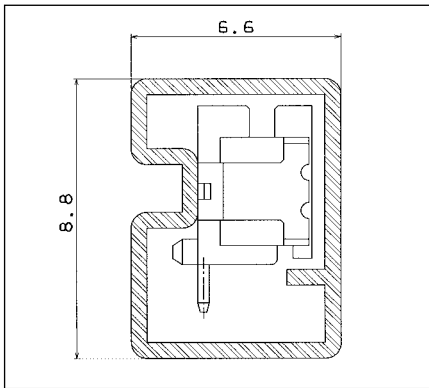
Note 1. Please order the tube packaging product, multiplying the tube packaging quantity.

Note 2. Please order the embossed tape packaging product according to reel number. (1000 pcs. per reel)

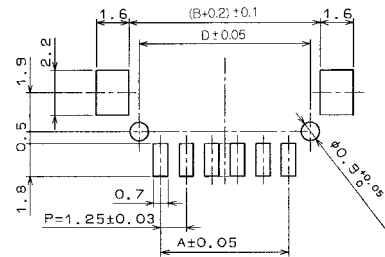
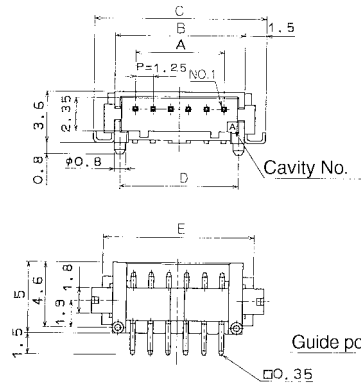
# Single Row Right Angle Pin Header (SMT) (Four-Wall/Correspond to Emboss Absorption)



## Tube Dimensions



## PCB mounting pattern



Note This hole isn't needed for "No guide post".

Note: "without boss" indicates the style with no boss.

[Specific No.] – \*\*, (\*\*)  
 (20): Tin plated tube packaging  
 (21): Tin plated embossed tape packaging  
 (50): Gold plated tube packaging  
 (51): Gold plated embossed tape packaging

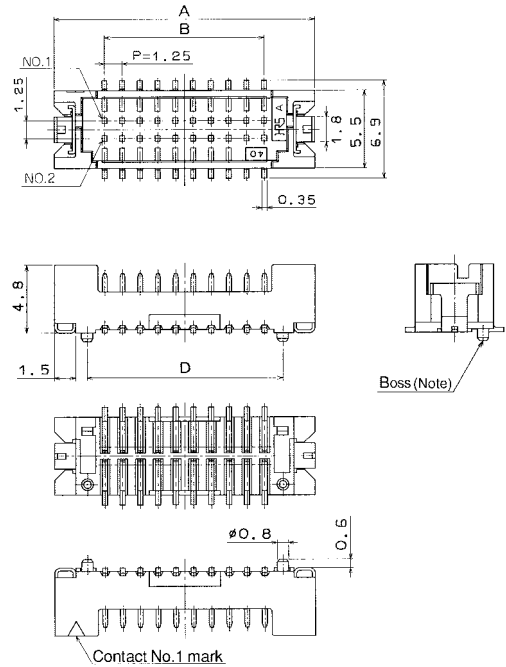
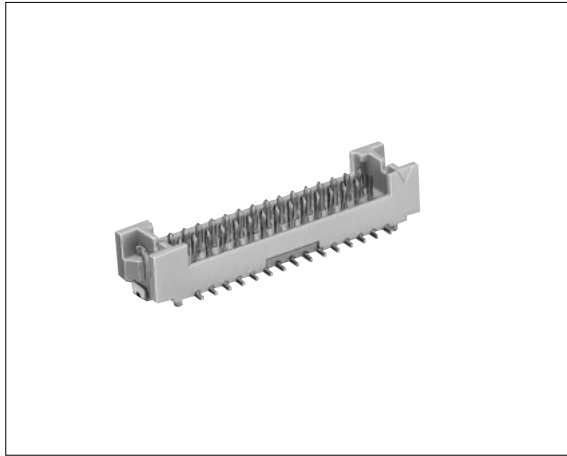
Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	Tube Packaging Quantity	Emboss Width	Remarks	
DF13- 2P-1.25H(**)	536-0251-1-**	2	1.25	4.15	7.15	3.35	5.65	67pcs	16	With boss	
DF13- 3P-1.25H(**)	536-0252-4-**	3	2.50	5.40	8.40	4.60	6.90	57	16		
DF13- 4P-1.25H(**)	536-0253-7-**	4	3.75	6.65	9.65	5.85	8.15	49	24		
DF13- 5P-1.25H(**)	536-0254-0-**	5	5.00	7.90	10.90	7.10	9.40	44	24		
DF13- 6P-1.25H(**)	536-0255-2-**	6	6.25	9.15	12.15	8.35	10.65	39	24		
DF13- 7P-1.25H(**)	536-0256-5-**	7	7.50	10.40	13.40	9.60	11.90	36	24		
DF13- 8P-1.25H(**)	536-0257-8-**	8	8.75	11.65	14.65	10.85	13.15	33	24		
DF13- 9P-1.25H(**)	536-0258-0-**	9	10.00	12.90	15.90	12.10	14.40	30	24		
DF13-10P-1.25H(**)	536-0259-3-**	10	11.25	14.15	17.15	13.35	15.65	28	24		
DF13-11P-1.25H(**)	536-0260-2-**	11	12.50	15.40	18.40	14.60	16.90	26	32		
DF13-12P-1.25H(**)	536-0261-5-**	12	13.75	16.65	19.65	15.85	18.15	24	32		
DF13-14P-1.25H(**)	536-0263-0-**	14	16.25	19.15	22.15	18.35	20.65	21	32		
DF13-15P-1.25H(**)	536-0264-3-**	15	17.50	20.40	23.40	19.60	21.90	20	44		
DF13A- 2P-1.25H(**)	536-0301-8-**	2	1.25	4.15	7.15	–	5.65	67pcs	16		Without boss
DF13A- 3P-1.25H(**)	536-0302-0-**	3	2.50	5.40	8.40	–	6.90	57	16		
DF13A- 4P-1.25H(**)	536-0303-3-**	4	3.75	6.65	9.65	–	8.15	49	24		
DF13A- 5P-1.25H(**)	536-0304-6-**	5	5.00	7.90	10.90	–	9.40	44	24		
DF13A- 6P-1.25H(**)	536-0305-9-**	6	6.25	9.15	12.15	–	10.65	39	24		
DF13A- 7P-1.25H(**)	536-0306-1-**	7	7.50	10.40	13.40	–	11.90	36	24		
DF13A- 8P-1.25H(**)	536-0307-4-**	8	8.75	11.65	14.65	–	13.15	33	24		
DF13A- 9P-1.25H(**)	536-0308-7-**	9	10.00	12.90	15.90	–	14.40	30	24		
DF13A-10P-1.25H(**)	536-0309-0-**	10	11.25	14.15	17.15	–	15.65	28	24		
DF13A-11P-1.25H(**)	536-0310-9-**	11	12.50	15.40	18.40	–	16.90	26	32		
DF13A-12P-1.25H(**)	536-0311-1-**	12	13.75	16.65	19.65	–	18.15	24	32		
DF13A-14P-1.25H(**)	536-0313-7-**	14	16.25	19.15	22.15	–	20.65	21	32		
DF13A-15P-1.25H(**)	536-0314-0-**	15	17.50	20.40	23.40	–	21.90	20	44		

Note 1. Please order the tube packaging product, multiplying the tube packaging quantity.

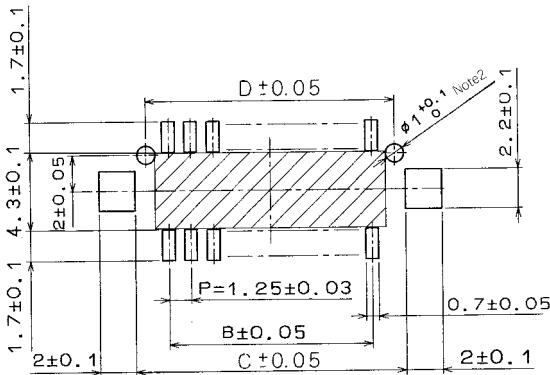
Note 2. Please order the embossed tape packaging product according to reel number. (1000 pcs. per reel)

# Double Row Straight Pin Header (SMT) (Four-Wall Type Compliant to Emboss Absorption)



Note: "Without boss" indicates the style with no boss.

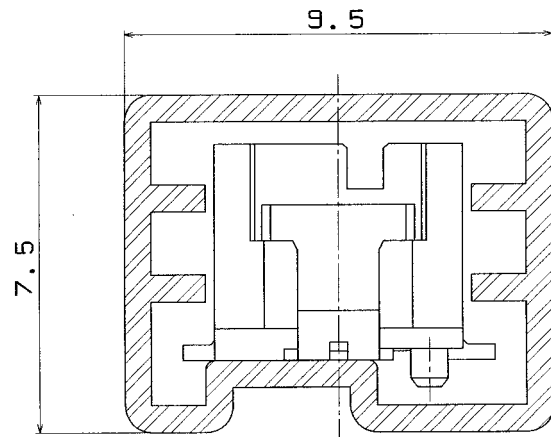
## PCB mounting pattern



Note 1. If the pattern exists in the shaded area, and isn't treated with resist, it could touch the connector contact.

Note 2. The hole isn't needed at "Without boss".

## Tube Dimensions



[Specific No.] - \*\*, (\*\*)  
 (20): Tin plated tube packaging  
 (29): Tin plated embossed tape packaging  
 (50): Gold plated tube packaging  
 (59): Gold plated embossed tape packaging

Unit: mm

Part Number	CL No.	Number of Contacts	A	B	C	D	Specification (20)	Specification (29)	Specification (50)	Specification (59)	Tube Package Quantity	Emboss Width	Remarks
DF13 -10DP-1.25V(**)	536-0510-8-**-	10	12.1	5	8.7	7.5	○	○	○	○	40 pcs	24	With boss
DF13 -20DP-1.25V(**)	536-0515-1-**-	20	18.35	11.25	14.95	13.75	○	○	○	○	26	32	
DF13 -30DP-1.25V(**)	536-0520-1-**-	30	24.6	17.5	21.2	20	-	-	○	○	19	44	
DF13 -40DP-1.25V(**)	536-0525-5-**-	40	30.85	23.75	27.45	26.25	-	-	○	○	15	44	
DF13A-10DP-1.25V(**)	536-0600-9-**-	10	12.1	5	8.7	-	○	○	○	○	40	24	Without boss
DF13A-20DP-1.25V(**)	536-0605-2-**-	20	18.35	11.25	14.95	-	○	○	○	○	26	32	
DF13A-30DP-1.25V(**)	536-0610-2-**-	30	24.6	17.5	21.2	-	-	-	○	○	19	44	
DF13A-40DP-1.25V(**)	536-0615-6-**-	40	30.85	23.75	27.45	-	-	-	○	○	15	44	

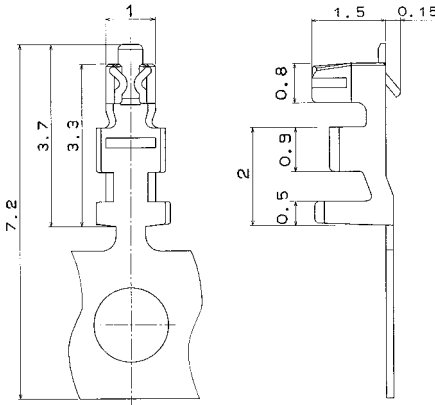
Note 1. Please order the tube packaging product, multiplying the tube packaging quantity.

Note 2. Please order the embossed tape packaging product according to reel number. (1 reel: 1000 pcs.)

Note 3. The absorption cap is attached to the embossed tape packaging product.



## ■Crimping Contact



Part Number	CL No.	Packaging Type	Quantity	Finish
DF13-2630SCF	536-0300-5	Reel	10,000	Tin plating
DF13-2630SCFA	536-0298-5	Reel	10,000	Gold plating

### ●Applicable Cable (Tin Plating Annealed Copper Wire)

Conductor Size (Wire construction)	Jacket Diameter
AWG26(7 cores./0.16mm)	φ0.65 to φ1.0mm
AWG28(7 cores./0.127mm)	
AWG30(7 cores./0.1mm)	

Note: If other cables are used instead of the applicable cable, please contact the Hirose sales department.

### ●Recommended Cable

UL1571

### ●Strip Length

1.2 to 1.9mm

## ◆Applicable Crimping Tool

Type	Part Number	CL No.	Applicable Contact
Applicator	AP105-DF13-2630S	901-4531-9	DF13-2630SCF/SCFA
Press Main Unit	CM-105	901-0005-4	—
Manual Crimping Tool	DF13-TB2630HC	550-0256-1	DF13-2630SCF
Extraction Tool	DF-C-PO(B)	550-0179-2	DF13-2630SCF

Note 1. If a trouble has occurred due to other tools, which are not designated by Hirose, Hirose won't guarantee any product.

Note 2. The manual crimping tool is used to sequentially cut the reel contact with carrier.

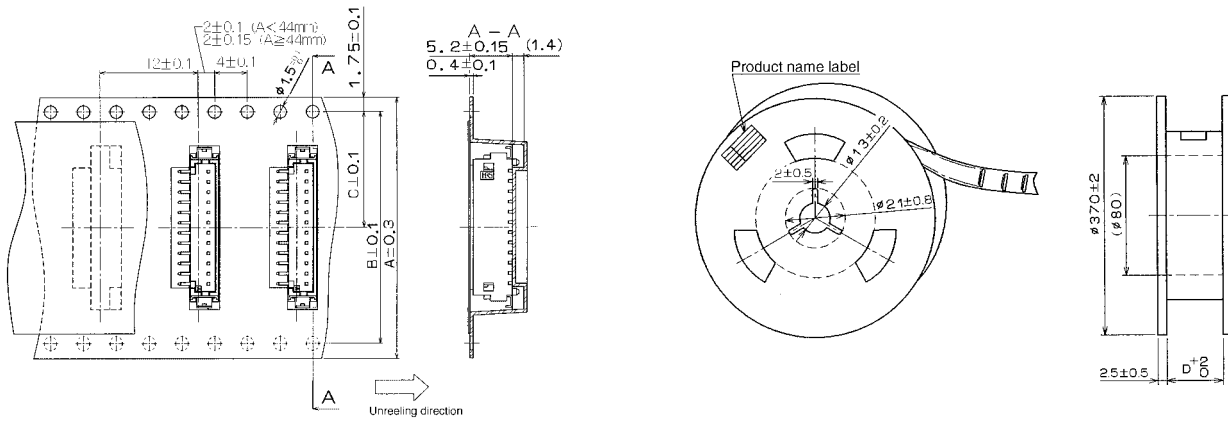
## ◆Application Pattern

	SMT (Single Row Product)	Through hole (Single Row Product)	SMT (Double Row Product)
Right Angle			
Straight			

# ◆ Embossed Carrier Tape Dimensions

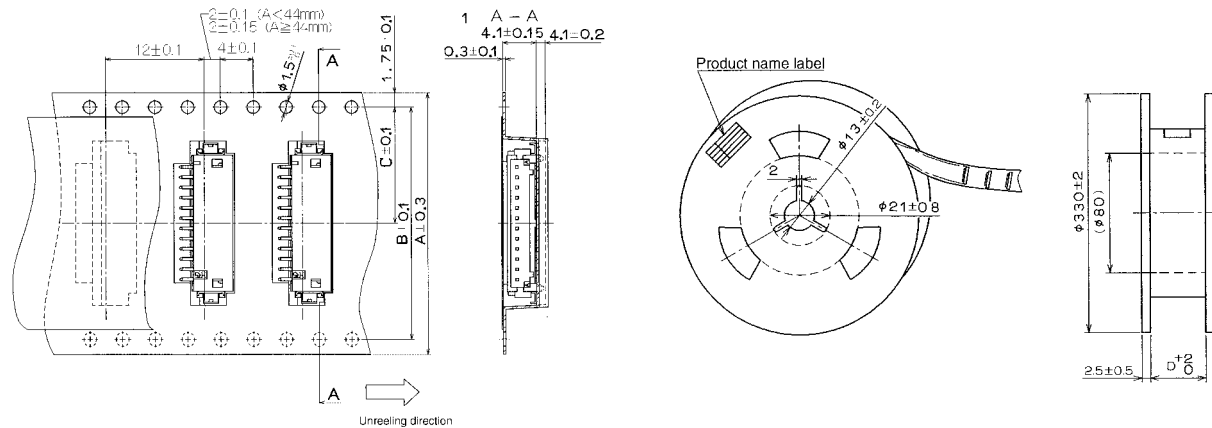
## ● DF13B-\*P-1.25V With boss

## ● DF13C-\*P-1.25V Without boss



## ● DF13-\*P-1.25H

## ● DF13A-\*P-1.25H



Unit: mm

Product Type	Number of Contacts	A	B	C	D
DF13B-*P-1.25V	2, 3	16	—	7.5	16.4
DF13C-*P-1.25V	4 to 90	24	—	11.5	24.4
DF13-*P-1.25H	10 to 14	32	28.4	14.2	32.4
DF13A-*P-1.25H	15	44	40.4	20.2	44.4

Note: The 13 contacts is not serialized.

## ◆Precautions

<p>1. Recommended Temperature Profile (SMT)</p>	<p>Temperature</p> <table border="1" data-bbox="609 180 982 293"> <thead> <tr> <th colspan="2">IR Reflow Condition</th> </tr> </thead> <tbody> <tr> <td>Preheating</td> <td>150°C for 60 to 120 seconds 235±5°C within 10 seconds</td> </tr> <tr> <td>Soldering</td> <td>More than 220°C for 10 to 30 seconds</td> </tr> </tbody> </table> <p>Max 240°C 220°C</p> <p>0 Sec 50 Sec 100 Sec 150 Sec 200 Sec Time</p> <p>Note 1. This process is allowed up to twice under the same condition. However, the interval between the first and second processes must be maintained at the room temperature.</p> <p>Note 2. The temperature indicates the board surface temperature in the connector lead area.</p>	IR Reflow Condition		Preheating	150°C for 60 to 120 seconds 235±5°C within 10 seconds	Soldering	More than 220°C for 10 to 30 seconds
IR Reflow Condition							
Preheating	150°C for 60 to 120 seconds 235±5°C within 10 seconds						
Soldering	More than 220°C for 10 to 30 seconds						
<p>2. Recommended Soldering Condition (SMT)</p>	<p>Manual soldering: 290°C for 2 seconds</p>						
<p>3. Recommended Screen Thickness (SMT)</p>	<p>0.15 to 0.2mm</p>						
<p>4. Board Warpage (SMT)</p>	<p>Max 0.03mm in the connector center area, based on both connector edges</p>						
<p>5. Recommended Soldering Condition (Through hole)</p>	<p>Flow: 250°C for 3 seconds Manual soldering: 290°C for 2 seconds</p>						
<p>6. Cleaning Condition</p>	<p>Refer to Nylon Connector Use Hand book.</p>						
<p>7. Connection Condition</p>	<p>Refer to Nylon Connector Use Hand book. ■Carefully carry out the crimping operation according to "Crimping Condition Sheet" and "Crimping Quality Standard", because the crimping contact is an extremely small style.</p>						
<p>8. Cautions</p>	<p>■Be careful for the excessive scoop insertion/extraction, which will cause damage to the product.</p>						