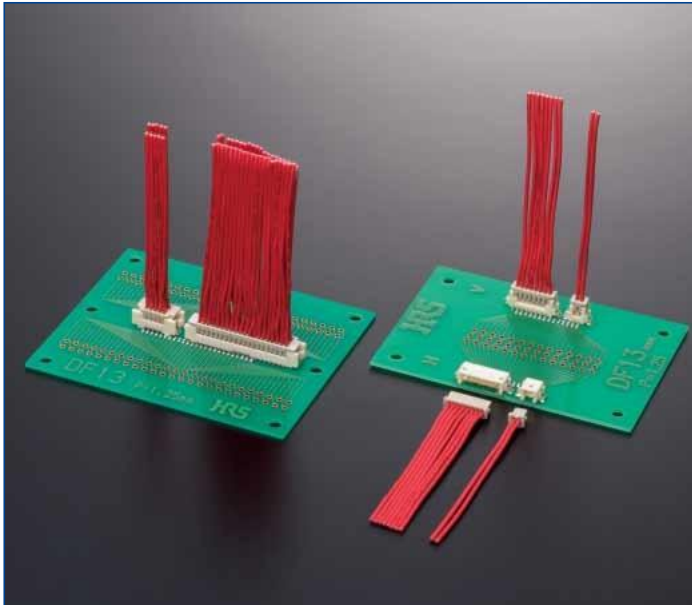


1.25mm Pitch Miniature Crimping Connector (UL Listed)

DF13 Series



	Type	Mounting Type	Mounting Height(h)
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. (Fig.1)

4. Integral Basic Function Despite Miniature Size

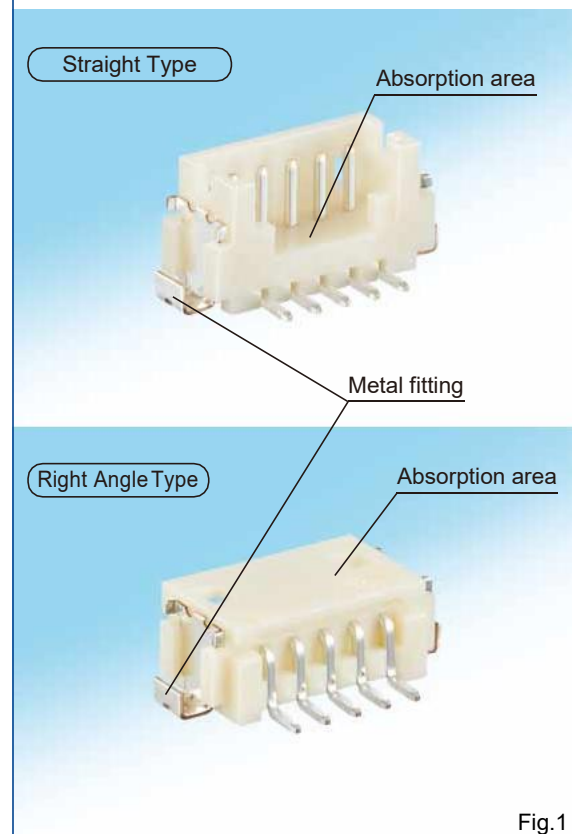
The header is designed in a scoop-proof box structure, and completely prevents mis-insertion.
In addition, the surface mounting (SMT) header is equipped with the metal fitting to prevent solder peeling. (Fig.1)

5. UL Certified

■ 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.



Product Specifications

Rating	Current rating	Specification	1A/pin	Operating Temperature Range : -35 to +85℃ (Note 1) Operating Moisture Range : 20 to 80% (Note 3)	Storage Temperature Range : -10 to +60℃ (Note 2) Storage Moisture Range : 40 to 70% (Note 2)
	Voltage rating	Specification			
		UL	150V AC/DC		
		UL	29.9V AC/DC		
Item	Specification			Condition	
1. Insulation Resistance	500MΩ min.			100V DC	
2. Withstanding voltage	No flashover or insulation breakdown.			500V AC/1 minute	
3. Contact Resistance	30mΩ max.			100mA	
4. 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.	
5. Humidity (Steady state)	Contact resistance : 30mΩ max. Insulation resistance : 500MΩ min.			96 hours at temperature of 40℃ and humidity of 90% to 95%	
6. Temperature Cycle	Contact resistance : 30mΩ max. Insulation resistance : 500MΩ min.			(-55℃ : 30 minutes → 5 to 35℃ : 10 minutes → 85℃ : 30 minutes → 5 to 35℃ : 10 minutes) 5 cycles	
7. Durability (Mating/un-mating)	Contact resistance : 30mΩ max.			Tin plating : 30 cycles Gold plating : 50 cycles	
8. Resistance to Soldering heat	No deformation of components affecting performance.			Flow : 250℃ for 10 seconds Manual soldering : 300℃ for 3 seconds Reflow : At the recommended temperature profile Manual soldering : 300℃ 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.

Note 3 : Use without condensation on parts.

Note 4 : Information contained in this catalog represents general requirements for this Series.

Contact us for the drawings and specifications for a specific part number shown.

• **UL File No. and Recognition**
No. UL : E52653

Materials/Finish

Product	Part	Material	Finish	Remarks	RoHS2
Crimping Socket	Insulator	Polyamide	Beige	UL94V-0	Yes
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 Single row)	Insulator	Polyamide	Beige	UL94V-0	
	Contact	Brass	Tin plated or gold plated	————	
	Metal Fitting	Phosphor copper	Tin plated	————	
Pin Header (SMT Double row)	Insulator	Polyamide	Beige	UL94V-0	
	Contact	Brass	Tin plated or gold plated	————	
	Metal Fitting	Phosphor copper	Tin plated	————	

Product Number Structure

Refer to the chart below when determining the product specifications from the product number.

Please select from the product numbers listed in this catalog when placing orders.

Connector

DF13 # - * S - 1.25 C
q w e r t y

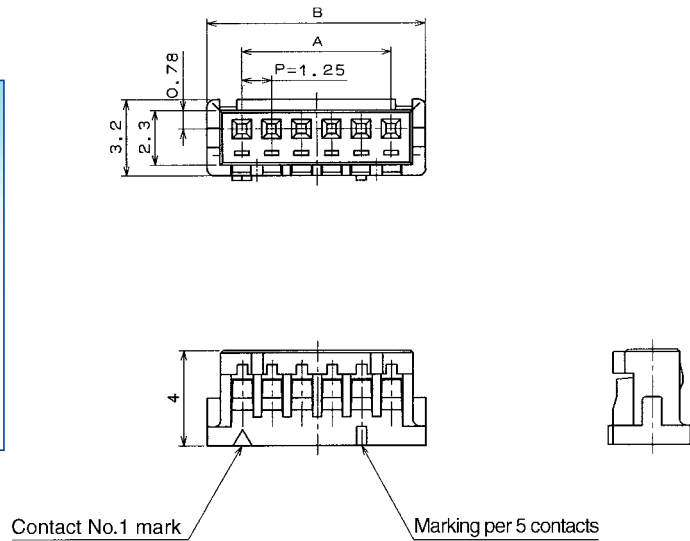
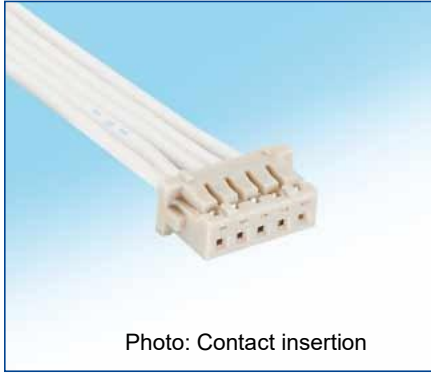
q Series Name : DF13	e Number of Contacts Single row : 2 to 12, 14, 15 Double row : 10, 20, 30, 40	t Contact Pitch : 1.25mm
w Style Symbol : Blank : With boss A : Without boss C : Without boss	r Connector Type S : Single row socket / P : Single row pin header DS : Double row socket / DP : Double row pin header	y Connection Form / Contact Style. C : Crimping socket / DSA : Straight through hole DS : Right angle through hole / V : Straight SMT H : Right angle SMT

Contact

DF13 # - 2630 SCF A
q w e r

q Style Symbol Blank : Standard G : Low insertion/extraction	e Packaging Type SCF : Socket Contact/Reel
w Applicable Cable Size 2630 : 26 to 30 AWG 3032 : 30 to 32 AWG	r Plating Type Blank : Tin plated A : Gold plated

Single Row Socket



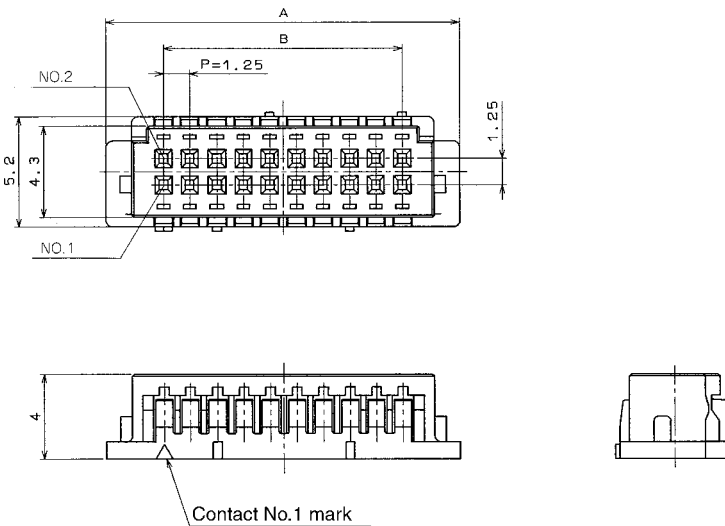
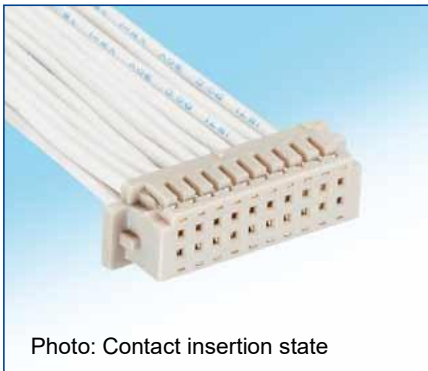
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B
DF13-2S-1.25C	536-0001-4	2	1.25	4.15
DF13-3S-1.25C	536-0002-7	3	2.50	5.40
DF13-4S-1.25C	536-0003-0	4	3.75	6.65
DF13-5S-1.25C	536-0004-2	5	5.00	7.90
DF13-6S-1.25C	536-0005-5	6	6.25	9.15
DF13-7S-1.25C	536-0006-8	7	7.50	10.40
DF13-8S-1.25C	536-0007-0	8	8.75	11.65

Part No.	HRS No.	No. of Contacts	A	B
DF13- 9S-1.25C	536-0008-3	9	10.00	12.90
DF13-10S-1.25C	536-0009-6	10	11.25	14.15
DF13-11S-1.25C	536-0010-5	11	12.50	15.40
DF13-12S-1.25C	536-0011-8	12	13.75	16.65
DF13-13S-1.25C	536-0012-0	13	15.00	17.90
DF13-14S-1.25C	536-0013-3	14	16.25	19.15
DF13-15S-1.25C	536-0014-6	15	17.50	20.40

Note 1 : The quantity is delivered per bag (100pcs.). If needed, please select and order the products per bag.

Double Row Socket

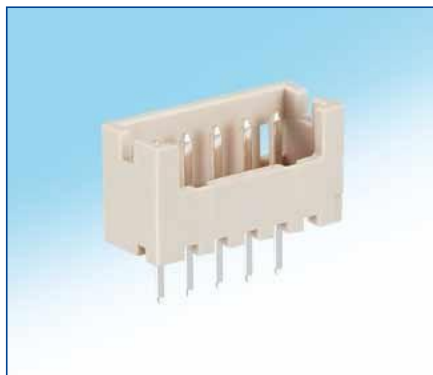


Unit : mm

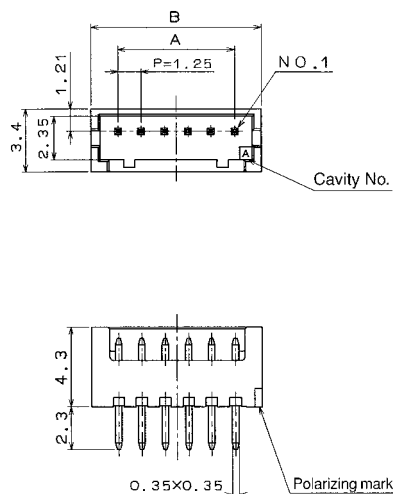
Part No.	HRS No.	No. of Contacts	A	B
DF13-10DS-1.25C	536-0550-2	10	10.40	5.00
DF13-20DS-1.25C	536-0555-6	20	16.65	11.25
DF13-30DS-1.25C	536-0560-6	30	22.90	17.50
DF13-40DS-1.25C	536-0565-0	40	29.15	23.75

Note : The quantity is delivered per bag (100pcs). If needed, please select and order the products per bag.

Single Row Straight Pin Header (Through hole)

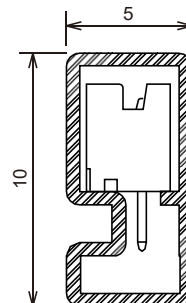


● Board Through-hole Diameter : $\varnothing 0.6 \pm 0.03$



[Specific No.] (**), **
Blank : Tin plated
(75) : Tin plated, tube packaging

BTube Dimensions



Unit : mm

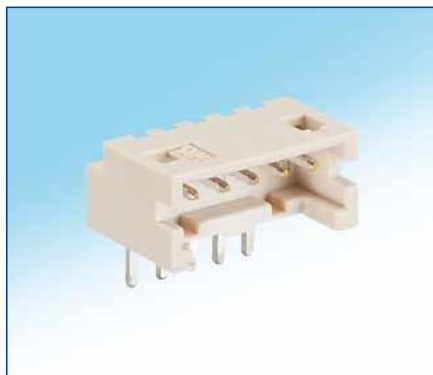
Part No.	HRS No.	No. of Contacts	A	B	Tube Packaging Quantity
DF13-2P-1.25DSA(**)	536-0101-9 **	2	1.25	4.15	115
DF13-3P-1.25DSA(**)	536-0102-1 **	3	2.50	5.40	89
DF13-4P-1.25DSA(**)	536-0103-4 **	4	3.75	6.65	72
DF13-5P-1.25DSA(**)	536-0104-7 **	5	5.00	7.90	61
DF13-6P-1.25DSA(**)	536-0105-0 **	6	6.25	9.15	52
DF13-7P-1.25DSA(**)	536-0106-2 **	7	7.50	10.40	46
DF13-8P-1.25DSA(**)	536-0107-5 **	8	8.75	11.65	41

Part No.	HRS No.	No. of Contacts	A	B	Tube Packaging Quantity
DF13- 9P-1.25DSA(**)	536-0108-8 **	9	10.00	12.90	37
DF13-10P-1.25DSA(**)	536-0109-0 **	10	11.25	14.15	34
DF13-11P-1.25DSA(**)	536-0110-0 **	11	12.50	15.40	31
DF13-12P-1.25DSA(**)	536-0111-2 **	12	13.75	16.65	29
DF13-13P-1.25DSA(**)	536-0112-5 **	13	15.00	17.90	27
DF13-14P-1.25DSA(**)	536-0113-8 **	14	16.25	19.15	25
DF13-15P-1.25DSA(**)	536-0114-0 **	15	17.50	20.40	23

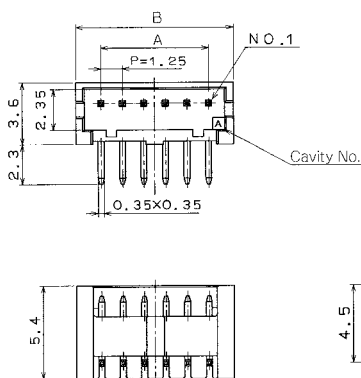
Note 1 : The quantity at the specific No."None" is delivered per bag (100pcs.). If needed, please select and order the products per bag.

Note 2 : Order the tube packaging product, multiplying the tube packaging quantity.

Single Row Right Angle Pin Header (Through hole)

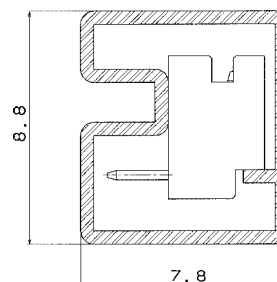


● Board Through-hole Diameter : $\varnothing 0.6 \pm 0.03$



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

BTube Dimensions



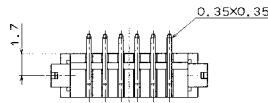
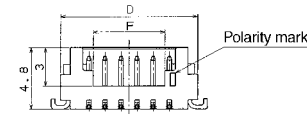
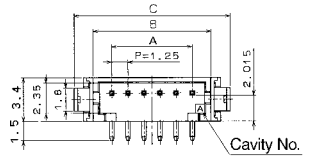
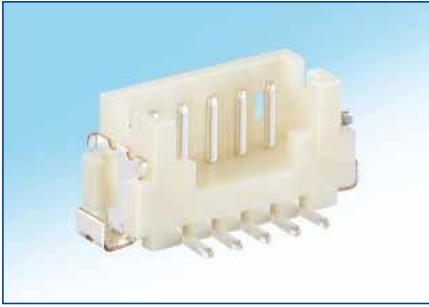
Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	Tube Packaging Quantity
DF13-2P-1.25DS(20)	536-0151-7 20	2	1.25	4.15	115
DF13-3P-1.25DS(20)	536-0152-0 20	3	2.50	5.40	89
DF13-4P-1.25DS(20)	536-0153-2 20	4	3.75	6.65	72
DF13-5P-1.25DS(20)	536-0154-5 20	5	5.00	7.90	61
DF13-6P-1.25DS(20)	536-0155-8 20	6	6.25	9.15	52
DF13-7P-1.25DS(20)	536-0156-0 20	7	7.50	10.40	46
DF13-8P-1.25DS(20)	536-0157-3 20	8	8.75	11.65	41

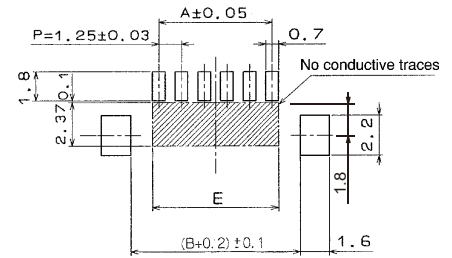
Part No.	HRS No.	No. of Contacts	A	B	Tube Packaging Quantity
DF13- 9P-1.25DS(20)	536-0158-6 20	9	10.00	12.90	37
DF13-10P-1.25DS(20)	536-0159-9 20	10	11.25	14.15	34
DF13-11P-1.25DS(20)	536-0160-8 20	11	12.50	15.40	31
DF13-12P-1.25DS(20)	536-0161-0 20	12	13.75	16.65	29
DF13-14P-1.25DS(20)	536-0163-6 20	14	16.25	19.15	25
DF13-15P-1.25DS(20)	536-0164-9 20	15	17.50	20.40	23

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

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



BPCB mounting pattern



Note 1. Shaded area must be free of any electrically conductive traces to avoid contact with soldered pin header terminations.

This pin header is a three-wall type, header has sufficiently large flat areas to allow pick-up with vacuum nozzles of automatic placement equipment.

[Specific No.] (**), **
(21) : Tin plated embossed tape packaging
(51) : Gold plated embossed tape packaging

Unit : mm

Part No.	HRS No.	No. of Contacts	A	B	C	D	E	F	Emboss Width
DF13C- 2P-1.25V(**)	536-0401-2 **	2	1.25	4.15	7.15	5.65	1.95	2.20	16
DF13C- 3P-1.25V(**)	536-0402-5 **	3	2.50	5.40	8.40	6.90	3.20	3.45	16
DF13C- 4P-1.25V(**)	536-0403-8 **	4	3.75	6.65	9.65	8.15	4.45	3.10	24
DF13C- 5P-1.25V(**)	536-0404-0 **	5	5.00	7.90	10.90	9.40	5.70	4.35	24
DF13C- 6P-1.25V(**)	536-0405-3 **	6	6.25	9.15	12.15	10.65	6.95	5.60	24
DF13C- 7P-1.25V(**)	536-0406-6 **	7	7.50	10.40	13.40	11.90	8.20	6.85	24
DF13C- 8P-1.25V(**)	536-0407-9 **	8	8.75	11.65	14.65	13.15	9.45	8.10	24
DF13C- 9P-1.25V(**)	536-0408-1 **	9	10.00	12.90	15.90	14.40	10.70	9.35	24
DF13C-10P-1.25V(**)	536-0409-4 **	10	11.25	14.15	17.15	15.65	11.95	10.60	24
DF13C-11P-1.25V(**)	536-0410-3 **	11	12.50	15.40	18.40	16.90	13.20	11.85	32
DF13C-12P-1.25V(**)	536-0411-6 **	12	13.75	16.65	19.65	18.15	14.45	13.10	32
DF13C-14P-1.25V(**)	536-0413-1 **	14	16.25	19.15	22.15	20.65	16.95	15.60	32
DF13C-15P-1.25V(**)	536-0414-4 **	15	17.50	20.40	23.40	21.90	18.20	16.85	44

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