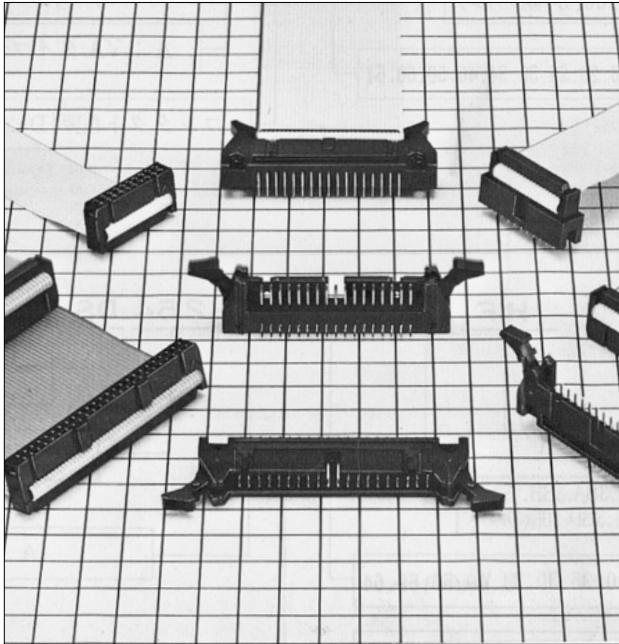


Ribbon Cable connector Compliant with MIL Standard

HIF3B Series



■ Features

1. Product Compliant with MIL Standard

HIF3B series has been developed as a product compliant with MIL standard, and used for wide applications.

2. UL Approval Product

HIF3B series connectors are UL approved.

3. Mechanism to Prevent Mis-insertion

This connector is equipped with the mechanism to prevent Mis-insertion as follows.

- ① The system provides the convex area to insert the guide-key on the pin header side, and to guide it in combination with the socket convex area (MIL standard).
- ② The system embeds and guides the polarizing key in the socket holes.

4. Applicable Cable AWG#28

The applicable cable is UL2651 AWG#28 flat cable (7 cores./ 0.127mm, jacket dia. 0.9±0.1mm).

■ Product Specifications

Rating	Current rating : 1A Voltage rating : 200V AC	Operating Temperature Range : -55 to +85°C (Note 1) Operating Moisture Range : 40 to 80%	Storage Temperature Range : -10 to +60°C (Note 2) Storage Humidity Range : 40 to 70% (Note 2)
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Item	Specification	Condition
1. Insulation Resistance	1000M ohms min.	500V DC
2. Withstanding voltage	No flashover or insulation breakdown.	650V AC/1 minute
3. Contact Resistance	15m ohms max.	0.1A
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)	Insulation resistance: 1000M ohms min.	96 hours at temperature of 40°C and humidity of 90% to 95%
6. Temperature Cycle	No damage, cracks, or parts looseness.	(-65°C: 30 minutes → 15 to 35°C: 5 minutes max. 125°C: 30 minutes → 15 to 35°C: 5 minutes max.) 5 cycles
7. Durability (Mating/un-mating)	Contact resistance: 15m ohms max.	500 cycles
8. Resistance to Soldering heat	No deformation of components affecting performance.	Flow: 260°C for 10 seconds 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

Part	Material		Finish		Remarks
Insulator	PBT		Black		UL94V-0
Socket Contact	D	Beryllium copper	Connection area	Gold plated	_____
			Connection area	Gold plated	
	DA	Copper alloy	Connection area	Gold plated	
			Connection area	Tin lead plated	
Pin header contact	Brass		Selective Gold plated		_____

■ Ordering Information

● Socket

HIF **3B** - ***** **D** **A** - **2.54** **R**
 ① ② ③ ④ ⑤ ⑥ ⑦

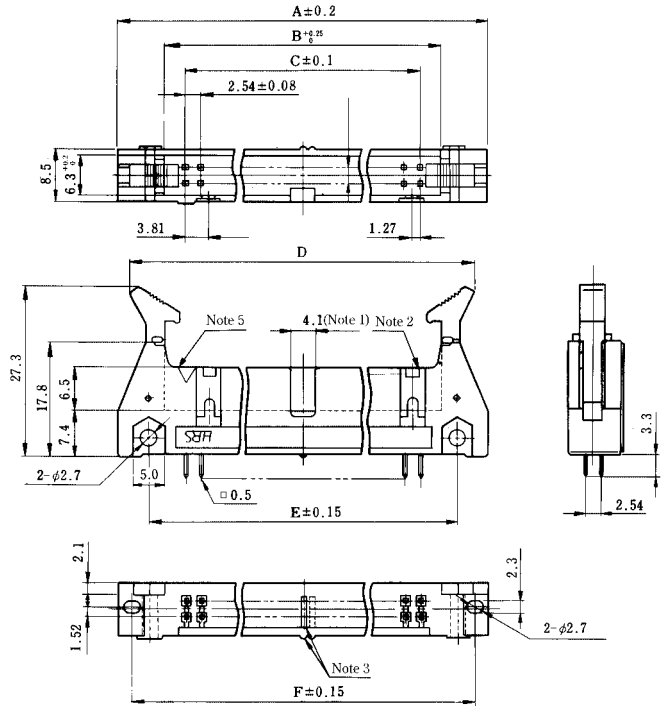
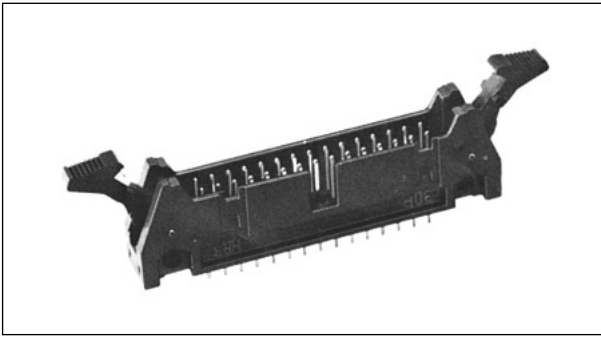
① Series Name	: HIF
② Series No.	: 3B, 3BA, 3BB (50, 60, 64 contacts only)
③ Number of contacts	: 16, 20, 26, 30, 34, 40, 50, 60, 64
④ Contact alignment	: D : Double
⑤ A	: VA type
⑥ Contact pitch	: 2.54mm
⑦ Connection type	R : ID type

● Pin Header

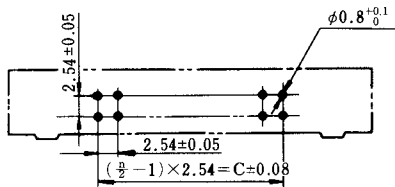
HIF **3B** - ***** **P** **A** - **2.54** **DS**
 ① ② ③ ④ ⑤ ⑥ ⑦

① Series Name	: HIF
② Series No.	: 3B : (14 contacts not included) 3BC: (10 contacts only) 3BA, 3BB: (50, 60, 64 contacts only) 3BD: (10 contacts only)
③ Number of contacts	: 16, 20, 26, 30, 34, 40, 50, 60, 64
④ P	: Pin header
⑤ A	: Selective gold plated
⑥ Contact pitch	: 2.54mm
⑦ Contact style	DS : Right angle type DSA : Straight type

■Four-Wall Straight Through hole



◆PCB mounting pattern



■n=number of contacts

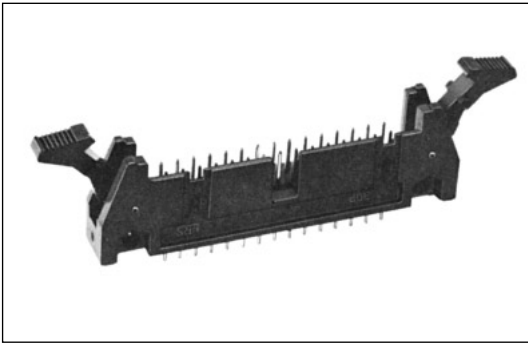
- Note 1, Note 2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.
- Note 3: The spacer moves to the right according to the number of contacts.
- Note 4: The 10, 50, 60 and 64 contact connectors contain two types of polarizing slots. Use products, confirming (Note 1) (Note 2).
- Note 5: The 6 contact has no polarity mark.

Unit:mm

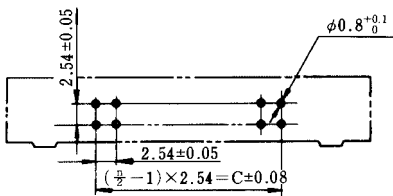
Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	Polarizing Slot (Note 1)	Polarizing Key Install (Note 2)
★ HIF3-6PA-2.54DSA	562-0503-9	6	26.92	12.42	5.08	23.06 MAX46.02	16.7	22.82	One at center	None
HIF3BA-10PA-2.54DSA	610-0111-8	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	None	One on right side
★ HIF3BD-10PA-2.54DSA	610-0181-3	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	One at center	None
★ HIF3BA-14PA-2.54DSA	610-0112-0	14	37.1	22.6	15.24	33.24 MAX56.2	26.9	33.0		One on right side
★ HIF3BA-16PA-2.54DSA	610-0113-3	16	39.6	25.1	17.78	35.74 MAX58.7	29.5	35.5		One on right and left sides, resp.
★ HIF3BA-20PA-2.54DSA	610-0114-6	20	44.7	30.2	22.86	40.84 MAX63.8	34.5	40.6		
★ HIF3BA-26PA-2.54DSA	610-0115-9	26	52.3	37.8	30.48	48.44 MAX71.4	42.2	48.3		
★ HIF3BA-30PA-2.54DSA	610-0116-1	30	57.4	42.9	35.56	53.54 MAX76.5	47.2	53.3		
★ HIF3BA-34PA-2.54DSA	610-0117-4	34	62.5	48.0	40.64	58.64 MAX81.6	52.3	58.4		
★ HIF3BA-40PA-2.54DSA	610-0118-7	40	70.1	55.6	48.26	66.24 MAX89.2	59.9	66.0		
★ HIF3BA-50PA-2.54DSA	610-0119-0	50	82.8	68.3	60.96	78.94 MAX101.9	72.6	78.7		
★ HIF3BB-50PA-2.54DSA	610-0141-9	50	82.8	68.3	60.96	78.94 MAX101.9	72.6	78.7		
★ HIF3BA-60PA-2.54DSA	610-0120-9	60	95.5	81.0	73.66	91.64 MAX114.6	85.3	91.4	One on right and left sides, resp.	
★ HIF3BB-60PA-2.54DSA	610-0142-1	60	95.5	81.0	73.66	91.64 MAX114.6	85.3	91.4	One at center	
★ HIF3BA-64PA-2.54DSA	610-0121-1	64	100.6	86.1	78.74	96.74 MAX119.7	90.4	96.5	One on right and left sides, resp.	
★ HIF3BB-64PA-2.54DSA	610-0143-4	64	100.6	86.1	78.74	96.74 MAX119.7	90.4	96.5	One at center	

The products marked with ★ comply with MIL standard.

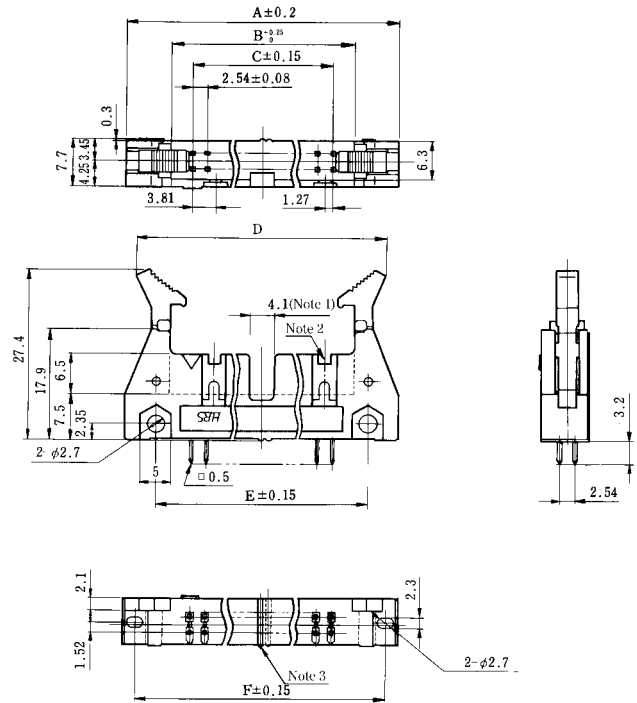
Three Wall Straight Through hole



PCB mounting pattern



n=number of contacts



Note1, Note2: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

Note3: The spacer moves to the right according to the number of contacts.

Note4: The 10 contact connector consists of two types. Use products, referring to (Note 1) and (Note 2).

Note5: The 6 contact has no polarity mark.

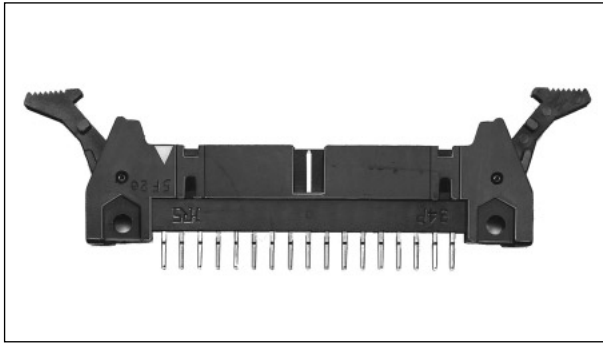
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	Polarizing Slot (Note 1)	Polarizing Key Install (Note 2)
★ HIF3B -10PA-2.54DSA	610-0071-5	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	None	One on right side
HIF3BC-10PA-2.54DSA	610-0161-6	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	One at center	None
★ HIF3B -16PA-2.54DSA	610-0072-8	16	39.6	25.1	17.78	35.74 MAX58.7	29.5	35.5		One on right and left sides, resp.
★ HIF3B -20PA-2.54DSA	610-0073-0	20	44.7	30.2	22.86	40.84 MAX63.8	34.5	40.6		
★ HIF3B -26PA-2.54DSA	610-0074-3	26	52.3	37.8	30.48	48.44 MAX71.4	42.2	48.3		
★ HIF3B -30PA-2.54DSA	610-0075-6	30	57.4	42.9	35.56	53.54 MAX76.5	47.2	53.3		
★ HIF3B -34PA-2.54DSA	610-0076-9	34	62.5	48.0	40.64	58.64 MAX81.6	52.3	58.4		
★ HIF3B -40PA-2.54DSA	610-0077-1	40	70.1	55.6	48.26	66.24 MAX89.2	59.9	66.0		
★ HIF3B -50PA-2.54DSA	610-0078-4	50	82.8	68.3	60.96	78.94 MAX101.9	72.6	78.7	One on right and left sides, resp.	
★ HIF3B -60PA-2.54DSA	610-0079-7	60	95.5	81.0	73.66	91.64 MAX114.6	85.3	91.4		
★ HIF3B -64PA-2.54DSA	610-0080-6	64	100.6	86.1	78.74	96.74 MAX119.7	90.4	96.5		

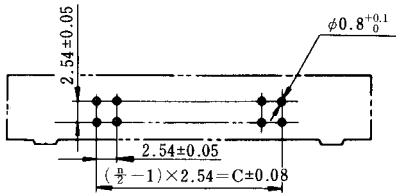
The products marked with ★ comply with MIL standard.

■Four Wall Straight Through hole

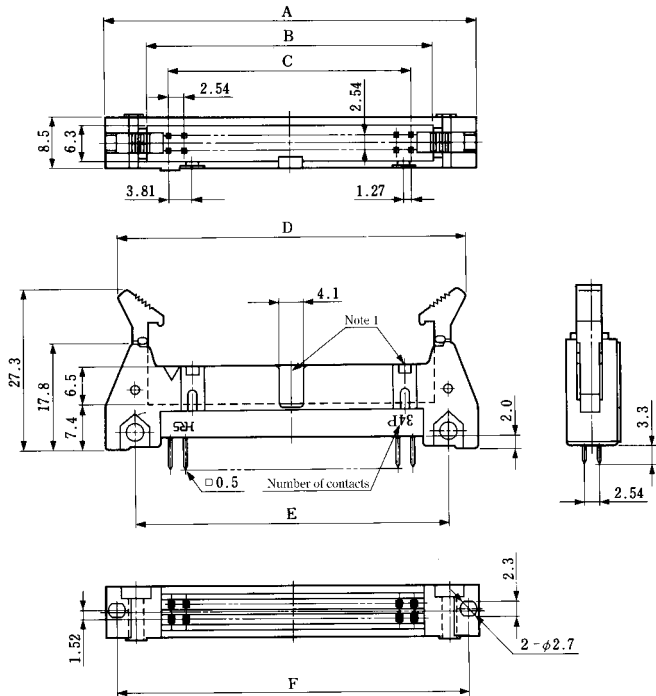
[Flux Blister Prevention Type]



◆PCB mounting pattern



■n=number of contacts



Note1: The number of polarizing slot and key installed positions changes according to products. Refer to the list as shown below.

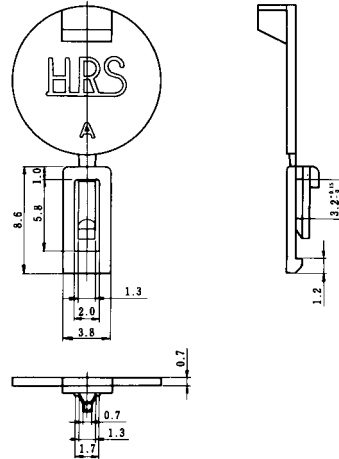
Unit:mm

Part Number	CL No.	Number of Contacts	A	B	C	D	E	F	Polarizing Slot	Polarizing Key Install
★ HIF3CA-10PA-2.54DSA	610-0701-1	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	None	One on right side
HIF3CD-10PA-2.54DSA	610-0722-1	10	32.0	17.5	10.16	28.14 MAX51.1	21.8	27.9	One at center	None
★ HIF3CA-16PA-2.54DSA	610-0703-7	16	39.6	25.1	17.78	35.74 MAX58.7	29.5	35.5		None
★ HIF3CA-20PA-2.54DSA	610-0704-0	20	44.7	30.2	22.86	40.84 MAX63.8	34.5	40.6		None
★ HIF3CA-26PA-2.54DSA	610-0705-2	26	52.3	37.8	30.48	48.44 MAX71.4	42.2	48.3		None
★ HIF3CA-30PA-2.54DSA	610-0706-5	30	57.4	42.9	35.56	53.54 MAX76.5	47.2	53.3		None
★ HIF3CA-34PA-2.54DSA	610-0707-8	34	62.5	48.0	40.64	58.64 MAX81.6	52.3	58.4		None
★ HIF3CA-40PA-2.54DSA	610-0708-0	40	70.1	55.6	48.26	66.24 MAX89.2	59.9	66.0		None
★ HIF3CA-50PA-2.54DSA	610-0709-3	50	82.8	68.3	60.96	78.94 MAX101.9	72.6	78.7		One on right and left sides, resp.
★ HIF3CB-50PA-2.54DSA	610-0721-9	50	82.8	68.3	60.96	78.94 MAX101.9	72.6	78.7		One at center
★ HIF3CB-60PA-2.54DSA	610-0723-4	60	95.5	81.0	73.66	91.64 MAX114.6	85.3	91.4		
★ HIF3CB-64PA-2.54DSA	610-0724-7	64	100.6	86.1	78.74	96.74 MAX119.7	90.4	96.5		

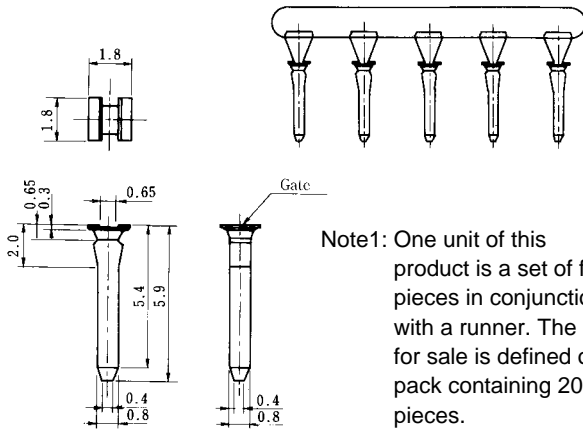
The products marked with ★ comply with MIL standard.

◆Polarizing Key

HIF3B-GK
CL562-0601-8



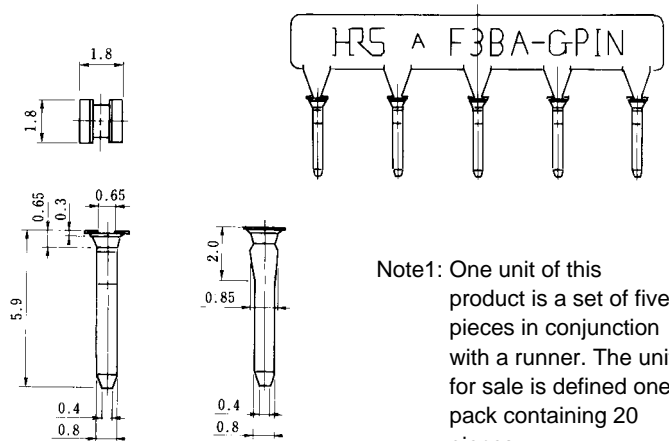
HIF3-GPIN(A)



Note1: One unit of this product is a set of five pieces in conjunction with a runner. The unit for sale is defined one pack containing 20 pieces.

Note2: This product is applicable to HIF3A-*D2.54R, HIF3C-*D2.54C and HIF3BA-*D2.54C products.

HIF3BA-GPIN



Note1: One unit of this product is a set of five pieces in conjunction with a runner. The unit for sale is defined one pack containing 20 pieces.

Note2: This product is applicable to the HIF3BA-*D2.54R product.

Part Number	CL No.	Material	Remarks
HIF3-GPIN(A)	562-0126-6	Poly acetal (white)	A set of 5 pieces

Part Number	CL No.	Material	Remarks
HIF3BA-GPIN	612-0500-2	Poly acetal (white)	A set of 5 pieces

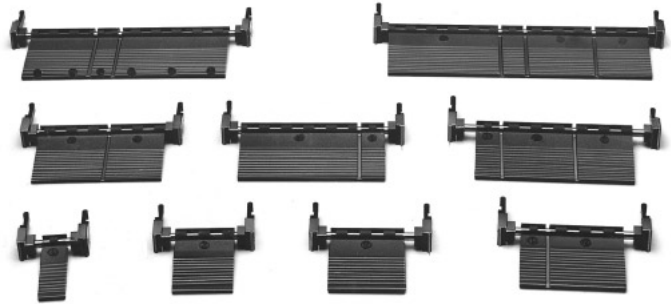
◆HIF3-Multi Clamp



This clamp is used for intermediate connection in the bus-line system, etc. Remove compulsory force from the insulation displacement area of the connector in intermediate connection.

Note: The pin header corresponds to the HIF3BAE series (lock E).

◆HIF3-*CL Pull Tab



This pull tab is used for the HIF3 series equipped with cable clamp function. Remove all compulsory force, which is loaded on the insulation displacement area of the connector for extraction.

Note: This HIF3-* Pull Tab can not be used for HIF3BA-*PD.

Note: The pin header corresponds to the HIF3BAE series (lock E).

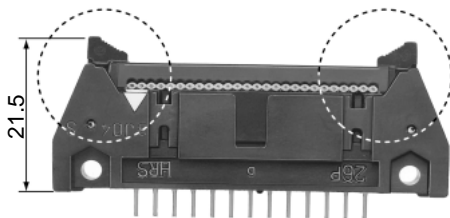


◆Lock

●Low Profile Lock Pin Header

Lock G

Part Number : HIF3BAG-**-PA-2.54DSA

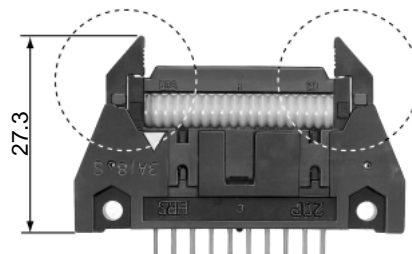


- Low profile type, and used for lock ejection. Connector height is reduced. Since no connector clamp is needed on the cable side, this is used without turning back on the cable side. Take care about this point.

●F Type Lock Pin Header

Lock F

Part Number : HIF3BAG-**-PA-2.54DSA



- Locking range more reduced than conventional lock type. Even if connectors are aligned laterally, the mounting space is reduced. Note : The clamp must be replaced for HIF3A socket type 50 contacts only. Take care about this point.