

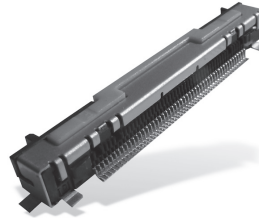
# Series HF507S

## Non-ZIF 90° Socket Direct Mating Type

# High Speed Connectors

### Specifications

Insulation Resistance: 100MΩ min.  
 Contact Resistance: 100mΩ max.  
 Withstanding Voltage: 125V ACrms for 1 minut  
 Voltage Rating: 50V ACrms  
 Current Rating: 0.3A  
 Operating Temp. Range: -20°C to +85°C  
 Insertion / Extraction: 30 times max.



### Materials and Finish

Housing: LCP (GF), black  
 Lock Hold: SUS t = 0.2mm  
 Contacts and Terminal: Phosphor Bronze, (t = 0.15mm) Ni-Au plating

### Features

- Suitable for LVDS, HDMI, DVI, PCI express and S-ATA data transmission
- One push lock funktion for FFC/FPC insertion integrated one push button to extract FFC
- Realization of high speed data transmission at Gbps level
- 100Ω Differential impedance
- High EMI protection due to shielding
- Tape and Reel (1,200 per reel)

### Connector Part Number (Details)

HF507S - \*\* - 72

Series No. [ ]

No. of Contacts (41 and 51) [ ]

Design No. [ ]

### FFC Part Number (Details)

YFC - \*\* - DM - \*

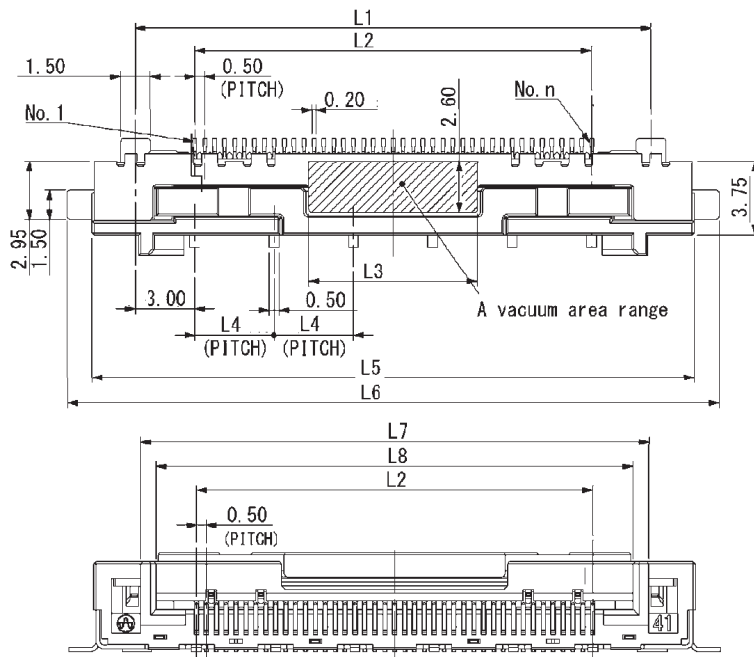
Series No. [ ]

Total Length in mm [ ]

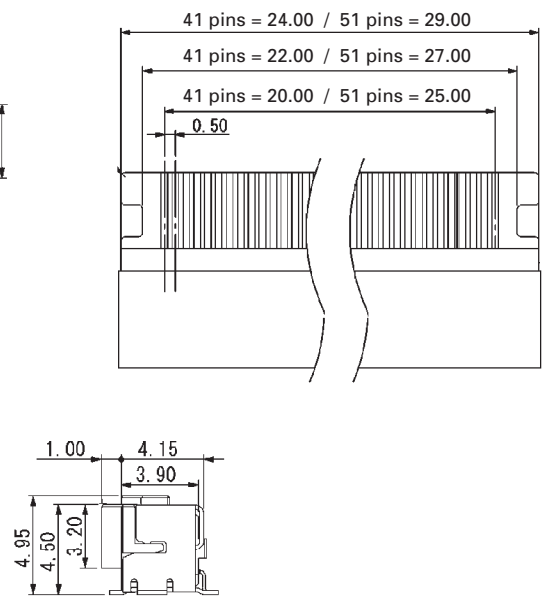
Design No. [ ]

FFC Mating Direction, A = same side  
 B = opposite side

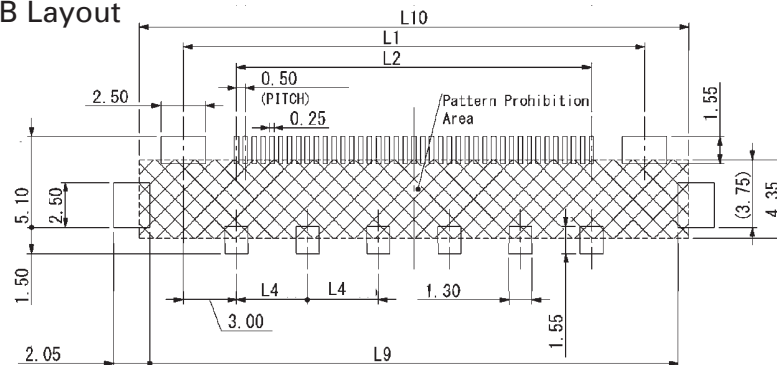
### Outline Dimensions for 90° Socket



### Outline Dimensions FFC



### Recommended PCB Layout



Part Number	Pin Count	L1	L2	L3	L4	L5	L6	L7	L8	L9	L10
HF507S-41-72	41	26.00	20.00	11.70	4.10	30.35	32.85	30.67	24.06	29.75	30.95
HF507S-51-72	51	31.00	25.00	11.70	5.10	35.35	37.85	25.67	29.06	34.75	35.95

Non-ZIF Connectors for High Speed Cable

### Specifications

Insulation Resistance:	100MΩ min. at 500V DC or higher
Contact Resistance:	1.7Ω/m
Withstanding Voltage:	250V AC for 1 minute
Voltage Rating:	30V AC DC
Current Rating:	0.2A or less
Operating Temp. Range:	-40°C to +80°C
Characteristic Impedance:	100±10Ω
Intra / Inter Skew:	10 ps/m or less
Attenuation:	19db/m at 5GHz (reference only)
Bending at 180°:	20 times or more

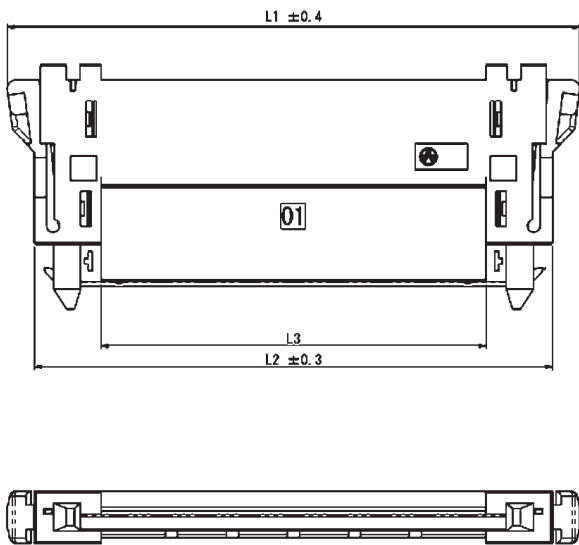
### Materials and Finish

Housing:	LCP (GF), black
Lock Hold:	SUS t = 0.2mm
Contacts:	Phosphor Bronze, (t = 0.15mm) Ni-Au plating
Terminal:	Phosphor Bronze, (t = 0.15mm) Ni-Au plating

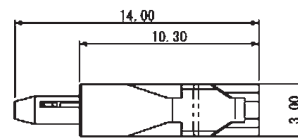
### Features

- High speed transmission 3Gbps
- Differential impedance 100Ω
- One shielding
- UL compliant

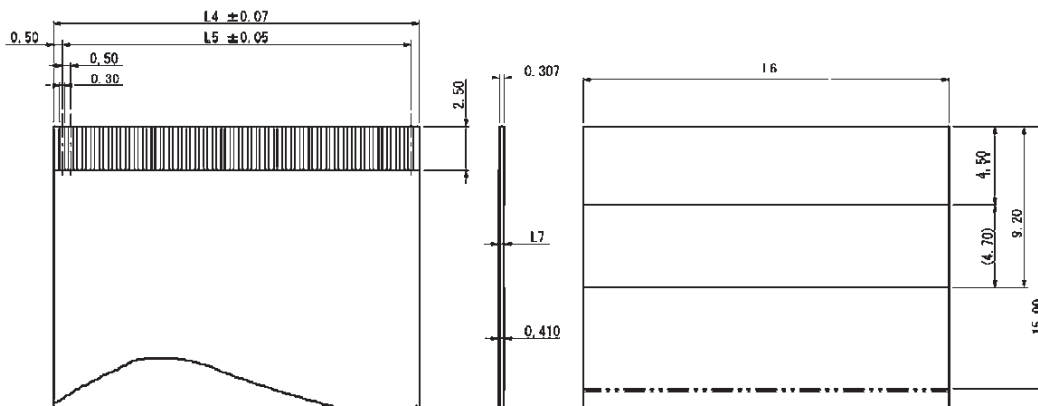
### Outline Dimensions



### Outline Shielding Dimensions



### Outline Cable Dimensions



### Part Number (Details)

YFT - \*\* - 250 - \*

Series No.

No. of Contacts  
(41 and 51)

Length in mm

A = Adapters on the same side  
B = Adapters on reversed side



Part Number	Pin Count	L1	L2	L3	L4	L5	L6
YFT-41-***.*	41	32.85	29.75	22.10	20.00	21.00	19.75
YFT-51-***.*	51	37.85	34.75	27.10	25.00	26.00	24.75

## Series HF507S Non-ZIF 90° Socket for High Speed Applications

### Specifications

Insulation Resistance: 100MΩ min.  
 Contact Resistance: 100mΩ max.  
 Withstanding Voltage: 125V ACrms for 1 minute  
 Voltage Rating: 50V ACrms  
 Current Rating: 0.3A  
 Operating Temp. Range: -20°C to +85°C  
 Differential Impedance: 100 Ω  
 Insertion / Extraction: 30 times max.



### Materials and Finish

Housing: LCP (GF), black  
 Lock Hold: SUS t = 0.2mm  
 Contacts: Phosphor Bronze, (t = 0.15mm) Ni-Au plating  
 Terminal: Phosphor Bronze, (t = 0.15mm) Ni-Au plating

### Features

- Suitable for LVDS, HDMI, DVI, PCI express and S-ATA data transmission
- Easy operation by side-locking mechanism prevents cable angular insertion and guarantees secure locking

### Part Number (Details)

HF507S - 41 - \*\*

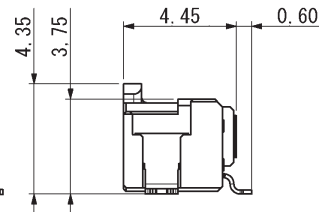
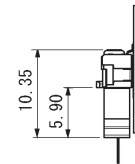
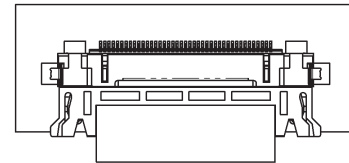
Series No.

No. of Contacts  
(21, 31, 41 and 51)

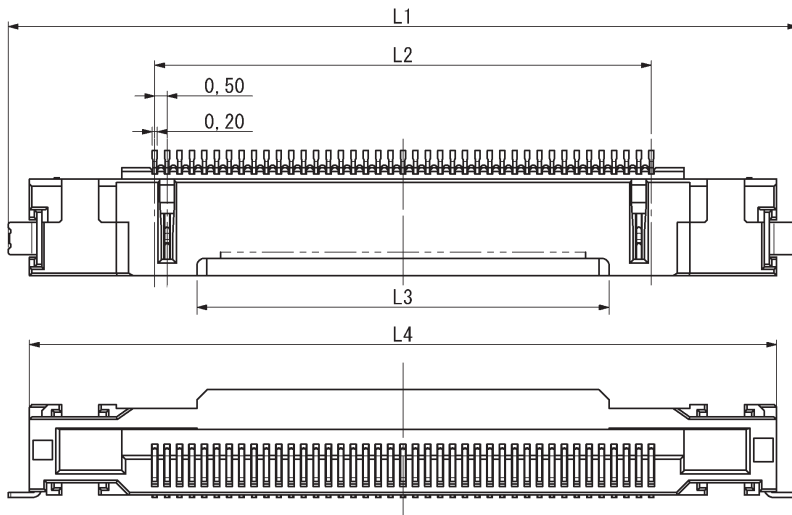
01 = 90° Without Shielding  
 03 = 90° With Shielding

Applicable Cable  
see page C-5 to C-7

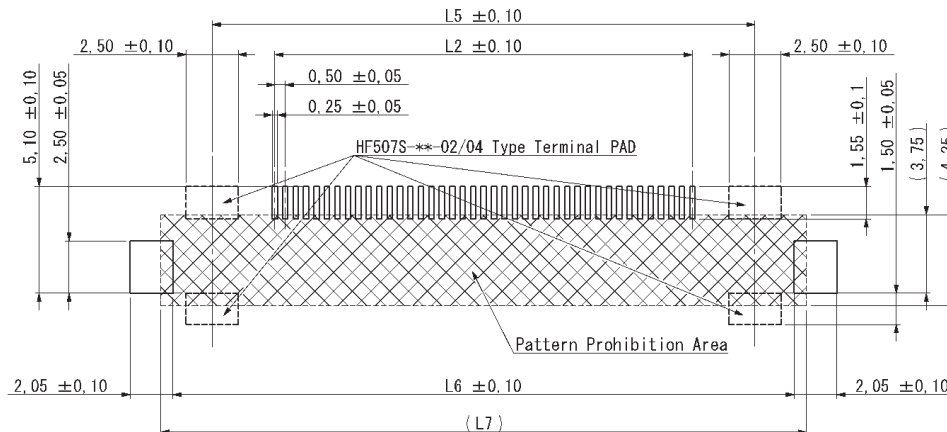
### Orientation for 90° Socket



### Outline Dimensions for 90° Socket



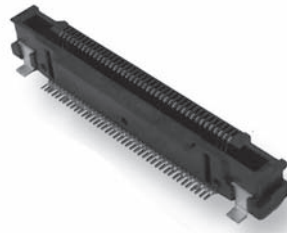
### Recommended PCB Layout



Part Number	Pin Count	L1	L2	L3	L4	L5	L6	L7
HF507S-21-0*	21	16.00	10.00	6.60	20.10	16.00	19.75	20.95
HF507S-31-0*	31	21.00	15.00	11.60	25.10	21.00	24.75	25.95
HF507S-41-0*	41	26.00	20.00	16.60	30.10	26.00	29.75	30.95
HF507S-51-0*	51	31.00	25.00	21.60	35.10	31.00	34.75	35.95

### Specifications

- Insulation Resistance: 100MΩ min.
- Contact Resistance: 100mΩ max.
- Withstanding Voltage: 125V ACrms for 1 minute
- Voltage Rating: 50V ACrms
- Current Rating: 0.3A
- Operating Temp. Range: -20°C to +85°C
- Differential Impedance: 100 Ω
- Insertion / Extraction: 30 times max.



### Materials and Finish

- Housing: LCP (GF), black
- Lock Hold: SUS t = 0.2mm
- Contacts: Phosphor Bronze, (t = 0.15mm) Ni-Au plating
- Terminal: Phosphor Bronze, (t = 0.15mm) Ni-Au plating

### Features

- Suitable for LVDS, HDMI, DVI, PCI express and S-ATA data transmission
- Easy operation by side-locking mechanism prevents cable angular insertion and guarantees secure locking

### Part Number (Details)

HF507S - 21 - \*\*

Series No.

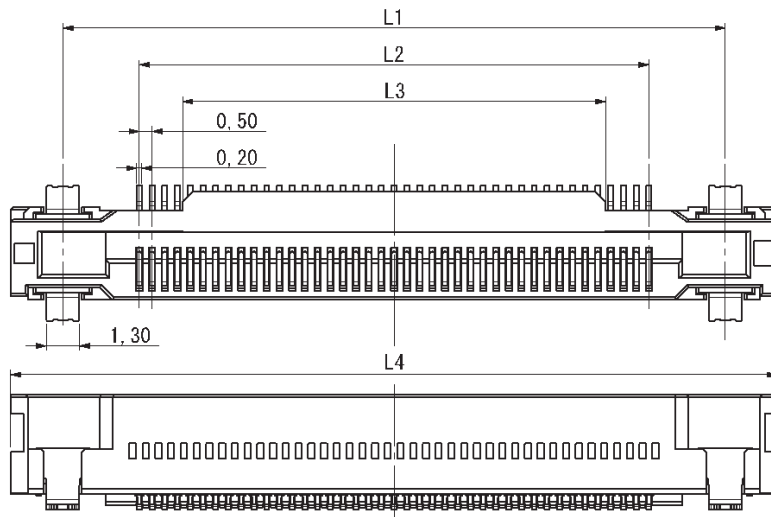
No. of Contacts  
(21, 31, 41 and 51)

02 = 180° Without Shielding  
04 = 180° With Shielding\*

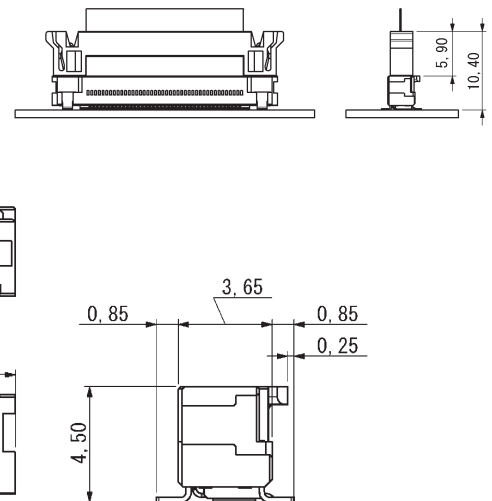
\*180° with shielding not available for 21 pin version

Applicable Cable  
see page C-5 to C-7

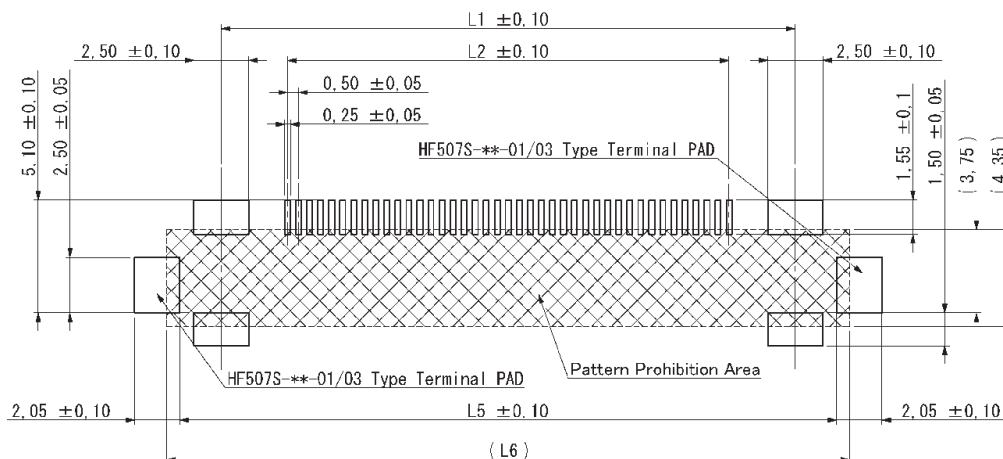
### Outline Dimensions for 180° Socket



### Orientation for 180° Socket



### Recommended PCB Layout



Part Number	Pin Count	L1	L2	L3	L4	L5	L6
HF507S-21-0*	21	16.00	10.00	6.60	20.10	19.75	20.95
HF507S-31-0*	31	21.00	15.00	11.60	25.10	24.75	25.95
HF507S-41-0*	41	26.00	20.00	16.60	30.10	29.75	30.95
HF507S-51-0*	51	31.00	25.00	21.60	35.10	34.75	35.95

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[HF507P-41-015](#) [HF507P-41-041](#) [HF507P-41-04SH-TT1](#) [HF507P-51-014](#) [HF507P-51-015](#) [HF507P-51-041](#) [HF507P-](#)  
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[HF507S-51-03](#) [HF507S-51-04](#)