


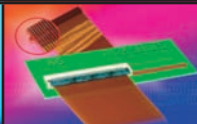
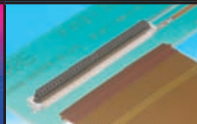
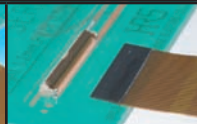


# Hirose Flex Circuit Connectors

For 0.5mm Pitch


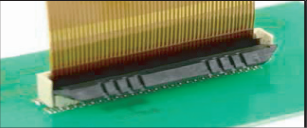




Series Name:						
	FH12	FH16	FH19	FH28	FH31	FH33
Category:	FPC/ FFC Connector (ZIF)	FPC Connector (ZIF)	FPC Connector (ZIF)	FPC/ FFC Connector (ZIF)	FPC/ FFC Connector (ZIF)	FPC/ FFC Connector (ZIF)
Contact Pitch:	0.5mm / 1mm	0.5mm	0.5mm	0.5mm	0.5mm/ 1mm	0.5mm/ 0.4mm/ 1.0mm
Variations Available:	<b>FH12:</b> Bottom contact	<b>FH16H:</b> 0.5mm pitch	<b>FH19C:</b> For 0.2mm thick FPC	<b>FH28:</b> Standard	<b>FH31H:</b> 1.8mm height	<b>FH33:</b> Standard
	<b>FH12A:</b> Top contact					
	<b>FH12S:</b> Bottom contact, strengthened actuator	<b>FH16:</b> 0.3mm pitch	<b>FH19SC:</b> For 0.3mm thick FPC	<b>FH28D:</b> Standard	<b>FH31S:</b> Thicker actuator and 2.4mm height	<b>FH33J:</b> Halogen free, with UL-flammability rating 94V-0
	<b>FH12E:</b> Bottom contact, higher actuator retention force					
	<b>FH12EW:</b> Bottom contact, higher actuator retention force, Halogen free	<b>FH16M:</b> 0.4mm pitch	<b>FH19D:</b> For 0.2mm thick FPC with side catches and nickel barrier	<b>FH28E:</b> Longer metal fitting	<b>FH31S:</b> Thicker actuator and 2.4mm height	<b>FH33W:</b> Halogen free, with UL-flammability rating 94H-B
	<b>FH12F:</b> Bottom contact, 0.18 FPC thickness	<b>FH16P:</b> 0.5mm pitch	<b>FH19SD:</b> For 0.3mm thick FPC with side catches and nickel barrier	<b>FH28H:</b> Shorter actuator		
Pin Count:	Varies from style to style. Refer to FH series catalog. 4-60 positions	<b>FH16:</b> 60, 80, 90 <b>FH16H:</b> 50 <b>FH16M:</b> 80, 96 <b>FH16P:</b> 64	Varies from style to style. Refer to FH series catalog. 4-50 positions	Varies from style to style. Refer to FH series catalog. 10, 15, 20, 28, 30, 40, 45, 50, 55, 60, 64, 68, 74, 80	Varies from style to style. Refer to FH series catalog. 0.5 = 56, 64, 68, 80 1.0 = 16, 32	Varies from style to style. Refer to FH series catalog. 4,6,9,10,12,14,16, 19,20,26,28,30,32, 36,40,45,65
Type of Connector:	Top, Bottom, Vertical	Bottom contact: Staggered row type	Bottom contact	Bottom contact	Bottom contact	Bottom contact
Contact Plating:	Gold flash over phosphor bronze base.	Gold flash over phosphor bronze base.	Gold flash over phosphor bronze base.	Gold flash over phosphor bronze base.	Gold flash over nickel with phosphor bronze base.	Gold flash over phosphor bronze base.
Contact Tail:	SMT: Horizontal and Vertical	SMT: Horizontal	SMT: Horizontal	SMT: Horizontal	SMT: Horizontal	SMT: Horizontal
Mating Cycle:	20	20	20	20	20	20
Nominal Height of Board:	Horizontal: 2mm Vertical: 5.5mm <b>(S) Version</b> Horizontal : 2.4mm	Horizontal: 3.0mm	Horizontal: 0.9mm	Horizontal: 2.55mm	Horizontal: 1.8 - 2.4mm	Horizontal: 1.2mm
Rated Current:	0.5A for 0.5mm and 1mm	0.4 Amps for 0.5 pitch	0.5 Amps	0.5 Amps	0.5 Amps	0.5 Amps
Rated Voltage:	50 VAC	60 VAC for 0.5 pitch	50 VAC	50 VAC	50 VAC	50 VAC
Side Catches:	No	Yes	Yes, but only on D or SD version	Yes	Yes	No
Locking Mechanism:	<b>Standard Version:</b> Front flip lock actuator <b>(S) Version:</b> Strengthened front flip actuator	Rotating front flip lock actuator	Rotating front flip lock actuator	Front Flip. Strengthened flip lock actuator that can withstand 70 Newtons	Rotating front flip lock actuator	Rotating front flip lock actuator
FPC Acceptable Thickness:	0.3mm (+/-) 0.05mm	0.3mm (+/-) 0.05mm	<b>(C) &amp; (D) Version:</b> 0.2mm (+/-) 0.03mm	0.3mm (+/-) 0.05mm	0.3mm (+/-) 0.05mm	0.3mm (+/-) 0.05mm
	<b>(F) Version:</b> 0.18mm (+/-) 0.05mm		<b>(SC) &amp; (SD) Version:</b> 0.3mm (+/-) 0.03mm			

# Hirose Flex Circuit Connectors

For 0.5mm Pitch



Series Name:				
	<b>FH34S</b>	<b>FH40</b>	<b>FH41</b>	<b>FH48</b>
Category:	FPC/ FFC Connector (ZIF)	FPC/ FFC Connector (ZIF)	FFC Connector (ZIF)	FFC Connector (ZIF)
Contact Pitch:	0.5mm	0.5mm	Ground contact: 2.5mm Signal contact: 0.5mm	Ground contact: 2.5mm Signal contact: 0.5mm
Variations Available:	<b>FH34S</b> : Standard top contact. Same PCB pattern as FH19 Series	<b>FH40</b> : Standard, halogen free	<b>FH41</b> : Standard, high speed transmission, halogen free, with ground contacts and strengthened actuator	<b>FH48</b> : Standard, high speed transmission, halogen free, with ground contacts and strengthened actuator
	<b>FH34SW</b> : Bottom contact, halogen free			
	<b>FH34SRJ</b> : Bottom contact and halogen free			
Pin Count:	Varies from style to style. Refer to FH series catalog. 4,6,7,8,11,14,16,20,22,23,24,26,30,32,34	10,20,24,30,40,45,50,60,64,80	40,50,68, (28 Pos Under Development)	31,40,50
Type of Connector:	<b>FH34SJ / FH34SW</b> = top contact <b>FH34SR / FH34SRJ</b> = bottom contact	Vertical	Bottom Contact	Vertical
Contact Plating:	Gold flash over nickel with phosphor bronze base	Gold flash over nickel with phosphor bronze base	Gold flash over nickel with phosphor bronze base	Gold flash over nickel with phosphor bronze base
Contact Tail:	SMT: Horizontal	SMT: Vertical	SMT: Horizontal	SMT: Vertical
Mating Cycle:	20	20	20	20
Nominal Height from Board:	Horizontal: 1.0mm	Vertical: 5.8	Horizontal: 2.5mm	Horizontal: 6.8mm (With latch open)
Rated Current:	0.5 Amps	0.5 Amps	0.5 Amps	0.5 Amps
Rated Voltage:	50 VAC	50 VAC	50 VAC	50 VAC
Side Catches:	<b>NO</b>	<b>YES</b>	<b>YES</b>	<b>YES</b>
Locking Mechanisms:	Rotating, back flip lock actuator	Rotating flip lock actuator	Rotating, front flip lock actuator	Rotating flip lock actuator
FPC Acceptable Thickness:	0.3mm (+/-) 0.03mm	0.3mm (+/-) 0.05mm	0.3mm (+/-) 0.05mm	0.3mm (+/-) 0.05mm