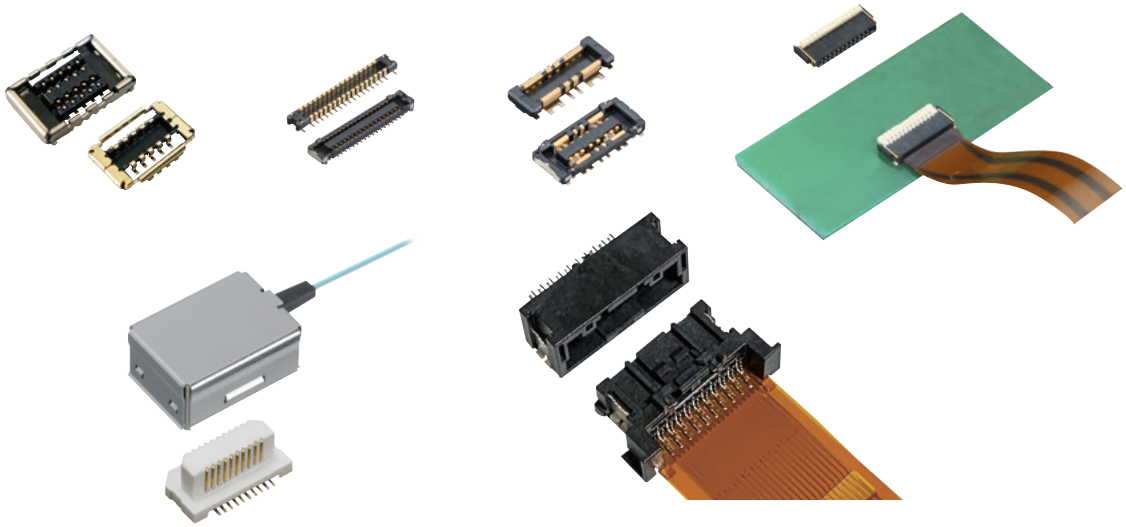
Panasonic
INDUSTRY

Connectors

Narrow pitch RF connectors, Narrow pitch connectors, High current connectors, FPC/FFC connectors, Active optical connector, Automotive connectors

SELECTION GUIDE

IN Better Solution



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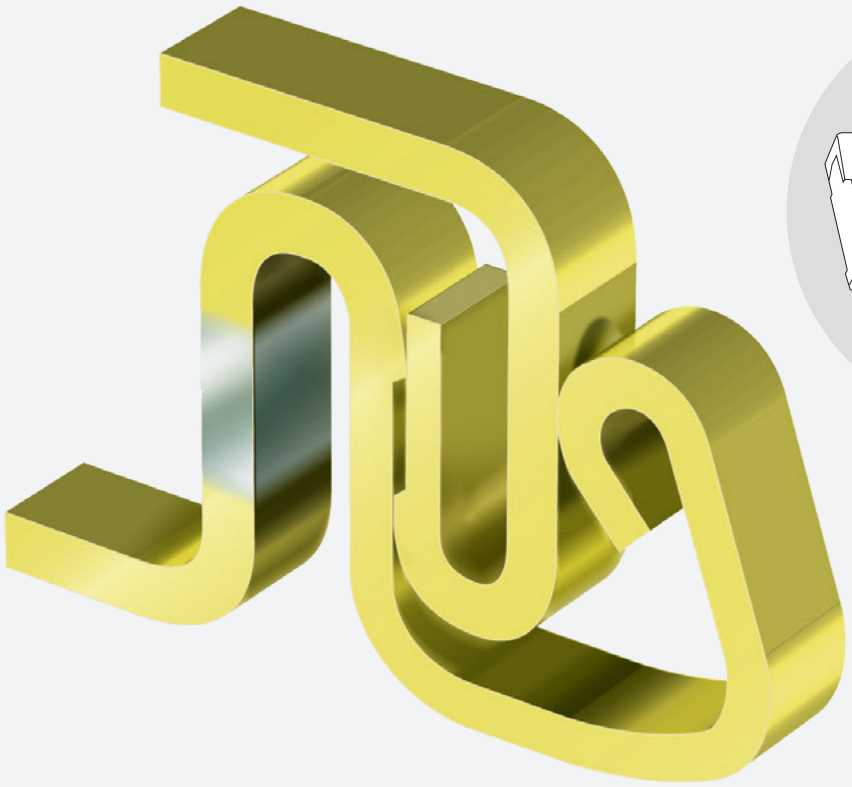
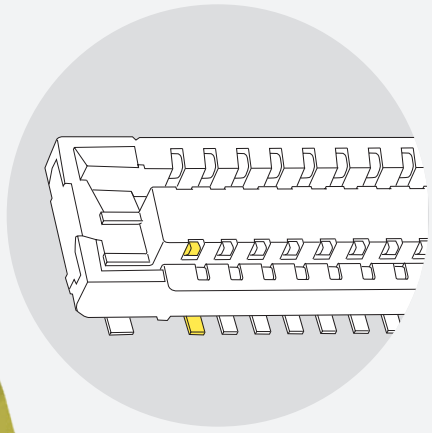
Narrow pitch Connector series

TOUGH CONTACT





Contact image of A4S

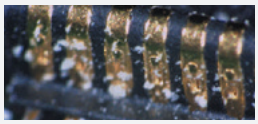
Patented

Tough against exposure to foreign particles and solder flux!

V notch contact construction

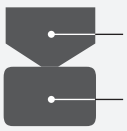
The amount of contact pressure (per unit area) was dramatically increased by taking into consideration the contact edge design. This further improves the overall ability to resist foreign particles from entering inside the contact area.

Evaluation example of plastic powder adhered on post contact surface



Improved with 2-point contacting and edge contact

Product without notch



V notched product

More effective in eliminating flux and foreign particles, and also more effective in keeping foreign particles from getting inside

Improved contact movement effect before and after V notch passage

Improved with use of double contact

A4S Contact construction view

<The combination of these effects greatly improves contact reliability (resistance to entry of foreign matter)>

*Japan: Registration of patent (Patent No. 3726836) Korea: Registration of patent (Patent No. 531938) Taiwan: Registration of patent (Patent No. 1225323) China: Registration of patent (Patent No. 1314171) North America: Registration of patent (Patent No. 7278861)

ACCTB35E 202208

High reliability contact that can stand up to various environmental conditions

Our unique technology
For Board-to-board/Board-to-FPC
Narrow pitch connector series/High current connector series

Tough against shock impact!

Bellows contact construction

The high precision design curved molding provides the right amount of spring action from the contacts which is made possible by means of high precision-metal-processing, one of Panasonic's core technologies.
This spring-like feature is key in many mobile devices.

Simulation Analysis
Through extensive analysis, the contacts are optimally designed to bring the best spring action. Once this is set, the contacts are then precision molded.

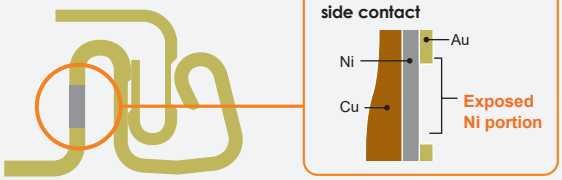
Tough against solder rise!

Ni Barrier construction

Exposed nickel is placed on mid part of socket contacts. This contact, while being ultra low in profile, prevents solder rise.

Exposing Ni plated area prevents solder rise

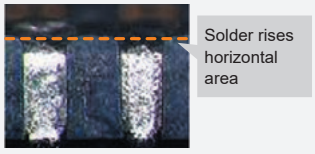
Exposed Ni barrier portion



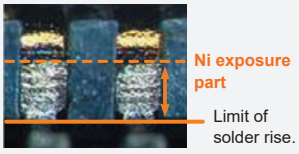
Solder remains in the terminals and stable fillet mold is possible.

Solder rise after reflow[*1]

Example without Ni barrier



Example with Ni barrier

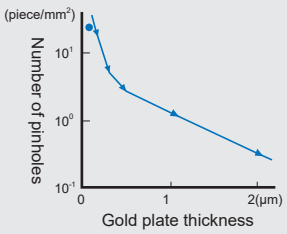


Tough against corrosive gases!

Porosity Treatment

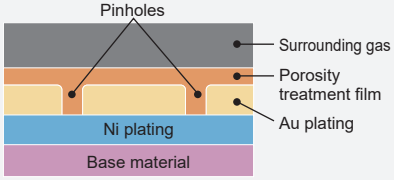
This treatment consists of coating surface with a very thin film to seal pinholes in the gold plating. We have developed this porosity treatment technology, which ensures the same contact reliability for thin gold plating as that of thick gold plating.

Relationship between gold plate thickness and number of pinholes
(on the nickel plating (1μm))



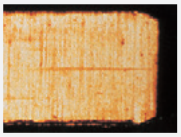
Improvement in resistance to corrosion, insertion/removal durability and contact reliability for digital signals

Plating technology (Porosity treatment technology)

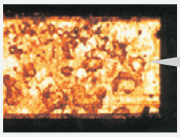


Status of the post's contact after the sulfur dioxide test[*2]

Porosity-treated product

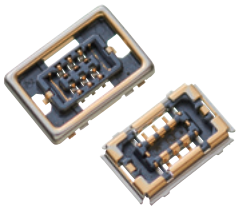
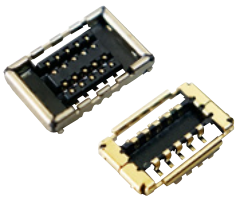


Conventional product

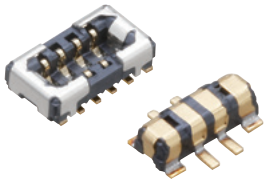
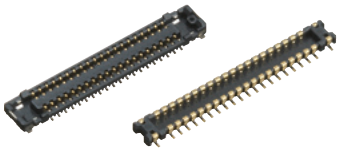
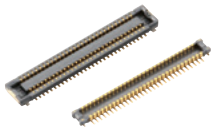


*1 Solder paste coating conditions: Metal screen thickness; 120 μm; Open ratio 90% (solder amount 136% of recommended value)
Reflow conditions: (lead-free solder conditions) temperature profile; 260C peak temperature, atmosphere; N2 reflow (oxygen concentration 1,000 ppm)
*2 Test conditions SO2 concentration: 103 ppm, Humidity: 90 to 95% RH, Temperature: 402C Time: 145 hours

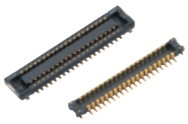
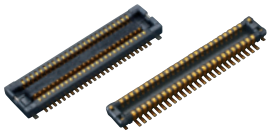
Narrow pitch RF connectors Selector chart

Terminal pitch		0.35 mm pitch	
Types		For Board-to-FPC	
Product name		RF4	RF35
Part No.		Socket : AXG3B0602 Header: AXG4B0602	Socket : AXG3A1012 Header: AXG4A1012
Shape			
Features		● Seamless metal shield with all-around contact achieves both good EMI characteristics and high robustness ● Good SI characteristics with terminals for high frequency signals and shielded terminals ● "TOUGH CONTACT" structure and shield lock structure achieves high contact reliability and high retention force	● Good SI / EMI / EMS characteristics with high frequency application ● "TOUGH CONTACT" structure achieves high contact reliability and high retention force ● With metal exposure structure, tough against shock impact by misalignment motion or dropping
Mated height		0.65 mm	0.6 mm
Dimensions (short width) (Include terminal)		Socket : 2.48 mm Header: 2.20 mm	Socket : 2.44 mm Header: 2.04 mm
No. of pins	100		
	90		
	80		
	70		
	60		
	50		
	40		
	30		
	20		
	10	6	10
Rated current		Max. 1.0 A/pin contact × 2 pin contacts (2 pin contacts other than high frequency signal contacts) Max. 0.3 A/pin contact × 6 pin contacts	Power terminal: Max. 1.0 A/pin contact × 2 pin contacts Signal terminal: Max. 0.3 A/pin contact × 8 pin contacts
Rated voltage		30 V AC/DC	30 V AC/DC
Ambient temperature		−55 to +85 ℃	−55 to +85 ℃
Insertion and removal life		10 times	10 times

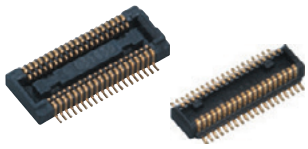
Narrow pitch connectors Selector chart

Terminal pitch		0.35 mm pitch			
Types		For Board-to-FPC			
Product name		R35K	S35		A35S
Part No.		Socket : AXF5K*** Header: AXF6K***	Socket : AXG1*** Header: AXG2***		Socket : AXE7*** Header: AXE8***
Shape					
Features		● Slim: width 1.3 mm ● Low profile construction: mated height 0.6 mm ● Supports 3 A power terminals ● "TOUGH CONTACT" construction withstands tough environments despite being slim and low profile. ● Double contact with a simple lock structure made this connector realize low profile, make a good clicking feel and high removal force.	● Slim: width 1.7 mm ● Low profile construction: mated height 0.6 mm/0.8 mm ● "TOUGH CONTACT" construction withstands tough environments despite being slim and low profile. ● For 0.6 mm mated height, thanks to our proprietary "Fine fitting" construction, high removability with a nice click feel is maintained while being low profile.		● 0.35 mm terminal pitch, 2.5 mm width and 0.8 mm mated height ● Low profile type with up to 100 pins ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Simple lock structure provides tactile feedback to ensure excellent mating/unmating operation feel. ● Connectors for inspection available
Mated height		0.6 mm	0.6 mm	0.8 mm	0.8 mm
Dimensions (short width) (Include terminal)		Socket : 1.3 mm Header: 1.1 mm	Socket : 1.7 mm Header: 1.5 mm		Socket : 2.5 mm Header: 2.0 mm
No. of pins	100				100
	90				
	80				80
	70				70
	60		60		60 64
	50		50 54		50 54
	40		40 44	44	40 44
	30		30 34	34	30 34
	20		20 24	24	20 24
	10	4 6	6 10 12 16	12	10 12 16
Rated current		Power terminal: 3.0 A/pin contact Signal terminal: 0.3 A/pin contact	0.3 A/pin contact (Max. 5 A at total pin contacts)		0.25 A/pin contact (Max. 4 A at total pin contacts)
Rated voltage		30 V AC/DC	60 V AC/DC		60 V AC/DC
Ambient temperature		−55 to +85 ℃	−55 to +85 ℃		−55 to +85 ℃
Insertion and removal life		10 times	30 times		30 times

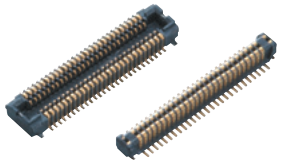
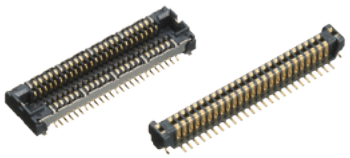
Narrow pitch connectors Selector chart

Terminal pitch		0.4 mm pitch		
Types		For Board-to-FPC		
Product name		A4S		F4S
Part No.		Socket : AXE5*** Header: AXE6***		Socket : AXT5*** Header: AXT6***
Shape				
Features		● Simple lock structure provides tactile feedback to ensure excellent mating / unmating operation feel. ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Connectors for inspection available		● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Simple lock structure provides tactile feedback to ensure excellent mating/unmating operation feel. ● Connectors for inspection available
Mated height		0.8 mm	1.0 mm	1.0 mm
Dimensions (short width) (Include terminal)		Socket : 2.5 mm Header: 2.0 mm		Socket : 3.6 mm Header: 2.6 mm
No. of pins	100			
	90			
	80	80	80	80
	70	70	70	70
	60	60 64	60	60
	50	50 54	50 54	50
	40	40 44	40 44	40 42 48
	30	30 34	30	30 34
	20	20 24	20 24	20 24 26
	10	10 12 14 16	10 12 14	10 16
Rated current		0.3 A/pin contact (Max. 5A at total pin contacts)		0.3 A/pin contact (Max. 5A at total pin contacts)
Rated voltage		60 V AC/DC		60 V AC/DC
Ambient temperature		−55 to +85 ℃		−55 to +85 ℃
Insertion and removal life		30 times		50 times

Narrow pitch connectors Selector chart

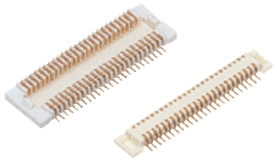
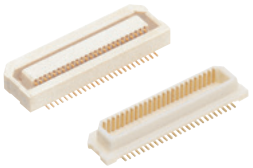
Terminal pitch		0.4 mm pitch				
Types		For Board-to-FPC/Board-to-Board				
Product name		P4				
Part No.		Socket : AXK7*** Header: AXK8***				
Shape						
Features		● Mated heights of 1.5, 2.0, 2.5, 3.0 and 3.5 mm is available ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Pattern wiring is possible on PC board of the connector undersurface				
Mated height		1.5 mm	2.0 mm	2.5 mm	3.0 mm	3.5 mm
Dimensions (short width) (Include terminal)		Socket : 5.1 mm Header: 3.96 mm				
No. of pins	100	100				
	90					
	80	80	80	80	80	
	70	70	70	70		
	60	60	60	60	60	
	50	50	50	50	50	
	40	40	40	40	40	40
	30	30	30	30	30	30
	20	20 24	20 24	20 24	20 24	20
	10					
Rated current		0.3 A/pin contact (Max. 5 A at total pin contacts)				
Rated voltage		60 V AC/DC				
Ambient temperature		−55 to +85 ℃				
Insertion and removal life		50 times				

Narrow pitch connectors Selector chart

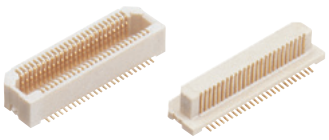
Terminal pitch		0.4 mm pitch				
Types		For Board-to-FPC/Board-to-Board				
Product name		P4S				P4 Sshield type
Part No.		Socket : AXT3*** Header: AXT4***				Socket : AXT3*** Header: AXT4***
Shape						
Features		● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Pattern wiring is possible on PC board of the connector undersurface ● Connectors for inspection available ● Shield type is also available.				● Radiation noise is reduced thanks to better grounding with multi-point ground construction and covering using a shield plate. ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Previous standard product (P4S) can also be used on the header side ● Freedom of design is increased, because it has the same foot pattern as the previous standard product (P4S) .
Mated height		1.5 mm	2.0 mm	2.5 mm	3.0 mm	1.5 mm
Dimensions (short width) (Include terminal)		Socket : 3.6 mm Header: 2.35 mm				Socket : 3.8 mm Header: 2.35 mm
No. of pins	100	100	100	100	100	
	90	90	90			
	80	80		80	80	
	70	70				74
	60	60		60	60	
	50	50				50
	40	40	40	40		
	30	30 34 38	30	30	30	38
	20	20 24 26	20	20	20	
	10	10 16				14
Rated current		0.3 A/pin contact (Max. 5 A at total pin contacts)				0.3 A/pin contact (Max. 5 A at total pin contacts)
Rated voltage		60 V AC/DC				60 V AC/DC
Ambient temperature		−55 to +85 ℃*1				−55 to +85℃
Insertion and removal life		50 times				50 times

*1: Products available that can handle ambient temperatures of −55 to +105℃. For details, please contact our sales representative.

Narrow pitch connectors Selector chart

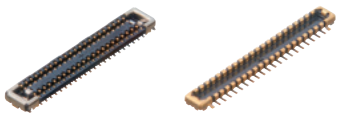
Terminal pitch		0.5 mm pitch			
Types		For Board-to-FPC/Board-to-Board			For Board-to-Board
Product name		P5KF			P5K
Part No.		Socket : AXK5F*** Header: AXK6F***			Socket : AXK5*** Header: AXK6***
Shape					
Features		● Wide lineup for pin counts ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● Simple lock structure provides tactile feedback to ensure excellent mating/unmating operation feel. ● Effective mating length 0.55mm			● "TOUGH CONTACT" construction provides high resistance to various environmental. ● The effective mating length is long and there is enough space for mating.
Mated height		1.5 mm	2.0 mm	2.5 mm	3.0 mm
Dimensions (short width) (Include terminal)		Socket: 5.8 mm Header: 3.3 mm			Socket: 5.8 mm Header: 4.6 mm
No. of pins	100		100	100	100 120
	90				
	80	80	80	80	80
	70	70	70	70	70
	60	60	60	60	60
	50	50	50	50	50
	40	40	40	40	40
	30	30 34	30 34	30 34	30
	20	20 24	20 24	20 24	20
	10	10 12 16	10 12 16	10 12 16	
Rated current		0.5 A/pin contact (Max. 10 A at total pin contacts)			0.5 A/pin contact (Max. 10 A at total pin contacts)
Rated voltage		60 V AC/DC			60 V AC/DC
Ambient temperature		−55 to +85 ℃			−55 to +85 ℃
Insertion and removal life		50 times			50 times

Narrow pitch connectors Selector chart

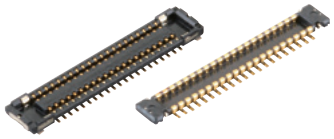
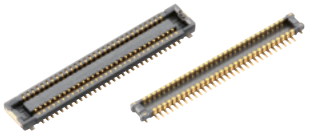
Terminal pitch		0.5 mm pitch								
Types		For Board-to-Board								
Product name		P5KS								
Part No.		Socket : AXK5S*** Header: AXK6S***								
Shape										
Features		● Wide range of mated heights (4.0 mm, 4.5 mm, 5.0 mm, 5.5 mm, 6.0 mm, 6.5 mm, 7.0 mm, 8.0 mm, and 9.0 mm) is available ● "TOUGH CONTACT" construction provides high resistance to various environmental. ● The effective mating length is long and there is enough space for mating.								
Mated height		4.0 mm	4.5 mm	5.0 mm	5.5 mm	6.0 mm	6.5 mm	7.0 mm	8.0 mm	9.0 mm
Dimensions (short width) (Include terminal)		Socket: 5.4 mm Header: 5.0 mm								
No. of pins	100	100	100	100	100	100	100	100	100	100
	90									
	80	80	80	80	80	80	80	80	80	80
	70	70	70	70	70	70	70	70	70	70
	60	60	60	60	60	60	60	60	60	60
	50	50	50	50	50	50	50	50	50	50
	40	40	40	40	40	40	40	40	40	40
	30	30 34	30 34	30 34	30 34	30	30	30	30	30
	20	20 24	20 24	20 24	20 24	20	20	20	20	20
	10									
Rated current	Power terminal	–								
	Signal terminal	0.5 A/pin contact (Max. 16 A at total pin contacts)								
Rated voltage		60 V AC/DC								
Ambient temperature		−55 to +85 ℃*1								
Insertion and removal life		50 times								

*1: Products available that can handle ambient temperatures of −55 to +105℃. For details, please contact our sales representative.

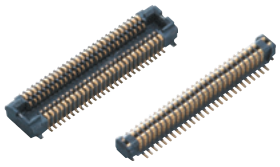
High current connectors Selector chart

Terminal pitch		0.35 mm pitch
Types		Connector for Board-to-FPC
Product name		R35
Part No.		Socket : AXF5J**12 Header: AXF6J**12
Shape		
Features		● Supports 5 A power terminals ● Slim: width 1.7 mm ● Low profile construction: mated height 0.6 mm ● Robust construction with metal exposure of flange section ● "TOUGH CONTACT" construction provides high resistance to various environmental.
Mated height		0.6 mm
Dimensions (short width) (Include terminal)		Socket : 1.7 mm Header: 1.5 mm
No. of pins	100	
	90	
	80	
	70	
	60	60
	50	50
	40	40
	30	30
	20	20 24 26
	10	10 16
Rated current	Power terminal	5.0 A/pin contact (2 terminal)
	Signal terminal	0.3 A/pin contact (All pins can carry; Max. 2 A)
Rated voltage		30 V AC/DC
Ambient temperature		−55 to +85 ℃
Insertion and removal life		30 times

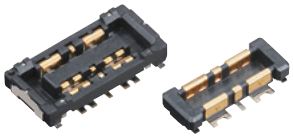
High current connectors Selector chart

Terminal pitch		0.35 mm pitch	
Types		Connector for Board-to-FPC	
Product name		A35UH	A35P
Part No.		Socket : AXF5D**12 Header: AXF6D**12	Socket : AXF5A*** Header: AXF6A***
Shape			
Features		● Supports 5A power terminals ● With power terminal, so number of pins can be reduced ● "TOUGH CONTACT" construction provides high resistance to various environmental.	● High current rating 5A (using 1.25 A/pin × 8 pins) ● By supporting high current rating, small number of pins design is available. ● Increased design flexibility (pin layout, high current multiple lines) ● Supports 5 A power terminals ● With power terminal, so number of pins can be reduced ● "TOUGH CONTACT" construction provides high resistance to various environmental.
Mated height		0.6 mm	0.8 mm
Dimensions (short width) (Include terminal)		Socket : 2.2 mm Header: 1.8 mm	Socket : 2.5 mm Header: 2.0 mm
No. of pins	100		100
	90		
	80		80
	70	70	70
	60	60	60 64
	50	50 54	50 54
	40	40 44	40 44
	30	30 34	30 34
	20	20 24	20 24
	10	10 12 16	10 12 16
Rated current	Power terminal	5 A/pin contact	—
	Signal terminal	0.3 A/pin contact (Max. 5A at total pin contacts)	For power contact: 1.5 A/pin contact × 4 pin contacts or 1.25 A/pin contact × 8 pin contacts For signal contact: 0.5 A/pin contact (12A or less at total pin contacts)
Rated voltage		30 V AC/DC	30 V AC/DC
Ambient temperature		−55 to +85 ℃	−55 to +85 ℃
Insertion and removal life		30 times	30 times

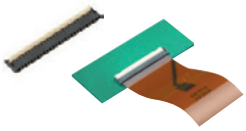
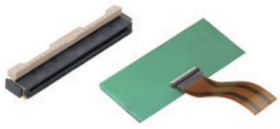
High current connectors Selector chart

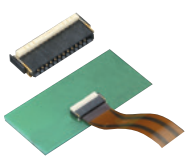
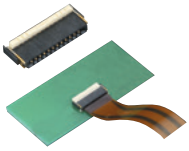
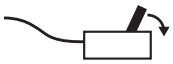
Terminal pitch		0.4 mm pitch		
Types		Connector for Board-to-FPC		
Product name		P4SP		
Part No.		Socket : AXF5G**12 Header: AXF6G**12		
Shape				
Features		● Capable of MAX. 5 A for power ● Rated current 1 A/pin (for power) 0.5 A/pin (for signal), Total: Max. 12 A ● Any terminal can be applied for power terminal ● Low contact resistance: Max. 40 mΩ ● High speed transmission of 10 Gbps is available ● Supports 5 A power terminals ● With power terminal, so number of pins can be reduced ● "TOUGH CONTACT" construction provides high resistance to various environmental.		
Mated height		1.5 mm	2.5 mm	3.0 mm
Dimensions (short width) (Include terminal)		Socket : 3.6 mm Header: 2.35 mm		
No. of pins	100	100	100	100
	90	90		
	80	80	80	80
	70	70		
	60	60	60	60
	50	50		
	40	40	40	
	30	30 34 38	30	30
	20	20 24 26	20	20
	10	10 16		
Rated current	Power terminal	—		
	Signal terminal	For power contact: 1.0 A/pin contact × 10 pin contacts For signal contact: 0.3 A/pin contact (12 A or less at total pin contacts)		
Rated voltage		30 V AC/DC		
Ambient temperature		−55 to +85 ℃		
Insertion and removal life		50 times		

High current connectors Selector chart

Terminal pitch		0.8 mm pitch		
Types		Connector for Board-to-FPC		
Product name		B01		B02
Part No.		Socket : AXF36*500 Header: AXF46*500		Socket : AXF38*700 Header: AXF48*700
Shape				
Features		● High current rating: 6 A (3 A/pin × 4 pins) ● High removal force while miniature and low profile		● High current rating: 10 A (5 A/pin × 4 pins) ● 4 signal pin type for wide range of control applications ● High removal force while miniature and low profile
Mated height		0.6 mm	0.8 mm	0.7 mm
Dimensions (short width) (Include terminal)		Socket : 2.4 mm Header: 1.8 mm		Socket : 2.2 mm Header: 1.8 mm
No. of pins	100			
	90			
	80			
	70			
	60			
	50			
	40			
	30			
	20			
	10	6	6	8
Rated current	Power terminal	3 A/pin contact		5 A/pin contact
	Signal terminal	0.3 A/pin contact		0.3 A/pin contact
Rated voltage		30 V AC/DC		30 V AC/DC
Ambient temperature		−55 to +85 ℃		−55 to +85 ℃
Insertion and removal life		30 times		30 times

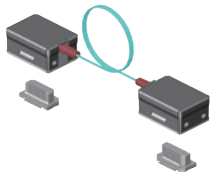
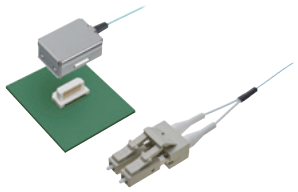
FPC/FFC connectors Selector chart

Contact pitch		0.3 mm pitch	0.5 mm pitch
Product name		Y3B	Y5BH
Part No.		AYF33**35	AYF56**35
Shape			
Features		● Double top and bottom contacts construction ● Time and effort can be reduced by delivering with lever open. ● Wiring patterns can be placed under the connector ● Ni barrier with high resistance to solder creepage	● Differential impedance matching (90 Ω, 85 Ω) compliant with various high-speed transmission standards ● 0.5 mm pitch, 1.8 mm height and double top and bottom contact construction ● Supports USB 3.1 high-speed transmission standard (transmission speed: up to 10 Gbps)* ● Contributes to customer cost savings by using impedance matching FFC. ※ Universal serial Bus 3.1 Specification Reversion 1.0
Lock structure			
Compatibility with FPC/FFC		FPC	FPC/FFC
Applicable FPC thickness		0.2 mm	0.3 mm
Contact structure		Top and bottom double contacts	Top and bottom double contacts
Terminal pitch		0.6 mm	0.5 mm
Mounting height		0.9 mm	1.8 mm
Dimensions (width)		3.15 mm (Including lever) 2.95 mm	5.5 mm (Including lever) 3.9 mm
No. of pins	70	71	
	60	61	
	50	51	50
	40	45	40
	30	31 39	
	20	21 23 25 27	
	10	13 15	
	2 to 9	7 8 9	
Rated current		0.2 A/pin contact	0.4 A/pin contact
Rated voltage		50 V AC/DC	50 V AC/DC
Ambient temperature		−55 to +85 ℃	−55 to +85 ℃
Insertion and removal life		20 times	20 times

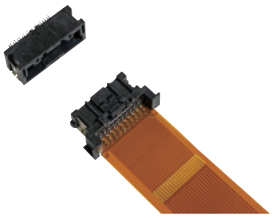
Contact pitch		0.5 mm pitch	
Product name		Y5B	Y5BW
Part No.		AYF53**35	AYF53**65T
Shape			
Features		● Double top and bottom contacts construction ● Wiring patterns can be placed under the connector ● Lock hold type (Y5BW) with excellent holding force is available (Y5BW: support only FPC) 1: With a structure that temporarily holds the FPC 2: Higher FPC holding force *V-by-One®HS: An interface for the next-generation high-speed signals developed by THine Electronics, Inc. V-by-One® is a registered trademark of THine Electronics, Inc.	
Lock structure		 Back lock	
Compatibility with FPC/FFC		FPC/FFC	FPC
Applicable FPC thickness		0.3 mm	
Contact structure		Top and bottom double contacts	
Terminal pitch		0.5 mm	
Mounting height		1.0 mm	
Dimensions (width)		3.7 mm (Including lever) 3.2 mm	
No. of pins	70		
	60		
	50		
	40		
	30	30 32 34	30 32
	20	24 28	22 26 28
	10	10 12 14 16	10 12 14
	2 to 9	4 5 6 8	2 3 4 6 8
Rated current		0.5 A/pin contact	
Rated voltage		50 V AC/DC	
Ambient temperature		−55 to +85 ℃*1	
Insertion and removal life		20 times	

*1: Products available that can handle ambient temperatures of −55 to +105° C. For details, please contact our sales representative.

Active optical connector Selector chart

Product name	Active optical connectors V series		
Types	Standard type		LC Connector type
Transmission specifications	1 channel-Bi-direction	2 channel-Uni-direction	1 channel-Bi-direction
Part No.	Integrated cable and plug: AYG4V1****M* Receptacle: AXK6S20447M*	Integrated cable and plug: AYG5V1****M* Receptacle: AXK6S20447M*	Integrated cable and plug: AYG4V5**85 Receptacle : AXK6S20447M*
Shape			
Features	● Plug is equipped with electrical/optical conversion function. ● Noise reduction of high speed signal and electrical isolation easily achieved. ● High speed and wide data rate transmission possible ● Lineup includes 1 channel-Bi-direction and 2 channel-Uni-direction 1 channel-Bi-direction: 20 Mbps to Max. 8 Gbps 2 channel-Uni-direction: 20 Mbps to Max. 16 Gbps (20 Mbps to 8 Gbps/ch)		● Long-distance high-speed, wide data rate transmission, and relay connections are possible. ● Easily achieved long-distance transmission by relay connection with a Duplex- LC connector. (Compliant IEC61754-20 standard) ● Separable optical transmission part for easy wiring and assembly. ● Easily achieved optical transmission by connecting an electrical connector to PC board. ● High-speed transmission with noise resistance or electrical isolation. ● Small, lightweight, wire-saving, and low power consumption for high-speed transmission.
Transmission rate	20 Mbps to 8 Gbps/ch		
Power consumption	Max. 230 mW		Max. 115 mW
Operating ambient temperature	0 to +70 ℃		
Insertion and removal life of plug	50 times		

Automotive connectors Selector chart

Terminal pitch		2.5 mm pitch	2.2 mm pitch	1 .0 mm pitch
Types		For Board-to-Wire	For Board-to-FPC	For Board-to-FPC
Product name		CW1	CF1	CF2
Part No.		Receptacle: AYC1**110 Housing : AYC2**00 Contact : AYC81110	Receptacle: AYC1F**10 Plug : AYC2F**10	Receptacle: AYC5F**10 Plug : AYC6F**10
Shape				
Features		● 3.4 mm low profile design. (Receptacle) ● Suitable for automotive applications that require vibration and heat resistance (125℃) characteristics. ● "Anti-misoperation bridge structure" prevents unintended operation of mating lock.	● Suitable for automotive applications that require vibration and heat resistance (125℃) characteristics. ● "Anti-misoperation bridge structure" prevents unintended operation of mating lock. ● FPCs and boards can be directly connected without relay wiring harnesses. ● Contact reliability is preserved by double-sided contact structure. ● Inertia lock construction prevents half-mating (4 pins only)	● Available for multiple pins ● Suitable for automotive applications that require vibration and heat resistance (125℃) characteristics. ● FPCs and boards can be directly connected without relay wiring harnesses. ● Contact reliability is preserved by double-sided contact structure.
Mated height		4.35 mm	6.48 mm	12.0 mm
Dimensions (Short width) (Include terminal)		Receptacle: 8.5 mm Housing : 12.20 mm	Receptacle: 11.5 mm Plug : 13.0 mm	Receptacle: 16.6 mm Plug : 16.0 mm
No. of pins	100			
	90			
	80			
	70			
	60			
	50			
	40			
	30			32
	20			20 28
	10	2 4 6 8	4 6 8 10	
Rated current		3.0 A/pin contact (Except for the capacity of wire.)	2.0 A/pin contact (Except for the capacity of FPC.)	1.0 A/pin contact (Except for the capacity of FPC.)
Rated voltage		50 V DC	50 V DC	50 V DC
Temperature and humidity of ambient, storage and transportation		−40 to +125 ℃ (Including temperature rise when applying current) (Storage and transportation temperature is −40 ℃ to +50 ℃ in a packing state.)		
Insertion and removal life		30 times	10 times	10 times

Please refer to **"the latest product specifications"** when designing your product.
• Requests to customers:
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ACCTB121E 202312
2023.12