Panasonic Electric Works of America

TOUGH CONTACT CONNECTORS

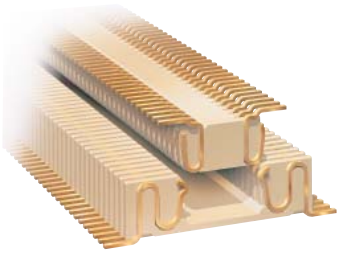
Narrow Pitch: Board to Board & FPC

Panasonic ideas for life

TOUGH CONTACT

For Tough Applications

- Withstands Physical Impact
- Resistant to Dust, Dirt & Flux
- 0.35 ~ 0.5mm Pitch
- Up to 160 Pin Count
- Slim & Space Saving
- Inspection Parts Available
- RoHS Compliant



	Board to FPC											Board to FPC & Board to Board																						
Series	A4F	A35S	A4US			A4S		F4	F35S	F4S		P35S	P4S					P4							P4 w/ Solderin									
Part Number (Socket)	AXE3**	AXE7**	AXE1**			AXE5**		AXK7L**	AXT7**	AXT5**		AXT1**	AXT3**					AXK7**							AXK7									
Part Number (Header)	AXE4**	AXE8**	AXE2**			AXE6**		AXK8L**	AXT8**	AXT6**		AXT2**	AXT4**					AXK8**							AXK8									
Mated Height (mm)	0.6	0.8	0.8	1.0	1.5	0.8	1.0	0.9	1.0	1.0	1.2	1.5	1.5	2.0	2.5	3.0		1.5	2.0	2.5	3.0	3.5	4.0		1.5	2.0	2.5							
Socket (W) (mm)	3.0	2.5	2.2			2.5		5.0	3.4	3.6		3.6	3.60					5.10							5.10									
Header (W) (mm)	2.4	2.0	1.8			2.0		4.1	2.6	2.6		2.35	2.35					3.96							3.96									
Terminal Pitch (mm)	0.4	0.35	0.4			0.4		0.4	0.35	0.4		0.4	0.4					0.4							0.4									
Number of Contacts																																		
10 - 19	10, 12, 14, 16		10, 14			10, 12, 14, 16, 18	10, 12, 14	10, 12, 14, 16		10, 12, 14, 16, 18	10		10, 16					14, 16	14	14					10, 12		12							
20 - 29	20, 22, 24, 26, 28	24	18, 20, 24	20	20	20, 22, 24, 26, 28	20, 24, 26	20, 22, 24, 26, 28		20, 22, 24, 26, 28		20, 22, 24, 26, 28	20, 22, 24, 26, 28		20	20		20, 22, 24, 26, 28	20, 24, 26	20, 24	20, 24	20	24		20, 22, 24, 28	20, 24	20, 28							
30 - 39	30, 32, 34, 36, 38	30, 34	30, 36	34		30, 32, 34, 36, 38	30, 32	30, 32, 34, 36, 38		30, 32, 34, 36, 38	30	30, 32, 34, 36, 38	30, 32, 34, 36, 38		30	30		30, 34, 36	30, 34, 38	30, 34	30	30			30, 34, 36	30, 34	32, 36							
40 - 49	40, 42, 44		40			40, 44	40	40, 44, 48	40	40, 42, 44, 46, 48	40	40	40, 44, 46	40	40	43		40, 42, 44	40	40, 44	40	40			40, 44, 46	40	40							
50 - 59	50, 54	50	50			50, 54, 56	50, 54	50, 54	50	50, 54	50	50, 52	50, 54, 56		56	56		50, 54	50, 54	50	50				50	50	50							
60 - 69	60, 64	60, 64	60	60	60	60, 64	60	60, 66	60	60, 64		60	60, 64		60	60		60, 64	60	60	60				60	60	60							
70 - 79	70		70			70	70	70	70	70	70	70	70					70	70	70														
80 +	80	100, 120	80	80	80	80	80	80	80	80	80	80, 90, 100	80, 90, 100	90, 100	80, 100	80, 100, 120		80, 90, 100	80, 100	80, 90, 100	80, 100				80, 90, 100	80	80, 90							
Rated Current (/contact)	0.3A	0.25A	0.3A	0.3A	0.3A	0.3A		0.3A	0.25A	0.3A		0.25A	0.3A					0.3A							0.3A									
Max Current @ All Contacts	5A																																	
Rated Voltage (AC/DC)	60V																																	
Insertion & Removal Life*	30 X							50 X																										

*Inspection Connectors Available @ 3000X :: Ambient Operating Temperature: -55 ~ +85°C

Panasonic Electric Works Corporation of America
http://pewa.panasonic.com/connectors

Tough Against Physical Impact

Bellows Contact Construction Gives Tough Contact Connectors Increased Tolerance to Twisting & Dropping.

Panasonic uses high precision metal processing to create a curved molding that provides the perfect amount of spring tension at the contacts. This gives an increased ability to withstand excessive shock when dropped.

Tough Against Dust, Dirt & Flux

V-Notch Improves Contact Reliability Through Increased Resistance to Dust & Foreign Particles.

Contact pressure per unit area is increased by using the edge as the contact. Not only does this increase the ability to remove flux and foreign particles but can prevent their entry altogether.

- Two Point Contacting
- Surface Contact to Edge Contact

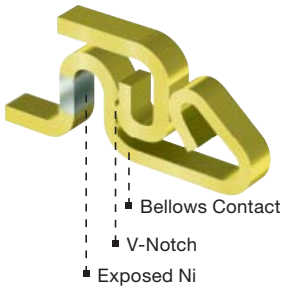
Tough Against Corrosive Gases

Panasonic's Porosity Treatment Improves Resistance to Corrosive Gasses.

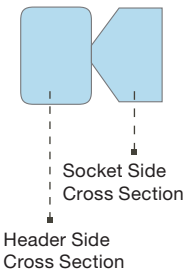
This treatment coats the connector's surface with a very thin film to seal pinholes in the gold plating. Panasonic developed this technology to ensure the same contact reliability for thin gold plating as that of thick gold plating.

- Improved Corrosion Resistance
- Improved Insertion/Removal Durability
- Improved Contact Reliability for Digital Signals

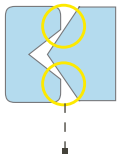
Product Construction



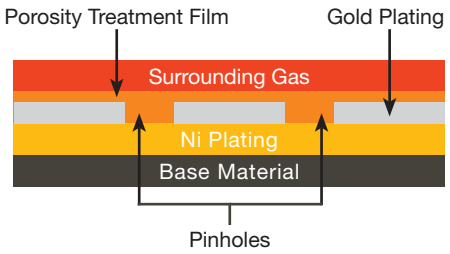
Typical Contact

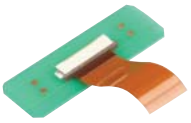


V-Notch Contact



Plating Technology





g Terminal			P5KL	P5KF			P5K		P5KS									P5	Series	FPC Connectors				
**			AXK5L**	AX5F**			AXK5**		AXK5S**									AXN5**	Part Number	AYF31**15	AYF32**15	AYF33**35	AYF53**35	AYF53**65
**			AXK6L**	AXK6F**			AXk6**		AXk6S**									AXN6**	Lock Structure	Front	Front	Back	Back	Back
3.0	3.5	4.0	1.2	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	5.5	6.0	6.5	7.0	8.0	9.0	5.0	Mounting Height (mm)	0.9	0.9	0.9	1	1
			5.8	5.8			5.8		5.4									4.4	Contact Pitch (mm)	0.3	0.3	0.3	0.5	0.5
			3.3	3.3			4.6		5.0									6.8	Terminal Pitch (mm)	0.6	0.6	0.6	0.5	0.5
			0.5	0.5			0.5		0.5									0.5	Dimension (W) (mm)	3.2	3.2	3.15	3.7	3.7
																			Number of Contacts					
			10, 12	10, 12, 14, 16, 18	10, 12, 14, 16, 18	10, 12, 14, 16													1 - 10			7, 8, 9	4, 5, 6, 8,	2, 3, 4, 6, 8
20	20		20, 24	20, 22, 24, 26	20, 22, 24, 26	20, 22, 24	20, 22	20, 22	20, 24	20, 24	20, 24	20, 24	20	20	20	20	20	20	10 - 19	13, 15, 17	13, 15, 17	11, 13, 15, 17	10, 12, 14, 16	10, 12, 14
36	30	34	30, 34	30, 32, 34	30, 34	30, 34, 36	30	30, 34	30, 34	30, 34, 36	30, 34	30, 34	30	30	30	30	30	30	20 - 29	23, 25, 27, 29	23, 25, 27, 29	21, 23, 25, 27	24, 28	22, 26, 28
40	40	42	40, 46	40	40	40, 44	40	40	40	40	40	40	40	40	40	40	40	40	30 - 39	31, 33, 35, 39	31, 33, 35, 39	31, 33, 35, 37, 39	30, 32, 34	30, 32, 38
50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	40 - 49	41, 45	41, 45	45	40, 42	40, 48
60	60		60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	50 - 59	51	51	51	50	
70	70			70	70	70	70	70	70	70	70	70	70	70	70	70	70		60 +					
80, 90	80	80, 90		80	80, 100	80	80, 100, 120	80, 100, 120	80, 100, 120, 160	80, 100, 120, 160	80, 100	80, 100	80, 100	80, 100, 130	80, 100	80, 100	80, 100	80, 100	Compatibility w/ FPC/FFC	FPC	FPC	FPC	FPC/FFC	FPC
			0.5A	0.5A			0.5A		0.5A									0.2A	Contact Structure	Bottom	Bottom	Top & Bottom	Top & Bottom	Top & Bottom
			10A						16A									5A	Rated Current (/Contact)	0.2A	0.2A	0.2A	0.2A	0.5A
																			Rated Voltage (AC/DC)	50V				
																		30 X	Insertion & Removal Life	30 X				

Panasonic Electric Works of America

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Panasonic ideas for life

XCP-CONNECTOR-0911

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