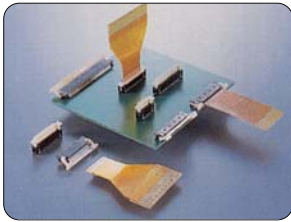


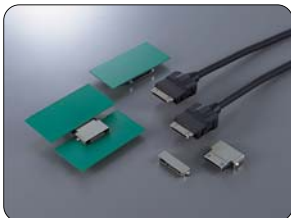
**FPC (Flat Printed Circuit)
FFC (Flat Flex Cable)**



IL-FPR/IL-FPRU FA5
FA1/FA2 FF02

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	IL-FPR / IL-FPRU (Slider)	No of contacts 5 to 50	Receptacle Straight /Right Angle	43
Pitch	0.5mm	Current Rating 0.5 amp	Contact Type Top and Bottom	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height Straight Version - 3.9mm Right Angle Version 2mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	FA5 (Hinge)	No of contacts 6 to 50	Receptacle Right Angle	41
Pitch	0.5mm	Current Rating 0.8 amp	Contact Type Top	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height Right Angle Version - 1.5mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	FA1 / FA2 (Hinge)	No of contacts 5 to 30	Receptacle Right Angle	40
Pitch	0.5mm	Current Rating 0.5 amp	Contact Type Top and Bottom	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height Right Angle Version - 1.9mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	FF02 (Hinge)	No of contacts 15 to 90	Receptacle Right Angle	38
Pitch	0.3mm	Current Rating 0.3 amp	Contact Type Bottom	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height Right Angle Version - 1.2mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	

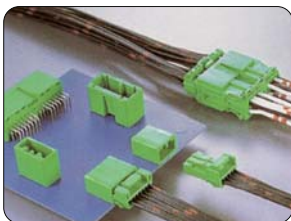
I/O Input Output



DD1 DA1 TX20A
DV2

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	DD1	No of contacts 30	Plug Straight Cable	Consult JAE
Pitch	0.5mm	Current Rating 0.5 amp	Receptacle Right Angle	
PCB Mounting Method	SMT	Operating Temp -25 +75 degrees	Docking Right Angle	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	DA1	No of contacts 10,18,26	Plug Straight Cable	70
Pitch	0.6mm	Current Rating 0.5 amp	Receptacle Right Angle	
PCB Mounting Method	SMT	Operating Temp -25 +75 degrees	Docking Right Angle	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	TX20A	No of contacts 10,14,26,36,50,68	Plug Straight Cable	71
Pitch	1.27mm	Current Rating 0.5 amp	Receptacle Right Angle	
PCB Mounting Method	SMT / Thru Hole	Operating Temp -40 +80 degrees		
Packaging Options	Loose	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	DV2	No of contacts 24, 29	Plug Straight Cable	72
Pitch	1.905mm	Current Rating 1.5 amp	Receptacle Right Angle /Straight	
PCB Mounting Method	Thru Hole	Operating Temp -20 +85 degrees		
Packaging Options	Loose	Contact Finish Gold Plating	Rohs Comp	

Automotive



IL-AG5/IL-AG9 MX23A
MX19 MX34

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	IL-AG5 / IL-AG9	No of contacts 4,5,6,7,10,14,16,18,22,30 / 2,3	Plug Straight /Right Angle/In-line Crimp	90 & 101
Pitch	2.50mm	Current Rating 3.0 amp	Receptacle Crimp	
PCB Mounting Method	Thru Hole	Operating Temp -40 +85 degrees		
Packaging Options	Loose	Contact Finish Tin		
JAE Ref	MX23A waterproof	No of contacts 12,18,26,34	Plug Right Angle	99
Pitch	2.50mm	Current Rating 3.0 amp	Receptacle Crimp	
PCB Mounting Method	Thru Hole	Operating Temp -40 +85 degrees		
Packaging Options	Loose	Contact Finish Tin		
JAE Ref	MX19 waterproof	No of contacts 2,(3) &4	Plug In-line Crimp	98
Pitch	2.50mm	Current Rating 3.0 amp	Receptacle In-line Crimp	
PCB Mounting Method	Crimp	Operating Temp -40 +85 degrees		
Packaging Options	Loose	Contact Finish Tin		
JAE Ref	MX34	No of contacts 3, 5, 12,16,20,24,28,32,36,40	Plug Straight /Right Angle	105
Pitch	2.20mm	Current Rating 3.0 amp	Receptacle Crimp	
PCB Mounting Method	Thru Hole	Operating Temp -40 +85 degrees		
Packaging Options	Loose	Contact Finish Tin		



All products specified are lead free.

Please consult JAE for verification of product availability.

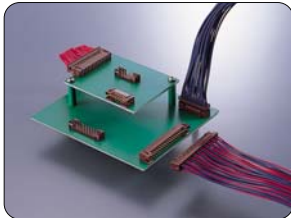
Board to Board



AA01A KX14/KX15 IL-WX
WR

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	AA01A	No of contacts 10,30,40,60	Plug Straight	21
Pitch	0.5mm	Current Rating 0.2 amp	Receptacle Straight	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height 1.5mm	
Packaging Options	Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	KX14/KX15	No of contacts 20,30,40,50,60,70,80,100	Plug Straight /Right Angle	26
Pitch	0.8mm	Current Rating 0.5 amp	Receptacle Straight	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height 4mm - 18mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	IL-WX	No of contacts 6,8,10,12,14,16,18,20,22 to 36	Plug Straight /Right Angle	Consult JAE
Pitch	0.8mm	Current Rating 0.5 amp	Receptacle Straight	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height 4.7mm - 5.65mm	
Packaging Options	Loose & Reeled	Contact Finish Tin Plating		
JAE Ref	WR	No of contacts 30,40,50,60,70,80,100,120,160	Plug Straight /Right Angle	24
Pitch	0.5mm	Current Rating 0.3 amp	Receptacle Straight	
PCB Mounting Method	SMT	Operating Temp -40 +85 degrees	Mounting Height 4mm - 9mm	
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	

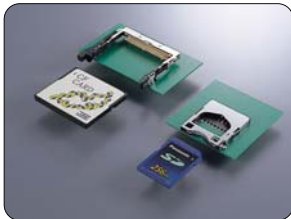
Board to Wire



ILZ ILS ILG
TX2/TX3

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	IL-Z	No of contacts 2,3,4,5,6,7,8,9,10,11,12,13,14,15	Plug Straight /Right Angle	55
Pitch	1.25mm	Current Rating 1.0 amp	Receptacle Crimp housing	
PCB Mounting Method	SMT / Thru Hole	Operating Temp -40 +70 degrees	Mounting Height Straight Version - 7.5mm Right Angle Version - 6mm	
Packaging Options	Loose & Reeled	Contact Finish Tin Plating		
JAE Ref	IL-S	No of contacts 2,3,4,5,6,7,8,9,10,11,12,13,14,15	Plug Straight /Right Angle	59
Pitch	2.0mm	Current Rating 3.0 amp	Receptacle Crimp housing	
PCB Mounting Method	Thru Hole	Operating Temp -40 +85 degrees	Mounting Height Straight Version - 7.5mm Right Angle Version - 4.6mm	
Packaging Options	Loose	Contact Finish Tin Plating	Rohs Comp	
JAE Ref	IL-G	No of contacts 2,3,4,5,6,7,8,9,10,11,12,13,14,15	Plug Straight /Right Angle	63
Pitch	2.5mm	Current Rating 3.0 amp	Receptacle Crimp housing	
PCB Mounting Method	Thru Hole	Operating Temp -40 +85 degrees	Mounting Height Straight Version - 10mm Right Angle Version - 6mm	
Packaging Options	Loose	Contact Finish Tin Plating	Rohs Comp	
JAE Ref	TX2 / TX3	No of contacts 20,26,30,34,40,50,60,68,80,100	Plug Straight /Right Angle	57
Pitch	1.27mm	Current Rating 0.5 amp	Receptacle IDC	
PCB Mounting Method	Thru Hole	Operating Temp -40 +80 degrees	Mounting Height Straight Version - 23mm Right Angle Version - 7mm	
Packaging Options	Loose	Contact Finish Gold Plating	Rohs Comp	

Small Memory Card



JC26C MM50 SG5/SC1
SF2/SF7

	SERIES	TECHNICAL SPECIFICATION	MOUNTING STYLES	CATALOGUE PAGE
JAE Ref	JC26C (Compact Flash)	No of contacts 50	Card Frame Con Right Angle	6
Pitch	1.27mm	Current Rating 0.5 amp	Frame Metal with Eject Button	
PCB Mounting Method	SMT	Operating Temp -20 +60 degrees		
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	MM50 (SODIMM)	No of contacts 200	Connector Standard / Reverse	10
Pitch	0.6mm	Current Rating 0.3 amp	Voltage 1.8v / 2.5v	
PCB Mounting Method	SMT	Operating Temp -55 +105 degrees		
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	SG5 / SC1 (SD/Mini SD)	No of contacts 13 / 9	Connector Standard or Reverse	18 & 19
Pitch	0.6mm	Current Rating 0.5 amp	Card Insert/Remove Push/Push	
PCB Mounting Method	SMT	Operating Temp -20 +85 degrees		
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	
JAE Ref	SF2 / SF7 (SIM/Hinged SIM)	No of contacts 6 / 6, 6+2	Connector Straight	12 & 15
Pitch	2.54mm	Current Rating 1.0 amps	Card Detection SF7	
PCB Mounting Method	SMT	Operating Temp -40 +90 degrees		
Packaging Options	Loose & Reeled	Contact Finish Gold Plating	Rohs Comp	



All products specified are lead free.

Please consult JAE for verification of product availability.

Hand Held Terminals

- FPC/FFC
 - FA1FA2, FE2, FA5, IL-FPR
- Board to Board
 - TX24TX25, AA8A, IL-WX, WR, KX14KX15
- SIM Card
 - SF2, SF7
- I/O Input Output
 - DA1, DD1, TX24

Medical Equipment

- FPC/FFC
 - IL-FPR, FA1FA2, FA5, FFR
- Micro-circular and DVI
 - J25, DV2
- Smart Card
 - SF3, SF5
- High speed Board to Board
 - MJ3, MJ2, MJ4

Instrumentation

- FPC/FFC
 - FR2, FA1FA2, IL-FPR, FA5
- I/O Input Output
 - DA1, DD1, TX24
- Board to Wire
 - IL-2, IL-6, IL-5
- Board to Board
 - KX14KX15, WR, IL-WX, AA8A

Network

- Fibre Optic
 - CONSULT JAE
- Backplane
 - MJ2, MJ4
- Coaxial
 - CN10, CN30, CV10
- High speed Board to Board
 - MJ3

Industrial Equipment

- Circulars
 - JL4, JA, JL5
- Board to Wire
 - IL-2, IL-5, IL-6, TX25
- Circulars
 - JN1, JN2, SRN
- Board to Board
 - WR, TX24TX25, KX14KX15

Security

- Coaxial
 - CN10, CV10, CV20
- I/O Input Output
 - DA1, DD1, TX24
- FPC/FFC
 - FA5, FE2, FA1FA2, IL-FPR
- Board to Board
 - TX24TX25, AA8A, IL-WX, WR, KX14KX15
- Board to Wire
 - IL-5, IL-2, IL-6, TX25

Elimination of Lead and Other Hazardous Substances

Since FY 2001, all new connectors developed by the JAE Group have been lead-free. In order to completely phase out lead by the end of FY 2004, the JAE Group is converting all of its existing products (except for FPC and FFC fine pitch connectors) to lead-free specifications in response to customer requirements. The JAE Group has also taken an industry-leading role in addressing whisker problems

faced by the connector industry. The Graph below shows the JAE Group's roadmap for eliminating the use of chemical substances designated by the EU's RoHS Directive*. The company is taking positive steps to reduce its environmental impact by placing a priority on meeting the requirements of its customers and closely monitoring advancements in technology.



Automotive

- Safety**
 - MX10, MX7, MX5, MX9, CONSULT JAE
- Information/Communication**
 - SF6, FMRA, MX25, EVM, CONSULT JAE
- Body/Chassis**
 - ILAG5, ILAG3, MX31, MX23A
- Power Train**
 - ILAG5, ILAG9, MX31, MX23A

Mobile Phone

- SIM Card**
 - SF2, SF7
- Board to Board**
 - AA10A, WR
- LCD/Camera**
 - FF02
- Small Memory Card**
 - SG5, SC1
- I/O Input Output**
 - DD1, DA1

PDA

- Memory Card**
 - JCSIC
- Small Memory Card**
 - SG5, SC1
- SIM Card**
 - SF2, SF7
- FPC/FFC**
 - FAYFA2, FF02, IL-EPR, FAS
- Board to Board**
 - AA10A, IL-312, WR
- I/O Input Output**
 - DA1, DD1, TX20A

Digital Set Top Box

- Smart Card**
 - SF3, SF5, CONSULT JAE
- FPC/FFC**
 - FF02, IL-EPR, FAS, FAYFA2
- Board to Board**
 - KATANK15, TXN1K25, WR, IL-WX
- I/O Input Output**
 - DV2

Display

- High speed FPC**
 - FI, FA, FLX, CONSULT JAE
- FPC/FFC**
 - FAS, FF02, IL-EPR, FAYFA2
- Board to Wire**
 - IL-Z, IL-C, IL-S
- I/O Input Output**
 - DV2

Digital Camera

- FPC/FFC**
 - FAS, FF02, IL-EPR, FAYFA2
- Board to Board**
 - AA10A, IL-WX, WR
- I/O Input Output**
 - DD1, DM
- Small Memory Card**
 - SC1, JCSIC, SG5

Roadmap for Elimination of Hazardous Substances Designated by RoHS Directive					
Substance	2002	2003	2004	2005	2006
Lead (used in plating and soldering)	Systematic Reduction		Complete disuse December 2004		
Hexavalent chromium	Systematic Reduction				Complete disuse December 2005