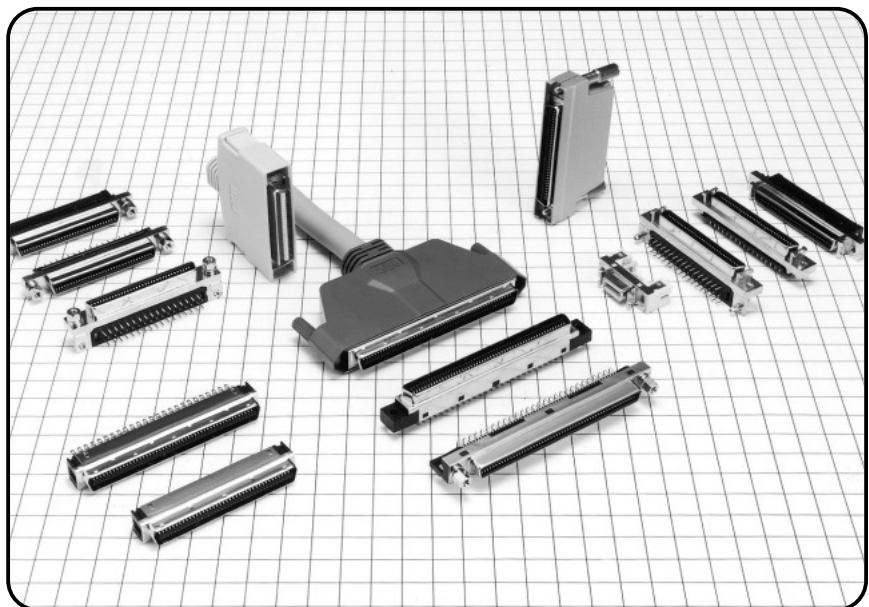
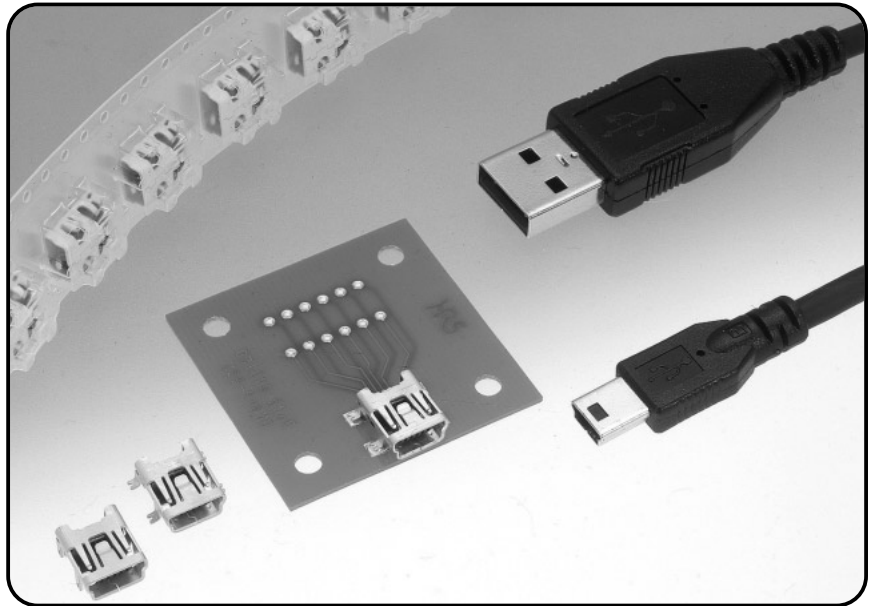


Rectangular Connectors



Rectangular Connectors



Subminiature Interface Connectors

Type	Series Name	Page
Connectors compliant to USB 2.0 standard	UX	33
Interface connectors for miniature, portable terminal devices	ST	33
Interface connectors for mobile phone	MQ138	34
20,000 times of mating cycle, interface connectors for portable equipment	3500	34
0.8mm pitch, SMT ultra small interface connectors	3200	35
1.27mm pitch interface connectors for electrostatic discharge (ESD) protection	3100	35
1.78mm pitch connectors for hand-held terminals	QM	36

Interface connectors for AC power supply

Type	Series Name	Page
Micro-miniature interface connectors for AC power supply/signaling	MQ172	36

Docking station connectors

Type	Series Name	Page
0.6mm pitch, docking station connectors	EX80	37

Interface Connectors

Type	Series Name	Page
High-speed differential signal connectors	EXT	37
D-configuration connectors for digital broadcasting equipment	DX*LM	38
Connectors compliant to ANSI SCSI standard	DX*M	38
1.27mm pitch IDC connectors	DX	39
Ribbon contact connectors	RC	39
2.54mm pitch crimp/IDC connectors	DN	40

D-sub Connectors

Type	Series Name	Page
D-sub right angle receptacle	RD*D	40
D-sub space saving type receptacle	RD*G	41
D-sub receptacle with a built-in ferrite core	RD*F	41
D-sub right angle receptacle	RD*B	42
D-sub straight through hole type connectors	SD	42
D-sub solder type connectors	HD	43
D-sub connectors, IDC termination	FD*D	43
D-sub connectors, IDC termination	FD	44
D-sub crimp type connectors	CD	44
D-sub connectors with coaxial contact	JDM	45
D-sub cover for electromagnetic interference (EMI) protection	CTH	45
D-sub plastic cover	CTF	46

High-current Connectors

Type	Current rating	Series Name	Page
High-current connectors	2.5A, 50A, 200A	PS	46

Multi-positions Standard type Connectors

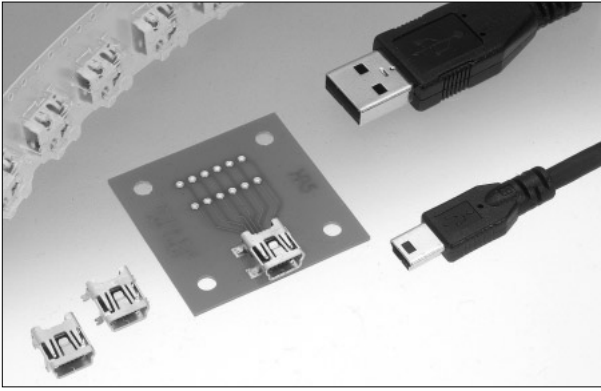
Type	Current rating	Series Name	Page
Hirose Unique Samicon connectors	3A	1600	47
Hirose Unique Minicon connectors	5A	1300	47

Power Connectors for Industrial equipments, Business machines

Type	Current rating	Series Name	Page
Power supply connectors for industrial equipment	10A	PX	48
Rack/panel crimp connectors (13A max.)	13A	QR/P	48
Rack/panel crimp connectors (13A max.)		QR/P1	49
Rack/panel crimp connectors (3A max.)	3A	QR/P4	49
Rack/panel crimp connectors (10A max.)	1A	QR/P6	50
Rack/panel crimp connectors (3A max.)	3A	QR/P8	50

Connectors compliant to USB 2.0 standard

UX Series



Features

- Certified to perform as required in USB 2.0 Standard.
- Performs at transmission speeds up to 480Mbps and ideal for connecting PC peripheral devices.
- The distance between twisted pairs conductors is of equal electrical length, resulting in zero theoretical skew.
- Without using heat shrinkable tubing suppresses impedance disturbance at the terminal section.
- The plug incorporates a build-in snap-lock feature, providing tactile verification of the full and secure mating of plug and receptacle.

Applications

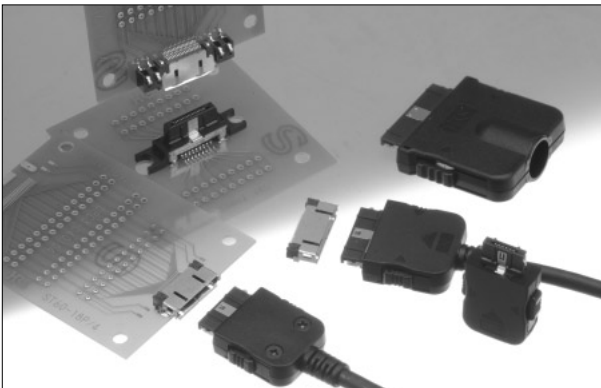
PC peripheral devices, Information terminals, PDA's, Digital cameras, MP3 players

Specifications

Item	Requirements
No. of Positions	5
Current rating (A)	1
PCB Mount Type	SMT, through hole
Generic Name	USB2.0
Terminal Pitch (mm)	0.8
Operating Temperature Range (°C)	-30 to 75
Insulator	Synthetic resin (UL94V-0, Color: Black)
Applicable Cable (mm)	Cable dia.:3.5 to 4.0,4.1 to 4.6
Industry Standard	USB2.0 UL 94V-0

Interface connectors for miniature, portable terminal devices

ST Series



Features

- Strong mating strength with solid locking system allows 49N max. pull of X, Y and Z direction.
- 4 keying structure prevents upside down insertion.
- Most suitable for interface of portable equipment.
- A lot of varieties to support various kinds of connections with peripheral equipment.
- Soldering wiring plug is possible to use any type of cables.

Applications

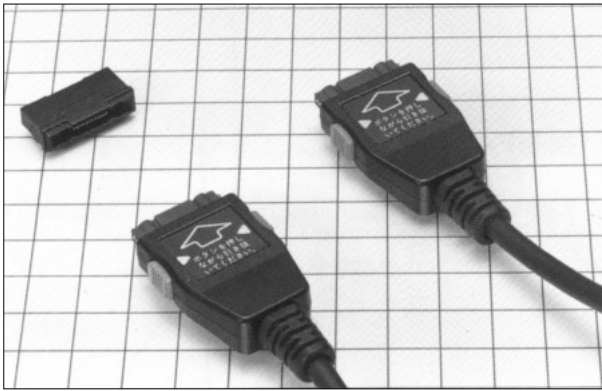
Mobile phone, Digital camera, Notebook PC

Specifications

Item	Requirements
No. of Positions	4-10-18-22-24-36
Current rating (A)	0.5-1-2
PCB Mount Type	SMT
Terminal Pitch (mm)	0.5-1
Operating Temperature Range (°C)	-30 to 80
Insulator	Synthetic resin (UL94V-1, Color: Black)

Interface connectors for mobile phone

MQ138 Series



Features

- Interface connector for cellular phones.
- Master plug mating with the PDC type cellular phones.
- Used to connect cellular phones and peripheral devices.
- Uses general purpose solder wiring.
- Use of coaxial connectors is possible.

Applications

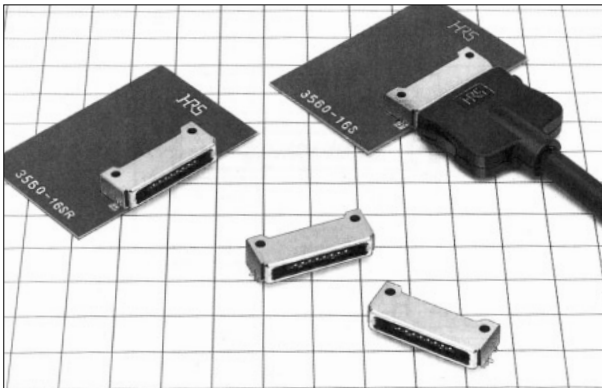
Mobile phone

Specifications

Item	Requirements
NO. OF POSITIONS	13
Current rating (A)	1
PCB Mount Type	Through hole
Contact Plating	Gold
Terminal Pitch (mm)	1
Operating Temperature Range (°C)	-30 to 70
Insulator	Synthetic resin (UL94V-0, Color: Brown)
Applicable Cable (mm)	Cable dia.:4.8,5,2
Accessories	Bushing, clamp metal, label
Remarks	Coaxial connector

20,000 times of mating cycle, interface connectors for portable equipment

3500 Series



Features

- Compact interface connector with shield ensuring insertion and extraction life of 20,000 cycles.
- Contacts' structure of highly reliable, two-contact bellows type.
- Use of a new box-bending structure for the metal shell supporting EMI protection and making a tough connector.
- ESD protection is provided by the over-mold plug cover incorporating an integrated push button structure.

Applications

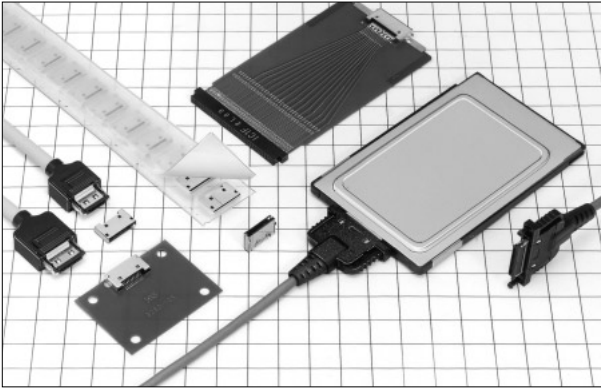
Hand-held terminals, PDA equipment, Notebook PC, Mobile communications equipment, Office equipment, Measurement equipment

Specifications

Item	Requirements
No. of Positions	10-16
Current rating (A)	1
PCB Mount Type	SMT
Contact Plating	Gold
Terminal Pitch (mm)	0.8
Operating Temperature Range (°C)	-40 to 85
Insulator	Synthetic resin (UL94V-1, Color: Black)
Applicable Cable (mm)	Conductor:AWG#28(7/0.127) Cable dia.:.5mm(10 pos.),Cable dia.:.5.9mm(16 pos.)
Remarks	IDC connection tool, cable clamp tool

0.8mm pitch, SMT ultra small interface connectors

3200 Series



Features

- Low-profile interface connector that the receptacle is 2.9 mm high from the PCB.
- The molded plug connector is designed to cover the metal shell for electrostatic discharge (ESD) protection.
- 0.8 mm pitch single row SMT ensures ease of PCB mounting.
- Mating with the space-saving latch locks on both sides to support compact design.
- Reinforcing fixtures are available in 0.5, 1, and 1.5 mm lengths depending on PCB thickness.

Applications

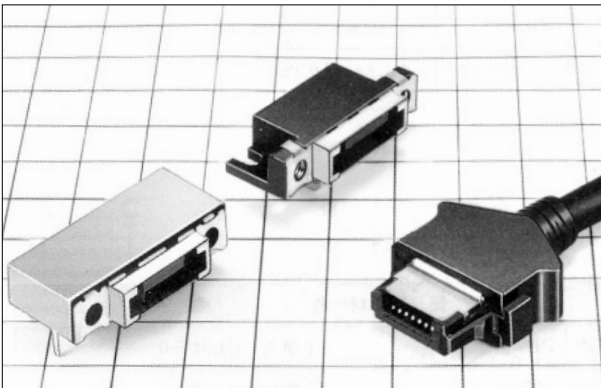
PDA, Office equipment, Mobile communications equipment

Specifications

Item	Requirements
No. of Positions	8-10
Current rating (A)	0.5
PCB Mount Type	SMT
Terminal Pitch (mm)	0.8
Operating Temperature Range (°C)	-30 to 70
Insulator	Synthetic resin (UL94V-0, Color: Black)
Applicable Cable (mm)	Cable dia.:5.2mm max.,Conductor:AWG#28 max.(8 pos.) Cable dia.:5.4mm max.,Conductor:AWG#28 max.(10 pos.)
Remarks	Cable clamp tool

1.27mm pitch interface connectors for electrostatic discharge (ESD) protection

3100 Series



Features

- Low-profile interface connector that the receptacle is 7 mm high from the PCB.
- The molded plug connector is designed to cover the metal shell for electrostatic discharge (ESD) protection.
- The cantilever profile of the female contact ensures low insertion and extraction force with a long life.
- Sequence mechanism to enable the shield to contact first with the mating part.
- The effective mating length is long enough (2 mm).

Applications

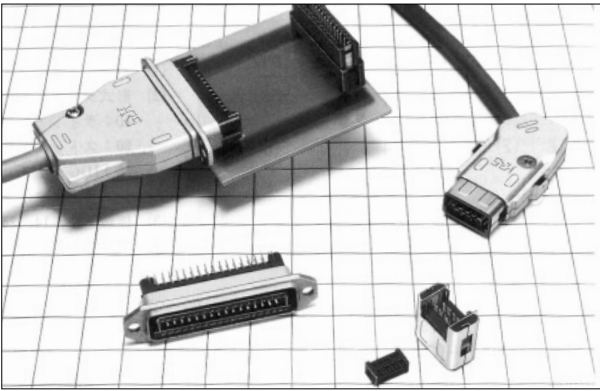
Office equipment, Communications equipment, Electrical household appliances

Specifications

Item	Requirements
No. of Positions	6-8-12-14-16
Current rating (A)	0.5
PCB Mount Type	Through hole
Contact Plating	Gold
Terminal Pitch (mm)	1.27
Operating Temperature Range (°C)	-25 to 60
Insulator	PBT (UL94V-0, Color: Black), polycarbonate (UL94V-0, Color: Black or White)
Applicable Cable (mm)	Cable clamp dia.:5.8, 6.2, 6.7, 7.0, Conductor:AWG#26 to 30
Remarks	IDC connection tool

1.78mm pitch connectors for hand-held terminals

QM Series



Features

- The opening and wiring sections of terminals are both in a 1.78-mm grid contact position supports compact and high density.
- Bellows contacts provides excellent mechanical strength against twisting and scooping with 1,000 insertion and extraction times guaranteed.
- IDC cable termination to save wiring effort.
- The dip connectors can be grounded to the PCB to protect from EMI/FRI and snapped onto the PCB.
- Die-cast zinc alloy shell reduces the penetration of internal and external EM noises.

Applications

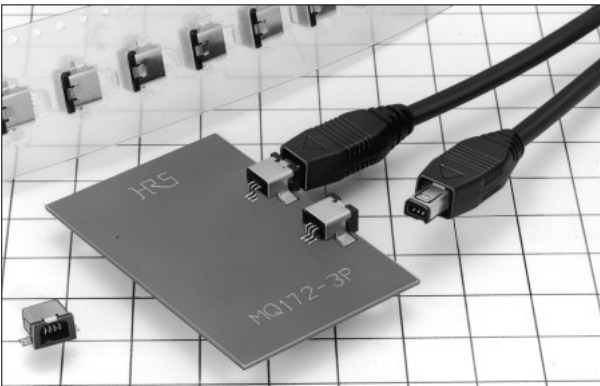
Hand-held terminals, Peripheral and terminal equipment

Specifications

Item	Requirements
No. of Positions	8-14-26-32
Current rating (A)	0.5
PCB Mount Type	Through hole
Contact Plating	Gold
Terminal Pitch (mm)	1.78
Operating Temperature Range (°C)	-55 to 85
Insulator	PET (Color: Black)
Applicable Cable (mm)	0.89mm pitch ribbon cable (IDC), conductor: AWG#30(7/0.1)
Accessories	Cover with lock, cover, stopper plate
Remarks	IDC connection tool

Micro-miniature interface connectors for AC power supply/signaling

MQ172 Series



Features

- Micro-miniature interface connectors for power supply/signaling.
- Compact, low-height construction (3-contact type) with dimensions of 3.9mm(H) x 6.4mm (W) x 6mm (D).
- The 2-point contact design that provides a contact which is resistant to vibration and shocks.
- Compact yet unique contact design ensures high current capacity (3A for 3-contact type).
- Use of a snap-lock system provides the sensation of locking at the time of insertion.

Applications

Personal Digital Assistant (PDA), Mobile Phones, Personal Handyphone System (PHS), Notebook PCs, and Electronic measurement equipment

Specifications

Item	Requirements
No. of Positions	3-4
Current rating (A)	2-3
PCB Mount Type	SMT
Contact Plating	Gold
Terminal Pitch (mm)	0.8
Operating Temperature Range (°C)	-30 to 75
Insulator	Synthetic resin (UL94V-0, Color: Black)
Applicable Cable (mm)	Dia.:3.5, Conductor:AWG#24 to 32
Remarks	Cable clamp tool

0.6mm Pitch, docking station connectors

EX80 Series



Features

- The effective mating length of 1.5mm is long enough for mating/unmating operation.
- Ground terminals placed on both sides of guide boss ensure ground function.
- Plug contacts has 3-step sequence structure including ground contact.
- Supporting 2.5Gbps signal transmission (PCI express).
- Self alignment is +/-1.2mm in the direction of XY (+/-0.7mm for shutter type).

Applications

PC, Work Station

Specifications

Item	Requirements
No. of Positions	54-100-240
Current rating (A)	0.5
PCB Mount Type	SMT
Contact Plating	Gold
Terminal Pitch (mm)	0.6
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP
Remarks	Receptacle (With shutter) available

High-speed differential signal connectors

EXT Series



Features

- The construction supports high-speed differential signals such as LVDS, IEEE 1394, and USB 2.0.
- Batch wiring of cables to the plug using solder paste.
- The wiring portion of the plug is secured by the molding which prevents short circuits without the use of shrink tubing.
- The 65-conductor connector incorporates 6 power supply terminals designed to connect 2A power lines.
- The receptacle is made to drop into the board, which results in a height dimension, including the PCB, of 5.6mm.

Applications

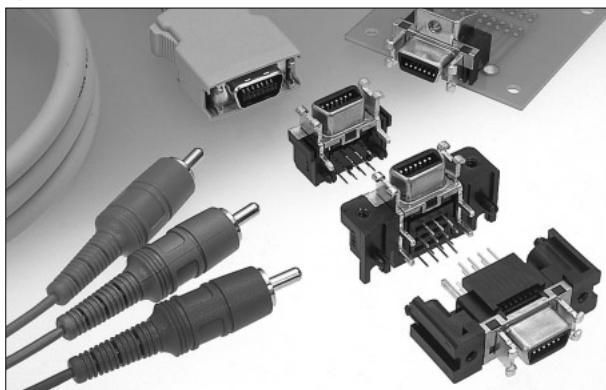
PCs, Workstations

Specifications

Item	Requirements
No. of Positions	65-71
Current rating (A)	0.5
PCB Mount Type	SMT
Operating Temperature Range (°C)	-55 to 85
Insulator	LCP (UL94V-0)
Applicable Cable (mm)	Insulation dia.0.7 max.
Accessories	Cover

D-configuration connectors for digital broadcasting equipment

DX*LM Series



Features

- D-configuration connector used in connections for digital image broadcast conforming to EIAJ RC-5237 standards.
- Extension of the mating and locking area by 1.5 mm has allowed the DXLM Series to be mounted on panels up to 3 mm thick.
- HIROSE's unique design makes reliable ground connection in sequence, with metal shell first, then the board circuit.
- Deflecting force of the side protrusion on the bottom of the connector provides superior retention to the PCB, thus preventing leaning forward during handling.
- Solid metal grounding posts soldered to the PCB creates extremely strong retention to the PCB.

Applications

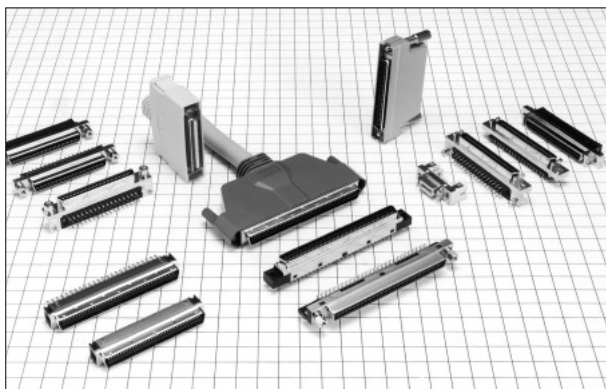
Digital broadcast TVs, Set top boxes (STB), DVDs, LCD TVs

Specifications

Item	Requirements
No. of Positions	14
Current rating (A)	1
PCB Mount Type	Through hole
Generic Name	D-configuration Connectors
Terminal Pitch (mm)	1.27
Operating Temperature Range (°C)	-25 to 70
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor:AWG#30(7/0.1),AWG#28(7/0.127),Conductor:AWG#28(7/0.127)

Connectors compliant to ANSI SCSI standard

DX*M Series



Features

- Ribbon (bellows) contacts provides excellent mechanical strength with smooth insertion and extraction.
- At the time of mating, the shell contacts earlier than the terminals, thus preventing the set from breaking due to static electricity.
- Die-cast zinc or stainless steel cover case prevents noise.
- Right angle dip type with ferrite incorporated for noise prevention.
- The ESD protection over mold cover case is provided with a one-touch lock and screw lock.

Applications

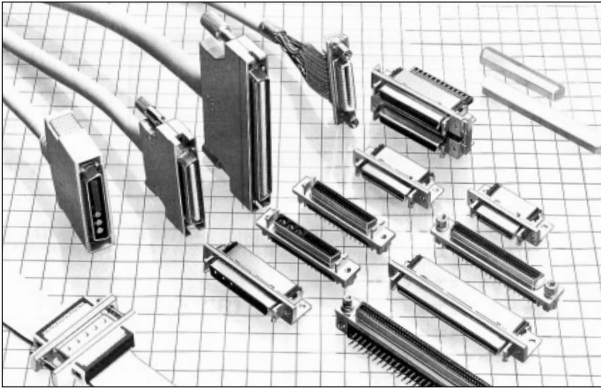
Computers, Office equipment, Measurement equipment, Communications equipment, Control equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	14-20-26-36-50-68-80-100-110
Current rating (A)	0.5
PCB Mount Type	Through hole
Generic Name	Half pitch connector
Contact Plating	Gold
Terminal Pitch (mm)	1.27
Operating Temperature Range (°C)	-55-0 to 50-85
Insulator	Synthetic resin
Applicable Cable (mm)	(I/O cable)Conductor:AWG#30(7/0.1),AWG#28(7/0.127),(Ribbon cable)Conductor:AWG#28(7/0.127)
Accessories	Cover, termination
Remarks	IDC connection tool, automatic discrete cable combing machine

1.27mm pitch IDC connectors

DX Series



Features

- Ribbon (bellows) contacts provides excellent mechanical strength with smooth insertion and extraction.
- At the time of mating, the shell contacts earlier than the terminals, thus preventing the set from breaking due to static electricity.
- Die-cast zinc alloy cover case and receptacle shell are sturdy and reduce the penetration of external EM noise.
- The effective contact length is 2.3 mm with excellent contact stability.
- Plug and receptacle shells for coaxial contacts for radio frequency use and a shielded plug-in models for unit-to-unit connections are available.

Applications

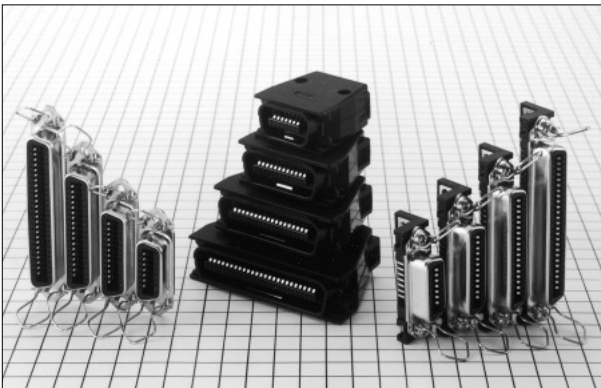
Computers, Office equipment, Measurement equipment, Communications equipment, Control equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	20-26-28-36-50-60-68-80-100-132 3(Coaxial connector type only)
Current rating (A)	0.5
PCB Mount Type	Through hole
Contact Plating	Gold
Terminal Pitch (mm)	1.27
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT or substitute (UL94V-0, Color: Black)
Applicable Cable (mm)	(I/O cable)Conductor:AWG#30(7/0.1),AWG#28(7/0.127),(Ribbon cable)Conductor:AWG#28(19/0.08,7/0.127)
Accessories	Cover, cap
Remarks	IDC connection tool, automatic discrete cable combing machine

Ribbon contact connectors

RC Series



Features

- Ribbon contact connector.
- Ideally suited for printer interface (conforming to CENTRONICS standards).
- Products with EMI (electromagnetic interference) protection are available.
- UL-approved products are available.
- Products with electrostatic discharge (ESD) protection are available.

Applications

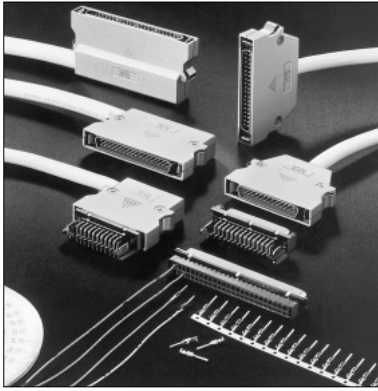
Computers, Peripherals and terminals, Communications equipment, Printer interface

Specifications

Item	Requirements
No. of Positions	14-24-36-50
Current rating (A)	1-3
PCB Mount Type	Through hole
Generic Name	Centronics (36 pos.)
Contact Plating	Gold
Terminal Pitch (mm)	2.16
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	1.27mm pitch ribbon cable,Conductor:AWG#28(7/0.127)
Industry Standard	IEEE UL
Accessories	Cap (36 pos.), cover
Remarks	With ferrite type (RC10(F) series), electrostatic protection type (RC10H series), IDC connection tool

2.54mm pitch crimp/IDC connectors

DN Series



Features

- 2.54-mm grid contact position can be directly dip-soldered to PCBs.
- One-touch lock mechanism ensures perfect operation.
- The cover case is made of die-cast aluminum to shield against electromagnetic waves, which ensures noise prevention.
- Provided with a dip soldering connector incorporating a snap clamp for temporarily fixing the connector on the PCB.
- Stable quality due to the contact design based on HIROSE's field-proven SM series (D sub connectors).

Applications

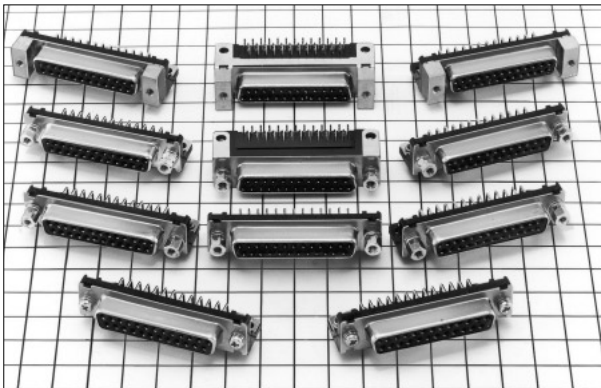
Office equipment, Communications equipment, Measurement equipment, Control equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	20-26-36-50
Current rating (A)	3
PCB Mount Type	Through hole
Contact Plating	Gold
Terminal Pitch (mm)	2.54
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	(IDC)1.27mm pitch ribbon cable, Conductor:AWG#28(7/0.127),AWG#26(7/0.16) (Crimp)AWG#26 to 28
Accessories	Cover
Remarks	Automatic crimp machine, crimp tool, IDC connection tool

D-sub right angle receptacle

RD*D Series



Features

- Simple construction of single mold.
- Designed to be directly connected to the circuits on PCBs in parallel, which ensures high-density mounting and allows convenience of cable plug connection.
- Provided with rectangular and hexagonal mating locking bases and a simple lock pin to tack on PCB.
- Saves gold by plating contacts with gold and PCB-contacting parts with solder.
- Various accessories, such as a dedicated mating locking screw and a mis-insertion prevention pin, are available.

Applications

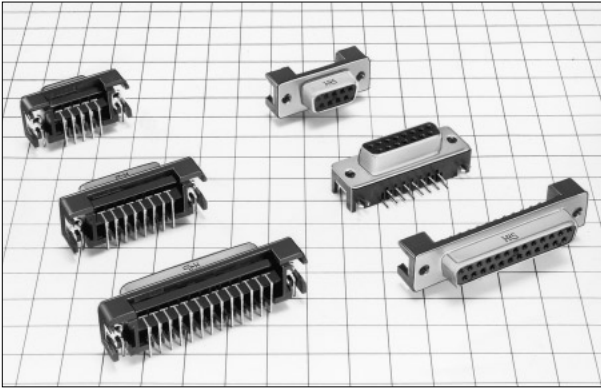
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Mis-insertion prevention pin, locking screw, cap

D-sub space saving type receptacle

RD*G Series



Features

- 35% space-saving achieved in the depth and mounting area with a weight reduction of approximately 10% in comparison with the conventional RD*D model.
- For smoother insertion and withdrawal, reliable partly gold-plated tulip-shaped contacts are used.
- The lock pin grounding system that solders directly to the PCB eliminates screws to secure the PCB.
- A lock pin length for 1.2- and 1.6-mm-thick PCBs with a dip post length of 3.5 or 2.8 mm.
- Connector design allows ease of robotic insertion.

Applications

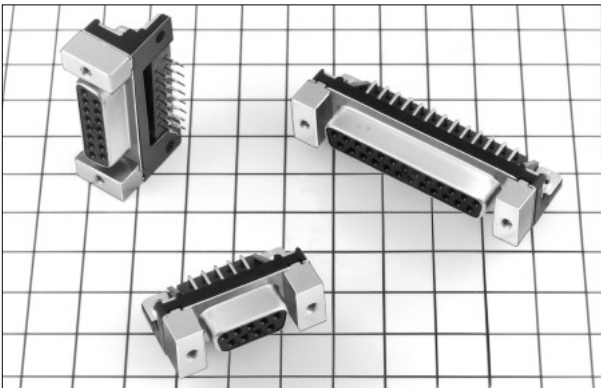
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	D-sub connector
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Mis-insertion prevention pin, locking screw, cap
Remarks	Space saving type

D-sub receptacle with a built-in ferrite core

RD*F Series



Features

- Conventional RD*D model with a built-in ferrite core for EMI protection.
- The ferrite effectively attenuates conduction noise.
- The same as the conventional RD*D model in mounting dimension and PCB hole pattern.
- Provided with a hexagonal mating locking base.
- Products with simple lock pins to tack on PCB. are available.

Applications

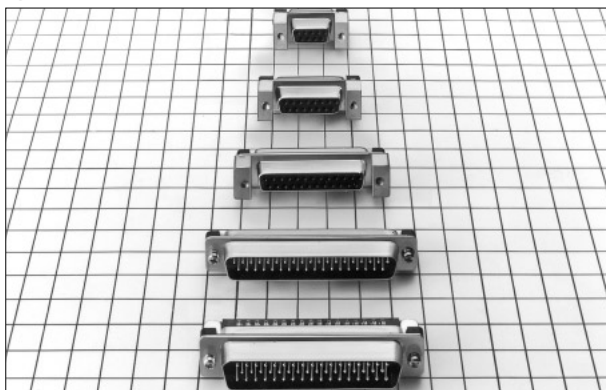
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Mis-insertion prevention pin, locking screw, cap
Remarks	With ferrite type

D-sub right angle receptacle

RD*B Series



Features

- Mounted in parallel on the PCB for ease of connection to the cable plug.
- High-density mounting enabled by direct connection to the circuit on the PCB.
- UL-approved synthetic resin provides superior heat and chemical resistance.
- For smoother insertion and withdrawal, reliable partly gold-plated tulip-shaped contacts are used.
- A wide variety of combinations with cable connectors available, such as soldering, crimping, and ribbon IDC termination.

Applications

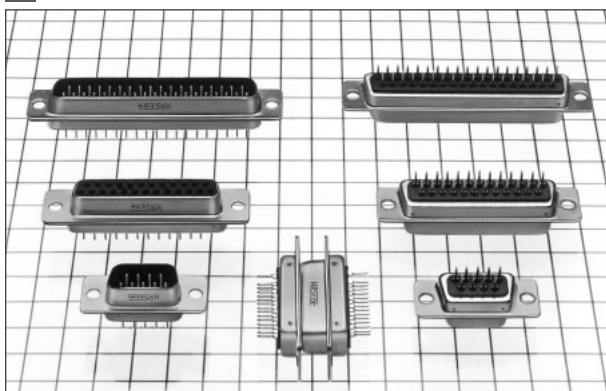
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37-50
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Mis-insertion prevention pin, locking screw, cap

D-sub straight through hole type connectors

SD Series



Features

- D-sub connectors designed to be mounted vertically to PCBs.
- Saves gold by plating contacts with gold and PCB-contacting parts with solder.
- Directly mountable on PCBs for mounting labor saving in high density and easily connectable to cable plugs.
- A wide variety of combinations with cable connectors available, such as soldering, crimping, and ribbon IDC termination.
- Uses insulation made from highly heat- and chemical-resistant glass-containing PBT resin (UL94V-0).

Applications

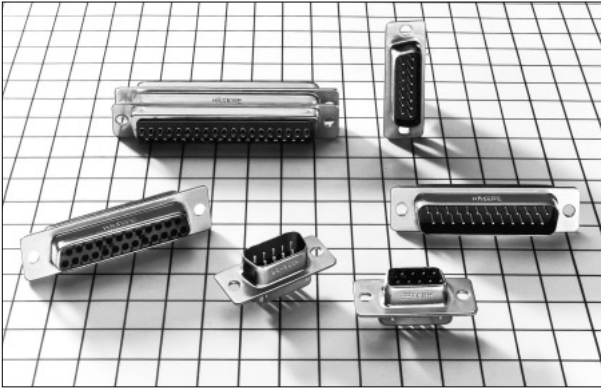
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37-50
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Spring lock, sliding lock, locking screw, cap

D-sub solder type connectors

HD Series



Features

- Press pin type ensures ease of soldering of a variety of stranded and solid wires.
- Wiring side of solder cup construction ensures ease of wiring work up to a wire size of AWG#20.
- A dimple-processed shell is available for improvement in mating and conductivity.
- Uses insulation made from highly heat- and chemical-resistant glass-containing PBT resin (UL94V-0).
- Various plug cases, such as CTF and CTH, are available.

Applications

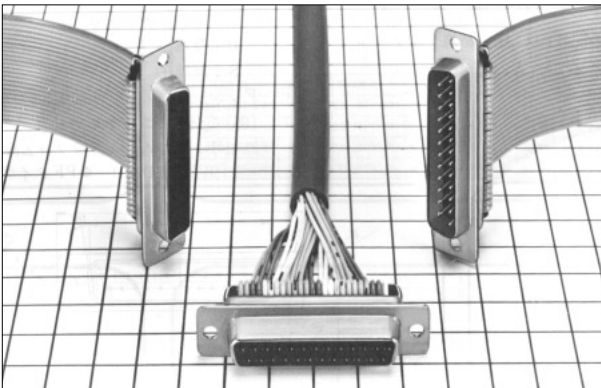
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37-50
Current rating (A)	3
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Industry Standard	MIL
Accessories	Spring lock, sliding lock, screw lock, locking screw, clamp, cap, cover

D-sub connectors, IDC termination

FD*D Series



Features

- D-sub connector for 1.27mm pitch and 1.38mm pitch ribbon cable IDC termination.
- Cable termination side is 30% lower-profile in comparison with FD series, ideal for the downsizing of the equipment.
- The cable IDC pitch is 1.38 mm, but IDC pitch of 1.27 mm is possible with a cable slit jig used.
- The presser plate of the ribbon cable is fixed with a metal bar strongly and securely.
- Discrete cable can be pressed to the low-profile model with a multi-core cable crimping device.

Applications

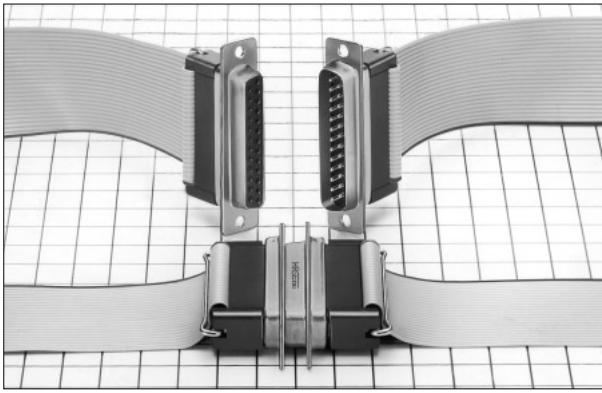
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37
Current rating (A)	1
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	1.27mm or 1.38mm pitch ribbon cable, Conductor: AWG#28(7/0.127)
Industry Standard	MIL
Accessories	Spring lock, sliding lock, screw lock, locking screw, clamp, cap, cover
Remarks	IDC connection tool

D-sub connectors, IDC termination

FD Series



Features

- D-sub connector for 1.27mm pitch standard ribbon cable IDC termination.
- Fixes the cable securely by fixing the ribbon cable clamp with a metal plate in the connector.
- The connector can be chassis- or panel-mounted on the front or back.
- The cable IDC pitch is 1.27 mm (standard) for ease of connecting standard ribbon cables.
- Ease to connect cables by following the same IDC termination and connection procedures as those for HIROSE's other ribbon cable connectors. Special pressing of connection wire only for this series is not required.

Applications

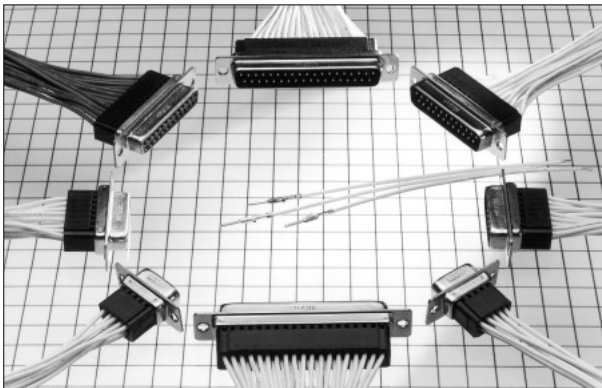
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37
Current rating (A)	1
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	1.27mm or 1.38mm pitch ribbon cable, Conductor: AWG#28(7/0.127)
Industry Standard	MIL
Accessories	Spring lock, sliding lock, screw lock, locking screw, clamp, cap, cover
Remarks	IDC connection tool

D-sub crimp type connectors

CD Series



Features

- SM-series (D-sub) crimp-type connectors.
- A dimple-processed shell is available for improvement in mating and conductivity.
- The connector can be chassis- or panel-mounted on the front or back.
- Requires no special withdrawal jig (push the retainers from the connector side to insert or withdraw the connector).
- Uses an insulator made from highly heat- and chemical-resistant UL-approved PBT synthetic resin.

Applications

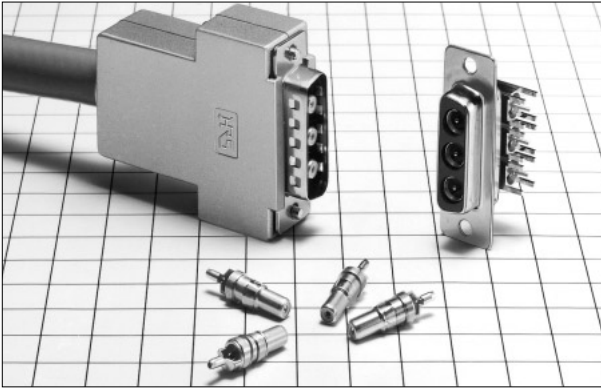
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37
Current rating (A)	3
Generic Name	D-sub connector
Contact Plating	Gold
Terminal Pitch (mm)	2.74-2.77
Operating Temperature Range (°C)	-55 to 85
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor: AWG#20 to 24, AWG#24 to 28
Industry Standard	MIL
Accessories	Spring lock, sliding lock, screw lock, locking screw, clamp, cap, cover
Remarks	Automatic crimp machine, crimp tool

D-sub connectors with coaxial contact

JDM Series



Features

- Connector unit with a coaxial cable insertion hole on the shell that is as large as the D-sub connector.
- Available in various types of soldering coaxial contact including straight dip soldering and right angle dip soldering, and compatible with all types of housing.
- EMI protection with the use of a dedicated plug case made of a die-cast zinc alloy.
- Compact and sturdy metal shell.
- Uses insulation made from highly heat- and chemical-resistant epoxy and PPS resins.

Applications

Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

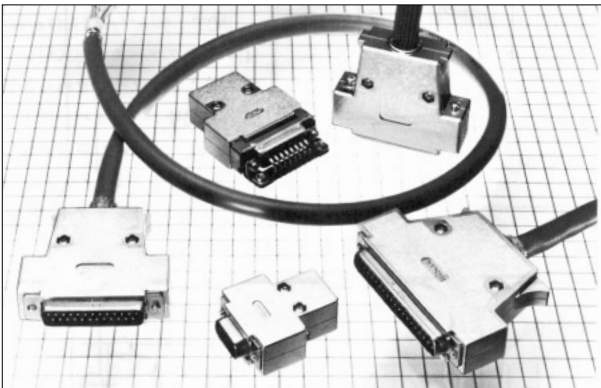
Specifications

Item	Requirements
No. of Positions	5W1,7W2,3W3,25W3,27W2
Current rating (A)	5
PCB Mount Type	Through hole
Generic Name	D-sub connector
Contact Plating	Gold
Operating Temperature Range (°C)	-55 to 85
Insulator	Epoxy, PPS
Applicable Cable (mm)	RG-196/U,2.5C-2V,RG-187/U,RG-188/U,1.5C-2V,1.5D-QEW,RG-58/U
Industry Standard	MIL-MIL,NDS
Accessories	Coaxial connector, cover
Remarks	Coaxial connector extraction tool

Note: 5W1 indicates 4: signal, 1: coaxial contact.

D-sub cover for electromagnetic interference (EMI) protection

CTH Series



Features

- Plug case with electromagnetic interference (EMI) protection.
- Standard screw-type locking mechanism providing a strong and secure lock.
- Plated (UL746C) ABS resin (UL94V-2) enables strong and excellent shielding characteristics.
- Enhanced shielding effectiveness by clamping the cable shielding part with two types of clamps sandwiched between the plug cases.
- The clamp has a screw to ground the drain wire.

Applications

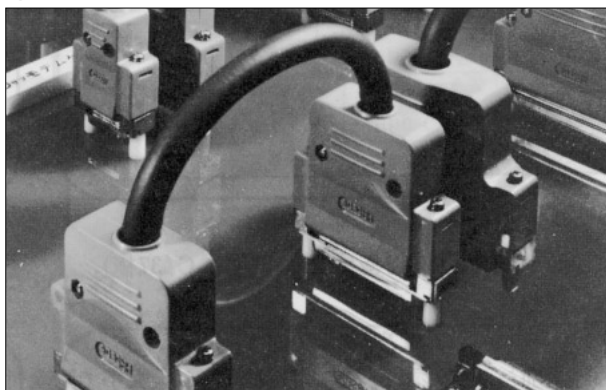
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37
Generic Name	D-sub cover
Operating Temperature Range (°C)	-55 to 85
Applicable Cable (mm)	Dia.:7 to 12
Insulator	ABS
Industry Standard	MIL
Accessories	Screw lock
Remarks	Finish: Nickel plated

D-sub plastic cover

CTF Series



Features

- Screw type locking mechanism for plug case provides a strong and secure lock.
- The plug case material is made of ABS resin that is lightweight and sturdy.
- Spring locking, sliding locking, and screw locking mechanism as D-sub accessories are available.
- A clamp metal and dust cap as D-sub accessories are available.
- Rectangular and hexagonal locking devices are selectable according to the panel mounting style.

Applications

Computers, Peripherals and terminals, Control equipment, Measurement equipment, Communications equipment, FA equipment

Specifications

Item	Requirements
No. of Positions	9-15-25-37-50
Generic Name	D-sub cover
Operating Temperature Range (°C)	-55 to 85
Insulator	ABS (2.5PB 6/2 color)
Applicable Cable (mm)	Dia.:7 to 12
Accessories	Screw lock
Remarks	Material: ABS

Large current connector

PS Series



Features

- Compound of 2 types of power supply contacts corresponding to IN and OUT current capacity in rectification unit of power supply equipment and signal contacts to control units.
- 3-step sequence can be chosen with sequence structure power contacts.
- Hot plug of low power supply contacts is the measure for charge.
- Bellows structure of signal contacts prevent buckling.
- Reliable crimping connection with cables.

Applications

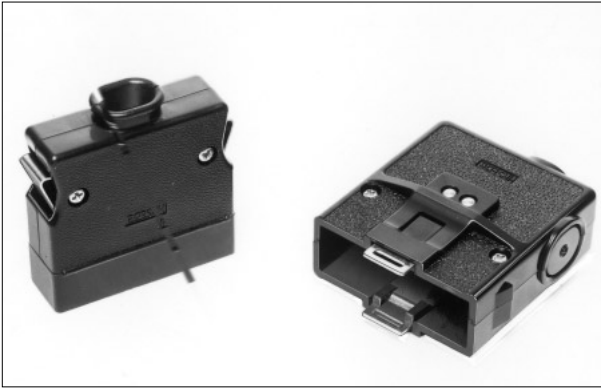
Power supply connector for industrial equipment

Specifications

Item	Requirements
No. of Positions	2-42(Power 4, single 32, power 4)
Current rating (A)	2.5-50-200
Operating Temperature Range (°C)	-55 to 125
Insulator	RBT (UL94V-0)
Accessories	Floating screw, dust cap, partition

Hirose Unique Samicon connectors

1600 Series



Features

- HIROSE's originally designed connector.
- Products conforming to NTT specifications (Spec number 1931) are available.
- No plug cases or stopper brackets are required with the plastic lock used.
- Combinations in a wide variety are possible as required, such as soldering, wrapping, and crimping cable connector mated with dip connector.
- Uses insulation made from highly heat- and chemical-resistant materials.

Applications

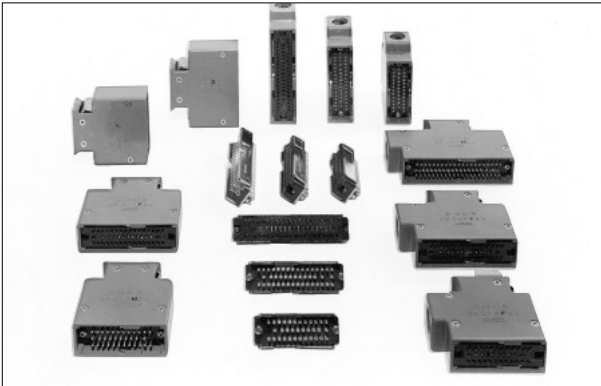
Computers, Peripherals and terminals, Control equipment, Measurement equipment, Signal devices, Communications equipment, Office equipment

Specifications

Item	Requirements
No. of Positions	8-12-16-20-24-28-34-45-60
Current rating (A)	3
PCB Mount Type	Through hole
Generic Name	Samicon
Contact Plating	Gold, silver
Terminal Pitch (mm)	2.5
Insulator	Diallyl phthalate (glass reinforced, color: blue)
Applicable Cable (mm)	Conductor:(Wrapping)AWG#26 to 30 Solid wire,(Crimp)AWG#24 to 28
Industry Standard	NTT
Accessories	Cover, stopper bracket, cap, stopper, handle, deep bracket, plastic lock, polarizing key
Remarks	Crimp tool, contact extraction tool

Hirose Unique Minicon connectors

1300 Series



Features

- Products conforming to NTT specifications (Spec number 1931) are available.
- The plug case is rugged and has a push-button lock mechanism to ensure reliable connection.
- The plug case is of side-locking and top-touch locking type (NTT spec and HIROSE's original).
- The top-touch locking plug case made of ABS resin is lightweight and sturdy with a holding strength of 30 kg.
- HIROSE's original side locking plug case has a cable inlet opening for both vertical and horizontal.

Applications

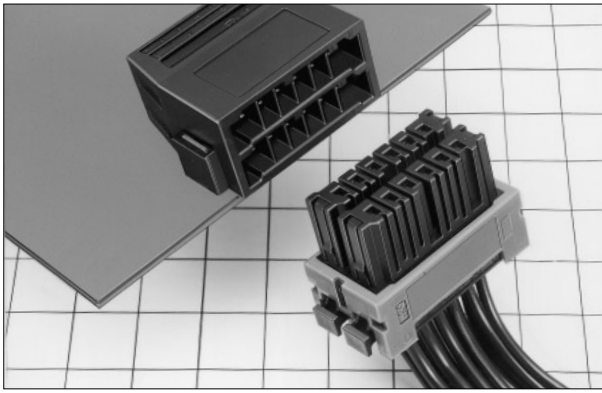
NTT touch-tone telephones, NTT station equipment, Data communications indoor equipment

Specifications

Item	Requirements
No. of Positions	4-6-8-12-16-20-24-28-34-45-60
Current rating (A)	5
PCB Mount Type	Through hole
Generic Name	Minicon
Contact Plating	Gold, silver
Terminal Pitch (mm)	3.5
Insulator	Epoxy (Color: greenish brown)
Applicable Cable (mm)	Conductor:(Wrapping)0.32 to 0.5 Solid wire
Industry Standard	NTT
Accessories	Cover, stopper bracket, handle

Power supply connectors for industrial equipment

PX Series



Features

- Large-current power supply connector withstanding a voltage of 2200V AC max. and a rated current of 10A/contact (60A/6 contacts).
- The opening section is keyed to prevent misalignment of plugs in parallel applications.
- Three point contact terminals with gold plating is environment resistant and ensures high reliability.
- Use of dedicated crimping tools will make harness work easier. One tool crimps both AWG#16 and AWG#18 wire.
- Release of contact lock can easily be performed with dedicated jig, which facilitates the wiring modification after assembly.

Applications

Power supply connector for industrial equipment

Specifications

Item	Requirements
No. of Positions	4-6-8-12
Current rating (A)	10
PCB Mount Type	Through hole
Contact Plating	Gold
Operating Temperature Range (°C)	-55 to 105
Insulator	PBT (UL94V-0)
Applicable Cable (mm)	Conductor:AWG#16,18
Industry Standard	UL,CSA,TUV
Accessories	Simple type plug holder cover
Remarks	Automatic crimp machine, crimp tool, contact extraction tool

Rack/panel crimp connectors (13A max.)

QR/P Series



Features

- Plug-in connection rectangular multi-contact rack/panel connector. Connects or disconnects the power supply or signal circuits between the unit and rack.
- The crimp-type pins are bellows sexless contact with smooth insertion and extraction ensured, while a stable contact pressure is ensured with a wide contact area.
- The two pairs of opposed contacts at both ends (4 electrodes) in the housing are spaced apart from signal contacts for power circuits.
- The metal guide pin withstands coupling shock.
- The receptacle housing is fixed securely to the panel or rack through floating bushings to ensure smooth insertion and extraction.

Applications

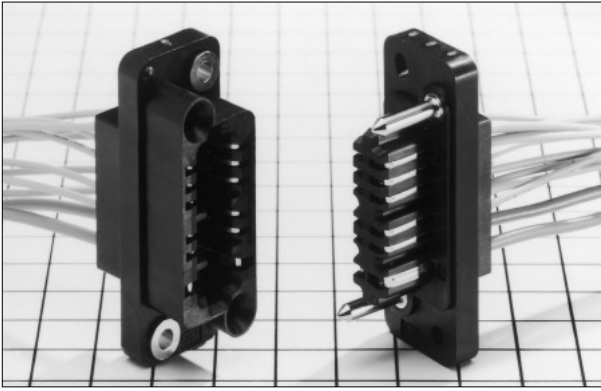
PPC, communications equipment, Automatic vending machines, Measurement equipment, Industrial equipment, Distribution boards

Specifications

Item	Requirements
No. of Positions	4-8-12-16-24
Current rating (A)	7-13
Contact Plating	Gold
Operating Temperature Range (°C)	-10 to 60
Insulator	PBT (UL94V-0, Color: Blue)
Applicable Cable (mm)	Conductor:AWG#14 to 16,AWG#18 to 24
Industry Standard	UL,CSA,TUV
Remarks	Automatic crimp machine, crimp tool, applicator, extraction tool

Rack/panel crimp connectors (13A max.)

QR/P1 Series



Features

- Compact type of plug-in connection rectangular multi-contact rack/panel connector QR/P for high-density mounting.
- Blade contacts ensure dealing with tolerance of the coupling length.
- Compact crimping contacts due to separate power contacts from signal contacts.
- One opposed pair (in 12 contacts), 2 pairs (in 8, 16, and 24 contacts), and 3 pairs (in 32 contacts) are spaced apart from signal contacts so that they can be used as power supply contacts.
- Guide pins are metal to be strong against accidental coupling shock, and receptacle securely mounted to the panel or rack through floating bushings to ensure smooth insertion and extraction.

Applications

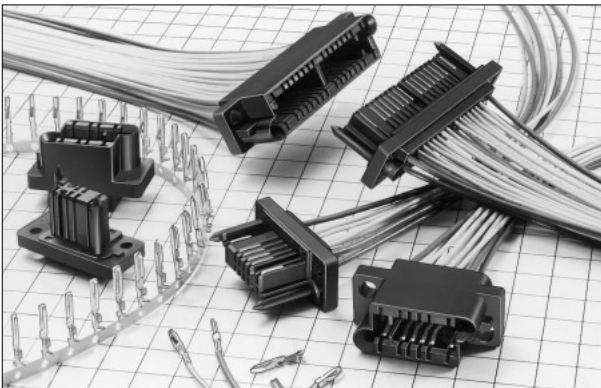
PPC, communications equipment, Automatic vending machines, Measurement equipment, Industrial equipment, Distribution boards

Specifications

Item	Requirements
No. of Positions	8-12-16-24-32
Current rating (A)	Signal 3A, Power 13A
Contact Plating	Gold
Operating Temperature Range (°C)	-10 to 60
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor: (For power) AWG#14 to 16, AWG#18 to #24 (For signal) AWG#20 to 24, AWG#24 to #28
Industry Standard	UL, CSA, TUV
Remarks	Automatic crimp machine, crimp tool, applicator, extraction tool

Rack/panel crimp connectors (3A max.)

QR/P4 Series



Features

- Compact type of plug-in connection rectangular multi-contact rack/panel connector QR/P1 for high-density mounting.
- Compact design with guide pins integrated with insulator.
- The connectors mounted to racks or panels with stepped screws and surface terminal contact ensure ease of insertion and extraction.
- Approved by UL, CSA, and TÜV (partly). Uses flame-retardant insulator (UL94V-0).
- The female housing construction is available to finger test (conforming to UL standard 1950).

Applications

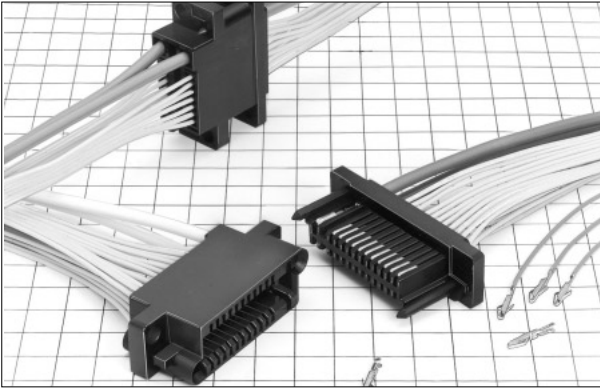
PPC, communications equipment, Automatic vending machines, Measurement equipment, Industrial equipment, Distribution boards

Specifications

Item	Requirements
No. of Positions	8-12-16-24-32-40
Current rating (A)	3
Operating Temperature Range (°C)	-10 to 60
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor: AWG#20 to 24, AWG#24 to 28
Industry Standard	UL, CSA, TUV
Remarks	Automatic crimp machine, crimp tool, applicator, extraction tool

Rack/panel crimp connectors (10A max.)

QR/P6 Series



Features

- Compact type of plug-in connection rectangular multi-contact rack/panel connector QR/P1 for high-density mounting.
- Approved by UL, CSA, and TÜV.
- The opposed contacts at one end of the connector in the housing are used for power supply. Uses flame-retardant insulator (UL94V-0).
- Separate crimping terminals for power supply use and signal use. Compact design the guide pins integrated with insulator.
- Blade contacts ensure dealing with tolerance of the coupling length, and connectors are mounted to racks or panels with stepped screws for easy mating and unmating.

Applications

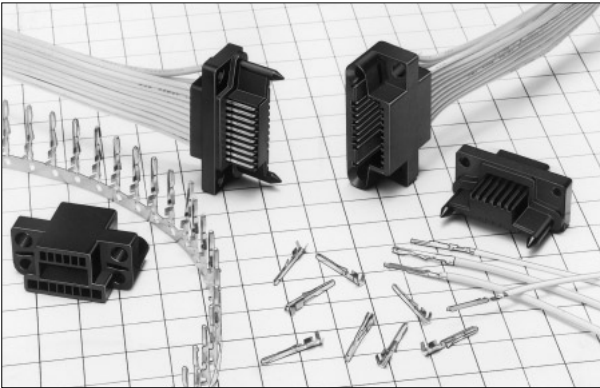
PPC, communications equipment, Automatic vending machines, Measurement equipment, Industrial equipment, Distribution boards

Specifications

Item	Requirements
No. of Positions	6-12-16-24
Current rating (A)	Signal 3A, Power 13A
Operating Temperature Range (°C)	-25 to 120
Insulator	PBT (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor: (For power) AWG#14 to 16, AWG#18 to #24 (For signal) AWG#24 to 28
Industry Standard	UL, CSA, TUV
Remarks	Automatic crimp machine, crimp tool, applicator, extraction tool

Rack/panel crimp connectors (3A max.)

QR/P8 Series



Features

- The plug-in connection rectangular multi-contact rack/panel connector of this series is about 20% smaller in length than that of the QR/P4 Series with the same number of contacts.
- Approved by UL, CSA, and TÜV.
- Two pairs of power supply contacts on both sides are located at the guide pin reinforcing section of the housing to realize compact design.
- Blade contacts ensure dealing with tolerance of the coupling length, and connectors are mounted to racks or panels with stepped screws for easy mating and unmating.
- Compact design with guide pins integrated with insulator.

Applications

PPC, communications equipment, Automatic vending machines, Measurement equipment, Industrial equipment, Distribution boards

Specifications

Item	Requirements
No. of Positions	8-12-20
Current rating (A)	2-3
Contact Plating	Gold
Operating Temperature Range (°C)	-10 to 60
Insulator	Polycarbonate (UL94V-0, Color: Black)
Applicable Cable (mm)	Conductor: AWG#20 to 24, AWG#24 to 28
Industry Standard	UL, CSA, TUV
Remarks	Automatic crimp machine, crimp tool, applicator, extraction tool