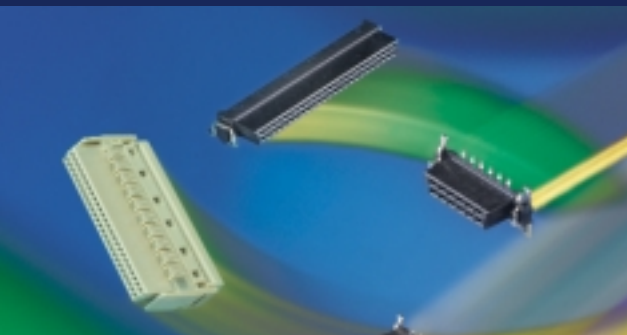




.050" (1.27mm) Connectors

Surface Mount Technology, Pressfit, IDC, Cable Assemblies

SMC

www.erni.com



Table of Contents

Section 1

SMC at a Glance	4
Applications	6
SMC Technical Features	7
Electrical and Mechanical Characteristics	8

Section 2 - Male

Right Angle Male Connectors Type B Standard Assembly Height	10
Vertical Male Connectors Type Q Standard Assembly Height	13
Vertical Male Connectors Type Q Low Profile	16
Vertical Male Press-Fit Connectors Type Q Standard Assembly Height	18
Male Connectors Type Q with Locking and Ejector Latches	20

Section 3 - Females

Vertical Female Connectors Type B Standard Assembly Height	22
Vertical Female Connectors Type B Low Profile	25
Right Angle Female Connectors Type Q Standard Assembly Height	27
IDC Female Connectors Type B for Male Connectors with Locking and Ejector Latches	29
IDC Female Connectors Type B with Locking Latches	31

Section 4 - Cable and Cable Assemblies

Ribbon Cable for IDC Connectors	34
Halogen Free Ribbon Cable for IDC Connectors	35
Cable Assemblies	36

Section 5 - Tooling

Press in Tools for Male Connectors	37
Tools for IDC Assemblies	37

Section 6 - Cross References List (Tape-and-Reel/Tube packaging)

SMT Cross Reference List (Tape-and-Reel/Tube packaging)	38
---	----

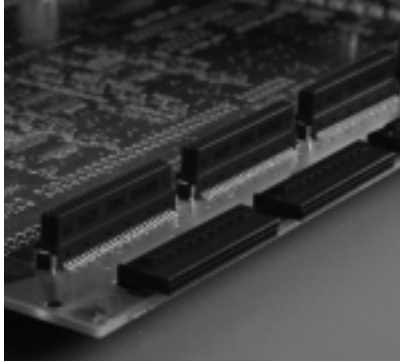
Section 7 - Mating Conditions for SMC-Systems

Mating Conditions for SMC-Systems	39
-----------------------------------	----

Section 8 - Part Number Index

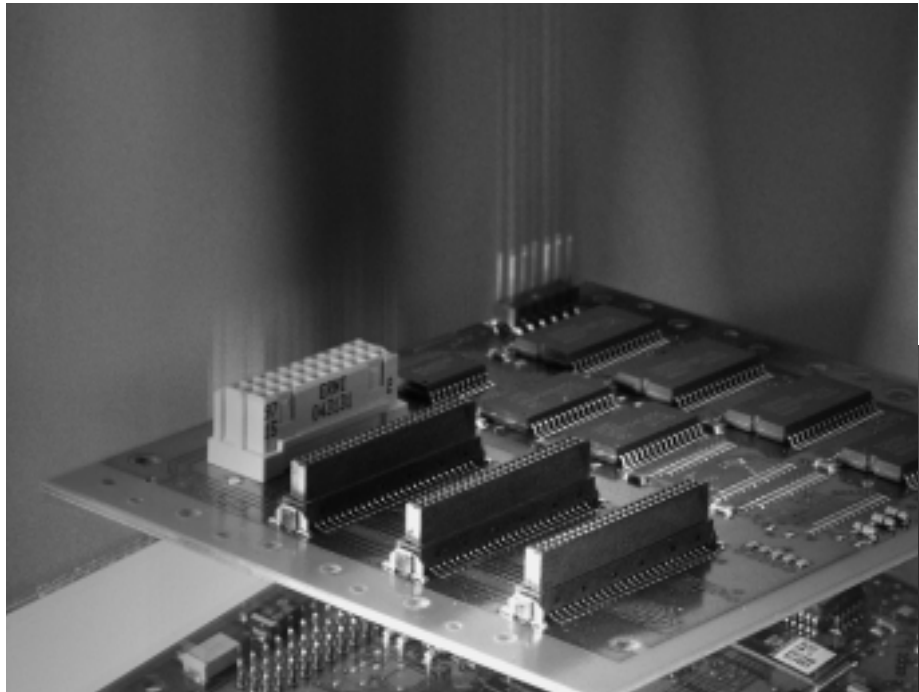
Part Number Index	41
-------------------	----

SMC at a Glance



Subassembly Design - Flexibility in Application

Straight and right angle male and female connectors, and other options permit many configurations and variations for maximum flexibility in designing modules.



Solution of Choice for Modern Subassembly Applications

Printed circuit board in an automation solution.



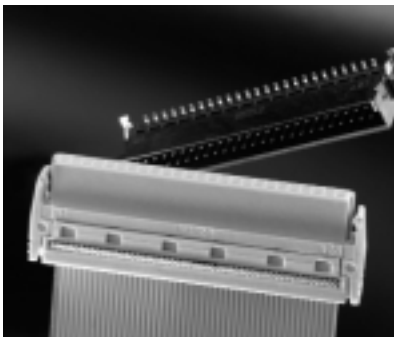
Variable Board-to-Board Height

Flexible board-to-board heights ranging from 8.0 mm to 14.0 mm for customized subassembly solutions.



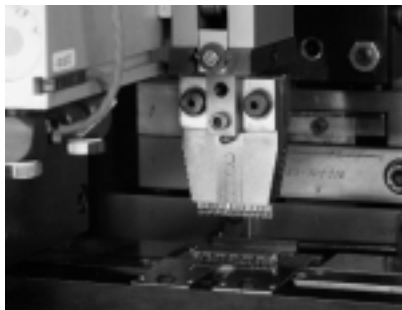
Rear I/O on Multilayer Backplane

The press-fit versions of the SMC male connectors are ideal for transferring I/O signals on the rear side of the backplane.



Simple I/O Signal Transfer with New "Snap-Lock" Female Cable Connector

The new female IDC cable connectors with snap-lock make transferring I/O signals easy and also save space by eliminating the need for latches.

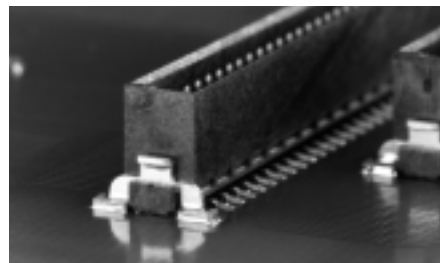


Completely Automated Manufacturing of SMC Connectors

SMC connectors are manufactured using controlled state of the art automated manufacturing equipment.

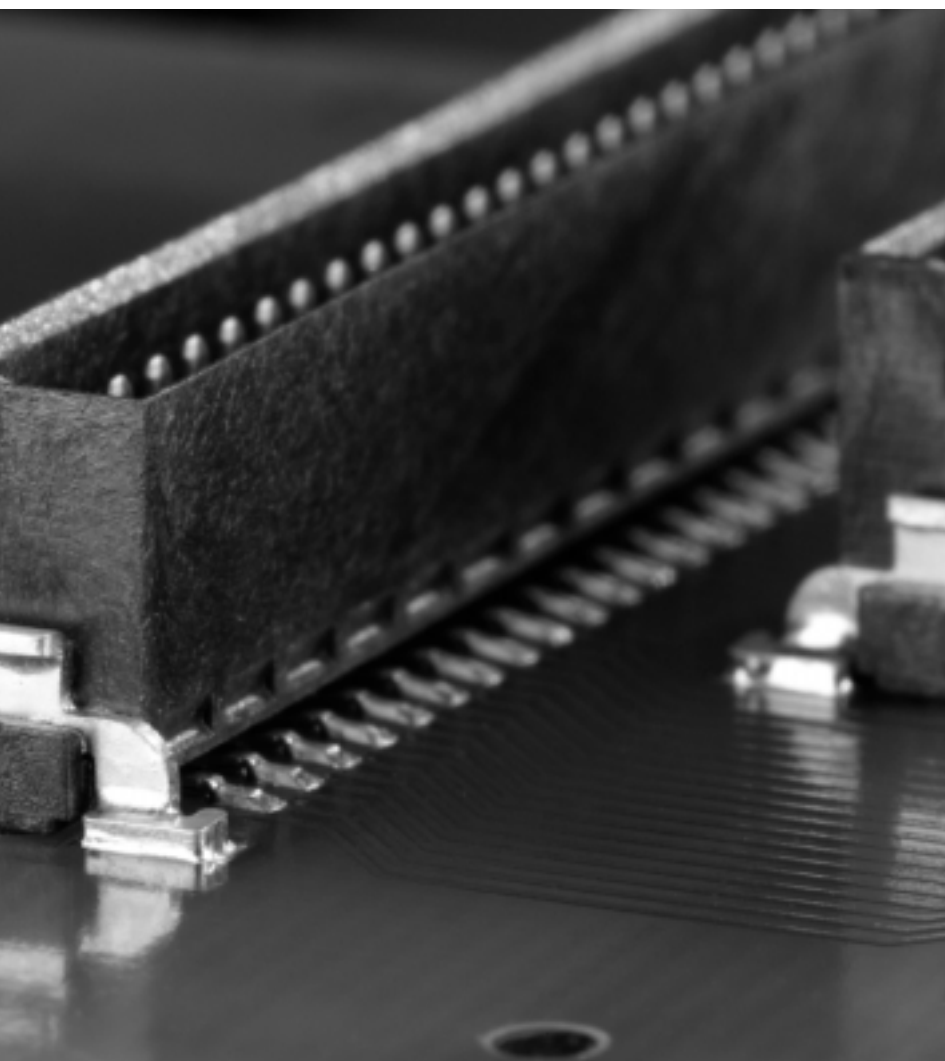
Controlled SMT Reflow Soldering Process

The heat-resistant thermoplastic insulator and precision coplanar contacts permit a controlled SMT soldering process.



Reliable Insertion and Removal

The metal SMT mounting ensures a reliable connection to the printed circuit board. As a result of its special design, it can handle high insertion and withdrawal forces. The metal clip is automatically positioned and soldered during the SMT process, thus eliminating the need for an additional operation such as rivets.



Quality Check

A full inspection of the contact forces and coplanarity of our SMC connectors guarantees maximum reliability for your printed circuit boards.



Safe Packaging and Fully Automated Feed

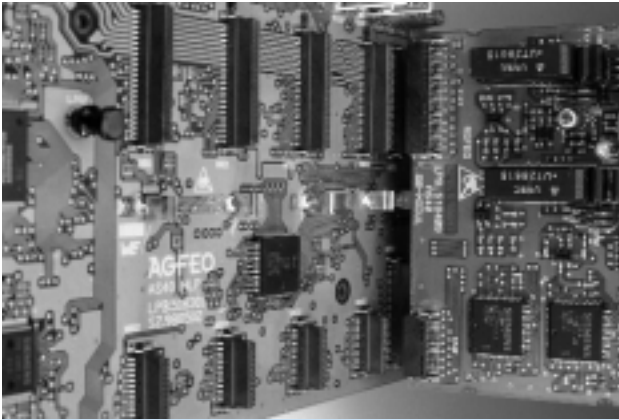
The antistatic tape-and-reel packaging not only protects the high-precision contacts and coplanarity of our SMC connectors, but also permits placement of connectors by automated pick and place equipment.



Easy Recognition and Safe Handling

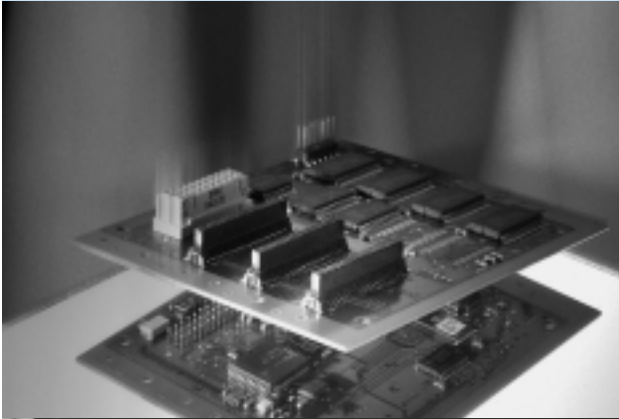
The black insulator ensures easy visual recognition by the automatic pick-and-place equipment.

Applications



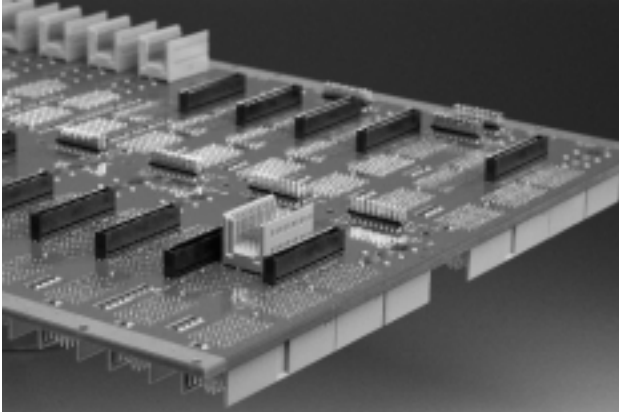
Male and Female connectors in ISDN equipment

TELECOM



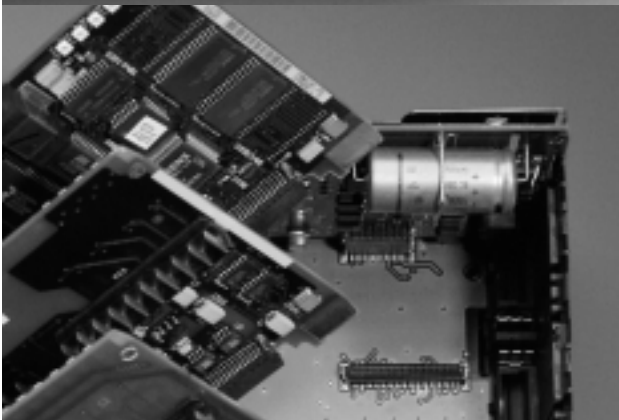
Female connectors in industrial automation

INDUSTRIAL
AUTOMATION



Male pressfit connectors in Video Coding System

INDUSTRIAL
ELECTRONICS

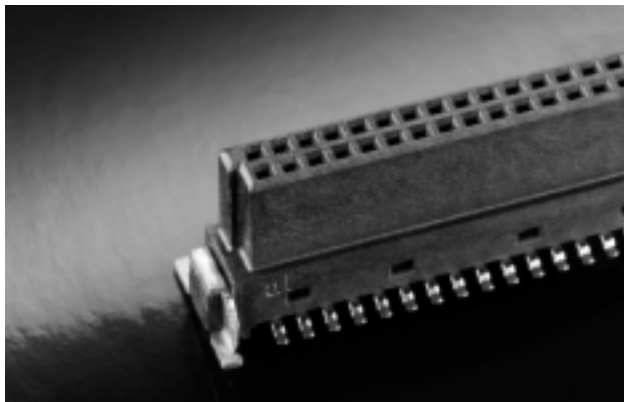


Male and female connectors in PLC

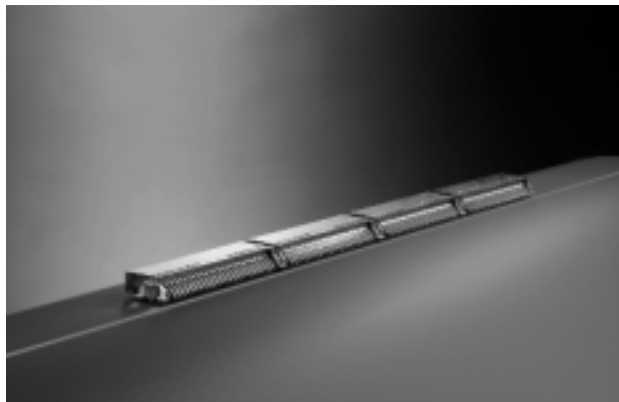
CONTROL
ENGINEERING

SMC Technical Features

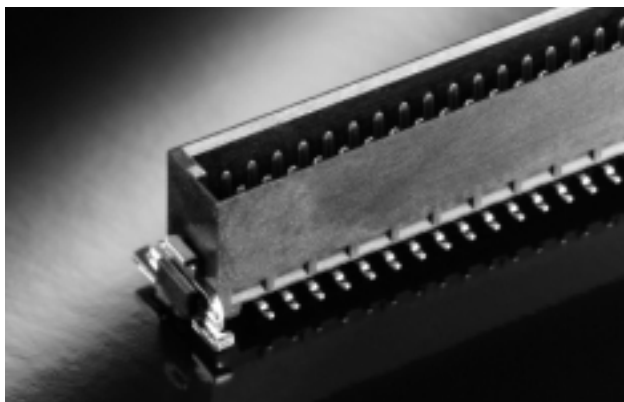
Wide Entry Area



Coplanarity



Polarization



Various Sizes



Board-to-Board and Board-to-Cable Applications



Rear I/O on Backplanes



Electrical and Mechanical Characteristics

	Standard	Type B and IDC Assemblies		Type Q (inversed)	
Number of Pins		12, 26, 50, 68 and 80		12, 26, 50, 68 and 80	
Technical data					
Climate Category	DIN EN 60068-1 test b	-55 to 125°C/56 days damp heat		-55 to 125°C/56 days damp heat	
Storage and operating temperature range		-55 to 125°C -55 to 125°C		-55 to 125°C	
Current rating	IEC60512 test 5b	Ambient Temp.	Max. Current	Ambient Temp.	Max. Current
		20°C	1.2 A	20°C	1.2 A
		70°C	0.9 A	70°C	0.9 A
		100°C	0.6 A	100°C	0.6 A
Clearance and creepage distance		0.4 mm		0.4 mm	
Comparative tracking index	IEC 112	CTI-150		CTI-150	
Voltage rating	DIN VDE 0110	Determined according to client-specific application (degree of environmental pollution) according to VDE 0110		Determined according to client-specific application (degree of environmental pollution) according to VDE 0110	
Dielectric strength	IEC 60512	contact – contact 500V		contact – contact 500V	
Contact resistance	IEC 60512 test 2a	< 25 mΩ		< 25 mΩ	
Insulation resistance	IEC 60512 test 3a	> 10 ⁴ MΩ		> 10 ⁴ MΩ	
Vibration	IEC 60512 test 6d	10 – 2000 Hz 20g		10 – 2000 Hz 20g	
Maximum contact disturbance during exposure	IEC 60512 test 2e	< 1 μs		< 1 μs	
Shock halfsine	IEC 60512 test 6c	50g 11 ms		50g 11 ms	
Maximum contact disturbance during exposure	IEC 60512 test 2e	< 1 μs		< 1 μs	
Mechanical operation (mating cycles)	IEC 60512 test 9a	> 500 mating cycles		> 500 mating cycles	
Insertion and extraction force	IEC 60512 test 13b	12 cont.: 6 N max. 26 cont.: 13 N max. 50 cont.: 26 N max. 68 cont.: 35 N max. 80 cont.: 40 N max.		12 cont.: 6 N max. 26 cont.: 13 N max. 50 cont.: 26 N max. 68 cont.: 35 N max. 80 cont.: 40 N max.	
Gauge retention force 15 gramweight	IEC 60512 test 16e	0.10 N min.		0.10 N min.	

Note: Electrical and mechanical specifications for the IDC connectors may exceed those for the IDC cable assemblies due to limitations by the cable chosen.



Electrical and Mechanical Characteristics

	Standard	Type B and IDC Assemblies	Type Q (inversed)
Number of Pins		12, 26, 50, 68 and 80	12, 26, 50, 68 and 80
Process-conditions			
Solder temperature max.	IEC 68-2-20		
Hand soldering temperature max.		3.5s at 350°C	3.5s at 350°C
Dip soldering temperature max.		10s at 260°C	10s at 260°C
SMT-reflow soldering temperature max.		10s at 260°C	10s at 260°C
Coplanarity		< 0.1 mm	< 0.1 mm
Materials			
Housing: plastic material (symbol)		LCP	LCP
CTI value	IEC 112	CTI 150	CTI 150
UL flame rating		UL 94 V-0	UL 94 V-0
UL file		E 83005	E 83005
Contact and mating area			
Base material		Cu alloy	Cu alloy
Plating		Au over Ni	Au over Ni
Termination area			
Base material		Cu alloy	Cu alloy
Solder, press-fit and IDC-technology		Sn	Sn
Enviroment compatibility			
recycling		No flame-retardent additives, no toxic additives allow easy recycling	
Product-approval and customer specific tests			
UL		file E 84703	file E 84703
CSA		in preparation	in preparation

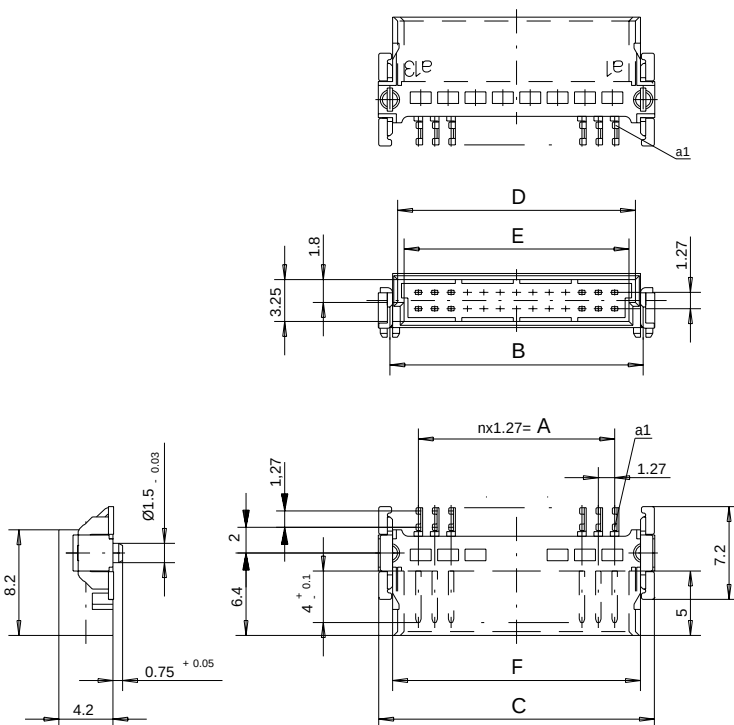
Right Angle Male Connectors Type B Standard Assembly Height



The SMC Type B right angle male connector is available in 12, 26, 50, 68 or 80 position. Variations in board-to-board stacking heights can be achieved by different combinations of the various connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

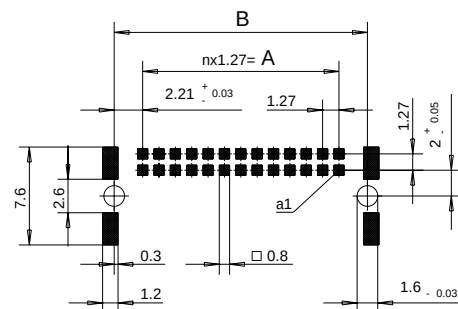
Tape-and-reel packaging is available for automatic pick-and-place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick-and-place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing



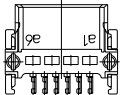
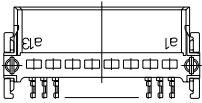
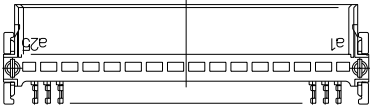
12	6.35	10.77	12.7	9.57	8.57	10.35
26	15.24	19.66	21.6	18.46	17.46	19.24
50	30.48	34.9	36.8	33.7	32.7	34.48
68	41.91	46.33	48.2	45.13	44.13	45.91
80	49.53	53.95	55.8	52.75	51.75	53.53
No. of contacts	A	B ± 0.03	C	D	E	F

PCB-Layout Proposal for SMT

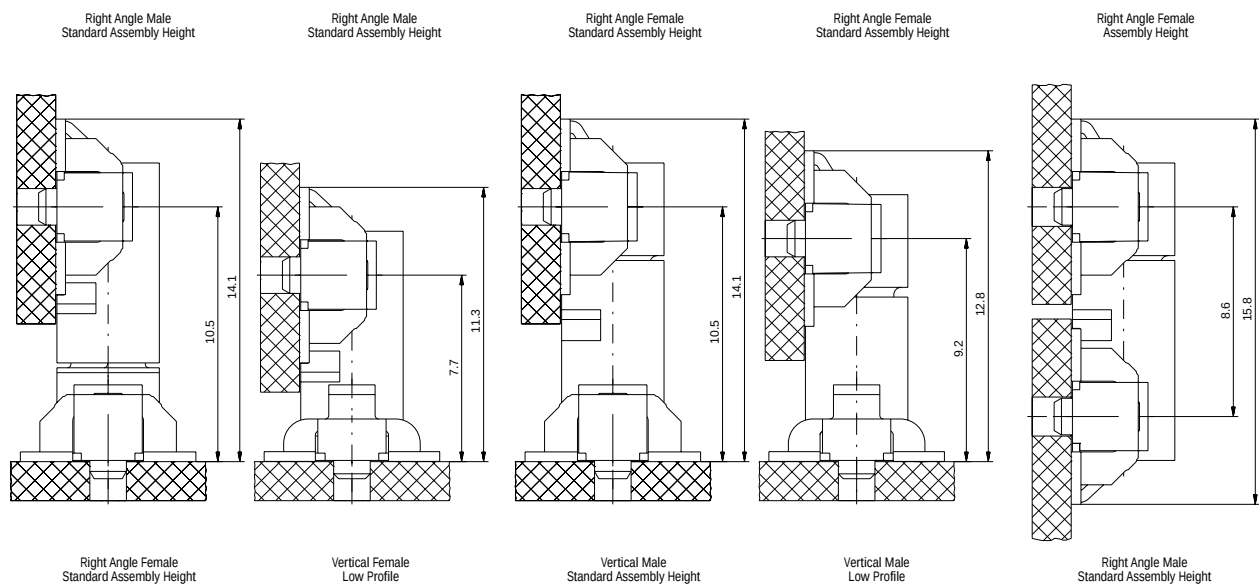


Right Angle Male Connectors Type B Standard Assembly Height

Ordering Information

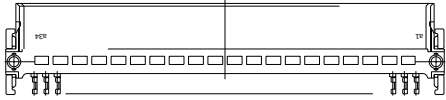
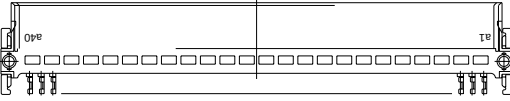
Configuration	No. of Pins	Part Number
Type B, pick-and-place cover, tape-and-reel, 560 pcs/reel		
 	12	054594
Type B, pick-and-place cover, tape-and-reel, 560 pcs/reel		
 	26	054595
Type B, pick-and-place cover, tape-and-reel, 560 pcs/reel		
 	50	054596

For smaller quantities or tube packaging please refer to the cross reference table on page 38.

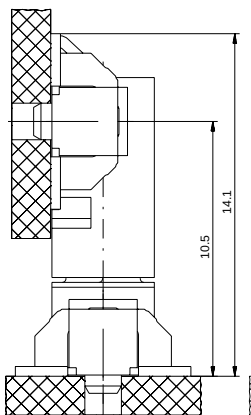


Right Angle Male Connectors Type B Standard Assembly Height

Ordering Information

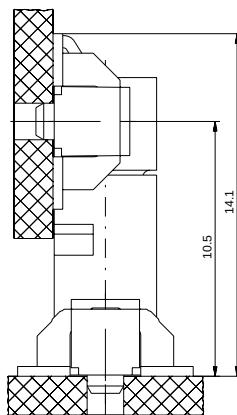
Configuration	No. of Pins	Part Number
Type B, pick-and-place cover, tape-and-reel, 560 pcs/reel		
 	68	114805
Type B, pick-and-place cover, tape-and-reel, 560 pcs/reel		
 	80	114806

Right Angle Male
Standard Assembly Height



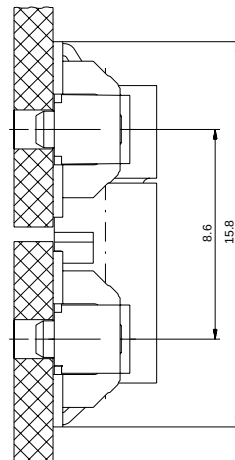
Right Angle Female
Standard Assembly Height

Right Angle Female
Standard Assembly Height



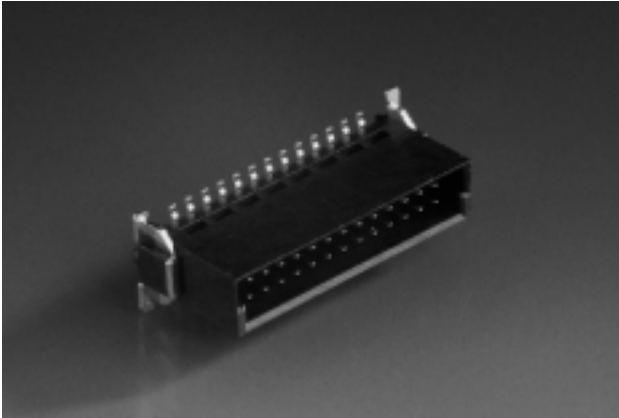
Vertical Male
Standard Assembly Height

Right Angle Female
Assembly Height



Right Angle Male
Standard Assembly Height

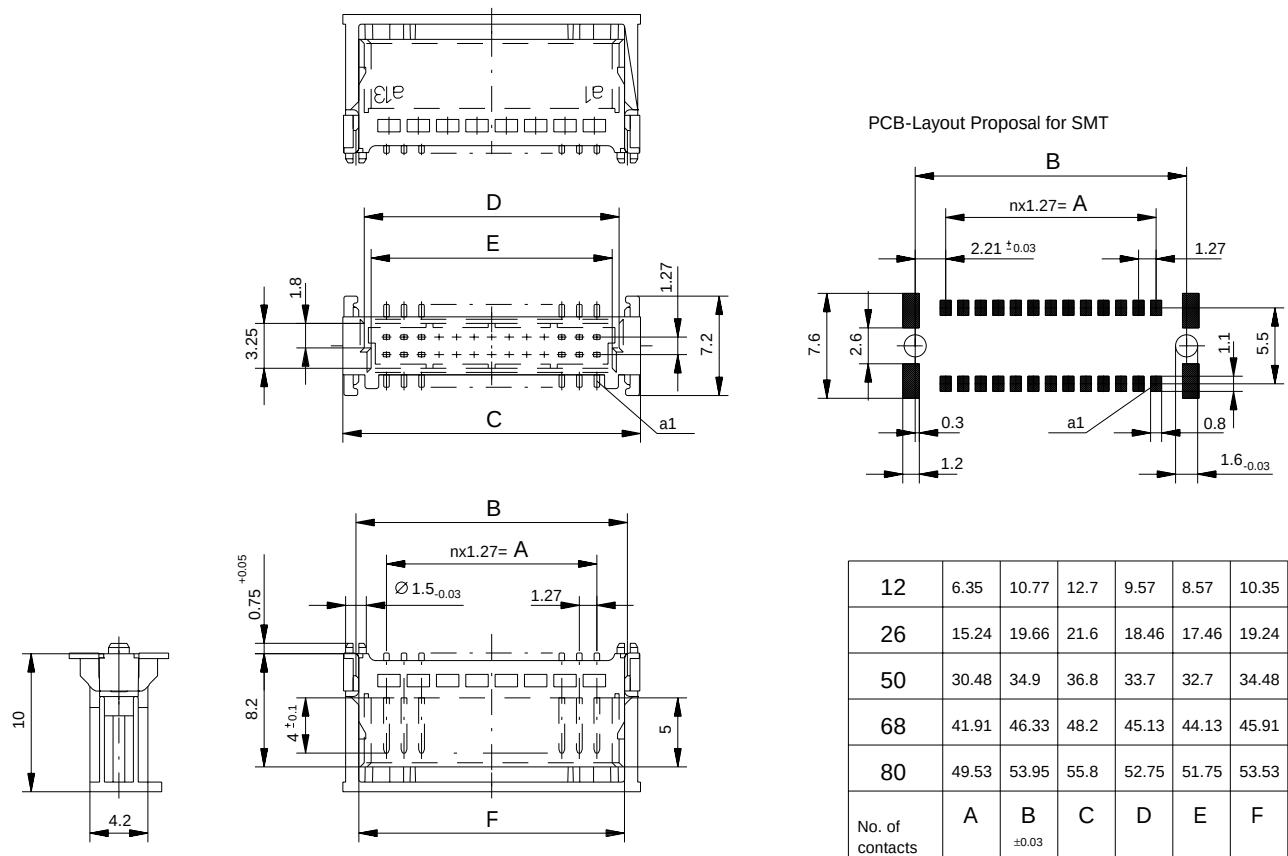
Vertical Male Connectors Type Q Standard Assembly Height



The SMC Type Q vertical male connector is available in 12, 26 or 50 position. Variations in board-to-board stacking heights can be achieved by different combinations of connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

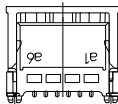
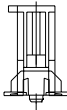
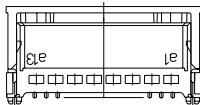
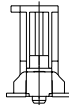
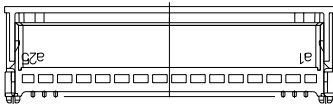
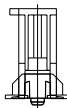
Tape-and-reel packaging is available for automatic pick-and-place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick-and-place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing



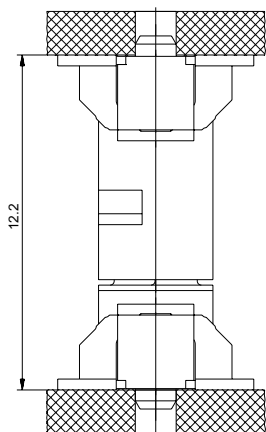
Vertical Male Connectors Type Q Standard Assembly Height

Ordering Information

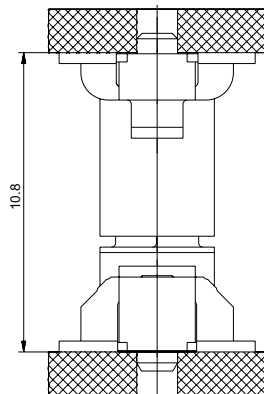
Configuration		Height	No. of Pins	Part Number	
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel			8.2 mm	12	063179
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel			8.2 mm	26	063209
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel			8.2 mm	50	063210

For smaller quantities or tube packaging please refer to the cross reference table on page 38.

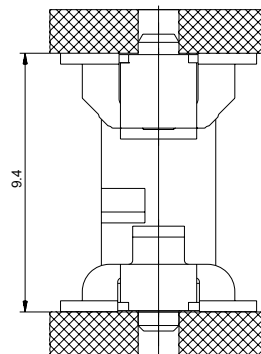
Vertical Male Standard Assembly Height



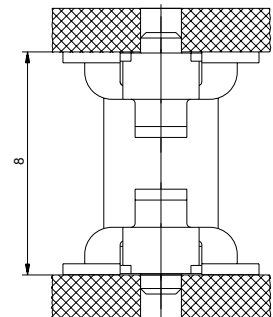
Vertical Male Low Profile



Vertical Male Standard Assembly Height



Vertical Male Low Profile



Vertical Female Standard Assembly Height

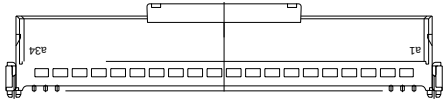
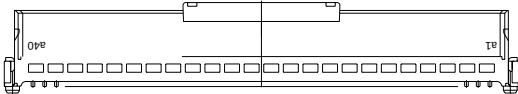
Vertical Female Standard Assembly Height

Vertical Female Low Profile

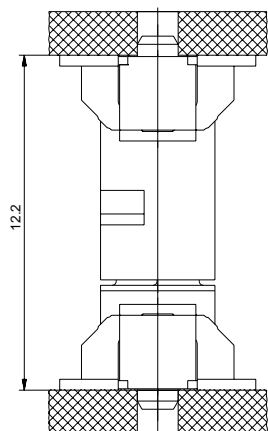
Vertical Female Low Profile

Vertical Male Connectors Type Q Standard Assembly Height

Ordering Information

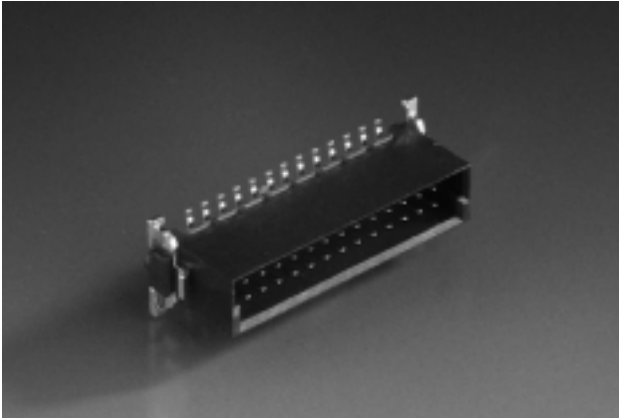
Configuration	Height	No. of Pins	Part Number
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel  	8.2 mm	68	114807
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel  	8.2 mm	80	114808

Vertical Male Standard Assembly Height



Vertical Female Standard Assembly Height

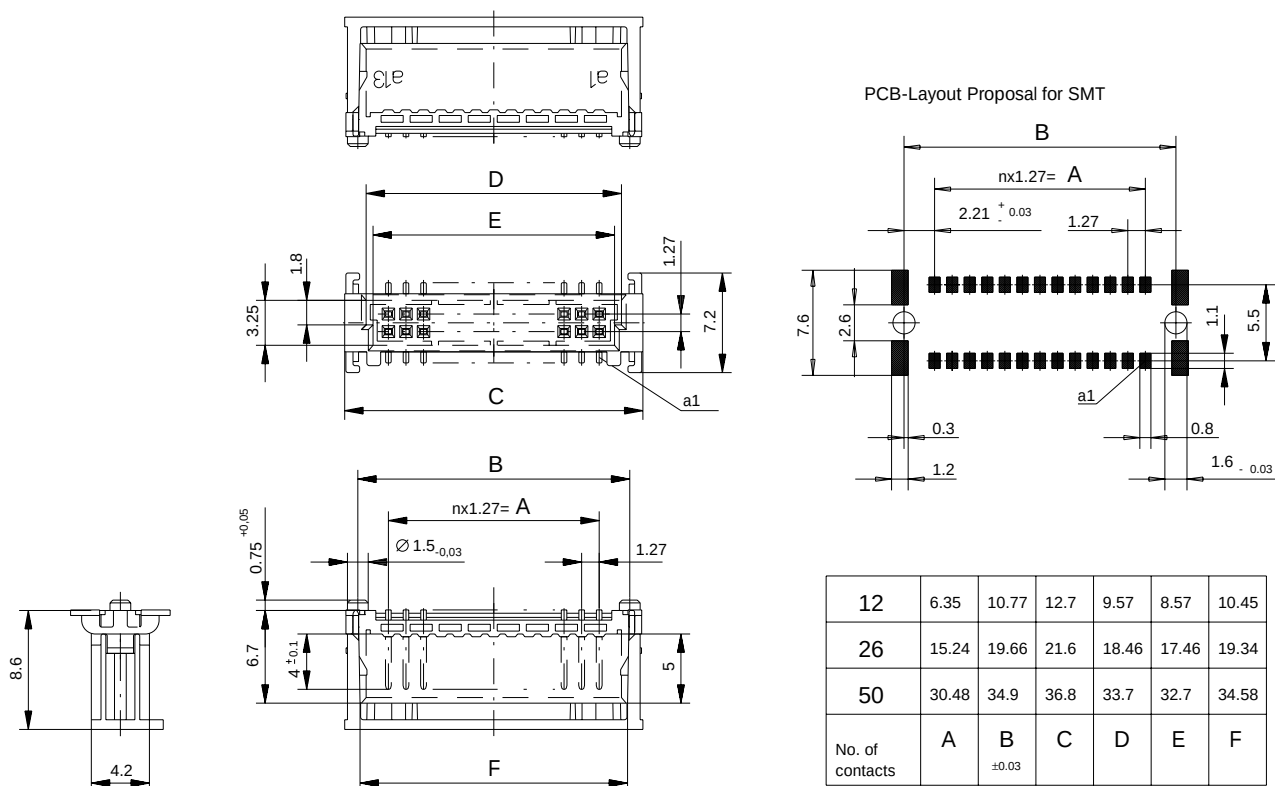
Vertical Male Connectors Type Q Low Profile



The SMC Type Q vertical male connector is available in 12, 26 or 50 position. Variations in board-to-board stacking heights can be achieved by different combinations of connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

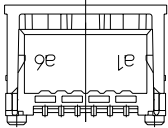
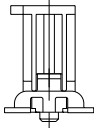
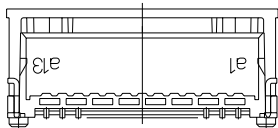
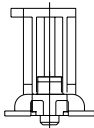
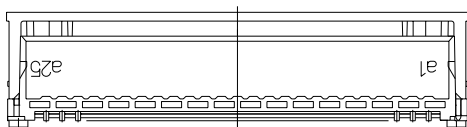
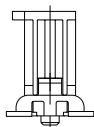
Tape-and-reel packaging is available for automatic pick-and-place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick-and-place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing

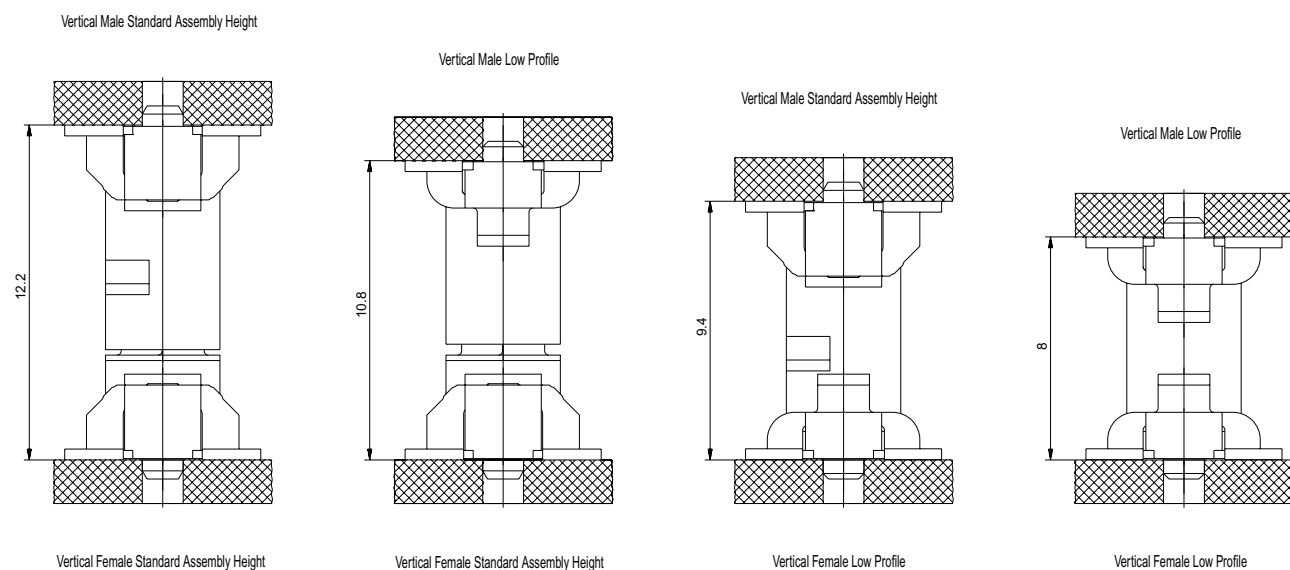


Vertical Male Connectors Type Q Low Profile

Ordering Information

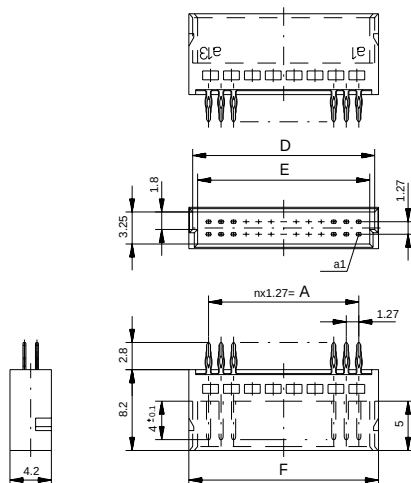
Configuration		Height	No. of Pins	Part Number
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.7 mm	12	064321
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.7 mm	26	064320
Type Q, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.7 mm	50	064319

For smaller quantities or tube packaging please refer to the cross reference table on page 38.



The press-fit male connectors, with the compliant ERNI-PRESS area, allow board-to-board connections between BUS PC Boards (motherboard) with press-fit connectors and plug-in cards (daughter boards) with SMT assembly. It is also ideal for rear I/O applications on backplanes where pressfit connectors are typically used.

Dimensional drawing



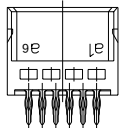
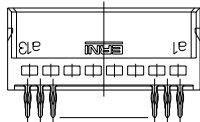
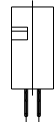
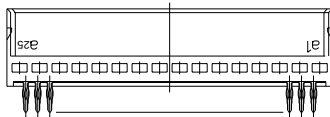
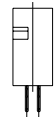
12	6.35	9.57	8.57	10.35
26	15.24	18.46	17.46	19.24
50	30.48	33.7	32.7	34.48
No. of contacts	A	D	E	F

Technical drawing of a plated-through hole (PTH) in a PCB. The drawing shows a cross-section of the hole with various dimensions and labels:

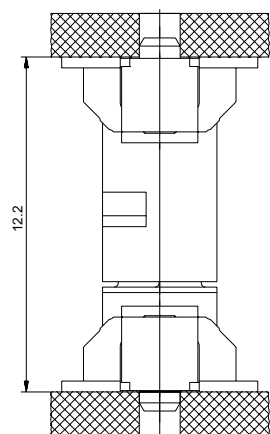
- Ø0.7 ±0.02**: Diameter of drilled hole
- Ø0.6 ±0.05**: Diameter of finished plated-through hole
- min. 0.1**: Pad width
- max. 15 µm**: Maximum thickness of copper plating
- min. 25 µm Cu**: Minimum thickness of copper plating
- Sn / SnPb**: Plating material

Vertical Male Press-Fit Connectors Type Q Standard Assembly Height

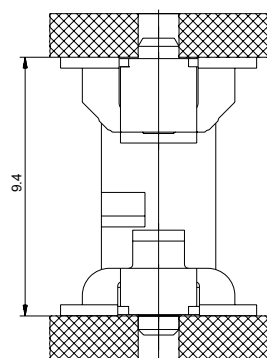
Ordering Information

Configuration		Height	No. of Pins	Part Number	
Type Q, 65 pcs/tube			8.2 mm	12	064002
Type Q, 34 pcs/tube			8.2 mm	26	064003
Type Q, 19 pcs/tube			8.2 mm	50	064004

Vertical Male Standard Assembly Height



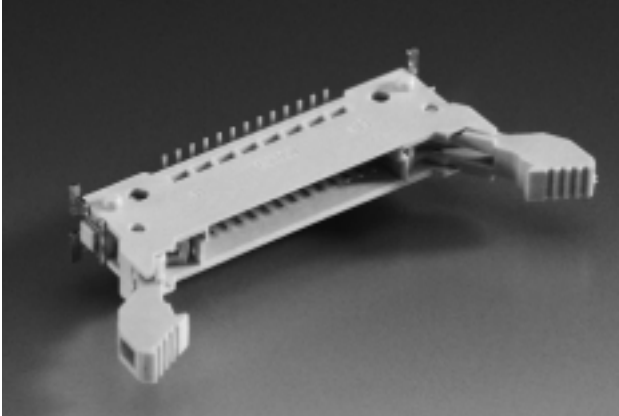
Vertical Male Standard Assembly Height



Vertical Female Standard Assembly Height

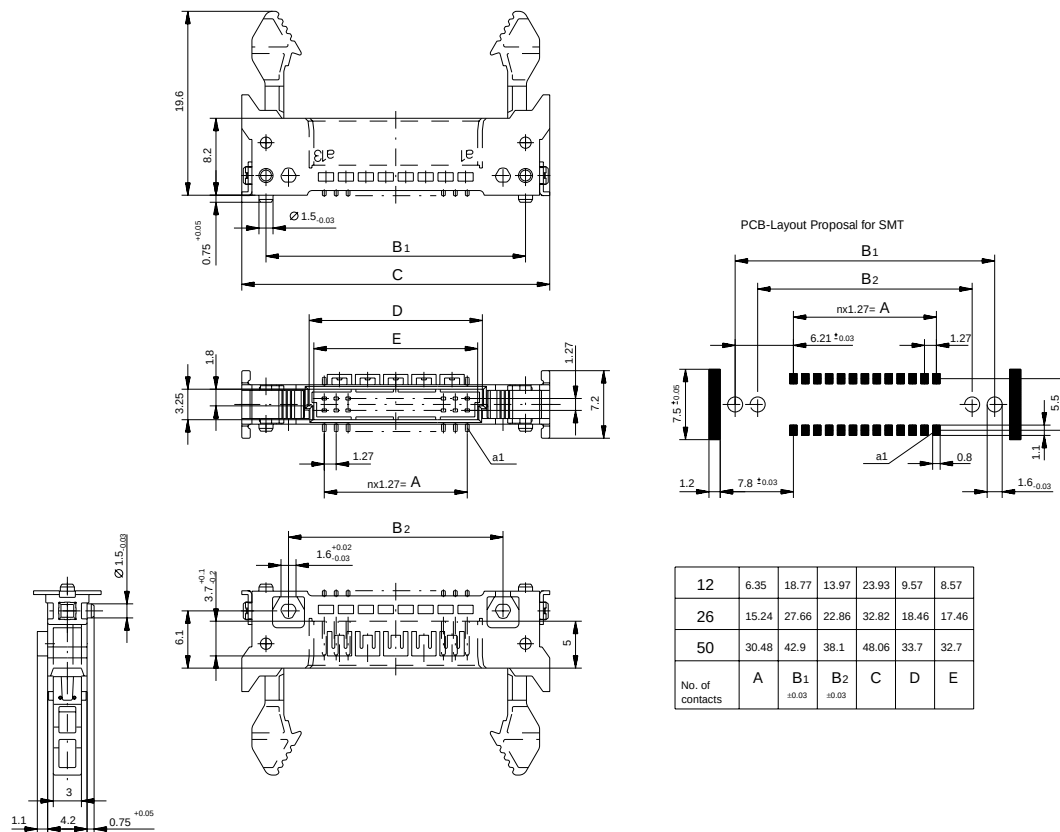
Vertical Female Low Profile

Male Connectors Type Q With Locking And Ejector Latches



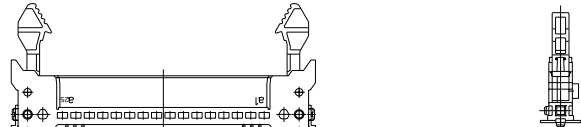
The vertical male Type Q connector with locking latches is used with the female Type B IDC connector without latches. The insulators of the male connectors are designed to be mounted vertically.

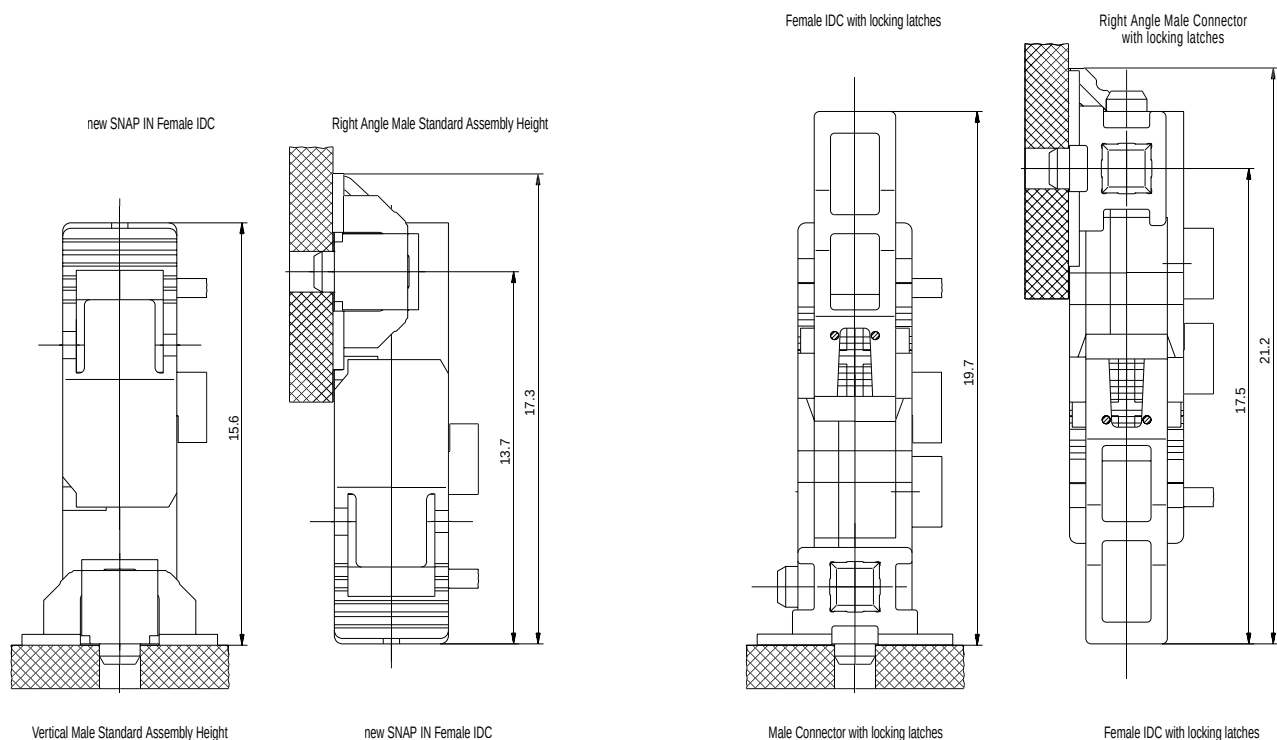
Dimensional drawing



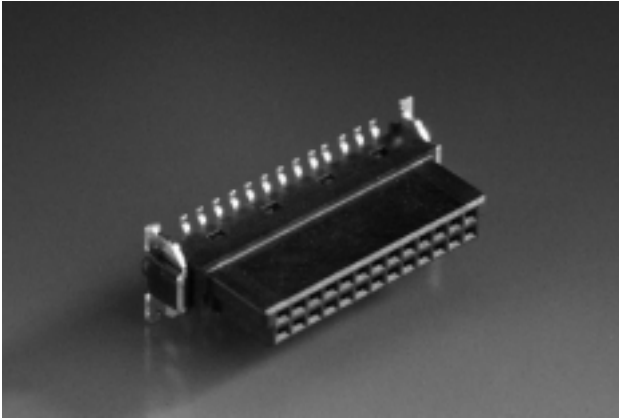
Male Connectors Type Q with Locking and Ejector Latches

Ordering Information

Configuration	No. of Pins	Part Number
Type Q, without coding, styrofoam package, 50 pcs/pack		
	12	103754
Type Q, without coding, styrofoam package, 40 pcs/pack		
	26	103755
Type Q, without coding, styrofoam package, 30 pcs/pack		
	50	103756



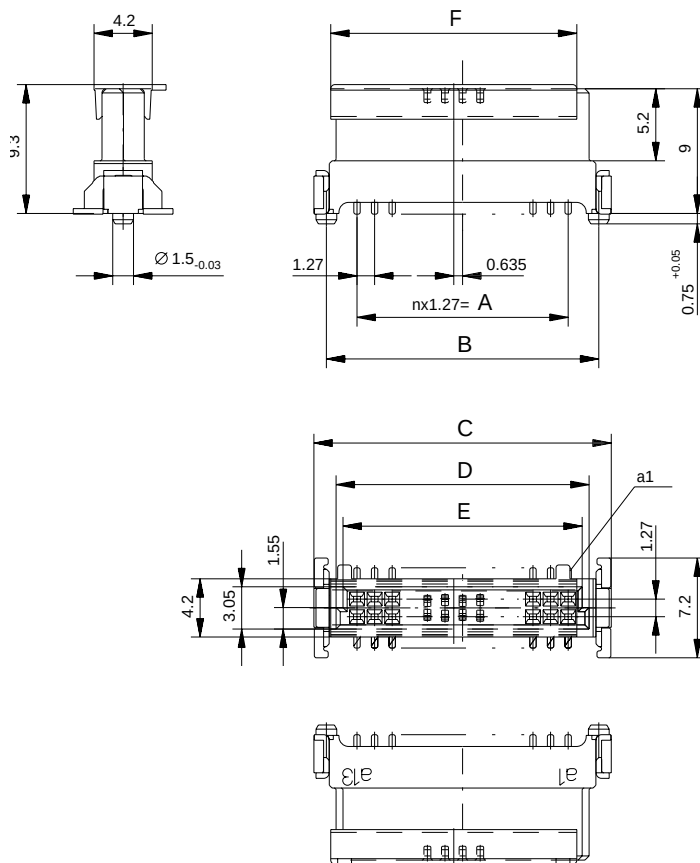
Vertical Female Connectors Type B Standard Assembly Height



The SMC Type B vertical female is available in 12, 26, 50, 68 or 80 positions. Variations in board-to-board stacking heights can be achieved by different combinations of the various connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

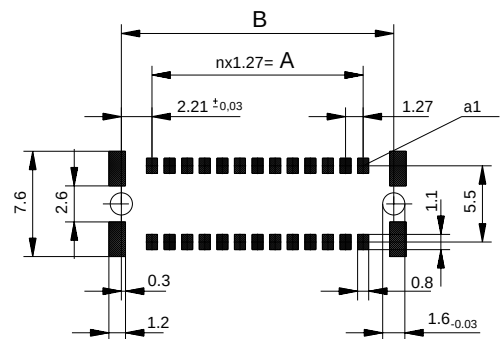
Tape-and-reel packaging is available for automatic pick and place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick and place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing



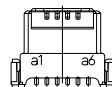
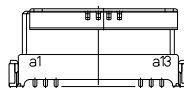
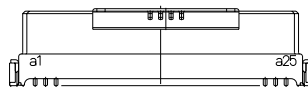
12	6.35	10.77	12.7	9.37	8.37	7.6
26	15.24	19.66	21.6	18.26	17.26	17.76
50	30.48	34.9	36.8	33.5	32.5	17.76
68	41.91	46.33	48.2	44.93	43.93	17.76
80	49.53	53.95	55.8	52.55	51.55	17.76
No. of contacts	A	B ± 0.03	C	D	E	F

PCB-Layout Proposal for SMT



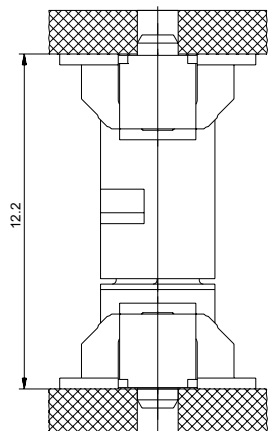
Vertical Female Connectors Type B Standard Assembly Height

Ordering Information

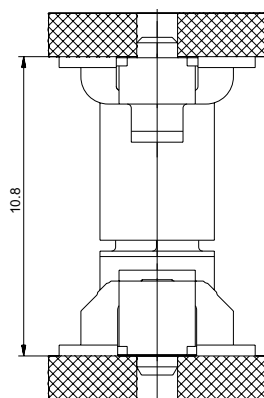
Configuration		Height	No. of Pins	Part Number	
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel			9 mm	12	124043
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel			9 mm	26	124044
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel			9 mm	50	124045

For smaller quantities or tube packaging please refer to the cross reference table on page 38.

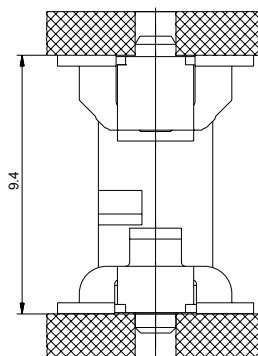
Vertical Male Standard Assembly Height



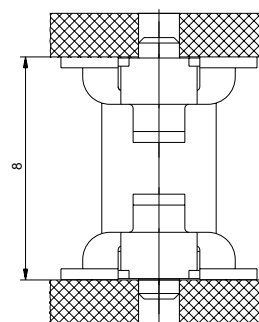
Vertical Male Low Profile



Vertical Male Standard Assembly Height



Vertical Male Low Profile



Vertical Female Standard Assembly Height

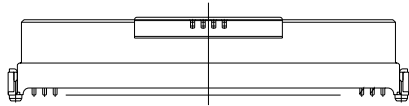
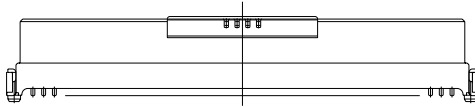
Vertical Female Standard Assembly Height

Vertical Female Low Profile

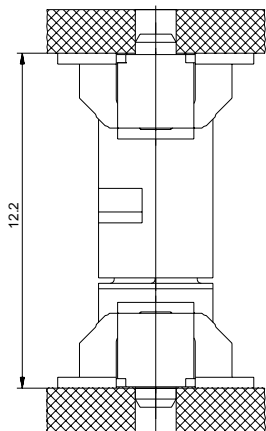
Vertical Female Low Profile

Vertical Female Connectors Type B Standard Assembly Height

Ordering Information

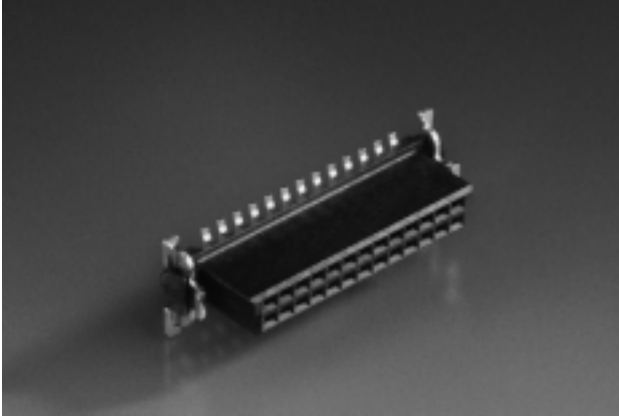
Configuration		Height	No. of Pins	Part Number	
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel			9 mm	68	114803
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel			9 mm	80	114804

Vertical Male Standard Assembly Height



Vertical Female Standard Assembly Height

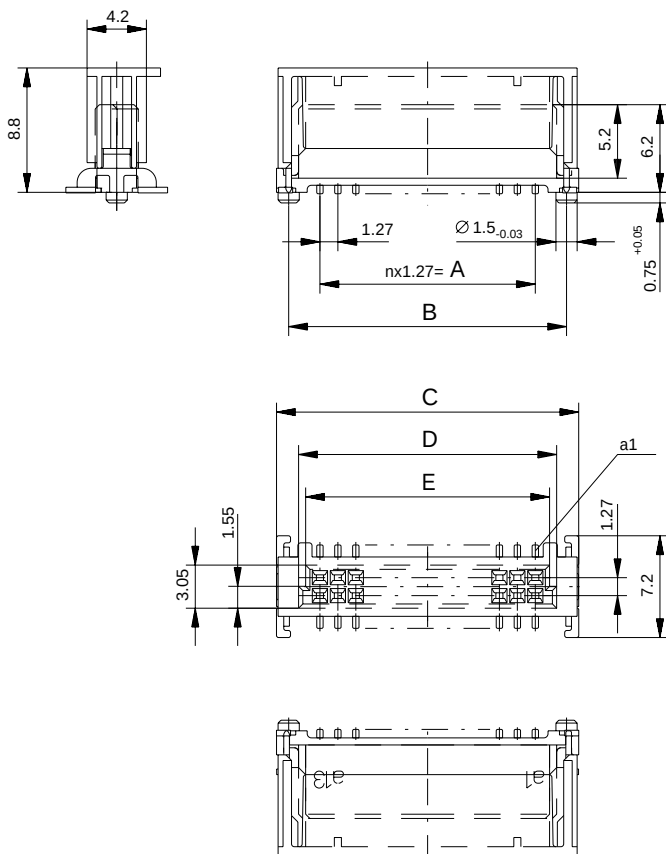
Vertical Female Connectors Type B Low Profile



The SMC Type B vertical female connector is available in 12, 26 or 50 positions. Variations in board-to-board stacking heights can be achieved by different combinations of the various connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are possible between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

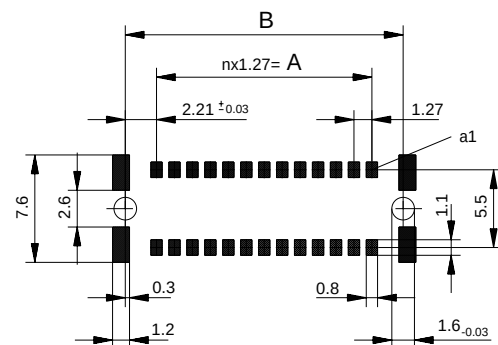
Tape-and-reel packaging is available for automatic pick and place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick-and-place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing



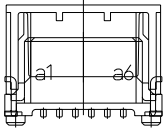
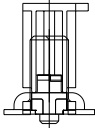
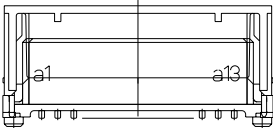
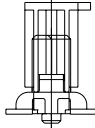
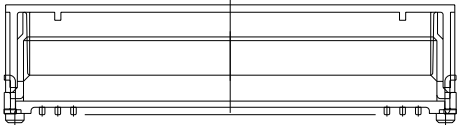
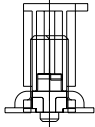
12	6.35	10.77	12.7	9.37	8.37
26	15.24	19.66	21.6	18.26	17.26
50	30.48	34.9	36.8	33.5	32.5
No. of contacts	A	B ± 0.03	C	D	E

PCB-Layout Proposal for SMT



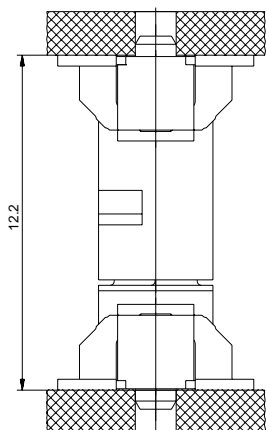
Vertical Female Connectors Type B Low Profile

Ordering Information

Configuration		Height	No. of Pins	Part Number
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.2 mm	12	064318
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.2 mm	26	064317
Type B, pick-and-place cover, tape-and-reel, 280 pcs/reel	 	6.2 mm	50	064316

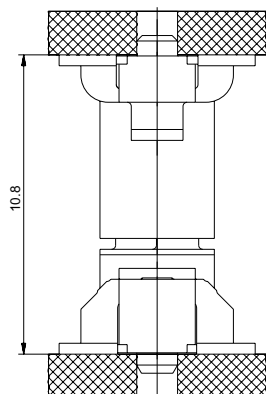
For smaller quantities or tube packaging please refer to the cross reference table on page 38.

Vertical Male Standard Assembly Height



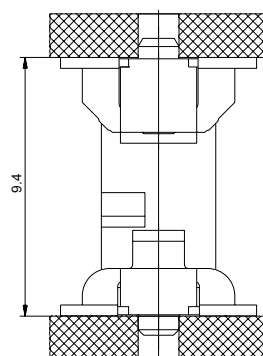
Vertical Female Standard Assembly Height

Vertical Male Low Profile



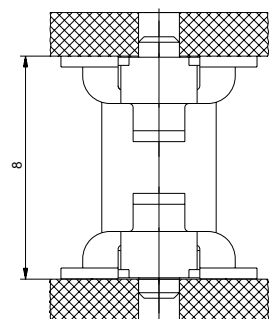
Vertical Female Standard Assembly Height

Vertical Male Standard Assembly Height



Vertical Female Low Profile

Vertical Male Low Profile



Vertical Female Low Profile

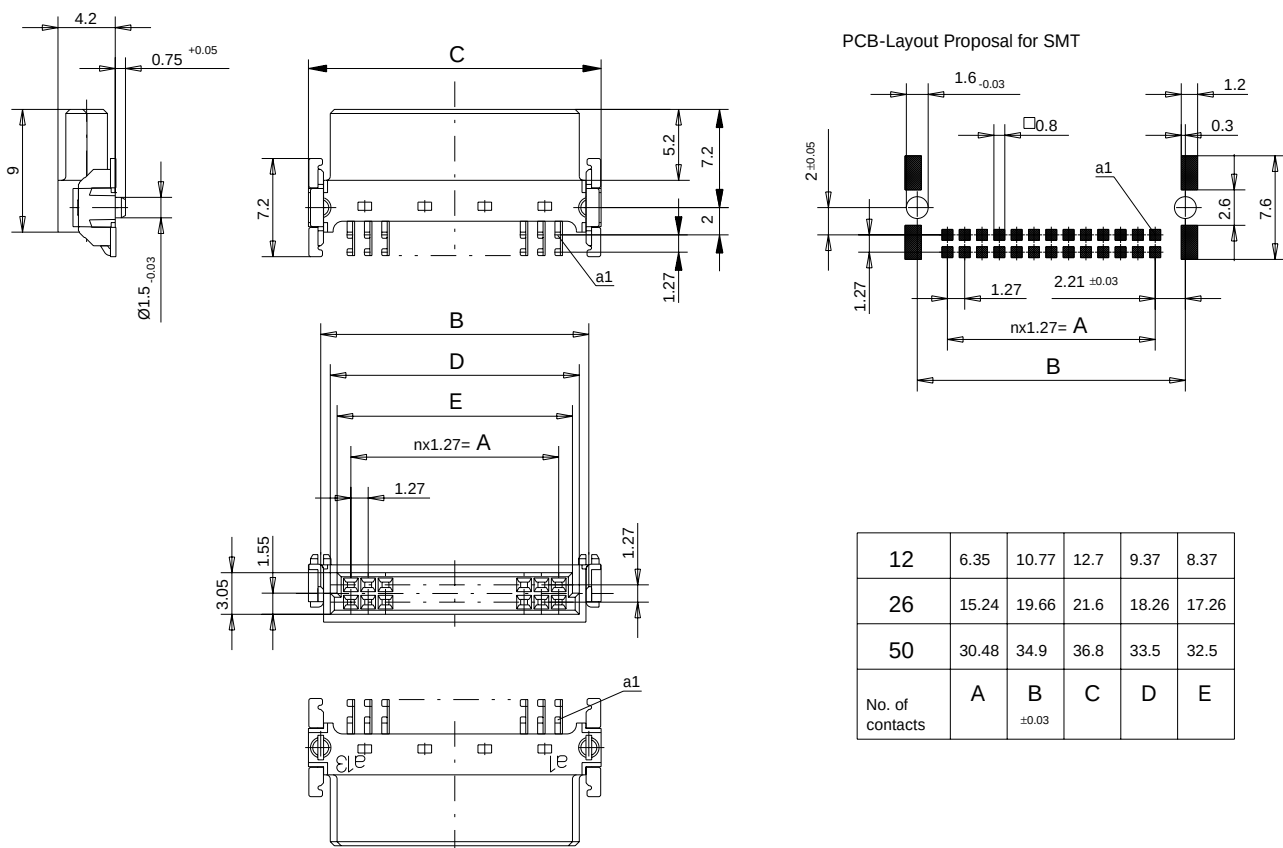
Right Angle Female Connectors Type Q Standard Assembly Height



The SMC Type Q right angle female connector is available in 12, 26 or 50 positions. Variations in board-to-board stacking heights can be achieved by different combinations of the various connector heights (6.2 mm, 6.7 mm, 8.2 mm and 9 mm). The board-to-board heights are between 8.0 mm and 12.2 mm (wipe length 2.5 mm) or up to 14.0 mm (wipe length 0.7 mm).

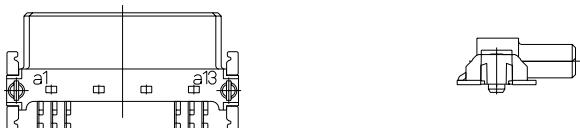
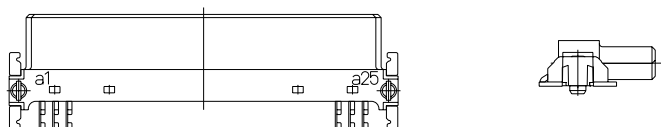
Tape-and-reel packaging is available for automatic pick-and-place assembly. The black insulator ensures easy recognition for quick visual identification, and the pre-assembled pick-and-place cover provides a firm vacuum grip of the connector. Special contact lead design guarantees exact placement of the connectors on the PCB. A secure soldering process is possible due to the coplanarity of the contacts and the high temperature insulator. The integrated solid metal SMT mounting clip secures the connector on the PCB for reliable mating and unmating.

Dimensional drawing

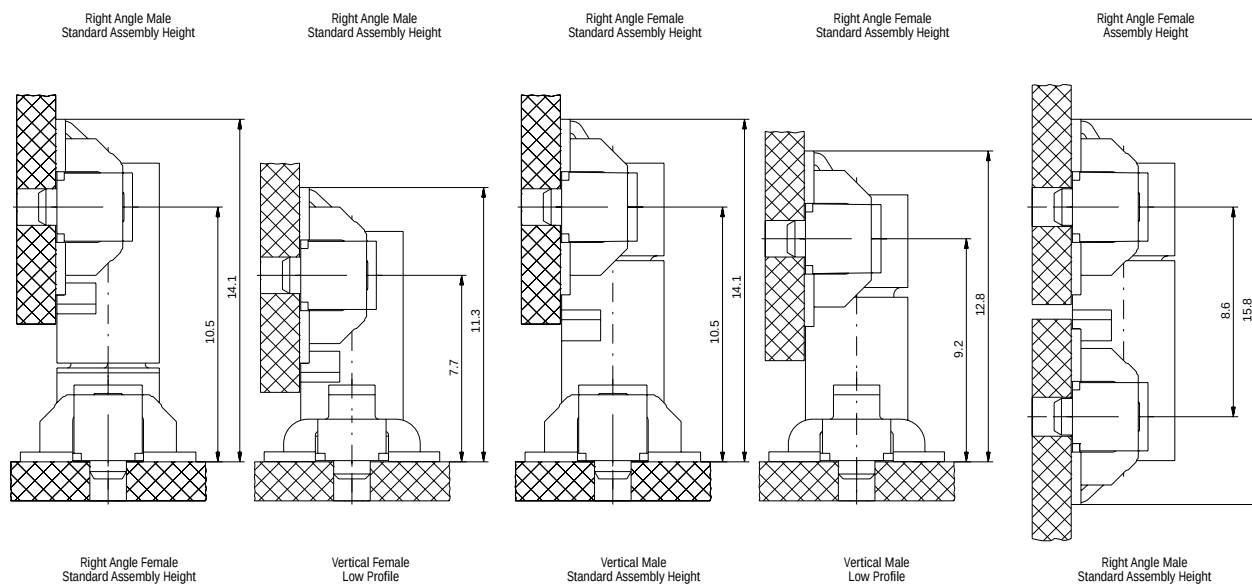


Right Angle Female Connectors Type Q Standard Assembly Height

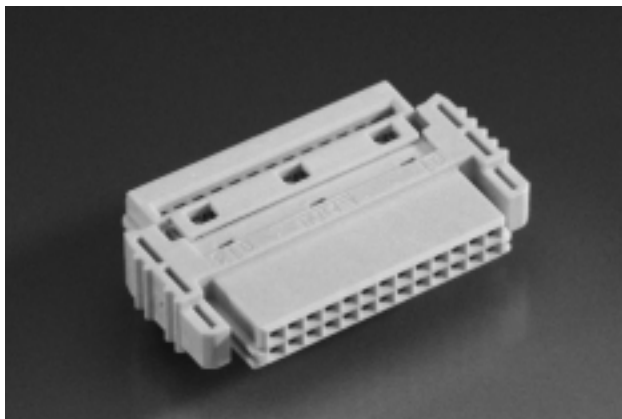
Ordering Information

Configuration	No. of Pins	Part Number
Type Q, pick-and-place cover, tape-and-reel, 560 pcs/reel		
	12	104557
Type Q, pick-and-place cover, tape-and-reel, 560 pcs/reel		
	26	104558
Type Q, pick-and-place cover, tape-and-reel, 560 pcs/reel		
	50	104559

For smaller quantities or tube packaging please refer to the cross reference table on page 38.



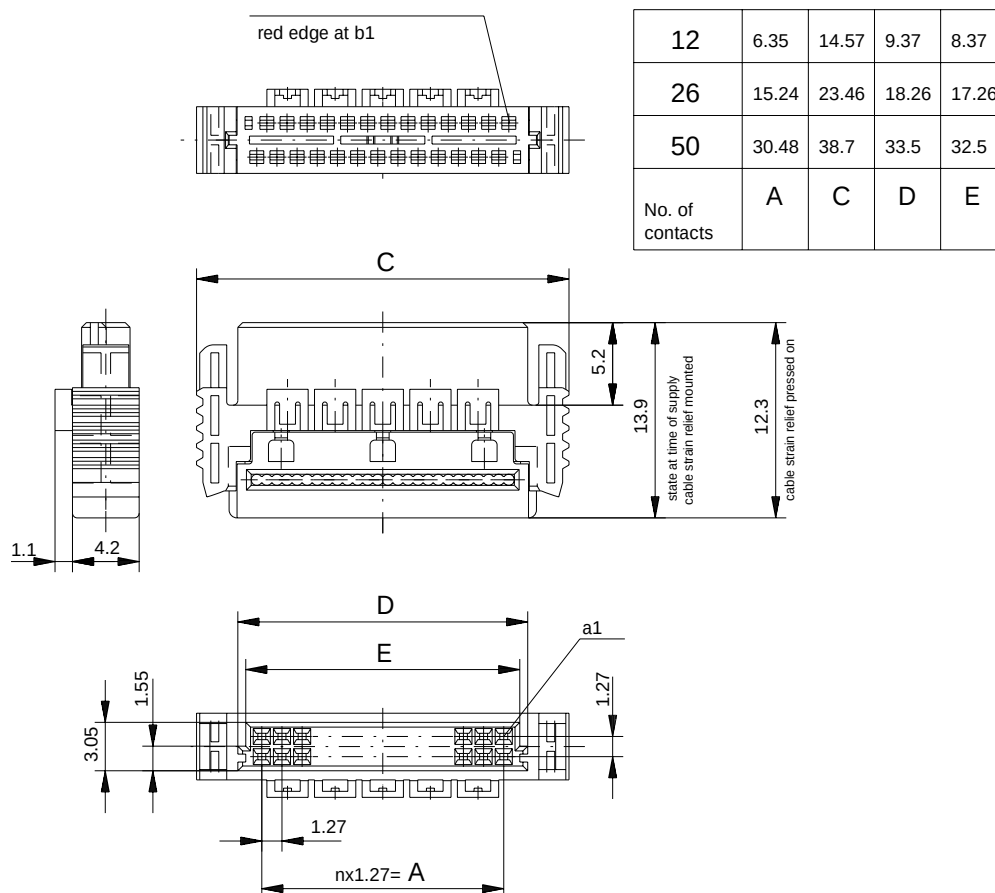
IDC Female Connectors Type B for Male Connectors with Locking and Ejector Latches



The SMC Type B IDC female connector is available in 12, 26 or 50 positions.

The IDC female connector with locking and ejector latches is used with the male connector type B or Q with locking and ejector latches, standard assembly height.

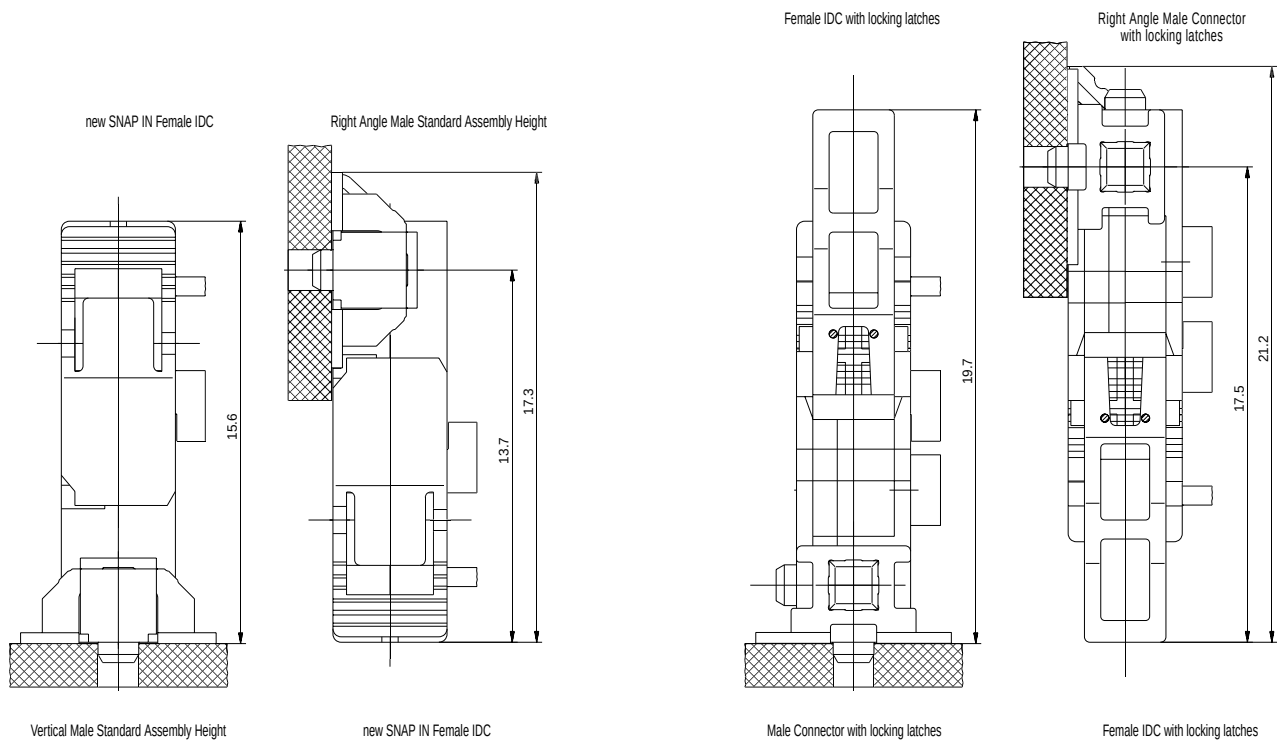
Dimensional drawing



IDC Female Connectors Type B for Male Connectors with Locking and Ejector Latches

Ordering Information

Configuration	No. of Pins	Part Number
Type B, without coding, styrofoam package, 50 pcs/pack	12	044663
Type B, without coding, styrofoam package, 30 pcs/pack	26	044658
Type B, without coding, styrofoam package, 30 pcs/pack	50	024403



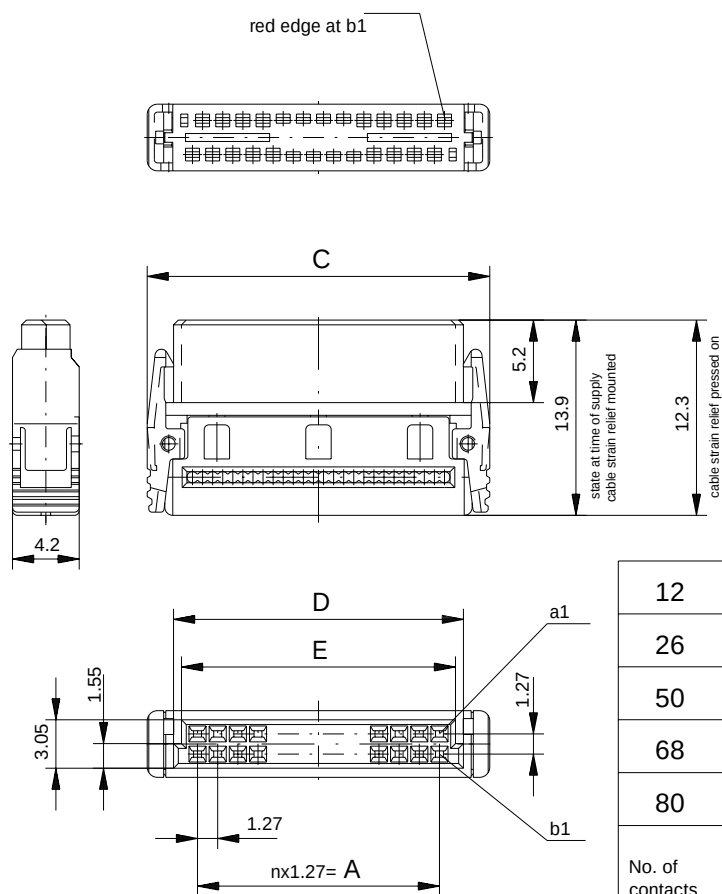


IDC Female Connectors Type B with Locking Latches



The new IDC females are available in 12, 26, 50, 68 and 80 positions and are designed for quick locking. Latches are integrally mounted on the insulator, saving space, and are designed to snap into existing notches on the mating male connector. The insulator also features an alignment guide for the exact positioning of each wire of the ribbon cable.

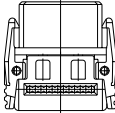
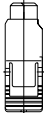
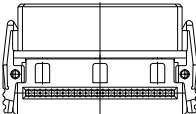
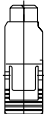
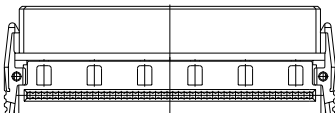
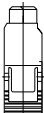
Dimensional drawing

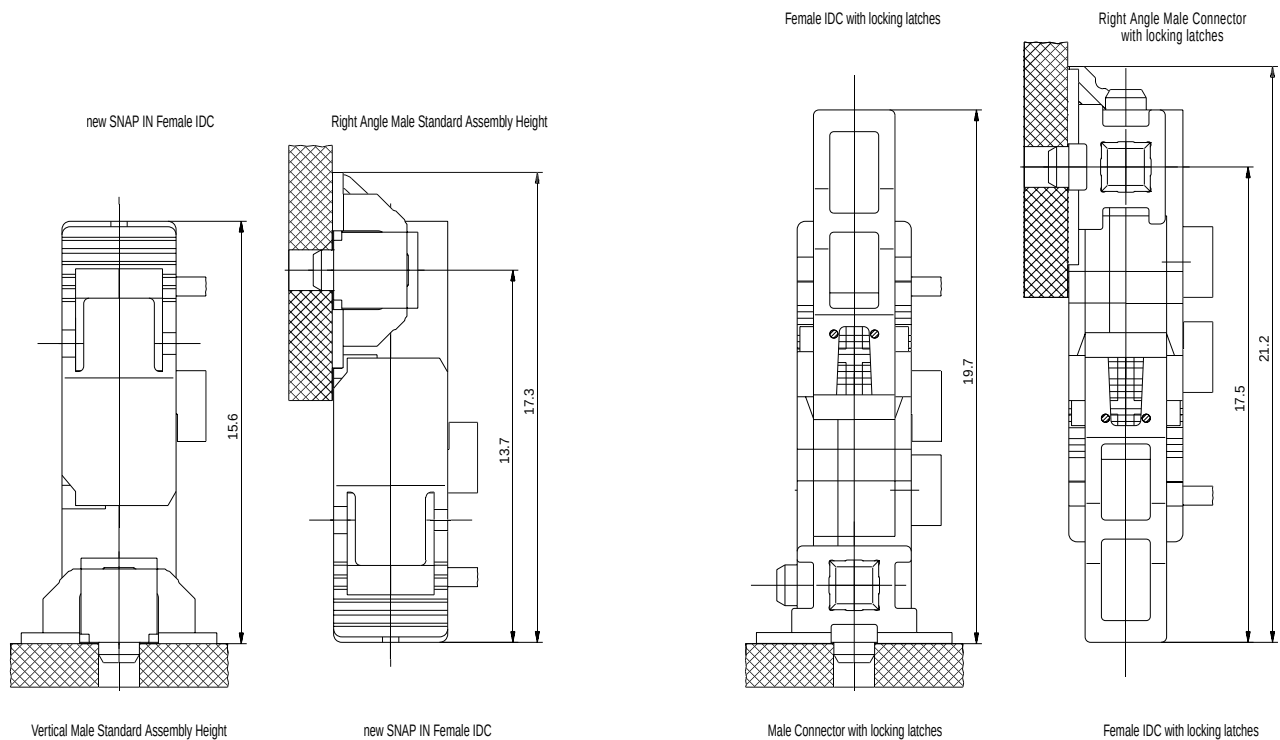


12	6.35	12.69	9.37	8.37
26	15.24	21.58	18.26	17.26
50	30.48	36.82	33.5	32.5
68	41.91	48.25	44.93	43.93
80	49.53	55.87	52.55	51.55
No. of contacts	A	C	D	E

IDC Female Connectors Type B with Locking Latches

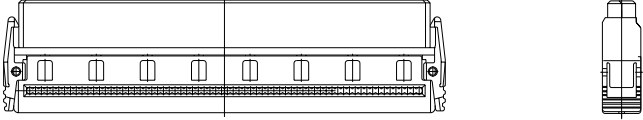
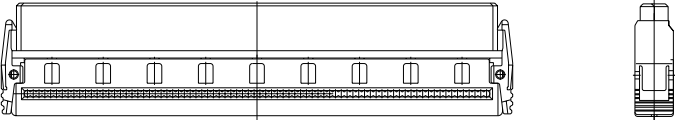
Ordering Information

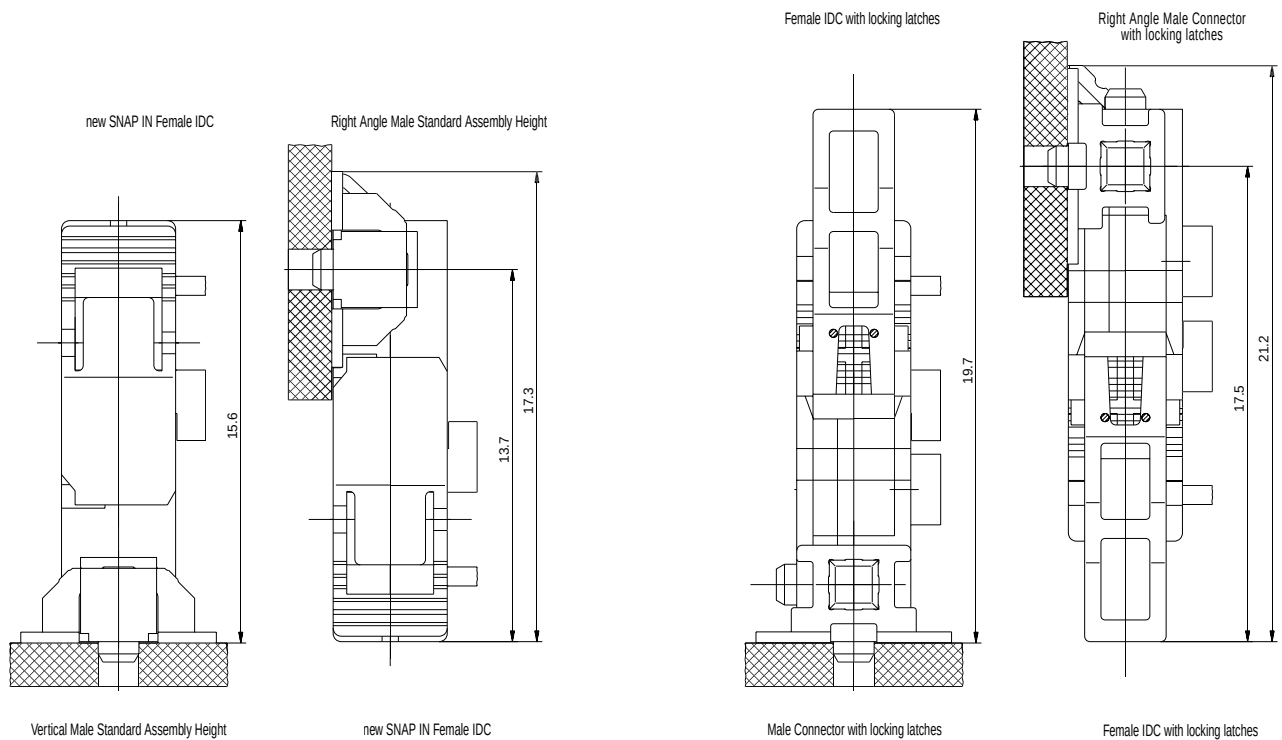
Configuration	No. of Pins	Part Number
Type B, without coding, tray package, 480 pcs/pack	12	124260
 		
Type B, without coding, tray package, 250 pcs/pack	26	124261
 		
Type B, without coding, Tray Package, 150 pcs/pack	50	124262
 		



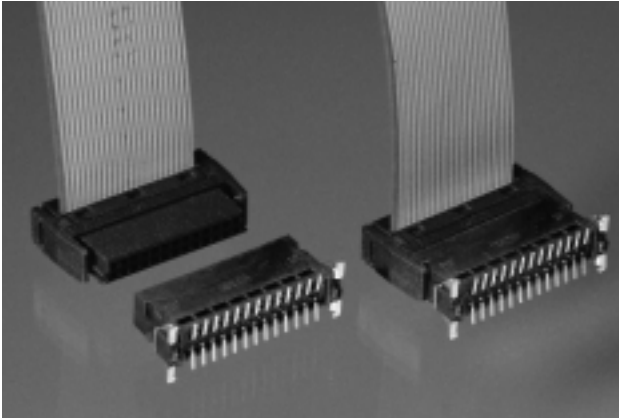
IDC Female Connectors Type B with Locking Latches

Ordering Information

Configuration	No. of Pins	Part Number
Type B, without coding, tray package, 100 pcs/pack	68	124263
		
Type B, without coding, tray package, 100 pcs/pack	80	124264
		



Ribbon Cable for IDC Connectors

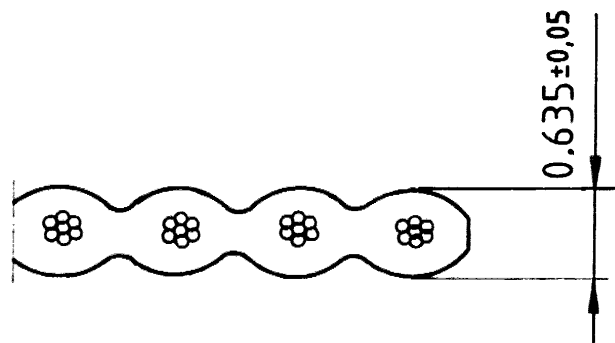
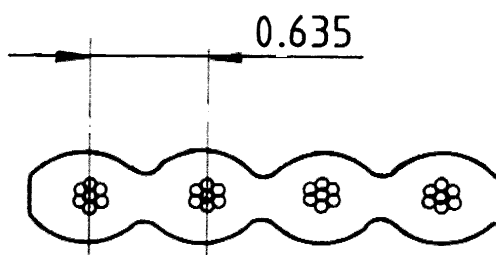


Specification for ribbon cable

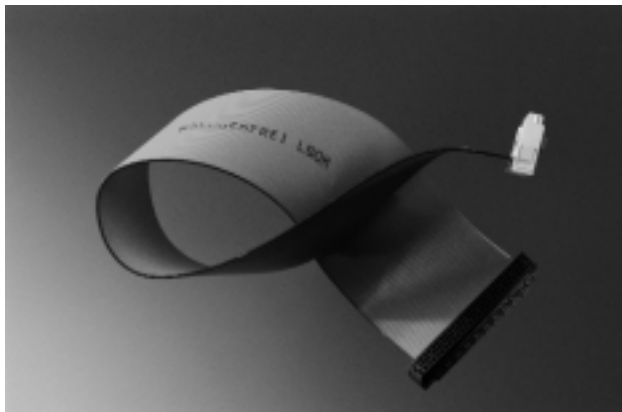
Wire size:	AWG30, stranded, tin plated
Wire stranding:	7 * 0.102 (7/38")
Insulation:	PVC, flame retardent VW-1, red stripe
Conductor spacing:	0.635 mm (0.025")
Temperature range:	-20°C... + 105°C
Voltage rating:	150V
Test voltage:	1500Veff
Conductor resistance:	max. 354Ω/km
Capacitance at 1 kHz:	95 pF/m
Inductance at 10 kHz:	0.5μH/m
Insulation resistance:	min. 30MΩ x km
UL-Style:	E2678

Ordering Information

No. of Pins	Length	Part Number
12	30.5 m	053786
26	30.5 m	053787
50	30.5 m	034575
68	30.5 m	134527
80	30.5 m	134528



Halogen Free Ribbon Cable For IDC Connectors

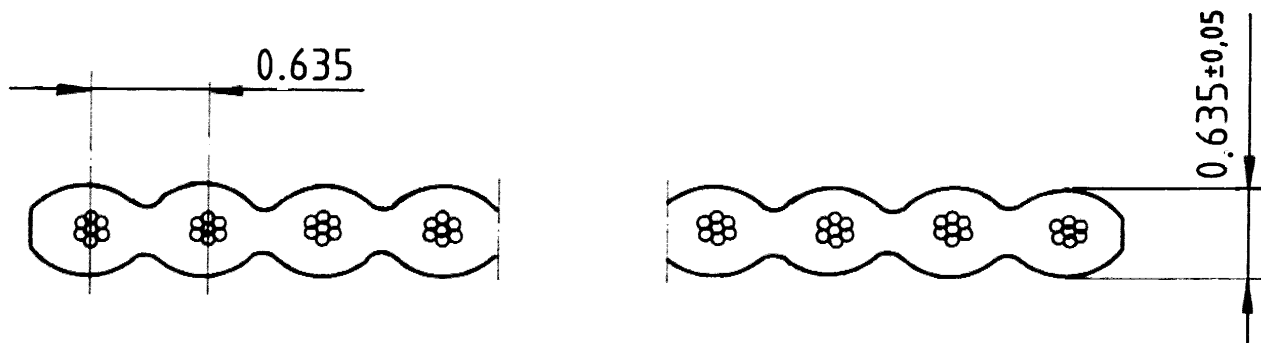


Specification for ribbon cable

Wire size:	AWG 30, stranded, tin plated
Wire Stranding:	7*0.102 mm
Insulation:	TPE/halide free
Conductor spacing:	0.635 mm
Temperatur range:	-20°C...+90°C
Voltage rating:	150V
Test voltage:	1500Veff
Conductor resistance:	max. $\leq 354\Omega/\text{km}$
Insulation resistance:	$\geq 20\text{M}\Omega \times \text{km}$
UL-Style:	E 2678

Ordering Information

No. of Pins	Length	Part Number
12	30.5 m	823822
26	30.5 m	823823
50	30.5 m	823824
68	30.5 m	134529
80	30.5 m	134530

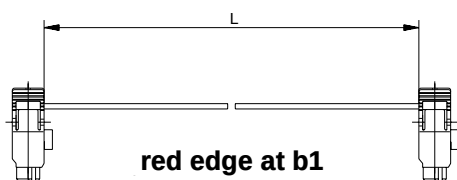


Cable Assemblies

Ordering Information

Configuration	Length (L)	Part Number
IDC Female Connector SMC, Type B, 12 position without coding, with locking latches (ERNI P/N: 124260).	300 mm	173801
	200 mm	173800
	100 mm	173799
IDC Female Connector SMC, Type B, 26 position without coding, with locking latches (ERNI P/N: 124261)..	300 mm	173798
	200 mm	173797
	100 mm	173796
IDC Female Connector SMC, Type B, 50 position without coding, with locking latches (ERNI P/N: 124262)..	300 mm	173795
	200 mm	173794
	100 mm	173793
IDC Female Connector SMC, Type B, 68 position without coding, with locking latches (ERNI P/N: 124263).	300 mm	193890
	200 mm	193889
	100 mm	193888
IDC Female Connector SMC, Type B, 80 position without coding with locking latches (ERNI P/N: 124264).	300 mm	193893
	200 mm	193892
	100 mm	193891

Drawing



Pressfit Tooling for Male Connectors

Ordering Information

Design	Type	Comment	Upper Tool Part Number	Lower Tool Part Number
Vertical Male 12 pin Pressfit	Q Standard Assembly Height	with quick change	220160	220165
Vertical Male 26 pin Pressfit	Q Standard Assembly Height	with quick change	220162	220167
Vertical Male 50 pin Pressfit	Q Standard Assembly Height	with quick change	220164	220169

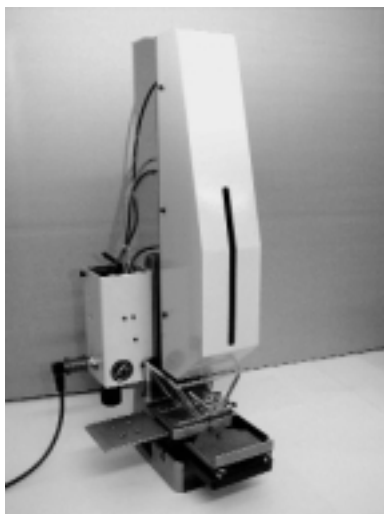
Tools for IDC Assemblies



Cable Cutting Tool



Hand Crimp Tool



Bench Press



Hand Lever Press

Ordering Information

Description	Part Number
Cable Cutting Tool	134296
Hand Crimp Tool	053283
Hand Lever Press	134297

Description	Part Number
Bench Press	134298
Toolset	134299

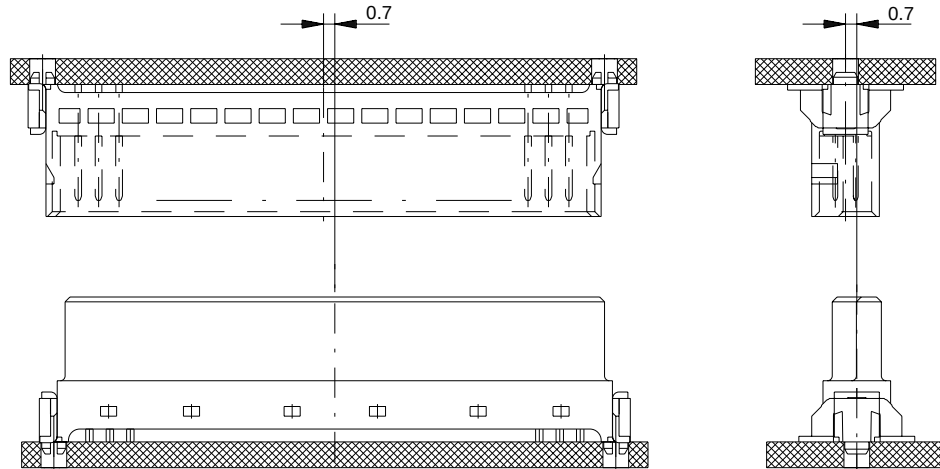


SMT Cross Reference List (Tape-and-Reel/Tube packaging)

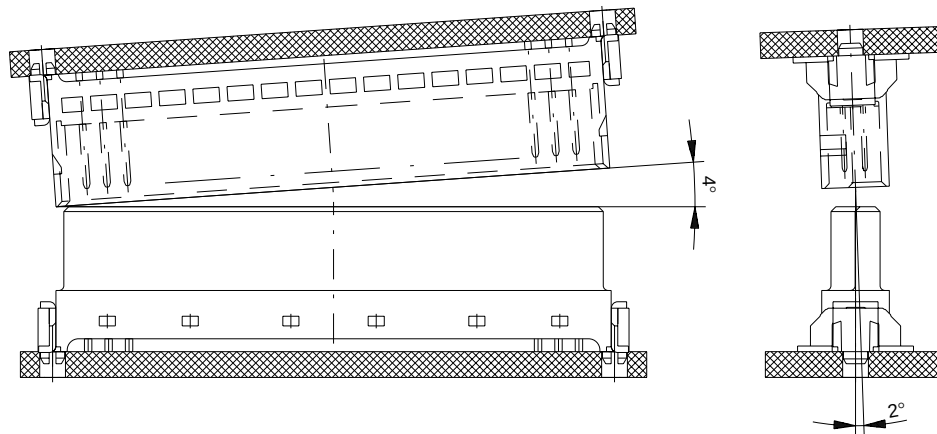
	Tape-and-Reel Packaging SMT Termination	Tube packaging SMT Termination with pick-and-place cover	Tube packaging SMT Termination without pick-and-place cover
Number of Pins	Female connector Type B	Female connector Type B	Female connector Type B
12	Part No. 124043	Part No. 104941	
26	Part No. 124044	Part No. 104942	
50	Part No. 124045	Part No. 104943	
Number of Pins	Female connector Type B low profile (8 mm height)	Female connector Type B low profile (8 mm height)	Female connector Type B low profile (8 mm height)
12	Part No. 064318	Part No. 063653	
26	Part No. 064317	Part No. 063651	
50	Part No. 064316	Part No. 063652	
Number of Pins	Female connector Type Q	Female connector Type Q	Female connector Type Q
12	Part No. 104557		Part No. 103523
26	Part No. 104558		Part No. 103524
50	Part No. 104559		Part No. 103525
Number of Pins	Male connector Type B	Male connector Type B	Male connector Type B
12	Part No. 054594		Part No. 044985
26	Part No. 054595		Part No. 044987
50	Part No. 054596		Part No. 063197
Number of Pins	Male connector Type Q	Male connector Type Q	Male connector Type Q
12	Part No. 063179	Part No. 054088	Part No. 053261
26	Part No. 063209	Part No. 063208	Part No. 063319
50	Part No. 063210	Part No. 054029	Part No. 054021
Number of Pins	Male connector Type Q low profile (8 mm height)	Male connector Type Q low profile (8 mm height)	Male connector Type Q low profile (8 mm height)
12	Part No. 064321	Part No. 063656	
26	Part No. 064320	Part No. 063655	
50	Part No. 064319	Part No. 063654	

Mating Conditions for SMC-Systems

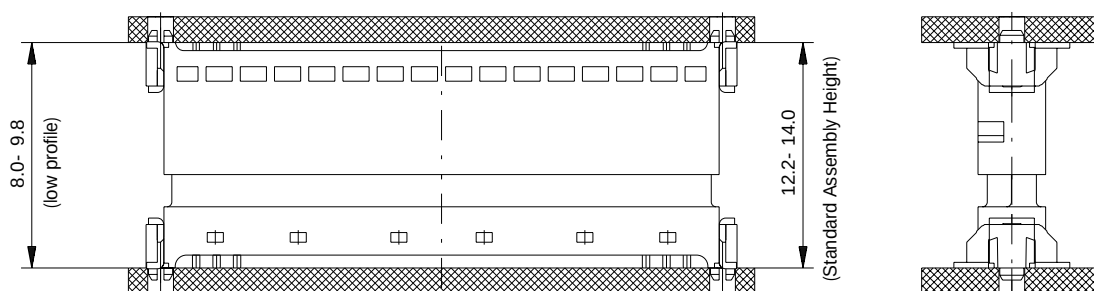
Allowed misalignment in longitudinal and transverse axes ± 0.7 mm



Allowed angular Inclination longitudinal: $\pm 4^\circ$, transverse: $\pm 2^\circ$



Maximum Board-to-Board distance for secure mating: 12.2-14.0 (Standard Assembly Height) / 8.0-9.8 (low profile)



Part Number Index

Part Number	Page	Part Number	Page
024403.....	30	134528.....	34
034575.....	34	134529.....	35
044658.....	30	134530.....	35
044663.....	30	173793.....	36
053283.....	37	173794.....	36
053786.....	34	173795.....	36
053787.....	34	173796.....	36
054594.....	11	173797.....	36
054595.....	11	173798.....	36
054596.....	11	173799.....	36
063179.....	14	173800.....	36
063209.....	14	173801.....	36
063210.....	14	220160.....	37
064002.....	19	220162.....	37
064003.....	19	220164.....	37
064004.....	19	220165.....	37
064316.....	26	220167.....	37
064317.....	26	220169.....	37
064318.....	26	823822.....	35
064319.....	17	823823.....	35
064320.....	17	823824.....	35
064321.....	17		
103754.....	21		
103755.....	21		
103756.....	21		
104557.....	28		
104558.....	28		
104559.....	28		
114803.....	24		
114804.....	24		
114805.....	12		
114806.....	12		
114807.....	15		
114808.....	15		
124043.....	23		
124044.....	23		
124045.....	23		
124260.....	32		
124261.....	32		
124262.....	32		
124263.....	33		
124264.....	33		
134296.....	37		
134297.....	37		
134298.....	37		
134299.....	37		
134527.....	34		

ERNI Elektroapparate GmbH

Seestrasse 9, Postfach
73099 Adelberg, Deutschland
Telefon +49 (0)71 66 50-0
Fax +49 (0)71 66 50-282
info@erni.de

Europe South America Africa

ERNI Electronics, Inc.

3005 E. Boundary Terrace
Midlothian, VA 23112 USA
Tel +1 (804) 530-5012
Fax +1 (804) 530-5232
info.usa@erni.com

North America Canada Mexico

ERNI Asia Holding Pte Ltd.

Blk 4008 Ang Mo Kio Avenue 10
#04-01/02 Techplace I
Singapore 569625
Telephone +65 6 555-5885
Fax +65 6 555-5995
info@erni-asia.com

Asia

© ERNI Components, Inc. 2001, Printed in U.S.A.

A policy of continuous improvement is followed and the right to alter any published data without notice is reserved.