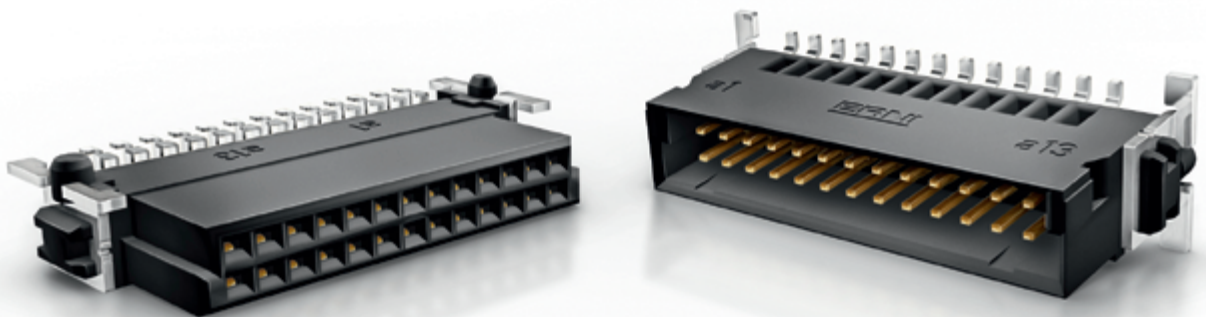


SMC

1.27 mm Connectors



Full-scale SMC 50 Pins



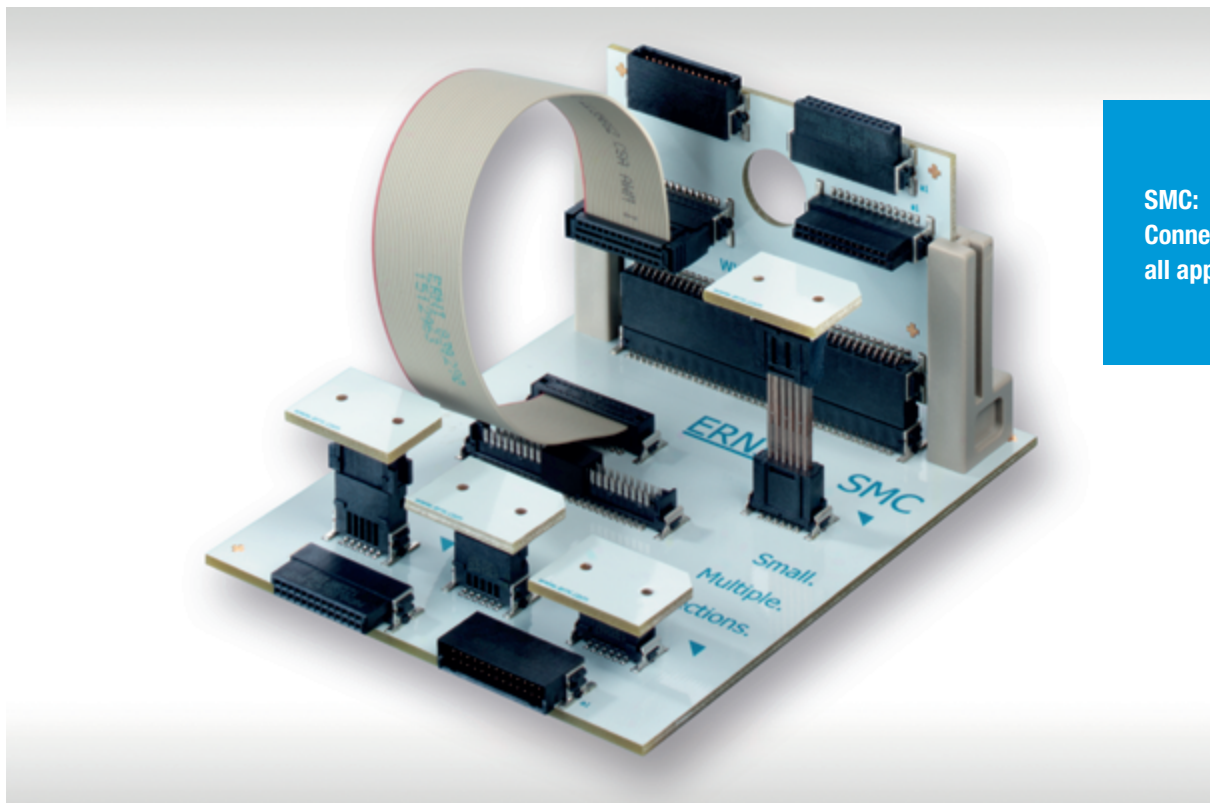
Ed. 08 | 09.2014

Catalog E 074473

SMC - 1.27 mm Connectors

DUAL ROW CONNECTOR

GENERAL



SMC:
Connectors for
all applications

Small Grid, Big Possibilities

Limited space and high performance demands are characteristics of many modern electronic systems, all of which the connectors must accommodate. There is a corresponding demand for compact, secure, and reliable connectors, with high signal integrity and a relatively high current-carrying capacity.

The comprehensive SMC range helps meet these requirements. The high-performance SMT connectors come in a number of different designs, heights, and contact densities in a 1.27 mm grid.

The basic design criteria for the SMC series include double-sided spring contacts for top-rate contact properties and maximum contact reliability, a

high-temperature resistant insulator with polarization and insertion chamfers, and a very high mating reliability.

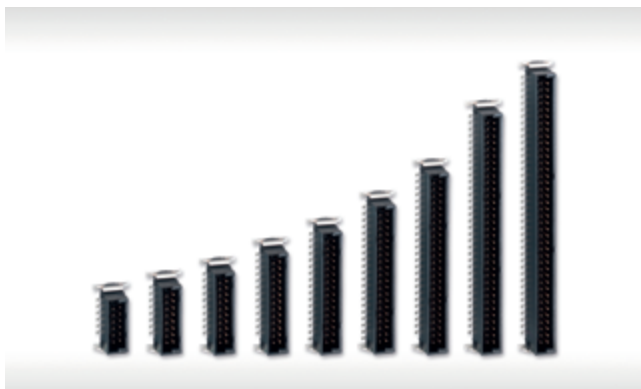
The perfect contact design exhibits a virtually continuous impedance profile and enables secure data transmission rates of up to 3 Gbit/s (differential) if the system is suitably designed.

SMC - 1.27 mm Connectors

CONCEPT

FEATURES

Pitch	1.27 mm
No. of Pins	12, 16, 20, 26, 32, 40, 50, 68, 80
Termination technology	SMT, individual variants in Pressfit technology
Applications	Data rate up to 3 Gbit/s Current rating up to 1.7 A per contact Board-to-board connections: - stacked (Mezzanine) - orthogonal - coplanar Wire-to-Board connections (ribbon cable): - pluggable - permanent
Connectors	Male connectors, vertical and right angle Female connectors, vertical and right angle Board-to-Board adapter Board-on IDC Cable assembly: - Female connectors IDC, right angle
Special versions	Lockable connectors Pressfit male connectors Reduced locating pegs / without pegs First mate/early break contacts

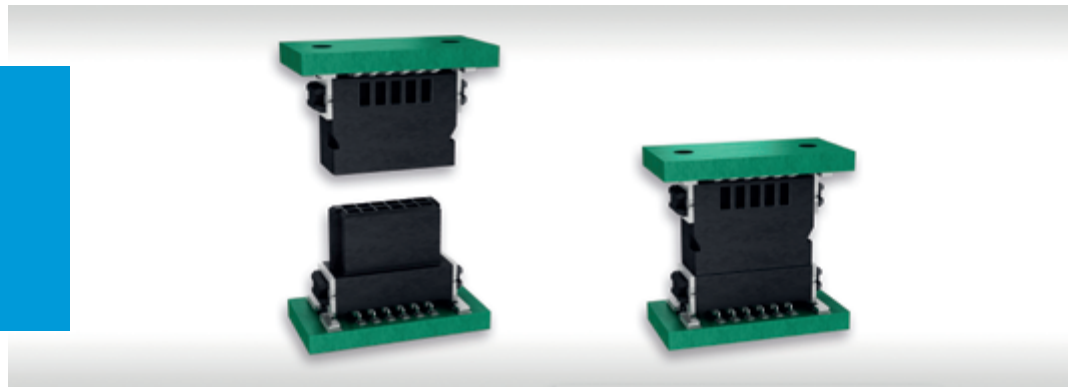


SMC - 1.27 mm Connectors

CONCEPT —

CAPABILITIES

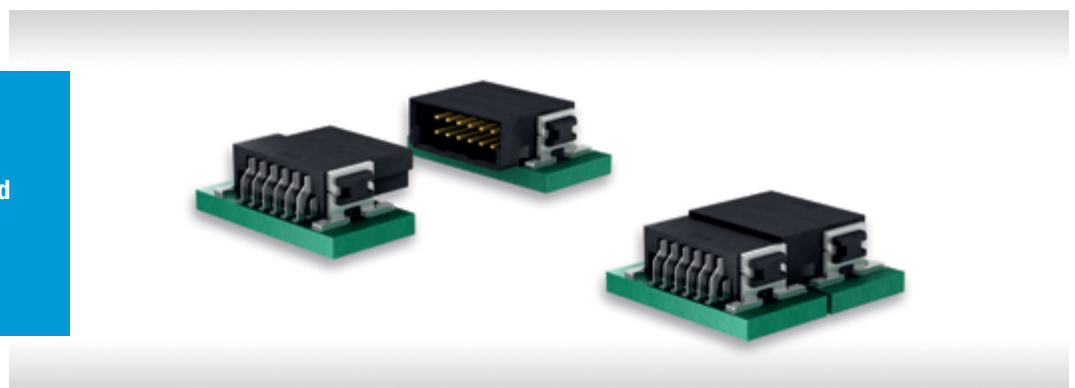
Stacked
boards
(Mezzanine)



Board-to-board
adapter: enhanced
board-to-board
heights



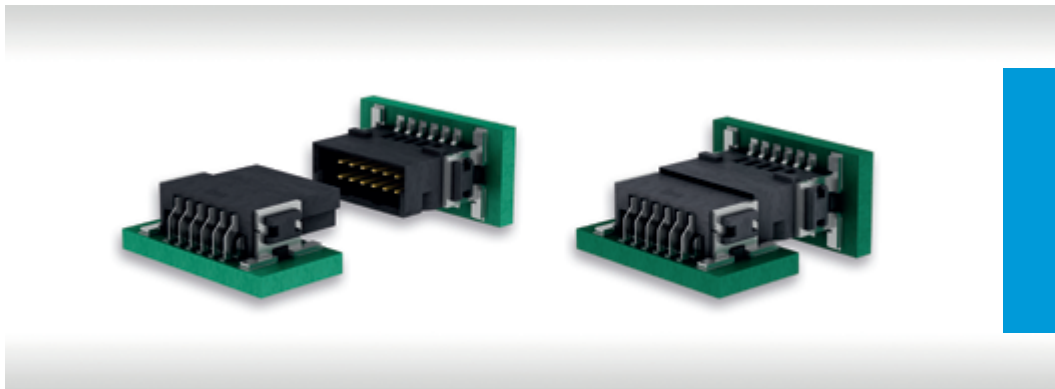
Extender card
(coplanar)



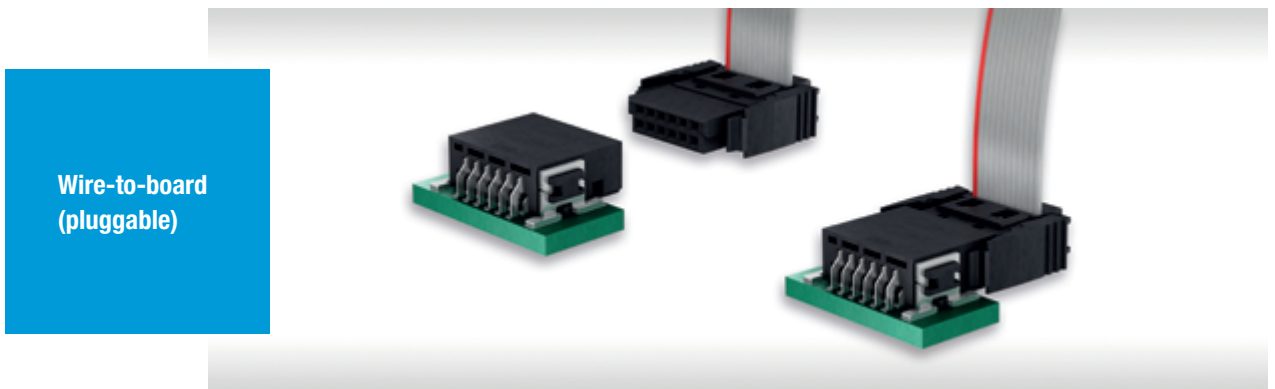
SMC - 1.27 mm Connectors

CONCEPT —

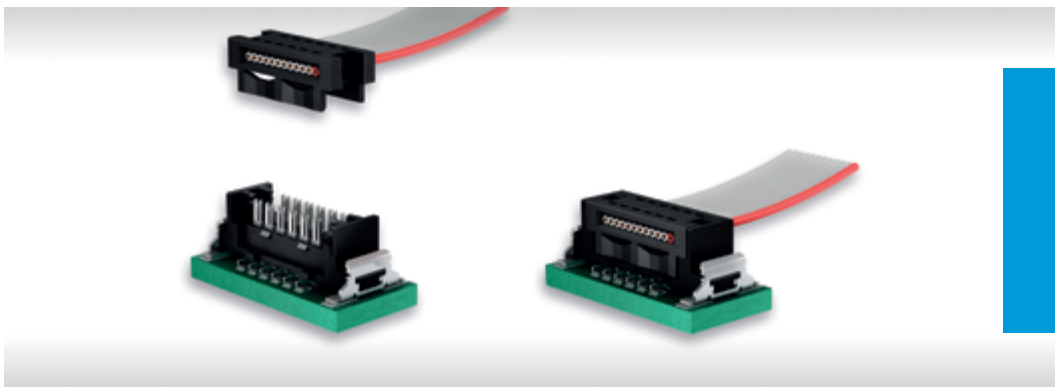
CAPABILITIES



Orthogonal
boards



Wire-to-board
(pluggable)



Wire-to-board
(permanent):
Board-on IDC

SMC - 1.27 mm Connectors

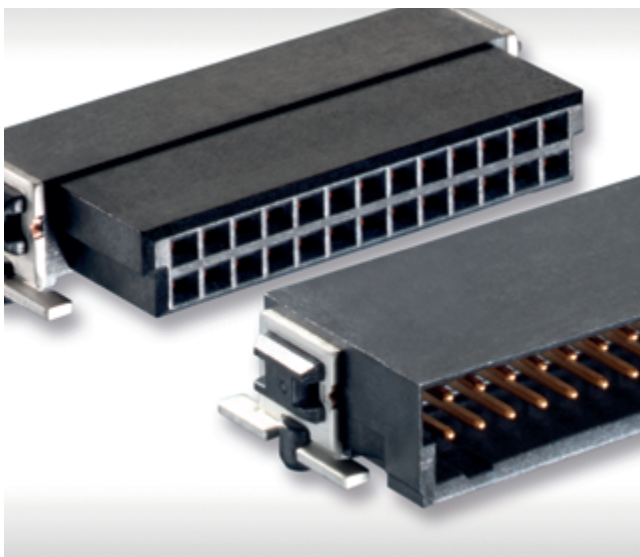
ADVANTAGES

HIGH RELIABLE CONTACT DESIGN



- ultra-reliable, dual-beam female contact
- twisted contact tulip (90°)
- rolled, homogeneous surface, guarantees secure contact mating
- wide contact surfaces between the mated pairs
- extremely low surface roughness minimizes abrasion
- low contact resistance

POLARIZATION / MATING FACE

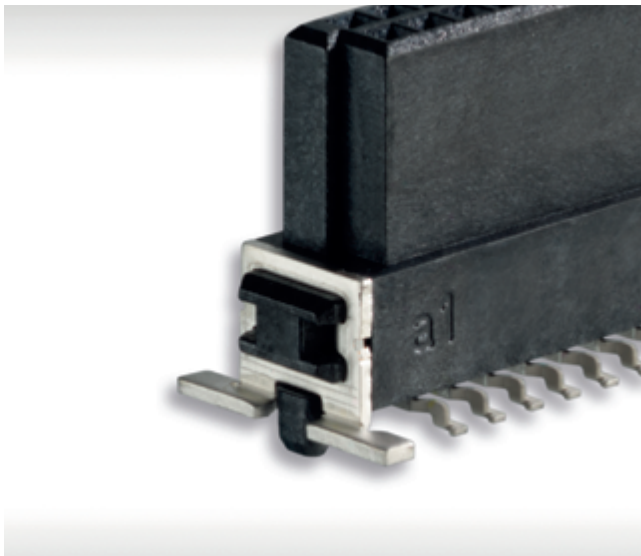


- mating face polarization prevents mismating and incorrect connection
- insertion chamfers in the capture range ensure secure mating
- distinctive guide elements for precise insertion

SMC - 1.27 mm Connectors

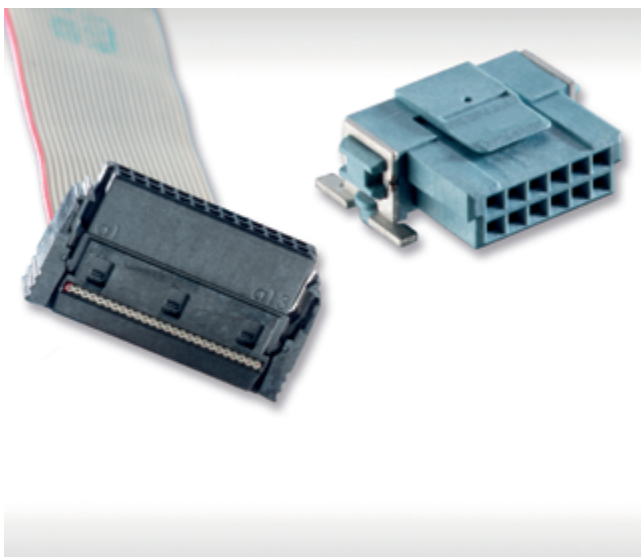
ADVANTAGES

ROBUST SOLDER CLIPS



- outstanding retention forces on the circuit board
- soldering brackets absorb mechanical stress and are able to withstand high shock and vibration loads
- documented shear and tear-off forces build trust in surface-mounted connectors (e.g., shear force: min. 1000 N; tear-off force: min. 100 N)

INTERLOCKING SNAP-IN



- lockable PCB and cable connectors
- secured against heavy vibration and shock loads
- snap-in: locking when mating; can only be released with tools
- cable connector: integrated locking lever; can be manually released without tools
- protection against accidental release of wire-to-board connections
- cable guide ensures strain relief

SMC - 1.27 mm Connectors

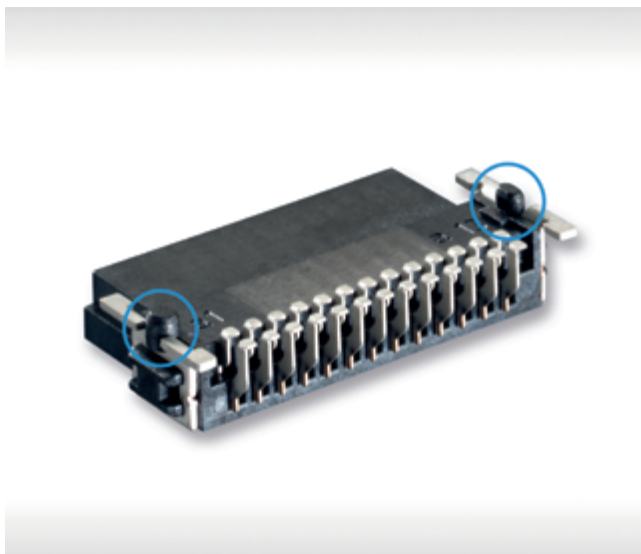
ADVANTAGES

SNAP-IN B-TO-B ADAPTER



- single-sided locking of board-to-board adapters on low-profile female connectors
- enables the mating and release of two boards always on one specified side

LOCATING PEGS



- geometrically heterogeneous locating pegs for precise positioning on the circuit board
- enables best possible compensation of PCB holes for both positive and negative tolerances

SMC - 1.27 mm Connectors

PROCESSING —

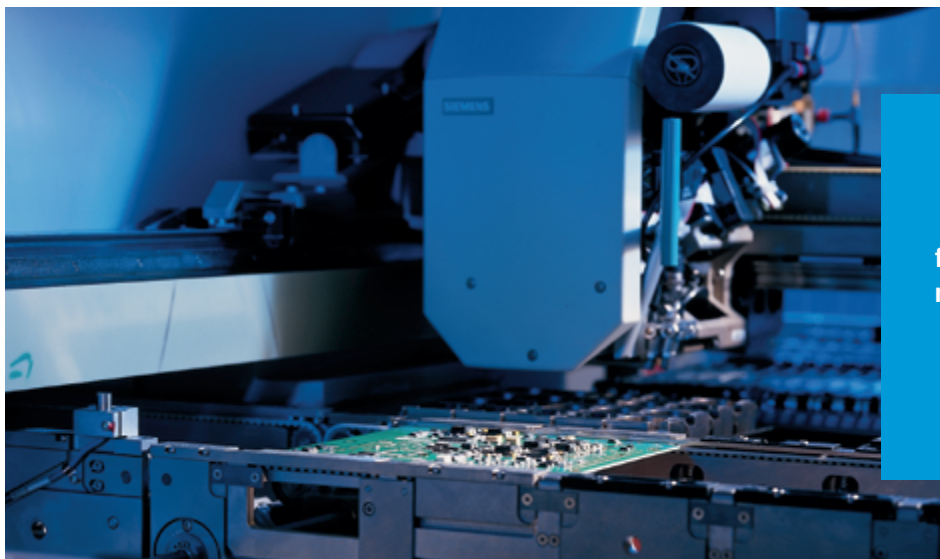
TAPE AND REEL PACKAGING

transport safe packaging
and fully automatic assembly



FULLY AUTOMATIC ASSEMBLY AND REFLOW SOLDERING

for efficient processing on
modern assembly lines

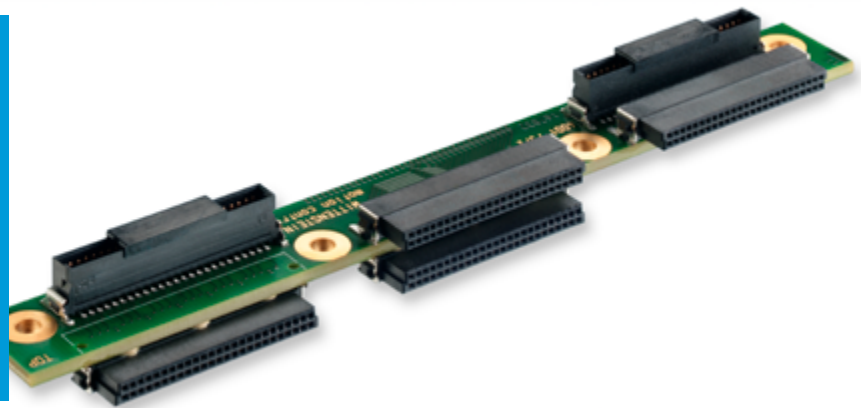


SMC - 1.27 mm Connectors

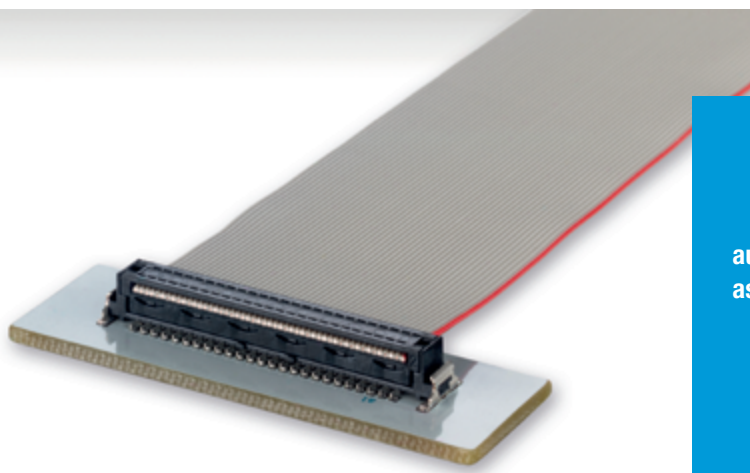
PROCESSING —

BACKSIDE REFLOW SOLDERING

capable of two sided reflow soldering



PERMANENT WIRE-TO-BOARD CONNECTION (BOARD-ON IDC)

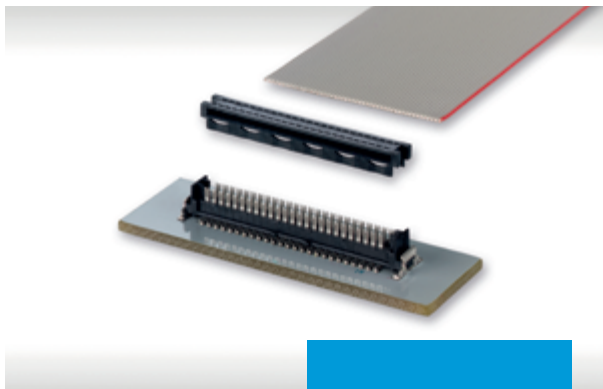


automated and cost-efficient assembly of ribbon cables

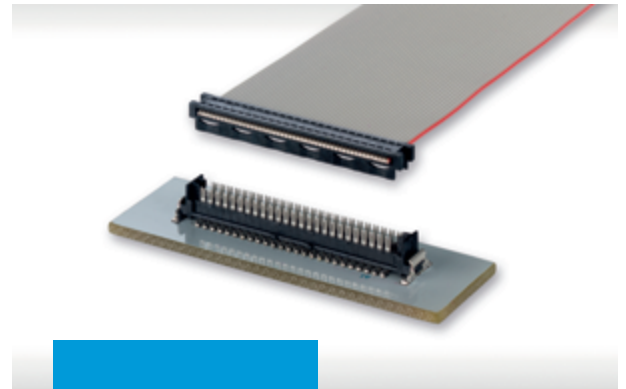
SMC - 1.27 mm Connectors

BOARD-ON IDC —

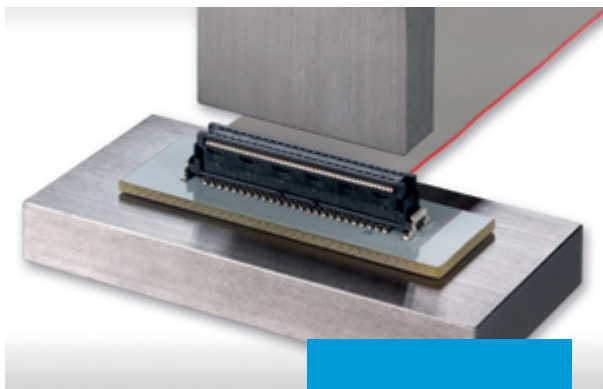
PERMANENT WIRE-TO-BOARD CONNECTION



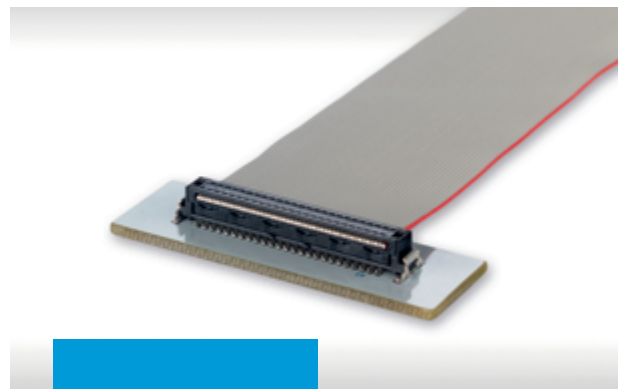
fully automated
assembly



feeding of the rib-
bon cable and cable
guide



press-in without
special tool

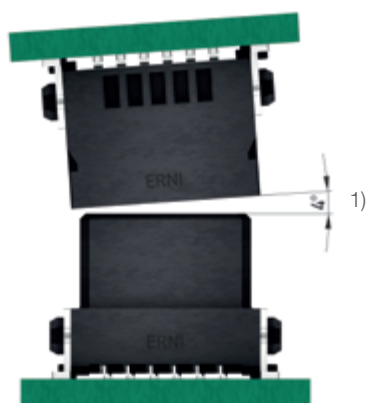


processed connec-
tion

SMC - 1.27 mm Connectors

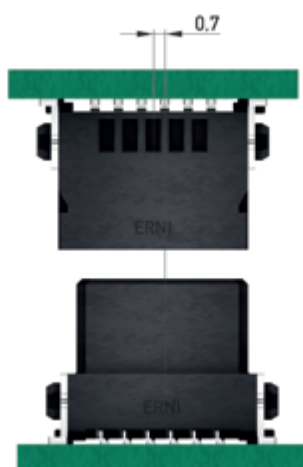
MATING CONDITIONS

ALLOWED INCLINATION FOR A SECURE SELF-CENTERING



1) depends on No. of Pins and misalignment tolerance

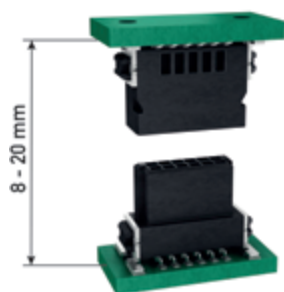
ALLOWED MISALIGNMENT TOLERANCES FOR A SECURE SELF-CENTERING



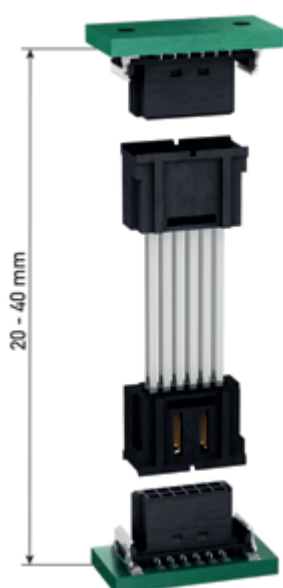
SMC - 1.27 mm Connectors

BOARD-TO-BOARD HEIGHT —

STACKED BOARDS / MEZZANINE



Board-to-Board Height	Male Stacking Height	Female Stacking Height
8.00 - 9.50 mm	1.75	6.25
9.50 - 11.0 mm	3.25	6.25
10.80 - 12.30 mm	1.75	9.05
12.30 - 13.80 mm	3.25	9.05
13.90 - 15.40 mm	4.85	9.05
15.40 - 16.90 mm	1.75	13.65
16.90 - 18.40 mm	3.25	13.65
18.50 - 20.00 mm	4.85	13.65



Board-to-Board Height	Board-to-Board Adapter	Female Stacking Height
20 mm	20	2 x 6.25
22 mm	22	2 x 6.25
24 mm	24	2 x 6.25
26 mm	26	2 x 6.25
28 mm	28	2 x 6.25
30 mm	30	2 x 6.25
32 mm	32	2 x 6.25
34 mm	34	2 x 6.25
36 mm	36	2 x 6.25
38 mm	38	2 x 6.25
40 mm	38 (reduced wipe length)	2 x 6.25

SMC - 1.27 mm Connectors

CHARACTERISTICS

TECHNICAL DATA

Description	Standard	PCB Connectors, Cable Assemblies, B-to-B Adapter	Board-on IDC (Ribbon Cable AWG 30, 250 mm)
Climate category	DIN EN 60068-1 test b	55 / 150 / 56	55 / 125 / 56
Temperature range		-55 / 125 °C (PCB Connectors) -55 / 105 °C (Cable Assemblies)	-55 / 105 °C
Current rating per contact	IEC60512 test 5b	12-pin version at 20 °C ambient temperature: 1.7 A (up to 2.7 A with optimized layout)	
Air- and creepage distance		contact - contact min. 0.4 mm	
Operating voltage	IEC 60664	The permissible operating voltages depend on the customer application and on the applicable or specified safety requirements. Insulation coordination according to IEC 60664-1 has to be regarded for the complete electrical device. Therefore, the maximum creepage and clearance distances of the mated connectors are specified for consideration as a part of the whole current path. In practice, reductions in creepage or clearance distances may occur due to the conductive pattern of the printed board or the wiring used, and have to be taken into account separately. As a result the creepage and clearance distances for the application may be reduced compared to those of the connector.	
Dielectric strength	IEC 60512 test 4a	contact - contact 500 V _{rms}	
Contact resistance	IEC 60512 test 2a	< 25 mΩ < 10 mΩ (cable assemblies)	< 10 mΩ
Insulation resistance	IEC 60512 test 3a	> 10 ⁴ MΩ	
Vibration, sine	IEC 60512 test 6d	10 – 2000 Hz 20 g	
Contact disturbance (while vibration test)	IEC 60512 test 2e	< 1 μs	
Shock halfsine	IEC 60512 test 6c	50 g 11 ms	
Contact disturbance (while shock test)	IEC 60512 test 2e	< 1 μs	

SMC - 1.27 mm Connectors

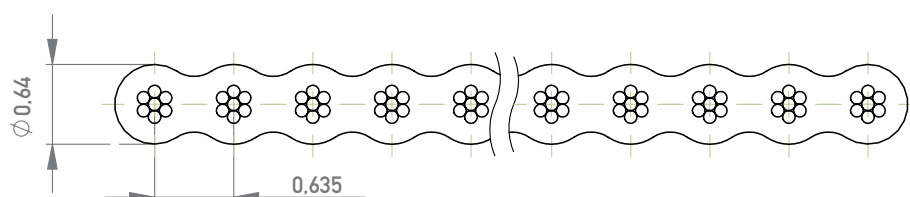
CHARACTERISTICS

Description	Standard	PCB Connectors, Cable Assemblies, B-to-B Adapter	Board-on IDC (Ribbon Cable AWG 30, 250 mm)
Mechanical operation	IEC 60512 test 9a	500 mating cycles	
Insertion and withdrawal force max.	IEC 60512 test 13b	0.5 N per contact	
Gauge retention force	IEC 60512 test 16e	> 0.1 N	
Processing Conditions			
Hand soldering temperature max.	IEC 60068-2-20	3.5 s at 350 °C	
Dip soldering temperature max.	IEC 60068-2-20	10 s at 260 °C	
Reflow soldering temperature max.	JEDEC J-STD-020	20 - 40 s at 260 °C	
Coplanarity		< 0.1 mm	
Housing Material			
Insulation body		LCP	
CTI value	IEC 112	175	
UL flame rating		UL 94 V-0	
UL file plastic material		E83005	
Contact Material			
Base material		Cu alloy	
Mating area		gold plating	—
Termination area		Sn	
Environment Compatibility			
Recycling		no flame-retardent additives, no toxic additives allow easy recycling	
Product Approval			
UL/CSA		E84703	

SMC - 1.27 mm Connectors

CABLE CHARACTERISTICS

TECHNICAL DATA FLAT RIBBON CABLES



Description	Standard cable (PVC)	High Temperature Cable (TPE-S)	Halogen-free Cable (Polyolefin TPE-O)
Cross section	AWG-30/ 7/ 0.06 mm ²		
Conductor	stranded Cu wire, tinned, 7x0.102 / 0.06 mm ²		
Coded wire	available		
Insulation	PVC gray (similar to RAL 78032)	TPE-S gray (similar to RAL 78032)	TPE-O gray (similar to RAL 78032)
Insulation thickness	min. 0.1mm		
Shore hardness	94 ±2 (Shore A)	52 ±3 (Shore D)	94 ±2 (Shore A); 50 ±3 (Shore D)
Technical Data			
Temperature range	-20/105 °C (fixed) -10/105 °C (mobile)	-60/125 °C (fixed) -40/125 °C (mobile)	-40/105 °C (fixed) -20/105 °C (mobile)
Dielectric strength	1500 V _{rms}	1000 V _{rms}	1200 V _{rms}
Conductor resistance	≤ 350 Ω/km at 20 °C		
Insulation resistance	≥ 20 MΩ x km at 20 °C		
Impedance	125 Ω (wire-wire) 80 Ω (Ground-Signal-Ground)	136 Ω (wire-wire)	110 Ω (wire-wire) 75 Ω (Ground-Signal-Ground)
Bending cycles (typical)	min. 1 million at 20 x cable diameter		
RoHS	compliant		
Flame rating	UL 94 VW-1	IEC 60332-1-2	UL 1581 (Horizontal Flame Test)

SMC - 1.27 mm Connectors

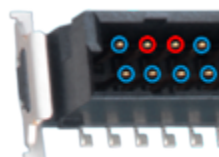
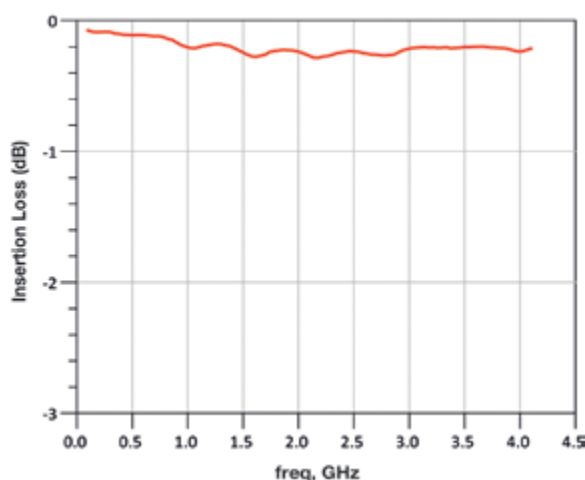
HIGH FREQUENCY CHARACTERISTICS

HIGH-SPEED DATA TRANSMISSION

SMC connectors as solution for unshielded high-speed applications. The practically continuous impedance profile allows for secure data transmission rates of up to 3 Gbit/s (differential) if the system is suitably designed.

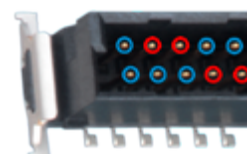
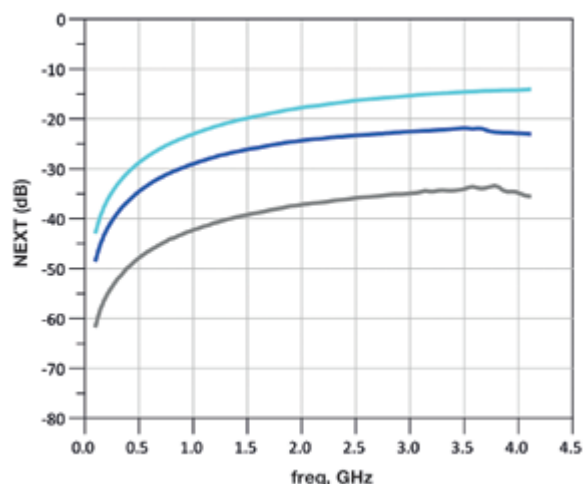
- De-embedded measurement results for the micro backplane/daughter card application
- 50-pin SMC, angled female connector, straight male connector (low profile)
- Differential signal transmission

INSERTION LOSS



- Ground
- Signal

NEAR END CROSSTALK (NEXT)



- Ground
- Signal

- Aggressor / Victim
- A2_3 / B2_3
 - A2_3 / A4_5
 - A2_3 / B4_5 (shown above)

SMC - 1.27 mm Connectors

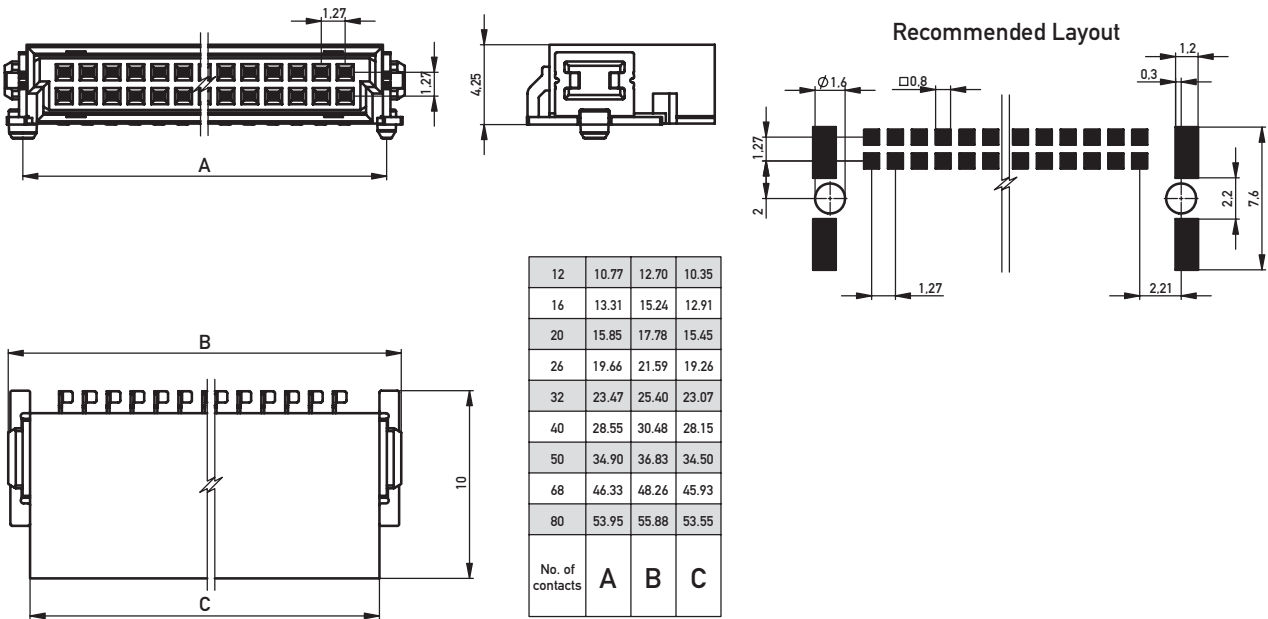
RIGHT ANGLE MALE

PRODUCT SPECIFICATION



- SMT termination
- dual row connector
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- black insulation body for fast and reliable visual recognition
- fully automated board assembly

DIMENSIONAL DRAWINGS



SMC - 1.27 mm Connectors

RIGHT ANGLE MALE —

ORDERING INFORMATION

No. of Pins	Packaging	Part Number
12	Tape and reel	154763
16	Tape and reel	354094
20	Tape and reel	354095
26	Tape and reel	154764
32	Tape and reel	354096
40	Tape and reel	354097
50	Tape and reel	154765
68	Tape and reel	154766
80	Tape and reel	154767

SMC - 1.27 mm Connectors

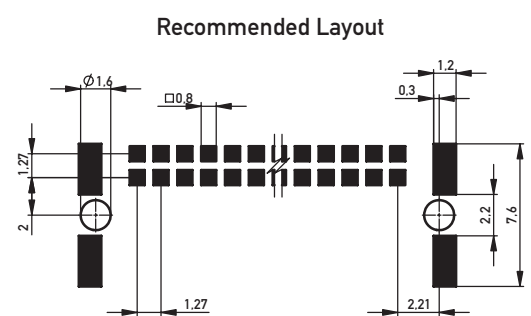
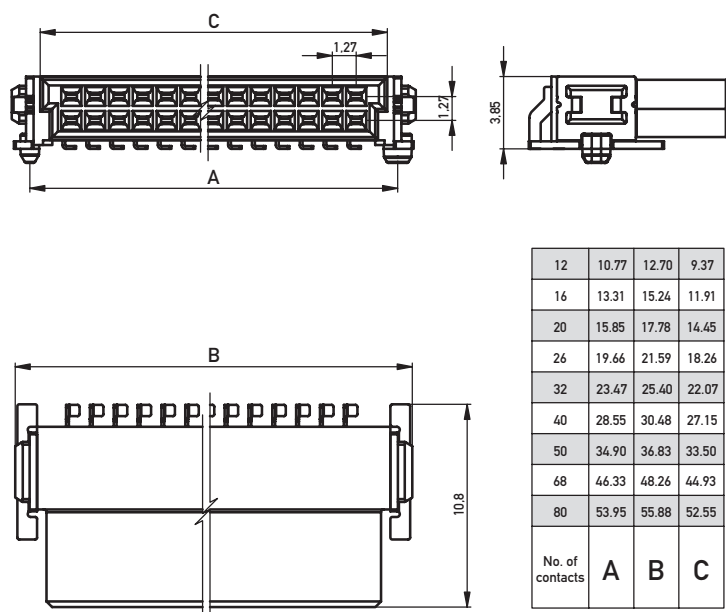
RIGHT ANGLE FEMALE

PRODUCT SPECIFICATION



- SMT termination
- dual row connector
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- black insulation body for fast and reliable visual recognition
- fully automated board assembly

DIMENSIONAL DRAWINGS



SMC - 1.27 mm Connectors

RIGHT ANGLE FEMALE

ORDERING INFORMATION

No. of Pins	Packaging	Part Number
12	Tape and reel	154740
16	Tape and reel	354078
20	Tape and reel	354079
26	Tape and reel	154741
32	Tape and reel	354080
40	Tape and reel	354081
50	Tape and reel	154742
68	Tape and reel	154743
80	Tape and reel	154744

SMC - 1.27 mm Connectors

VERTICAL MALE

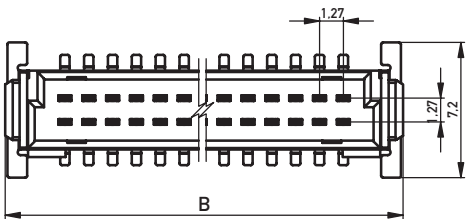
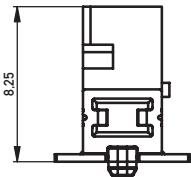
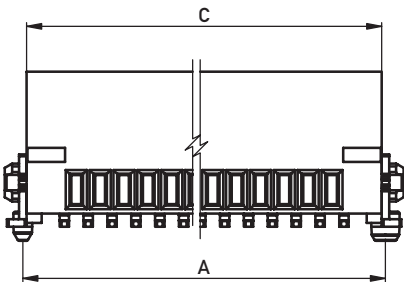
PRODUCT SPECIFICATION



- SMT termination
- dual row connector
- datarate up to 3 Gbit/s
- location pegs for exact board placement
- black insulation body for fast and reliable visual recognition
- fully automated board assembly
- 3 stacking heights (1.75, 3.25, 4.85 mm)

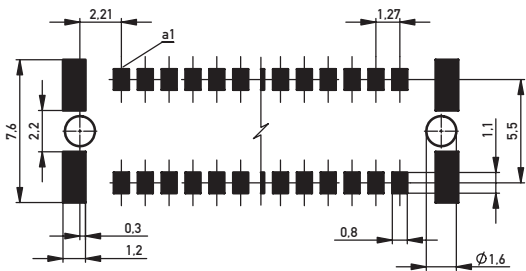
DIMENSIONAL DRAWINGS

Unmated Stacking Height 3.25 mm



12	10.77	12.70	10.37
16	13.31	15.24	12.91
20	15.85	17.78	15.45
26	19.66	21.59	19.26
32	23.47	25.40	23.07
40	28.55	30.48	28.15
50	34.90	36.83	34.50
68	46.33	48.26	45.93
80	53.95	55.88	53.55
No. of contacts	A	B	C

Recommended Layout



SMC - 1.27 mm Connectors

VERTICAL MALE

ORDERING INFORMATION

No. of Pins	Unmated Stacking Height	Packaging	Part Number
12	1.75	Tape and reel	244836
16	1.75	Tape and reel	254587
20	1.75	Tape and reel	254588
26	1.75	Tape and reel	244837
32	1.75	Tape and reel	254589
40	1.75	Tape and reel	254590
50	1.75	Tape and reel	244838
68	1.75	Tape and reel	244839
80	1.75	Tape and reel	244840
12	3.25	Tape and reel	244854
16	3.25	Tape and reel	254536
20	3.25	Tape and reel	254537
26	3.25	Tape and reel	244855
32	3.25	Tape and reel	254538
40	3.25	Tape and reel	254539
50	3.25	Tape and reel	244856
68	3.25	Tape and reel	244857
80	3.25	Tape and reel	244858

SMC - 1.27 mm Connectors

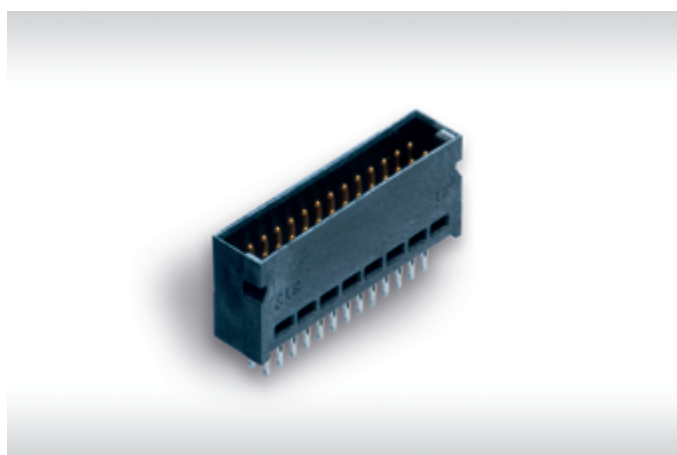
VERTICAL MALE —

No. of Pins	Unmated Stacking Height	Packaging	Part Number
12	4.85	Tape and reel	234206
16	4.85	Tape and reel	254414
20	4.85	Tape and reel	254415
26	4.85	Tape and reel	234207
32	4.85	Tape and reel	254416
40	4.85	Tape and reel	254417
50	4.85	Tape and reel	234208
68	4.85	Tape and reel	234209
80	4.85	Tape and reel	234210

SMC - 1.27 mm Connectors

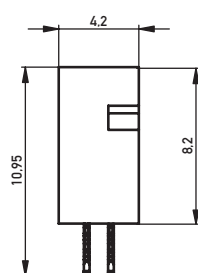
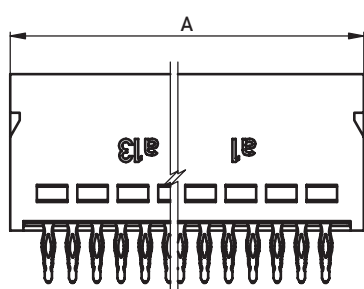
VERTICAL MALE PRESSFIT

PRODUCT SPECIFICATION

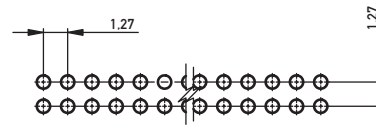


- pressfit termination
- dual row connector
- data rates up to 3 Gbit/s
- black insulation body for fast and reliable visual recognition
- fully automated board assembly
- stacking height 3.25 mm

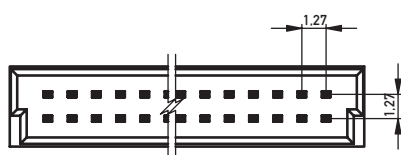
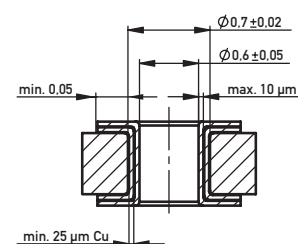
DIMENSIONAL DRAWINGS



Recommended Layout



Hole Design



12	10.35
26	19.24
50	34.48
68	45.91
80	53.53
No. of contacts	A

SMC - 1.27 mm Connectors

VERTICAL MALE PRESSFIT

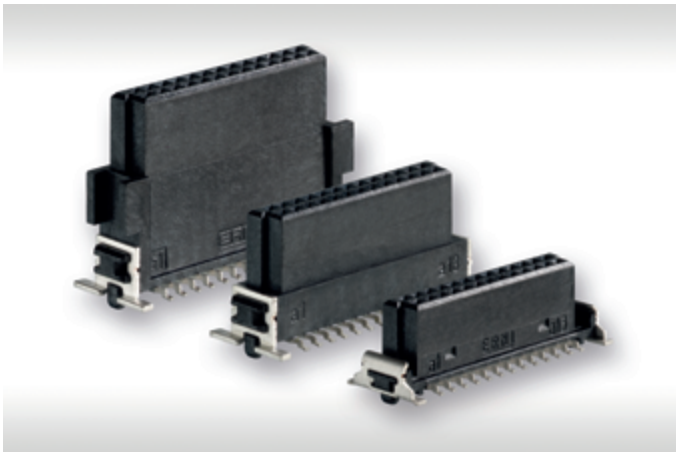
ORDERING INFORMATION

No. of Pins	Unmated Stacking Height	Packaging	Part Number
12	3.25	Tube	064002
26	3.25	Tube	064003
50	3.25	Tube	064004
68	3.25	Tube	144183
80	3.25	Tube	144185

SMC - 1.27 mm Connectors

VERTICAL FEMALE

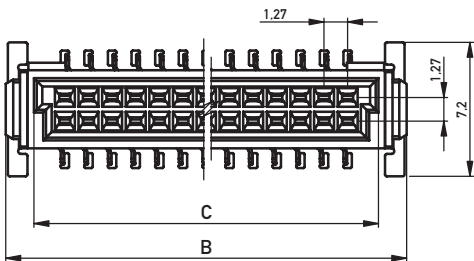
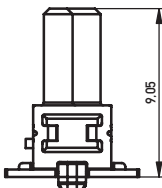
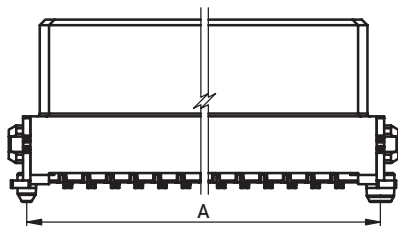
PRODUCT SPECIFICATION



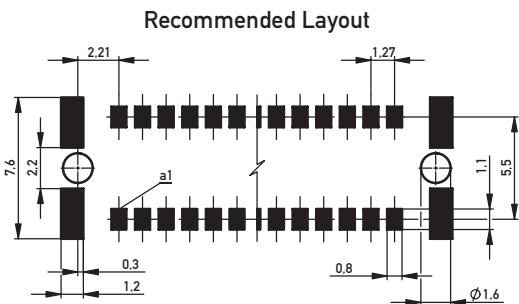
- SMT termination
- dual row connector
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- black insulation body for fast and reliable visual recognition
- fully automated board assembly
- 3 stacking heights (6.25, 9.05, 13.65 mm)

DIMENSIONAL DRAWINGS

Unmated Stacking Height 9.05 mm



12	10.77	12.70	9.37
16	13.31	15.24	11.91
20	15.85	17.78	14.45
26	19.66	21.60	18.26
32	23.47	25.40	22.07
40	28.55	30.48	27.15
50	34.90	36.80	33.50
68	46.33	48.20	44.93
80	53.95	55.80	52.55
No. of contacts	A	B	C



SMC - 1.27 mm Connectors

VERTICAL FEMALE

ORDERING INFORMATION

No. of Pins	Unmated Stacking Height	Packaging	Part Number
12	6.25	Tape and reel	154805
16	6.25	Tape and reel	354055
20	6.25	Tape and reel	354056
26	6.25	Tape and reel	154806
32	6.25	Tape and reel	354057
40	6.25	Tape and reel	204632
50	6.25	Tape and reel	154807
68	6.25	Tape and reel	154808
80	6.25	Tape and reel	154809
12	9.05	Tape and reel	154717
16	9.05	Tape and reel	354062
20	9.05	Tape and reel	354063
26	9.05	Tape and reel	154718
32	9.05	Tape and reel	354064
40	9.05	Tape and reel	354065
50	9.05	Tape and reel	154719
68	9.05	Tape and reel	154720
80	9.05	Tape and reel	154721

SMC - 1.27 mm Connectors

VERTICAL FEMALE —

No. of Pins	Unmated Stacking Height	Packaging	Part Number
12	13.65	Tape and reel	234198
16	13.65	Tape and reel	354070
20	13.65	Tape and reel	354071
26	13.65	Tape and reel	204763
32	13.65	Tape and reel	354072
40	13.65	Tape and reel	354073
50	13.65	Tape and reel	234199
68	13.65	Tape and reel	234200
80	13.65	Tape and reel	234201

SMC - 1.27 mm Connectors

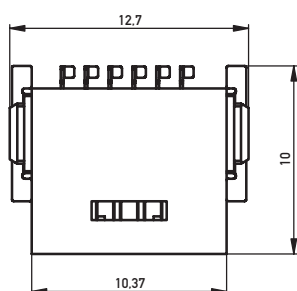
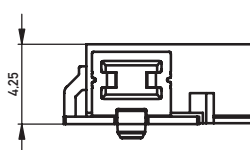
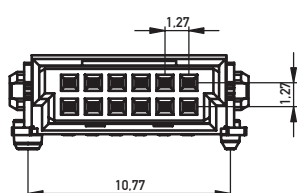
RIGHT ANGLE MALE WITH LOCKING SYSTEM

PRODUCT SPECIFICATION

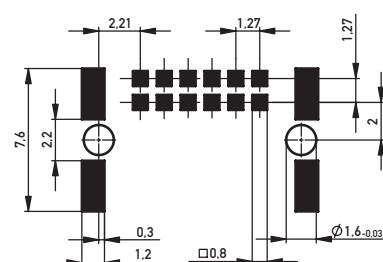


- two types of interlocking:
 - positive lock (blue colored): unlockable i.e. by tool, tip of pen
 - friction lock (black colored): unlockable without any tool
- SMT termination
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



Recommended Layout



SMC - 1.27 mm Connectors

RIGHT ANGLE MALE WITH LOCKING SYSTEM

ORDERING INFORMATION

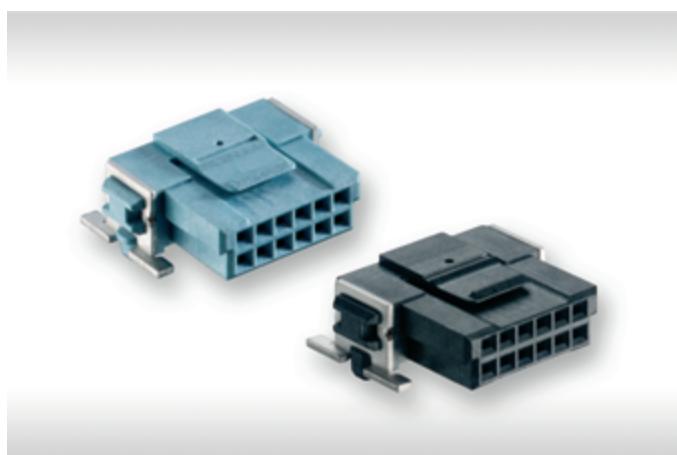
No. of Pins	Interlocking	Color	Packaging	Part Number
12	unlockable with tool	blue	Tape and reel	254273
12	unlockable without tool	black	Tape and reel	354949

Description	Part Number
Unlocking tool	484816

SMC - 1.27 mm Connectors

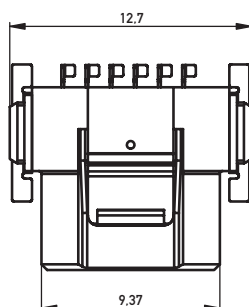
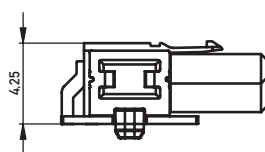
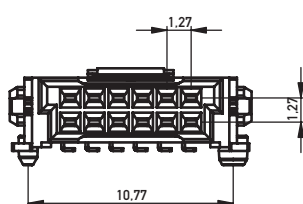
RIGHT ANGLE FEMALE WITH LOCKING SYSTEM

PRODUCT SPECIFICATION

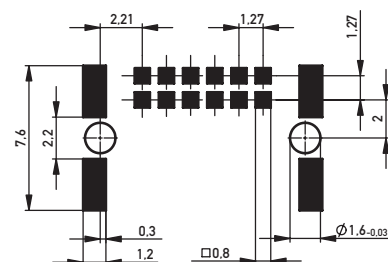


- two types of interlocking:
 - positive lock (blue colored): unlockable i.e. by tool, tip of pen
 - friction lock (black colored): unlockable without any tool
- SMT termination
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- fully automated board assembly

DIMENSIONAL DRAWINGS



Recommended Layout



SMC - 1.27 mm Connectors

RIGHT ANGLE FEMALE WITH LOCKING SYSTEM

ORDERING INFORMATION

No. of Pins	Interlocking	Color	Packaging	Part Number
12	unlockable with tool	blue	Tape and reel	254262
12	unlockable without tool	black	Tape and reel	354939

Description	Part Number
Unlocking tool	484816

SMC - 1.27 mm Connectors

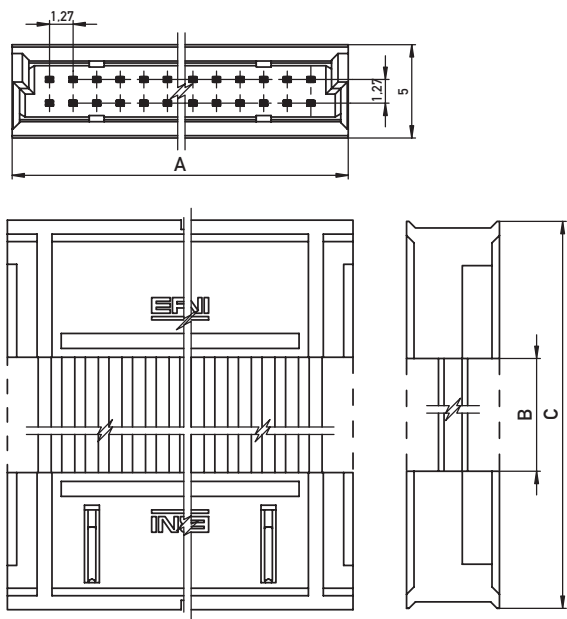
BOARD-TO-BOARD ADAPTER

PRODUCT SPECIFICATION



- Board-to-board Adapter for parallel PCB distances of 20-40 mm
- moulded (hotmelt) versions for improved environmental resistance and finger safe protection
- single-sided locking of board-to-board adapters on low-profile female connectors
- enables the mating and release of two boards always on one specified side

DIMENSIONAL DRAWINGS



12	10.37
26	19.26
50	34.5
68	45.93
80	53.55
No. of contacts	A

20	3.5	18.2
22	5.5	20.2
24	7.5	22.2
26	9.5	24.2
28	11.5	26.2
30	13.5	28.2
32	15.5	30.2
34	17.5	32.2
36	19.5	34.2
38	21.5	36.2
B-to-B Adapter (Board Distance)	B	C



SMC - 1.27 mm Connectors

BOARD-TO-BOARD ADAPTER

ORDERING INFORMATION

No. of Pins	Board Distance	Packaging	Part Number
12	20	Tray	364094
12	22	Tray	364095
12	24	Tray	364096
12	26	Tray	364097
12	28	Tray	364098
12	30	Tray	364099
12	32	Tray	364100
12	34	Tray	364101
12	36	Tray	364102
12	38	Tray	364103
26	20	Tray	364084
26	22	Tray	364085
26	24	Tray	364086
26	26	Tray	364087
26	28	Tray	364088
26	30	Tray	364089
26	32	Tray	364090
26	34	Tray	364091

Board-to-board distance 40 mm: Board-to-board Adapter 38 with reduced wipe length, on request

SMC - 1.27 mm Connectors

BOARD-TO-BOARD ADAPTER

No. of Pins	Board Distance	Packaging	Part Number
26	36	Tray	364092
26	38	Tray	364093
50	20	Tray	354307
50	22	Tray	354308
50	24	Tray	354309
50	26	Tray	354310
50	28	Tray	354311
50	30	Tray	354312
50	32	Tray	354313
50	34	Tray	354314
50	36	Tray	354315
50	38	Tray	354316
68	20	Tray	364715
68	22	Tray	354029
68	24	Tray	364717
68	26	Tray	364718
68	28	Tray	364719
68	30	Tray	364720
68	32	Tray	364721
68	34	Tray	364722

Board-to-board distance 40 mm: Board-to-board Adapter 38 with reduced wipe length, on request

SMC - 1.27 mm Connectors

BOARD-TO-BOARD ADAPTER —

No. of Pins	Board Distance	Packaging	Part Number
68	36	Tray	364723
68	38	Tray	364724
80	20	Tray	364725
80	22	Tray	364726
80	24	Tray	364727
80	26	Tray	364728
80	28	Tray	364729
80	30	Tray	364730
80	32	Tray	364731
80	34	Tray	364732
80	36	Tray	364733
80	38	Tray	354030

Board-to-board distance 40 mm: Board-to-board Adapter 38 with reduced wipe length, on request

Moulded Versions

No. of Pins	Board Distance	Packaging	Part Number
26	24	Tray	474589
50	22	Tray	474588

SMC - 1.27 mm Connectors

BOARD-ON IDC

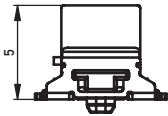
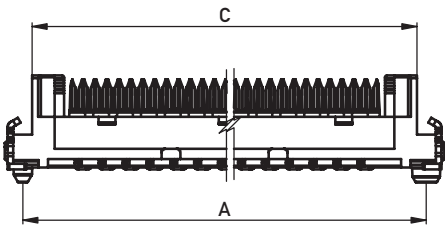
PRODUCT SPECIFICATION



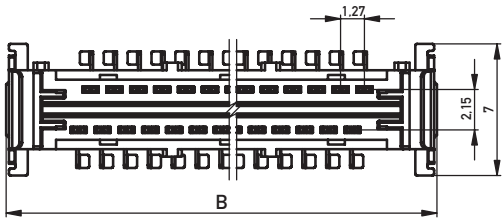
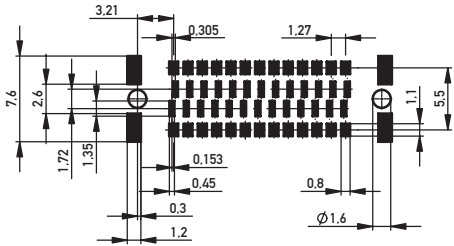
- permanent wire-to-board connection
- SMT and IDC termination
- dual row connector
- data rates up to 3 Gbit/s
- location pegs for exact board placement
- black insulation body for fast and reliable visual recognition
- flat ribbon cables AWG 30
- easy assembly with standard toggle press

DIMENSIONAL DRAWINGS

Board-on Connectors



Recommended Layout

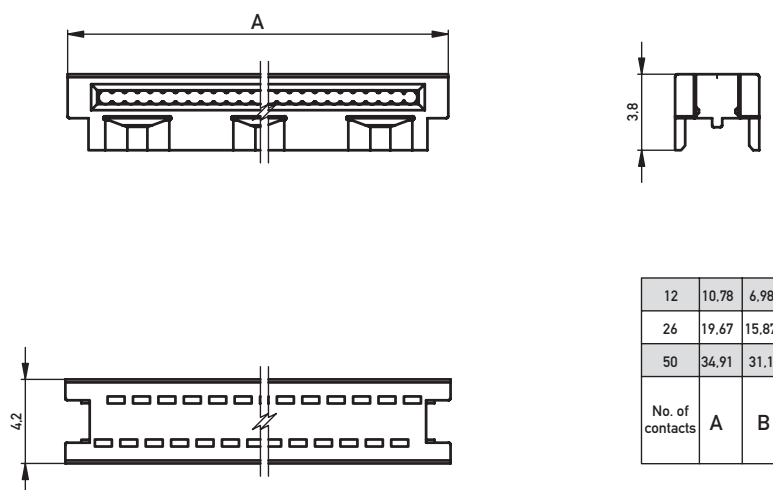


12	12.77	14.70	11.78
26	21.66	23.59	20.67
50	36.90	38.83	35.91
No. of contacts	A	B	C

SMC - 1.27 mm Connectors

BOARD-ON IDC

Board-on Cable Guide



ORDERING INFORMATION

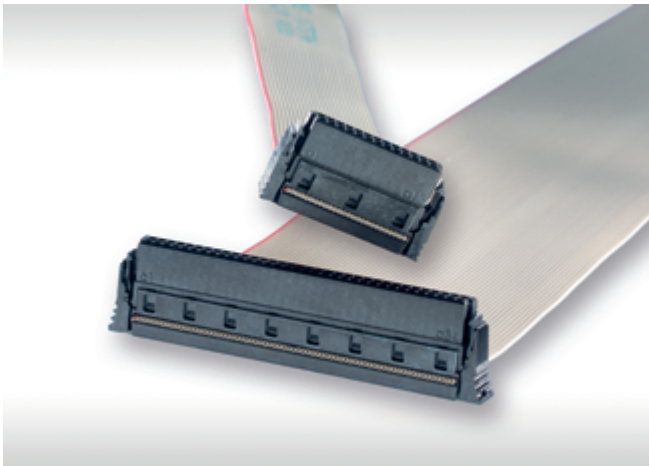
No. of Pins	Configuration	Packaging	Part Number
12	Connector	Tape and reel	244628
12	Cable guide	Poly bag	244631
26	Connector	Tape and reel	244629
26	Cable guide	Poly bag	244632
50	Connector	Tape and reel	244630
50	Cable guide	Poly bag	244633

Please order cable guide separately.

SMC - 1.27 mm Connectors

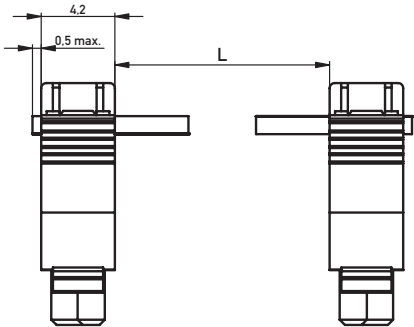
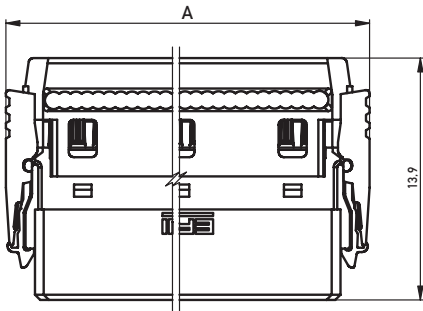
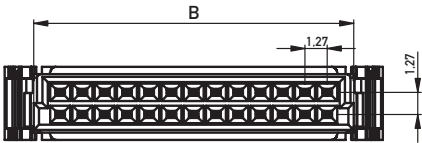
CABLE ASSEMBLIES

PRODUCT SPECIFICATION



- cable assemblies with IDC female connectors
- ribbon cable AWG 30/7
- three different cable types
- assemblies with single wire or shielded wires are possible (on request)

DIMENSIONAL DRAWINGS



12	12.69	9.37
16	15.23	11.91
20	17.77	14.45
26	21.58	18.26
32	25.39	22.07
40	32.53	27.15
50	38.88	33.50
68	50.31	44.93
80	57.93	52.55
No. of contacts	A	B

SMC - 1.27 mm Connectors

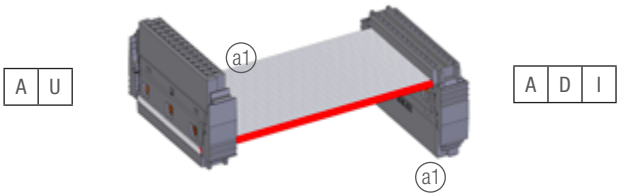
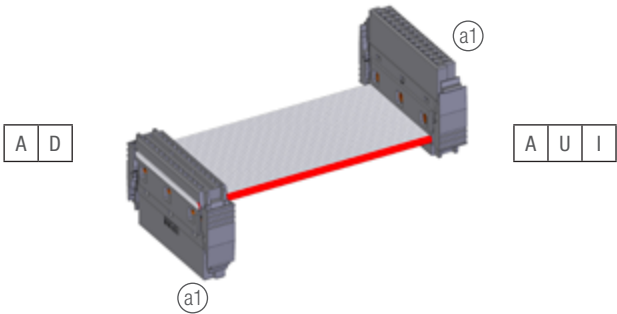
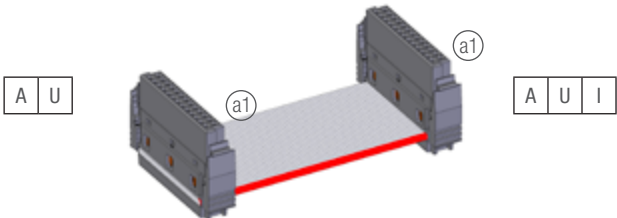
CABLE ASSEMBLIES

CONFIGURATIONS

Standard

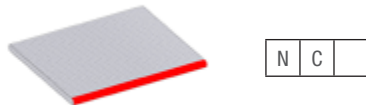
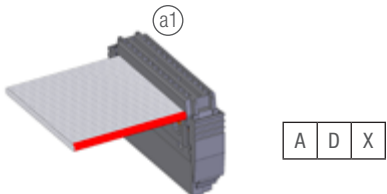
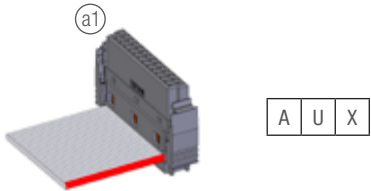
Connector #1

Connector #2



Crossed

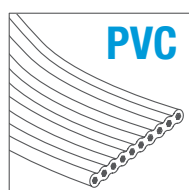
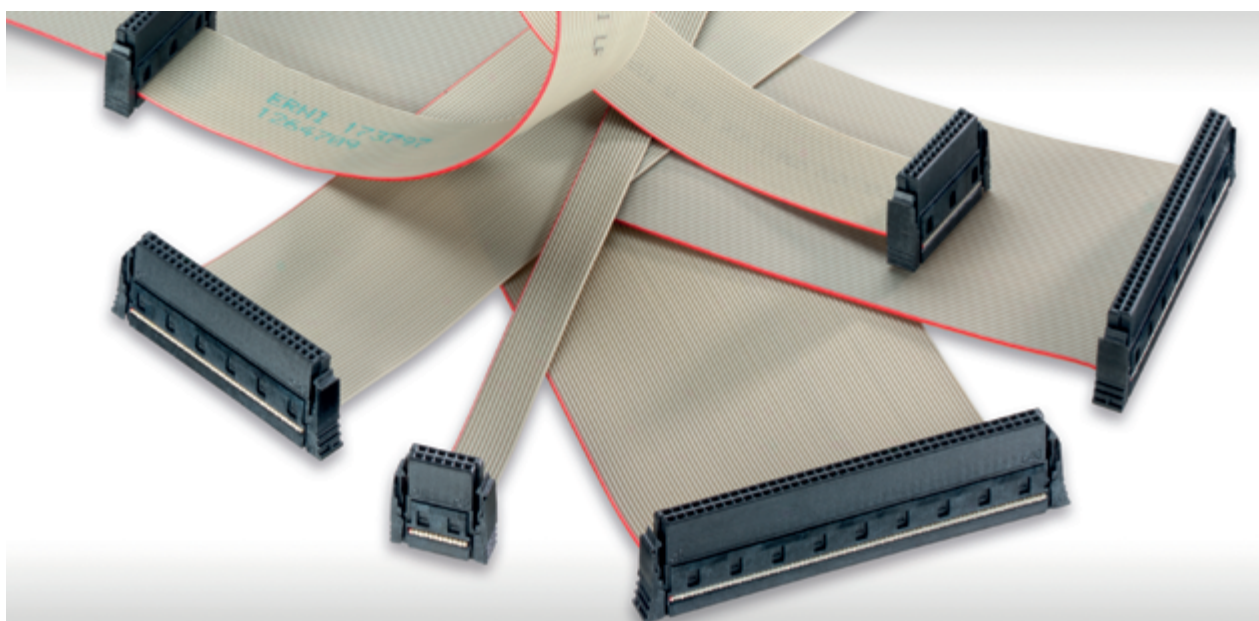
Connector #2



SMC - 1.27 mm Connectors

CABLE ASSEMBLIES

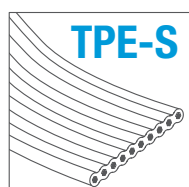
CABLE TYPES



PVC

Standard

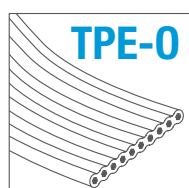
- Standard ribbon cable with PVC insulation
- AWG 30/7
- excellent abrasion and cut resistance
- temperature range: -20 °C to +105 °C (fixed)



TPE-S

High Temperature

- High temperature resistant ribbon cable with TPE-S insulation
- AWG 30/7
- excellent abrasion and cut resistance
- flexible at low temperatures up to -50 °C
- temperature range: -60 °C to +125 °C (fixed)



TPE-O

Halogen-free

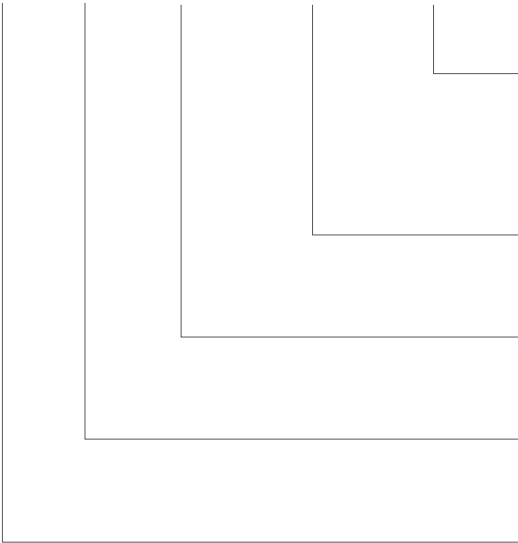
- Halogen-free ribbon cable with TPE-O insulation
- AWG 30/7
- excellent abrasion and cut resistance
- Oil-resistant (ASTM 2)
- temperature range: -40 °C to +105 °C (fixed)

SMC - 1.27 mm Connectors

CABLE ASSEMBLIES

ORDERIN INFORMATION STANDARD CABLE ASSEMBLIES

IDCCS _ SMC _ 1.27 _ _ _ _



- Cable type**
PV: Standard (PVC)
HT: High temperature (TPE-S)
HF: Halogen-free (TPE-O)
- Length**
in mm
- Connector #2**
e.g.: AUI or AUX
- Connector #1**
e.g.: AU
- No. of Contacts**
12, 16, 20, 26, 32, 40, 50, 68, 80

Example for a standard configuration:

IDCCS_SMC_1.27_12_AU_AUI_01000_PV

SMC cable assembly, 12-pin, assembled on both sides with equal connector orientation, length 1000 mm, pin assignment 1:1

SMC - 1.27 mm Connectors

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SMC - 1.27 mm Connectors

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SMC - 1.27 mm Connectors

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ERNI Electronics GmbH & Co. KG

Europe South America Africa

Seestrasse 9
73099 Adelberg
Germany
Tel +49 7166 50-0
Fax +49 7166 50-282
info@erni.com
www.erni.com

ERNI Electronics, Inc.

North America Canada Mexico

2201 Westwood Ave
Richmond, VA 23230/USA
Tel +1 804 228-4100
Fax +1 804 228-4099
info@erni.us

ERNI Asia Holding Pte Ltd.

Asia Australia New Zealand

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

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