

ODU FLAKAFIX

PCB Connectors



Contents

Chapter		From page	
1	IDC sockets, Series 517	3	
2	Pin headers, Series 511	10	
3	IDC PCB connectors, Series 533	47	
4	Flat cable and processing tools	50	

Description:

The ODU FLAKAFIX system offers a reliable and economical solution for connecting PCB's. This board-to-wire connector features contact stability, reliable long-term behaviour, low contact resistances and gas-proof contact points on the conductor.

**Board-to-wire connector,
pitch 2.54 mm. ODU also offer
cable assemblies.**

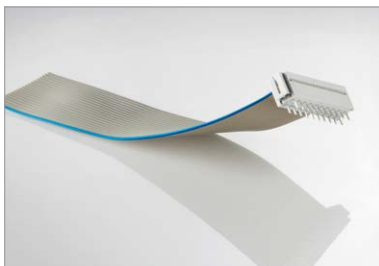
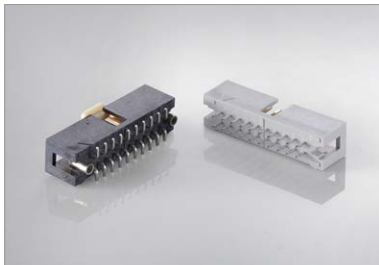
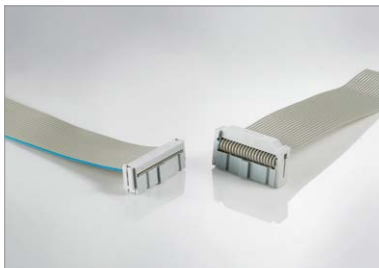
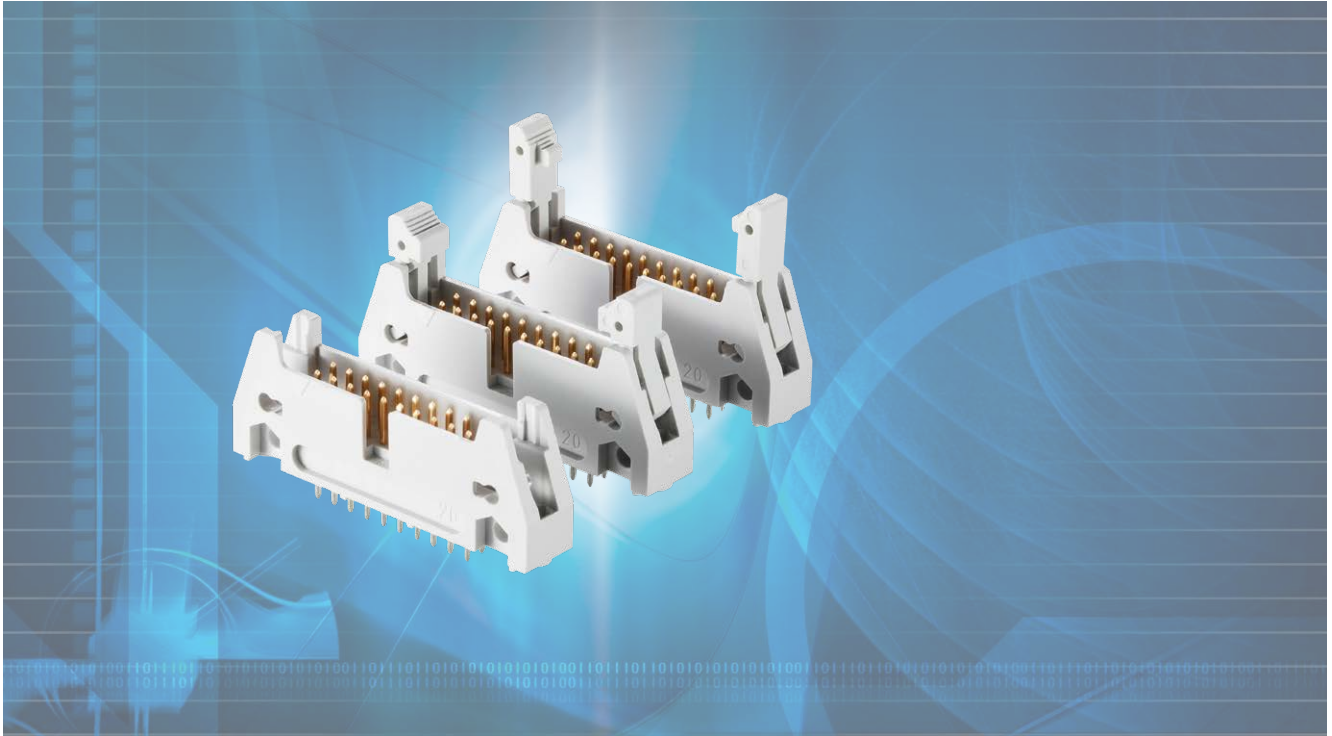
Features:

- Detachable connection using IDC sockets and headers
- Non-detachable connection using IDC PCB connector
- 2-row design
- 10 to 64 contacts
- UL approved
- Fully automatic placement (pick-and-place) of the SMT models using vacuum adapter plate and tape-and-reel packaging
- Extensive accessories and processing tools
- Assembly directly by ODU also possible

All dimensions in mm.
Some of the pictures are illustrations.
Errors and omissions excepted.

Issue: 2024-01

ODU FLAKAFIX IDC sockets Series 517



Contents

IDC sockets, Series 517

Chapter		From page	
1	Number codes for ODU FLAKAFIX, Series 517	5	
2	Single-U IDC contact Double-action spring contact	6	
4	Accessories	8	
	Strain relief	8	
	Locking latch	8	
	Spring clip	9	

No.	Meaning	Coding
A	Series	517 = IDC sockets
B	Model	0 = Cover plate, loose 1 = Cover plate, preloaded (upon request)
C	Type	75 = Single-U IDC contact, double action spring contact 76 = Single-U IDC contact, double action spring contact with strain relief
D	Surface plating	003 = In mating area 0.5 µm Au on Ni in termination area min. 1.0 µm Sn on Ni (standard) 009 = Flash-gold-plated (upon request) 035 = In mating area 0.75 µm Au on Ni (upon request) In termination area min. 1.0 µm Sn on Ni (standard)
E	Number of contacts	010 = 10 contacts (example)
F	Packaging	010 = Cardboard box /box

A			B		C		D				E			F				
5	1	7	.	0	7	5	.	0	0	3	.	0	1	0	.	0	1	0

Page 5

IDC sockets, Series 517 with single-U IDC contact

Double-action spring contact

Features

- Pluggable on all pin headers in cross-section 0.64×0.64 mm
- Plug compatible with all leading manufacturers
- With and without strain relief
- 10 to 64 contacts
- With keying pin
- In accordance with DIN EN 60603-13 (DIN 41651)
- Available with spring clip locking
-  approved

Technical data

Electrical specification

Contact load: ≤ 1 A at wire cross-section 0.08 mm^2 (AWG 28)
 ≤ 1.5 A at wire cross-section 0.14 mm^2 (AWG 26)

Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^\circ\text{C}$

Humidity level: 93 % rel. humidity in accordance with DIN EN 60603-13

Material and surface plating

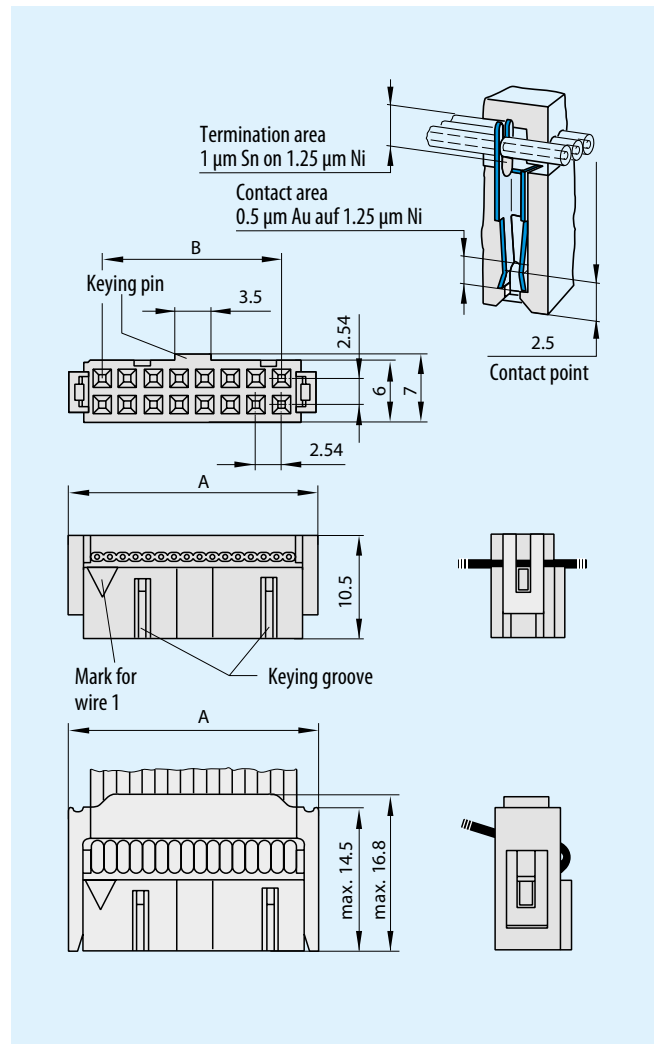
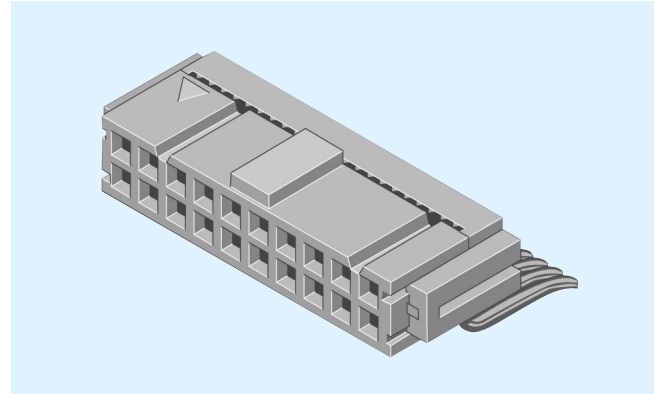
Contact surface

Mating area: $0.5 \mu\text{m Au}$ on $1.25 \mu\text{m Ni}$ / MIL-G-45 204 Class 00

Termination area: $1.0 \mu\text{m Sn}$ on $1.25 \mu\text{m Ni}$

Insulator material: PBT grey, fibre-glass reinforced
 Combustibility according to UL94 V-0

Contact material: Copper alloy



IDC sockets, Series 517 with single-U IDC contact Double-action spring contact

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾		Dimension A	Dimension B
	Without strain relief	With strain relief		
10	517.075.003.010.010	517.076.003.010.010	17.3	10.16
14	517.075.003.014.010	517.076.003.014.010	22.4	15.24
16	517.075.003.016.010	517.076.003.016.010	24.9	17.78
20	517.075.003.020.010	517.076.003.020.010	30.0	22.86
26	517.075.003.026.010	517.076.003.026.010	37.6	30.48
34	517.075.003.034.010	517.076.003.034.010	47.8	40.64
40	517.075.003.040.010	517.076.003.040.010	55.4	48.26
50	517.075.003.050.010	517.076.003.050.010	68.1	60.96
60	517.075.003.060.010	517.076.003.060.010	80.8	73.66
64	517.075.003.064.010	517.076.003.064.010	85.8	78.74

¹⁾ For __ please enter the required surface plating:

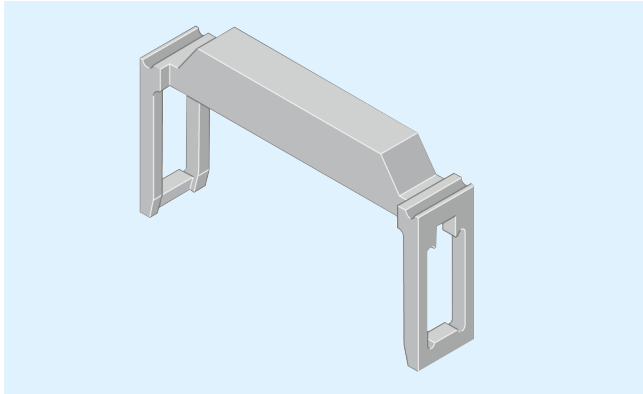
003 = 0.5 µm Au on Ni (standard)

009 = Flash-gold-plated (upon request)

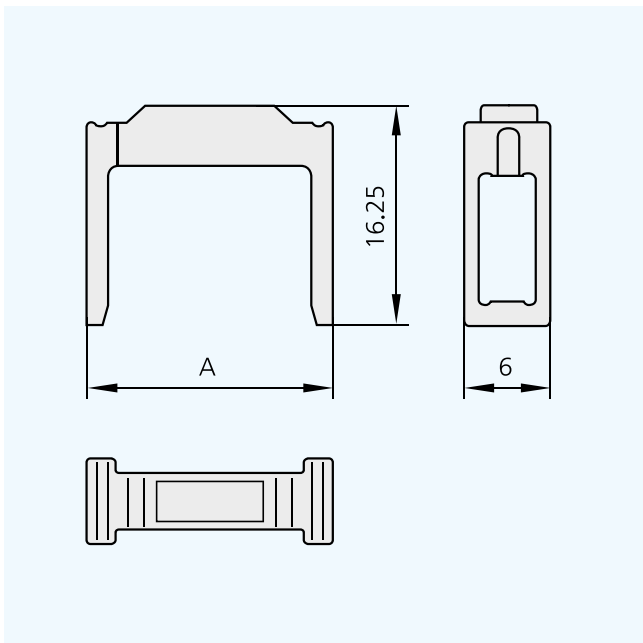
035 = 0.75 µm Au on Ni (upon request)

Number codes, see page 5.

Strain relief for IDC sockets, Series 517



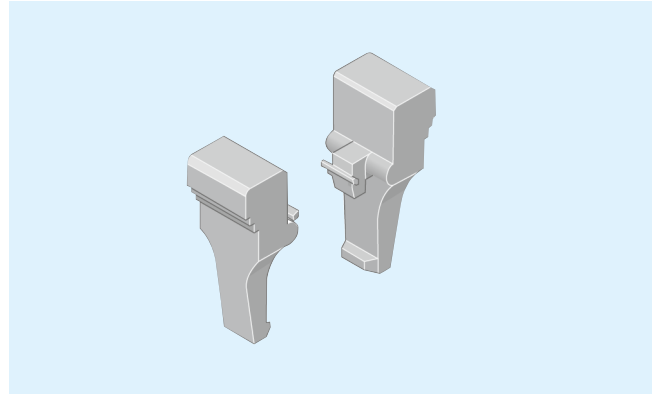
Dimensions (All dimensions are in mm)



Order information and dimensional table

Number of contacts	Part number	Dimension A
10	517.062.710.923.000	17.3
14	517.062.714.923.000	22.4
16	517.062.716.923.000	24.9
20	517.062.720.923.000	30.0
26	517.062.726.923.000	37.6
34	517.062.734.923.000	47.8
40	517.062.740.923.000	55.4
50	517.062.750.923.000	68.1
60	517.062.760.923.000	80.8
64	517.062.764.923.000	85.8

Locking latch for IDC sockets, Series 517

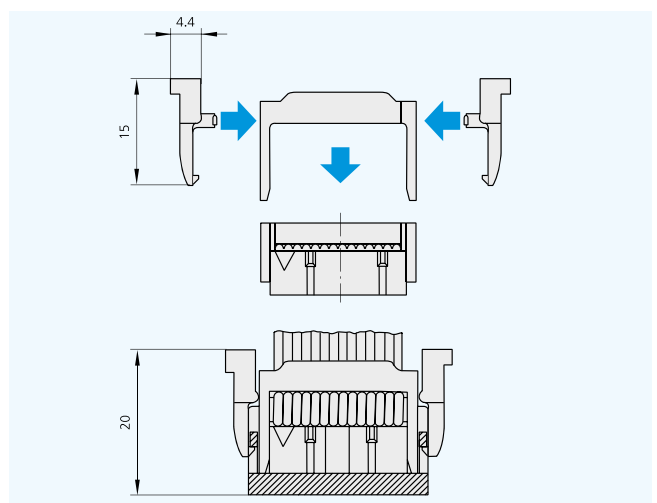


Features

- Can be added later
- As additional locking
- Only for space-saving version of the pin header
-  approved

The locking latch for IDC sockets Series 517 and space-saving pin headers can be assembled on the strain relief without tools or additional equipment.

This locking system, which simultaneously serves as a pull-out handle, allows simple retrofitting. Subsequent assembly on the existing IDC sockets is possible without a major effort.



Order information

Part number
517.063.105.923.000

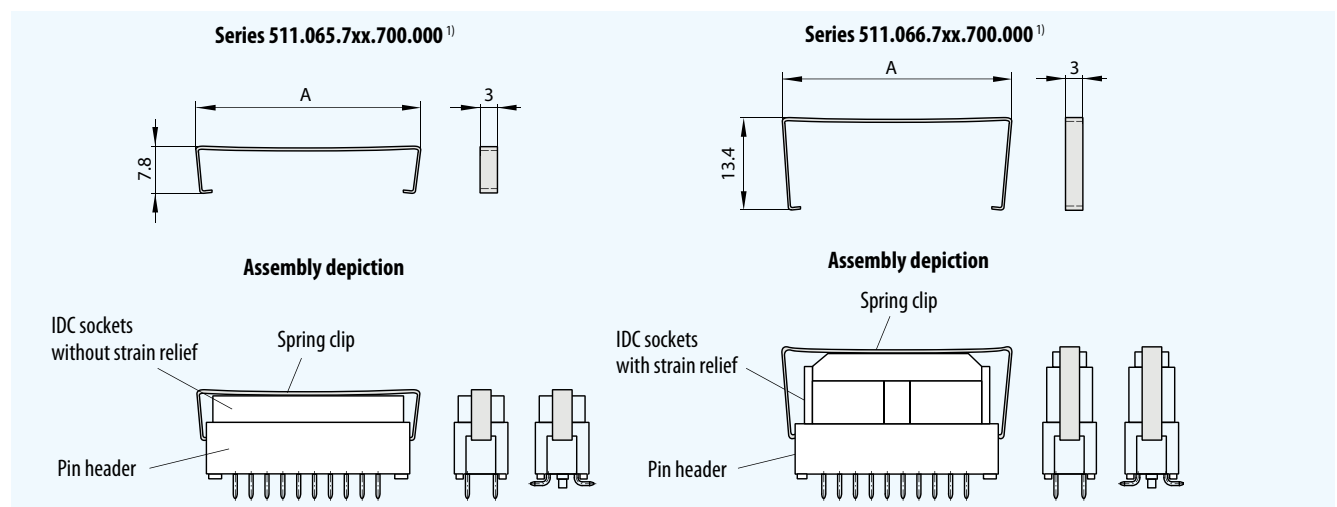
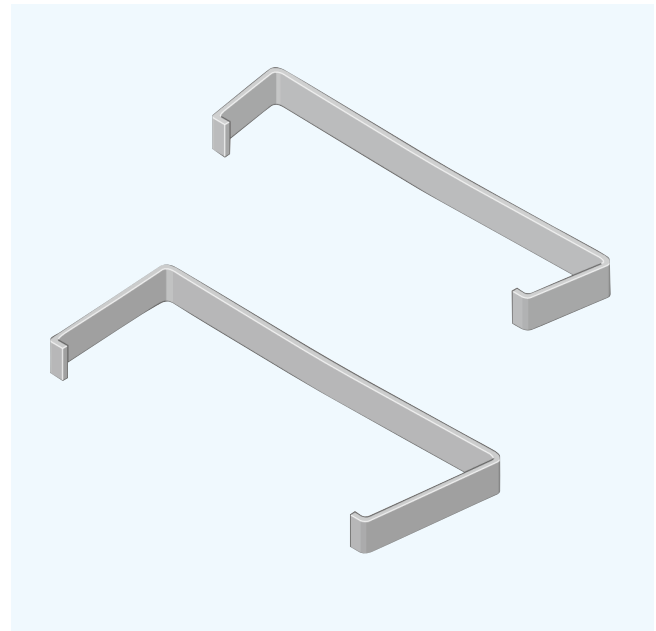
Spring clip for IDC sockets and low profile headers (space-saving design)

Features

- Trouble-free assembly
- Economical
- Absolutely solid fit
- Simple disassembly
- For IDC sockets Series 517 with and without strain relief
- approved

General information

These spring clips are manufactured from high-grade spring steel. An absolutely solid fit and simple assembly and disassembly are the special features of this product. The spring clips are suitable for IDC sockets, Series 517, with and without strain relief. An economical alternative to conventional lockings.

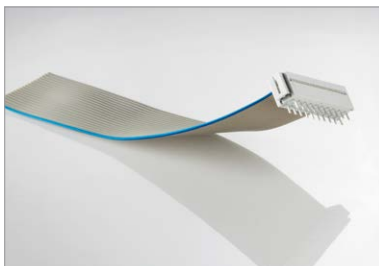
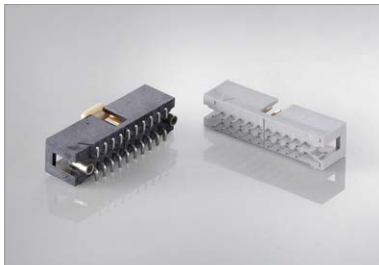
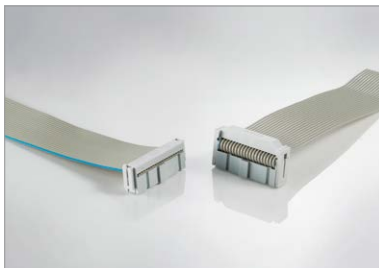
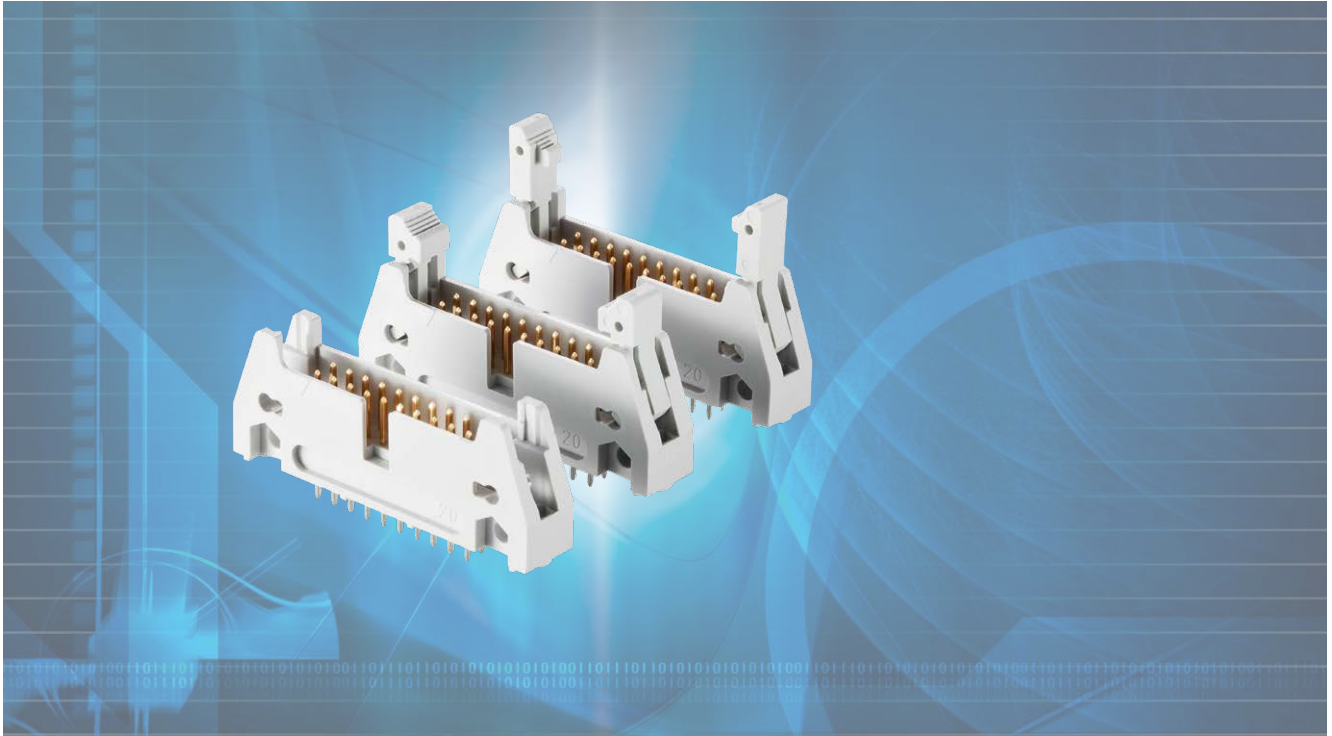


Order information and dimensional table (All dimensions are in mm)

¹⁾ In xx please enter the number of contacts.

Number of contacts	Part number		Dimension A
	Without strain relief	With strain relief	
10	511.065.710.700.000	511.066.710.700.000	21.1
14	511.065.714.700.000	511.066.714.700.000	26.2
16	511.065.716.700.000	511.066.716.700.000	28.7
20	511.065.720.700.000	511.066.720.700.000	33.8
26	511.065.726.700.000	511.066.726.700.000	41.4
34	511.065.734.700.000	511.066.734.700.000	51.6
40	511.065.740.700.000	511.066.740.700.000	59.2
50	511.065.750.700.000	511.066.750.700.000	71.9
60	511.065.760.700.000	511.066.760.700.000	84.9
64	511.065.764.700.000	511.066.764.700.000	89.7

ODU FLAKAFIX Pin headers Series 511



Contents

Pin headers for Series 511

Chapter		From page	
1	Number codes for ODU FLAKAFIX, Series 511	12	
2	THT models	13	
	THT latch headers, DIN EN 60603-13	13	
	THT low profile headers (space-saving design)	17	
	THT pin headers without plug-in frame	21	
3	SMT models	25	
	SMT latch headers DIN EN 60603-13	25	
	SMT low profile headers (space-saving design)	29	
	SMT pin headers without plug-in frame	31	
4	THR models	35	
	THR latch headers DIN EN 60603-13	35	
	THR low profile headers (space-saving design)	39	
	THR pin headers without plug-in frame	43	

Explanation of number codes for ODU FLAKAFIX, Series 511

No.	Meaning	Coding	
A	Series	511 = Pin header	
B	Type	THT and THR models: Latch headers 060 = Straight assembly, without latch 061 = Straight assembly, with latch, short 062 = Straight assembly, with latch, long 260 = Angled assembly, without latch 261 = Angled assembly, with latch, short 262 = Angled assembly, with latch, long Low profile headers 066 = Straight assembly 266 = Angled assembly Pin headers without plug-in frame 030 = Straight assembly, insulator 6.04 / 2.8 mm 032 = Straight assembly, insulator 5.08 / 2.8 mm 270 = Angled assembly SMT models: Latch headers 150 = Straight assembly, without latch 151 = Straight assembly, with latch, short 152 = Straight assembly, with latch, long 110 = Angled assembly, without latch 111 = Angled assembly, with latch, short 112 = Angled assembly, with latch, long Low profile headers 068 = Straight assembly Pin headers without plug-in frame 301 = Angled assembly 302 = Straight assembly	
C	Material property	0 = Standard 8 = High-temperature resistant insulator for SMT and THR termination	
D	Surface plating	03 = In mating area 0.5 µm Au on Ni, in termination area 2.0 µm Sn on Ni (standard) 09 = Flash-gold-plated (upon request) 35 = In mating area 0.75 µm Au on Ni, in termination area 2.0 µm Sn on Ni (upon request)	
E	Number of contacts	010 = 10 contacts (example)	
F	Packaging	000 = Cardboard box for pin headers without plug-in frame (standard) 010 = Cardboard box for lever and low profile headers (standard) 050 = Tape-and-reel for SMT models (upon request) 070 = Tray for SMT models (upon request)	

Ordering example for Series 511

A	B	C	D	E	F
5	1 1 . 0 6 0	. 0 0	3 . 0	1 0 . 0	1 0

A = Series: 511 Pin header

B = Model: straight assembly, without latch

C = High temperature resistance: standard

D = Surface plating: in mating area 0.5 µm Au on Ni, in termination area 2.0 µm Sn on Ni (standard)

E = Number of contacts: 10

F = Packaging: Standard for latch and low profile headers

THT latch header, Series 511

Straight with solder pins

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54×2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Straight contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- Available with short or long latch
- approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

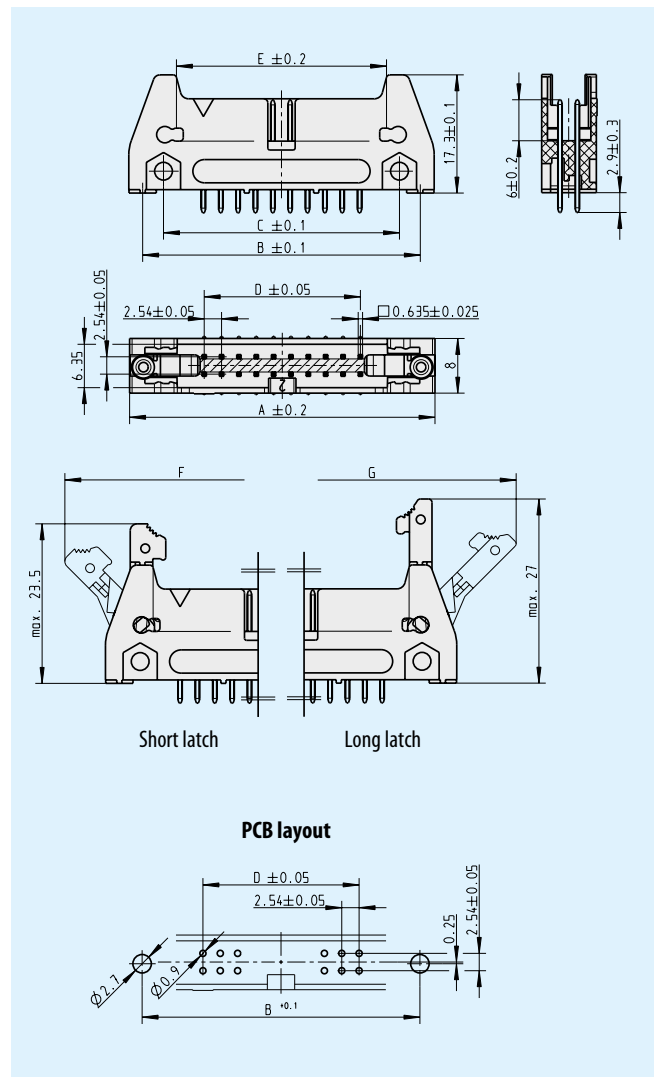
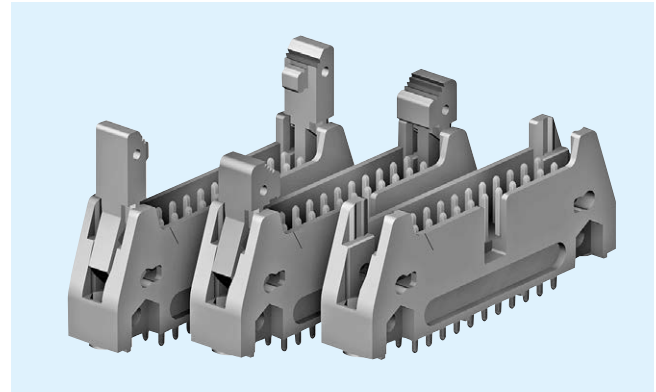
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
Humidity level: 93 % rel. humidity
in accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5 \mu\text{m}$ Au on $1.25 \mu\text{m}$ Ni /
MIL-G-45 204 Class 00
Termination area: $2.0 \mu\text{m}$ Sn on $1.25 \mu\text{m}$ Ni
Insulator material: PBT grey, fibre-glass reinforced
Combustibility according to
UL94 V-0
Contact material: Copper alloy



THT latch header, Series 511

Straight with solder pins

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.060.003.010.010	511.061.003.010.010	511.062.003.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.060.003.014.010	511.061.003.014.010	511.062.003.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.060.003.016.010	511.061.003.016.010	511.062.003.016.010	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.060.003.020.010	511.061.003.020.010	511.062.003.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.060.003.026.010	511.061.003.026.010	511.062.003.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.060.003.034.010	511.061.003.034.010	511.062.003.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.060.003.040.010	511.061.003.040.010	511.062.003.040.010	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.060.003.050.010	511.061.003.050.010	511.062.003.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.060.003.060.010	511.061.003.060.010	511.062.003.060.010	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.060.003.064.010	511.061.003.064.010	511.062.003.064.010	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Number codes, see page 12.

THT latch header, Series 511

Angled with solder pins

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54 × 2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Angled contacts, cross-section 0.64 × 0.64 mm
- 10 to 64 contacts
- Available with short or long latch
-  approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C
Humidity level: 93 % rel. humidity
in accordance with
DIN EN 60603-13

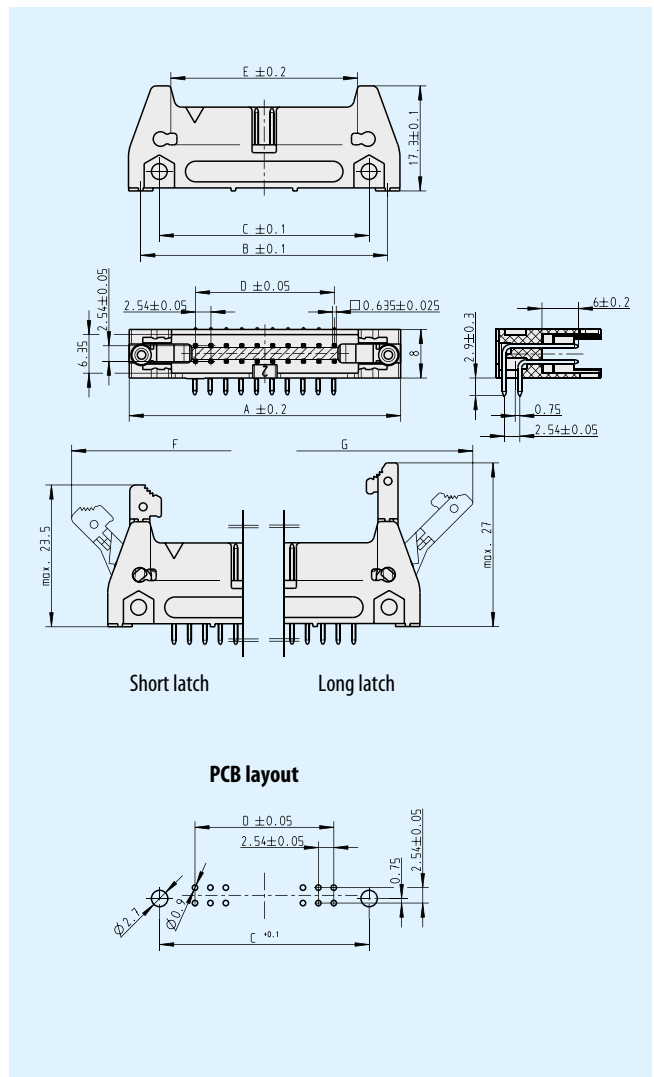
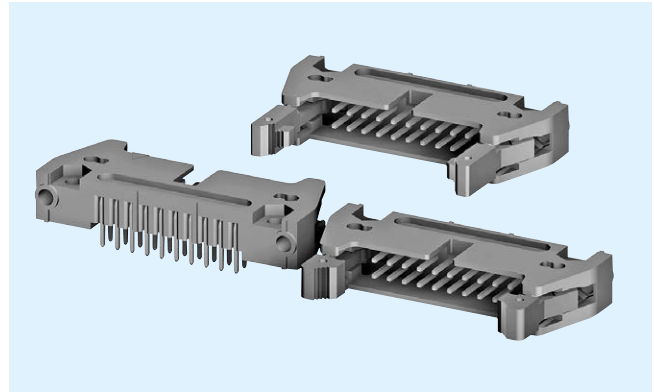
Material and surface plating

Contact surface

Mating area:	0.5 µm Au on 1.25 µm Ni / MIL-G-45 204 Class 00
Termination area:	2.0 µm Sn on 1.25 µm Ni

Insulator material: PBT grey, fibre-glass reinforced
Combustibility according to
UL94 V-0

Contact material: Copper alloy



THT latch header, Series 511

Angled with solder pins

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.260.003.010.010	511.261.003.010.010	511.262.003.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.260.003.014.010	511.261.003.014.010	511.262.003.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.260.003.016.010	511.261.003.016.010	511.262.003.016.010	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.260.003.020.010	511.261.003.020.010	511.262.003.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.260.003.026.010	511.261.003.026.010	511.262.003.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.260.003.034.010	511.261.003.034.010	511.262.003.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.260.003.040.010	511.261.003.040.010	511.262.003.040.010	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.260.003.050.010	511.261.003.050.010	511.262.003.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.260.003.060.010	511.261.003.060.010	511.262.003.060.010	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.260.003.064.010	511.261.003.064.010	511.262.003.064.010	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

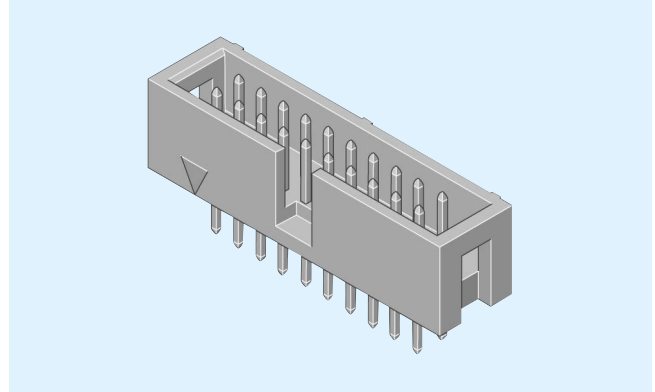
Number codes, see page 12.

THT low profile header, Series 511

Straight, space-saving design with solder pins

Features

- Pitch 2.54 × 2.54 mm
- 2-row design
- Closed, space-saving style
- Central polarisation
- Straight contacts, cross-section 0.64 × 0.64 mm
- 10 to 64 contacts
-  approved
- For PCB thickness up to 1.6 mm



Technical data

Electrical specification

Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C
Humidity level: 93 % rel. humidity
in accordance with
DIN EN 60603-13

Material and surface plating

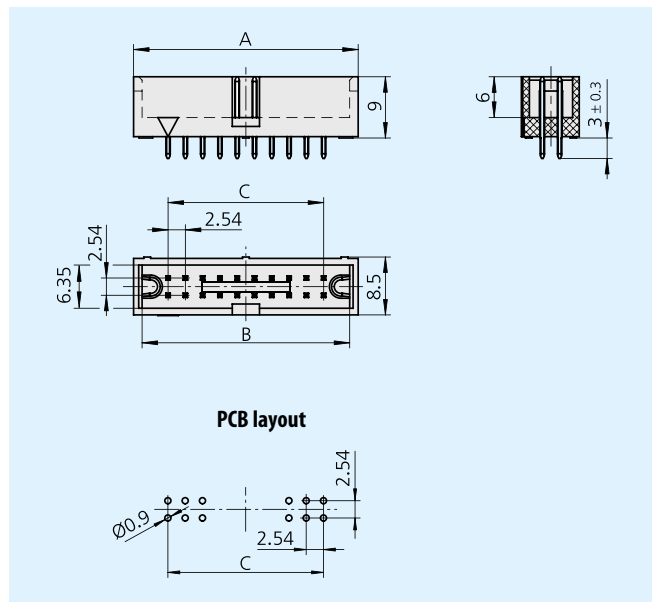
Contact surface

Mating area: 0.5 µm Au on 1.25 µm Ni /
MIL-G-45 204 Class 00

Termination area: 2.0 µm Sn on 1.25 µm Ni

Insulator material: PBT grey, fibre-glass reinforced
Combustibility according to
UL94 V-0

Contact material: Copper alloy



THT low profile header, Series 511

Straight, space-saving design with solder pins

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Dimension C
10	511.066.003.010.010	20.3	17.8	10.16
14	511.066.003.014.010	25.4	22.9	15.24
16	511.066.003.016.010	27.9	25.4	17.78
20	511.066.003.020.010	33.0	30.5	22.86
26	511.066.003.026.010	40.6	38.1	30.48
34	511.066.003.034.010	50.8	48.3	40.64
40	511.066.003.040.010	58.4	55.8	48.26
50	511.066.003.050.010	71.1	68.6	60.96
60	511.066.003.060.010	83.8	81.3	73.66
64	511.066.003.064.010	88.9	86.4	78.74

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

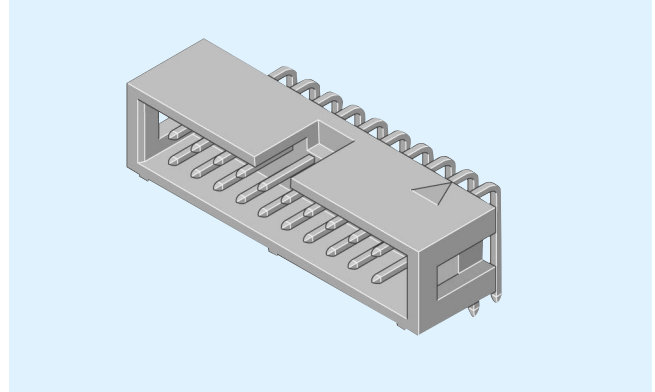
Number codes, see page 12.

THT low profile header, Series 511

Angled, space-saving design with solder pins

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Closed, space-saving style
- Central polarisation
- Angled contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
-  approved
- For PCB thickness up to 1.6 mm



Technical data

Electrical specification

Contact load: ≤ 5 A
 Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
 Humidity level: 93% rel. humidity
 in accordance with
 DIN EN 60603-13

Material and surface plating

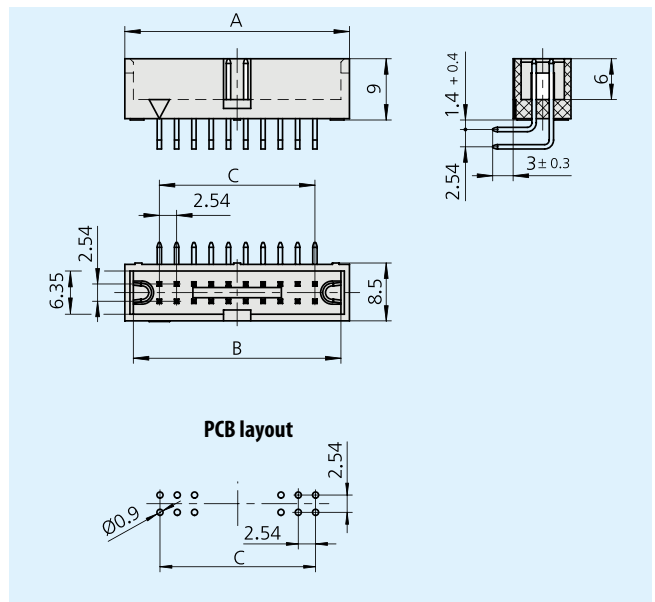
Contact surface

Mating area: $0.5\ \mu\text{m}$ Au on $1.25\ \mu\text{m}$ Ni /
 MIL-G-45 204 Class 00

Termination area: $2.0\ \mu\text{m}$ Sn on $1.25\ \mu\text{m}$ Ni

Insulator material: PBT grey, fibre-glass reinforced
 Combustibility according to
 UL94 V-0

Contact material: Copper alloy



THT low profile header, Series 511

Angled, space-saving design with solder pins

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Dimension C
10	511.266.003.010.010	20.3	17.8	10.16
14	511.266.003.014.010	25.4	22.9	15.24
16	511.266.003.016.010	27.9	25.4	17.48
20	511.266.003.020.010	33.0	30.5	22.86
26	511.266.003.026.010	40.6	38.1	30.48
34	511.266.003.034.010	50.8	48.3	40.64
40	511.266.003.040.010	58.4	55.8	48.26
50	511.266.003.050.010	71.1	68.6	60.96
60	511.266.003.060.010	83.8	81.3	73.66
64	511.266.003.064.010	88.9	86.4	78.74

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Number codes, see page 12.

THT pin header, Series 511

Without plug-in frame, straight design

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Straight contacts, cross-section 0.64×0.64 mm
- Mating length 6.0 mm
-  approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

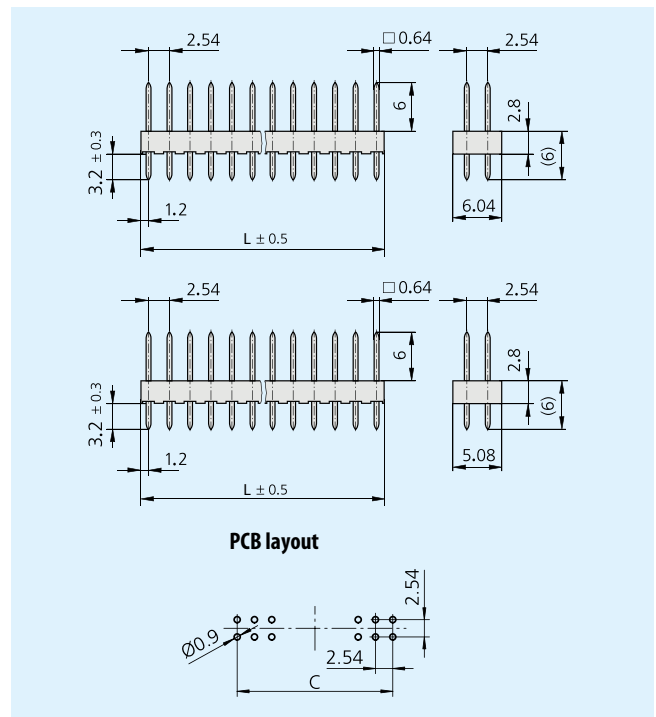
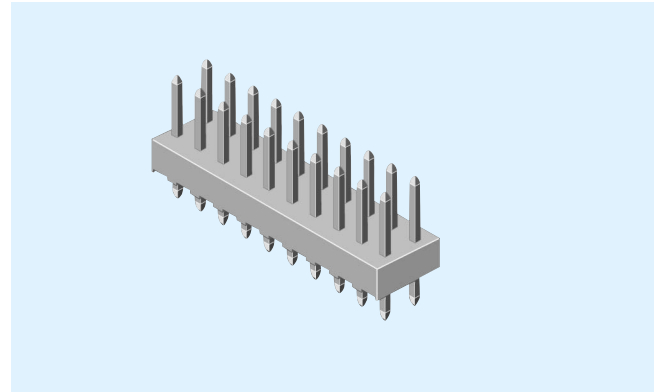
Contact load: ≤ 5 A
 Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
 Humidity level: 93 % rel. humidity
 in accordance with
 DIN EN 60603-13

Material and surface plating

Contact surface
 Mating area: $0.5\ \mu\text{m}$ Au on $1.25\ \mu\text{m}$ Ni /
 MIL-G-45 204 Class 00
 Termination area: $2.0\ \mu\text{m}$ Sn on $1.25\ \mu\text{m}$ Ni
 Insulator material: PBT grey, fibre-glass reinforced
 Combustibility according to
 UL94 V-0
 Contact material: Copper alloy



THT pin header, Series 511

Without plug-in frame, straight design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾		Dimension C	Dimension L
	Insulator 6.04 × 2.8 mm	Insulator 5.08 × 2.8 mm		
10	511.030.003.010.000	511.032.003.010.000	10.16	12.56
14	511.030.003.014.000	511.032.003.014.000	15.24	17.64
16	511.030.003.016.000	511.032.003.016.000	17.48	20.18
20	511.030.003.020.000	511.032.003.020.000	22.86	25.26
26	511.030.003.026.000	511.032.003.026.000	30.48	32.88
34	511.030.003.034.000	511.032.003.034.000	40.46	43.04
40	511.030.003.040.000	511.032.003.040.000	48.26	50.66
50	511.030.003.050.000	511.032.003.050.000	60.96	63.36
60	511.030.003.060.000	511.032.003.060.000	73.66	76.06
64	511.030.003.064.000	not available	78.74	81.14

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Number codes, see page 12.

THT pin header, Series 511

Without plug-in frame, angled design

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Angled contacts,
- Cross-section 0.64×0.64 mm
- Mating length 6.5 mm
-  approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
Humidity level: 93 % rel. humidity
in accordance with
DIN EN 60603-13

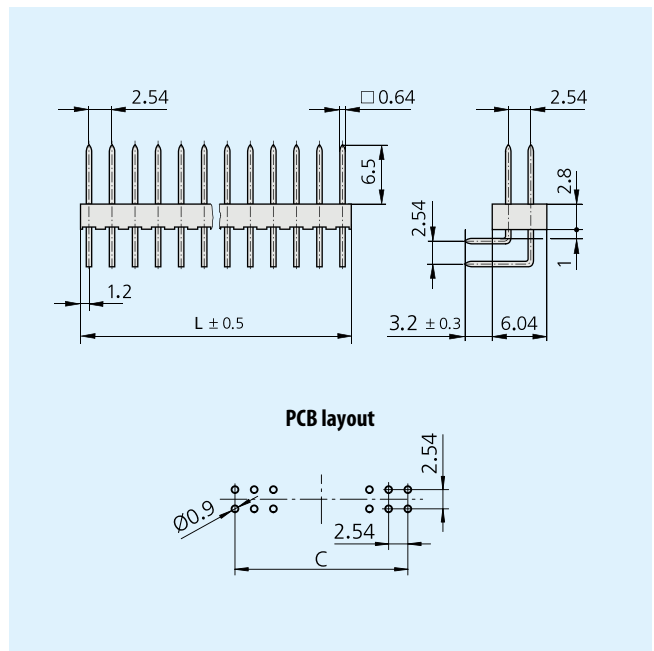
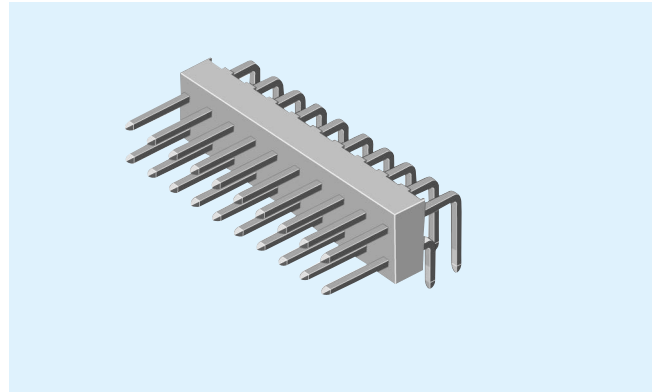
Material and surface plating

Contact surface

Mating area:	0.5 μm Au on 1.25 μm Ni / MIL-G-45 204 Class 00
Termination area:	2.0 μm Sn on 1.25 μm Ni

Insulator material: PBT grey, fibre-glass reinforced
Combustibility according to
UL94 V-0

Contact material: Copper alloy



THT pin header, Series 511

Without plug-in frame, angled design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension C	Dimension L
10	511.270.003.010.000	10.16	12.56
14	511.270.003.014.000	15.24	17.64
16	511.270.003.016.000	17.48	20.18
20	511.270.003.020.000	22.86	25.26
26	511.270.003.026.000	30.48	32.88
34	511.270.003.034.000	40.46	43.04
40	511.270.003.040.000	48.26	50.66
50	511.270.003.050.000	60.96	63.36
60	511.270.003.060.000	73.66	76.06
64	511.270.003.064.000	78.74	81.14

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Number codes, see page 12.

SMT latch header, Series 511

Straight design

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54×2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Straight contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- Available with short or long latch
- With solder sleeve
- approved

Technical data

Electrical specification

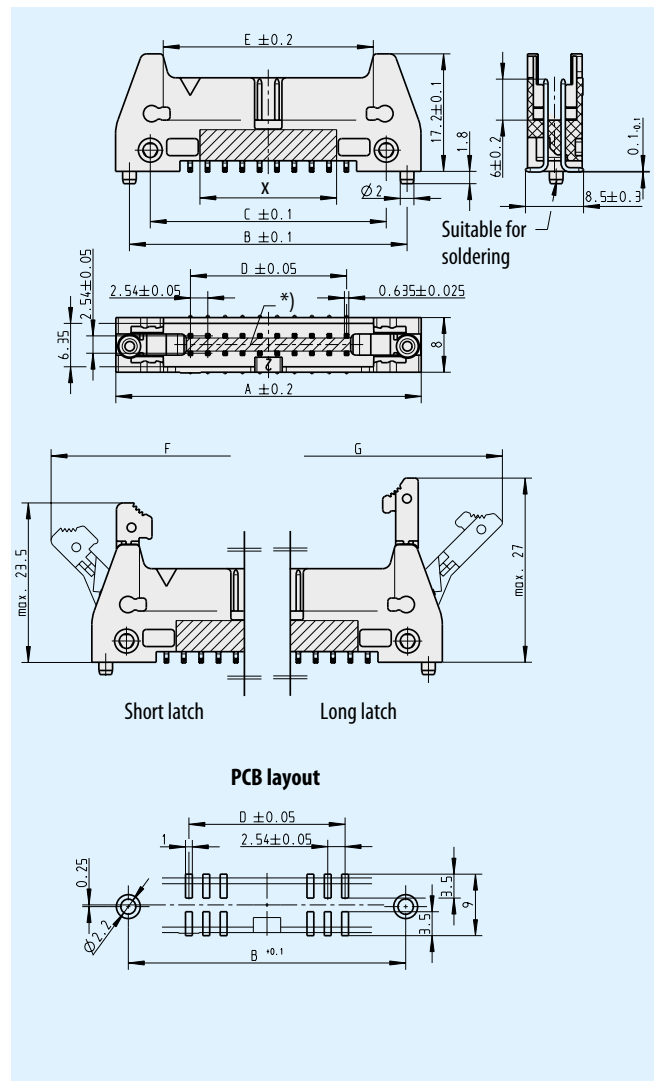
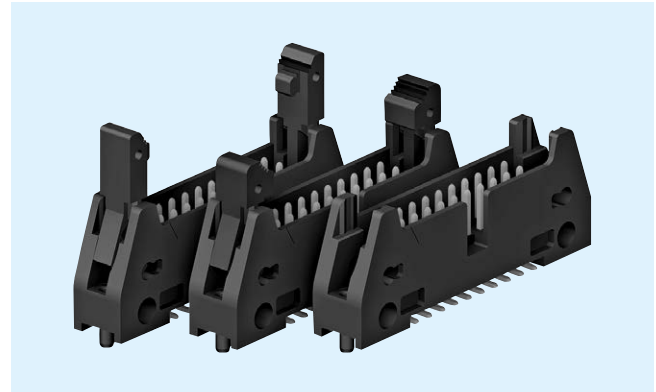
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5 \mu\text{m Au}$ on $1.25 \mu\text{m Ni}$ /
MIL-G-45 204 Class 00
Termination area: $2.0 \mu\text{m Sn}$ on $1.25 \mu\text{m Ni}$
Insulator material: LCP black,
Combustibility according to
UL94 V-0
Contact material: Copper alloy



*) Vacuum suction surface
x = 10 – 16 contacts 10 mm
20 – 64 contacts 20 mm

SMT latch header, Series 511

Straight design

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.150.803.010.010	511.151.803.010.010	511.152.803.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.150.803.014.010	511.151.803.014.010	511.152.803.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.150.803.016.010	511.151.803.016.010	511.152.803.016.010	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.150.803.020.010	511.151.803.020.010	511.152.803.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.150.803.026.010	511.151.803.026.010	511.152.803.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.150.803.034.010	511.151.803.034.010	511.152.803.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.150.803.040.010	511.151.803.040.010	511.152.803.040.010	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.150.803.050.010	511.151.803.050.010	511.152.803.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.150.803.060.010	511.151.803.060.010	511.152.803.060.010	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.150.803.064.010	511.151.803.064.010	511.152.803.064.010	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating (in the middle block of the part number) or the required packaging (last block of the part number):

Surface plating (middle block):

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Packaging (last block):

010 = Cardboard box (standard)

050 = Tape-and-reel (upon request)

070 = Tray (upon request)

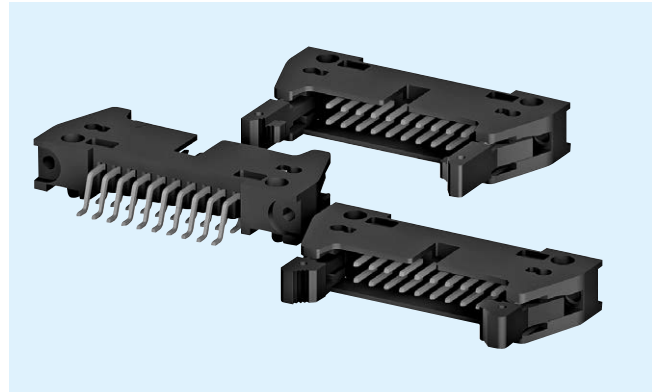
Number codes, see page 12.

SMT latch header, Series 511

In SMT, angled

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54×2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Angled SMT contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- Available with short or long latch
- With solder sleeve
-  approved



Technical data

Electrical specification

Contact load: $\leq 5\text{ A}$

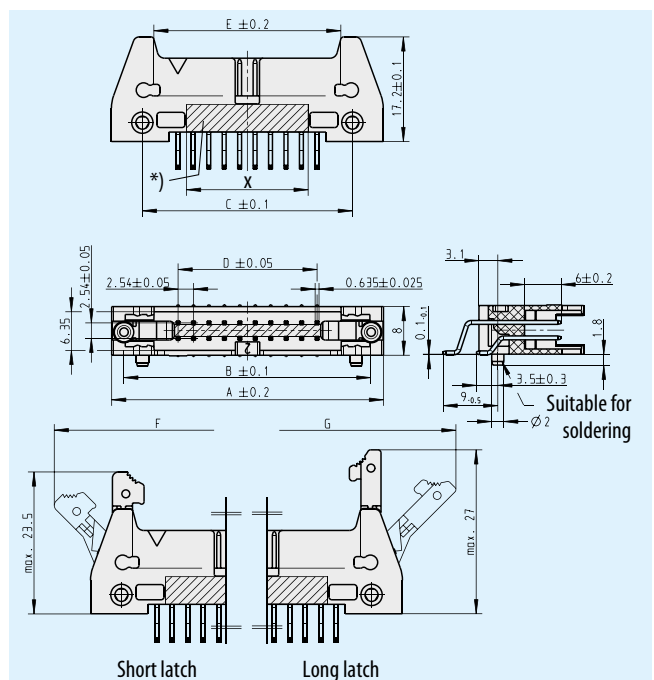
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C

SMT solder temperature: (max. 30 s)
on the solder point
260 °C

Humidity level: 93% rel. humidity in accordance with DIN EN 60603-13



Material and surface plating

Contact surface

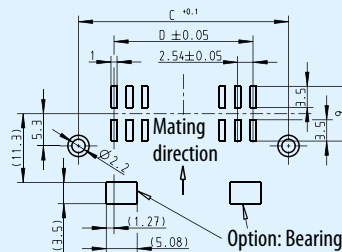
Mating area: 0.5 μm Au on 1.25 μm Ni / MIL-G-45 204 Class 00

Termination area: 2.0 μm Sn on 1.25 μm Ni

Insulator material: LCP black
Combustibility according to UL94 V-0

Contact material: Copper alloy

PCB layout



- Option: Bearing surfaces (solder pad plus solder resist; without solder paste imprint) in order to prevent the component from tipping during SMT soldering

*) Vacuum suction surface

x = 10 – 16 contacts 10 mm
20 – 64 contacts 20 mm

SMT latch header, Series 511

In SMT, angled

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.110.803.010.010	511.111.803.010.010	511.112.803.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.110.803.014.010	511.111.803.014.010	511.112.803.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.110.803.016.010	511.111.803.016.010	511.112.803.016.010	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.110.803.020.010	511.111.803.020.010	511.112.803.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.110.803.026.010	511.111.803.026.010	511.112.803.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.110.803.034.010	511.111.803.034.010	511.112.803.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.110.803.040.010	511.111.803.040.010	511.112.803.040.010	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.110.803.050.010	511.111.803.050.010	511.112.803.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.110.803.060.010	511.111.803.060.010	511.112.803.060.010	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.110.803.064.010	511.111.803.064.010	511.112.803.064.010	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating (in the middle block of the part number) or the required packaging (last block of the part number):

Surface plating (middle block):

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Packaging (last block):

010 = Cardboard box (standard)

050 = Tape-and-reel (upon request)

070 = Tray (upon request)

Number codes, see page 12.

SMT low profile header, Series 511

Straight, space-saving design

Features

- Pitch 2.54 × 2.54 mm
- 2-row design
- Closed, space-saving style
- Central polarisation
- Solder pin in SMT design
- 10 to 64 contacts
- With solder sleeve
-  approved

Technical data

Electrical specification

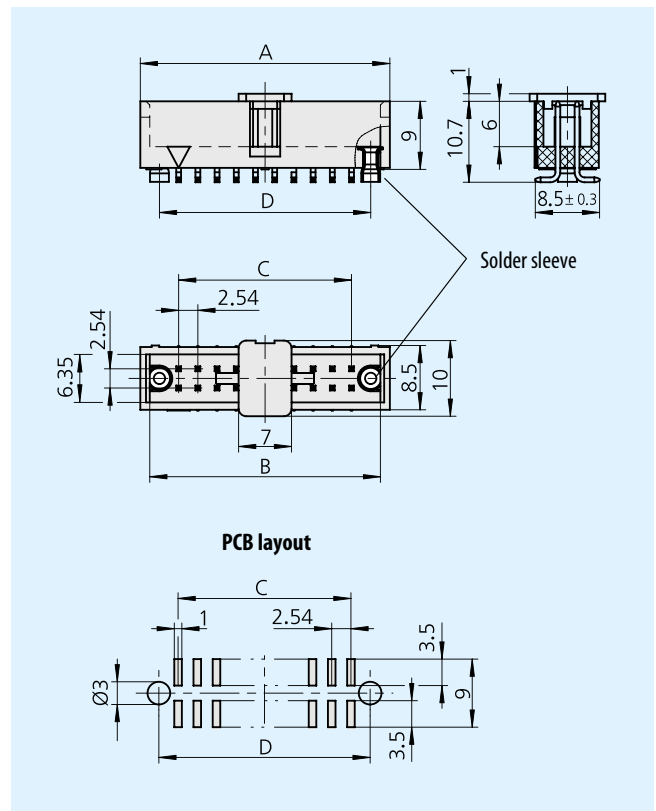
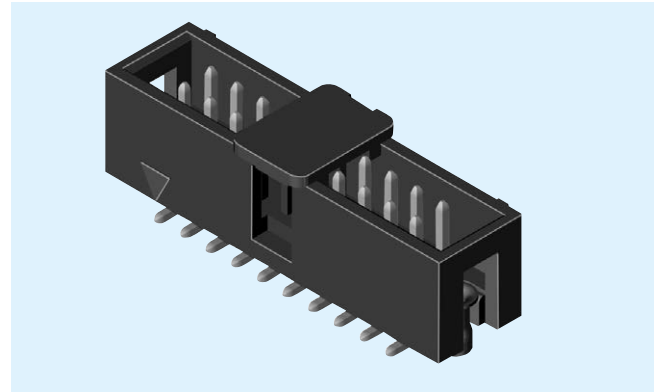
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C
SMT solder temperature: (max. 30 s)
on the solder point
260 °C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: 0.5 µm Au on 1.25 µm Ni /
MIL-G-45 204 Class 00
Termination area: 2.0 µm Sn on 1.25 µm Ni
Insulator material: LCP black
Combustibility according to
UL94 V-0
Contact material: Copper alloy



SMT low profile header, Series 511

Straight, space-saving design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Dimension C	Dimension D
10	511.068.803.010.010	20.30	17.8	10.16	15.24
14	511.068.803.014.010	25.40	22.9	15.24	20.32
16	511.068.803.016.010	27.90	25.4	17.78	22.86
20	511.068.803.020.010	33.00	30.5	22.86	27.94
26	511.068.803.026.010	40.60	38.1	30.48	35.56
34	511.068.803.034.010	50.80	48.3	40.64	45.72
40	511.068.803.040.010	58.40	55.8	48.26	53.34
50	511.068.803.050.010	71.10	68.6	60.96	66.04
60	511.068.803.060.010	83.80	81.3	73.66	78.74
64	511.068.803.064.010	88.88	86.4	78.74	83.82

¹⁾ For __ please enter the required surface plating (in the middle block of the part number) or the required packaging (last block of the part number):

Surface plating (middle block):

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Packaging (last block):

010 = Cardboard box (standard)

050 = Tape-and-reel (upon request)

070 = Tray (upon request)

Number codes, see page 12.

SMT pin header, Series 511

Without plug-in frame, straight design

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Straight SMT contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
-  approved

Technical data

Electrical specification

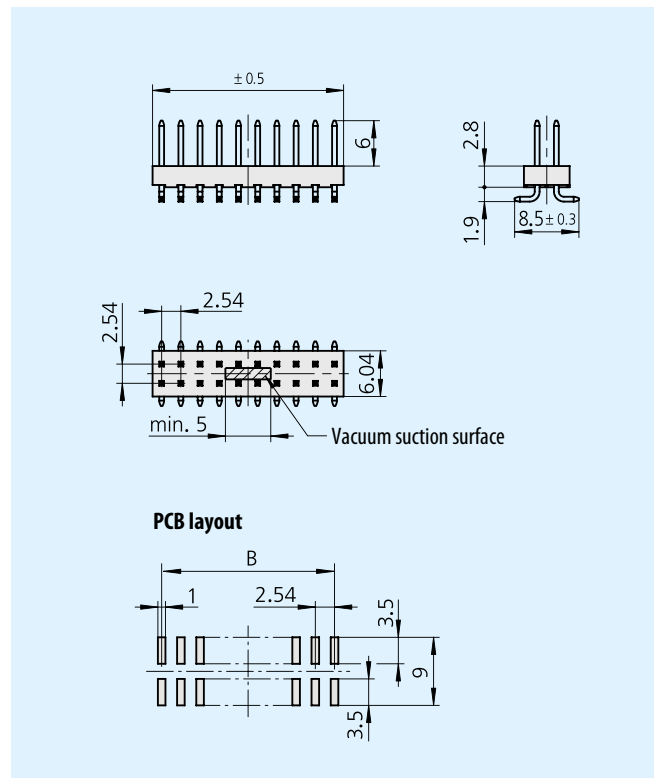
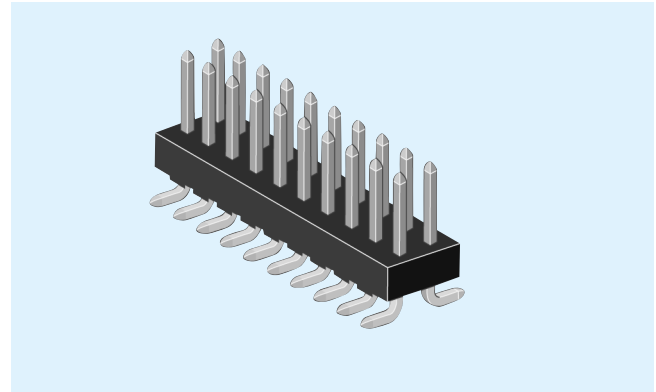
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5\ \mu\text{m}$ Au on $1.25\ \mu\text{m}$ Ni /
MIL-G-45 204 Class 00
Termination area: $2.0\ \mu\text{m}$ Sn on $1.25\ \mu\text{m}$ Ni
Insulator material: LCP black
Combustibility according to
UL94 V-0
Contact material: Copper alloy



SMT pin header, Series 511

Without plug-in frame, straight design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension B	Dimension L
10	511.302.803.010.000	10.16	12.56
14	511.302.803.014.000	15.24	17.64
16	511.302.803.016.000 ²⁾	17.78	20.18
20	511.302.803.020.000	22.86	25.26
26	511.302.803.026.000	30.48	32.88
34	511.302.803.034.000	40.64	43.04
40	511.302.803.040.000	48.26	50.66
50	511.302.803.050.000 ²⁾	60.96	63.36
60	511.302.803.060.000 ²⁾	73.66	76.06
64	511.302.803.064.000 ²⁾	78.74	81.14

¹⁾ For _ please enter the required surface plating (in the middle block of the part number) or the required packaging (last block of the part number):

Surface plating (middle block):

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Packaging (last block):

000 = Cardboard box (standard)

050 = Tape-and-reel (upon request)

070 = Tray (upon request)

²⁾ Upon request

Number codes, see page 12.

SMT pin header, Series 511

Without plug-in frame, angled design

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Angled SMT contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- approved

Technical data

Electrical specification

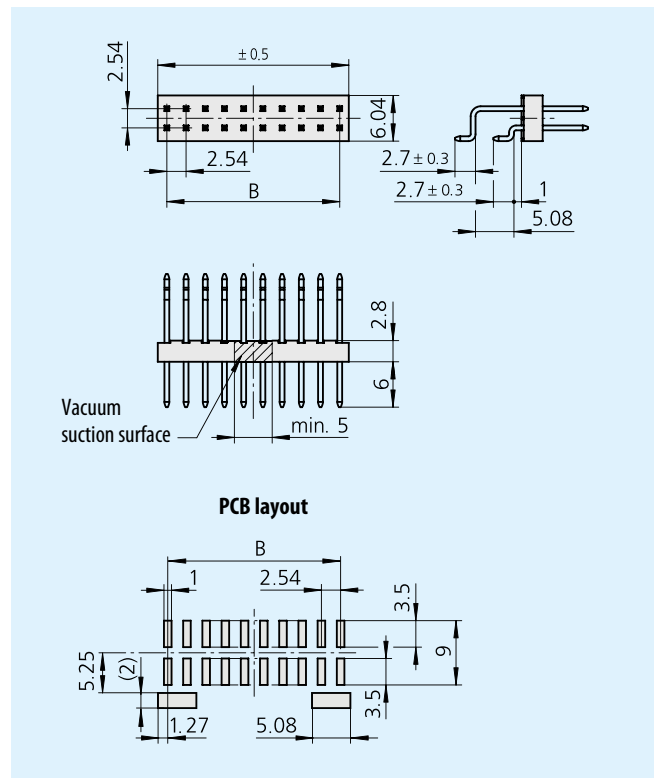
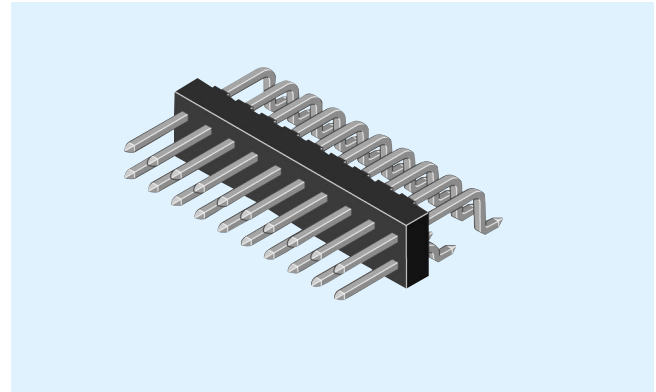
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5\text{ }\mu\text{m Au}$ on $1.25\text{ }\mu\text{m Ni}$ /
MIL-G-45 204 Class 00
Termination area: $2.0\text{ }\mu\text{m Sn}$ on $1.25\text{ }\mu\text{m Ni}$
Insulator material: LCP black
Combustibility according
to UL94 V-0
Contact material: Copper alloy



SMT pin header, Series 511

Without plug-in frame, angled design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension B	Dimension L
10	511.301.803.010.000	10.16	12.56
14	511.301.803.014.000	15.24	17.64
16	511.301.803.016.000 ²⁾	17.78	20.18
20	511.301.803.020.000	22.86	25.26
26	511.301.803.026.000	30.48	32.88
34	511.301.803.034.000	40.64	43.04
40	511.301.803.040.000	48.26	50.66
50	511.301.803.050.000	60.96	63.36
60	511.301.803.060.000 ²⁾	73.66	76.06
64	511.301.803.064.000 ²⁾	78.74	81.14

¹⁾ For __ please enter the required surface plating (in the middle block of the part number) or the required packaging (last block of the part number):

Surface plating (middle block):

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

Packaging (last block):

000 = Cardboard box (standard)

050 = Tape-and-reel (upon request)

070 = Tray (upon request)

²⁾ Upon request

Number codes, see page 12.

THR latch header, Series 511

High-temperature resistant,
straight with solder pins

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54×2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Straight contacts,
- Cross-section 0.64×0.64 mm 10 - 64 contacts
- Available with short or long latch
- High-temperature resistant
- approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

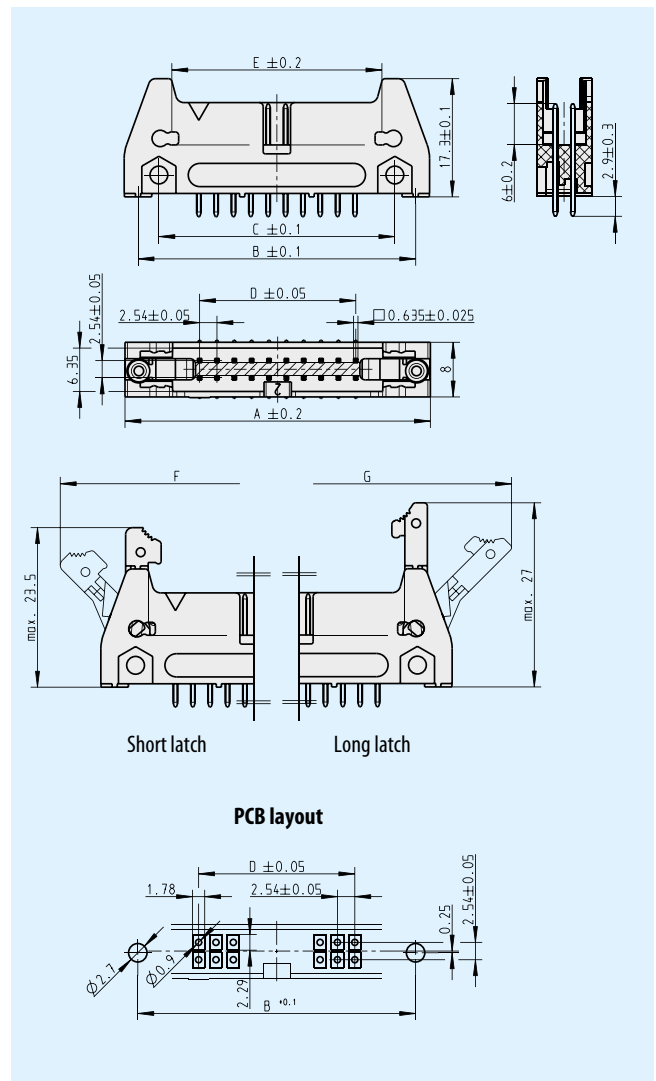
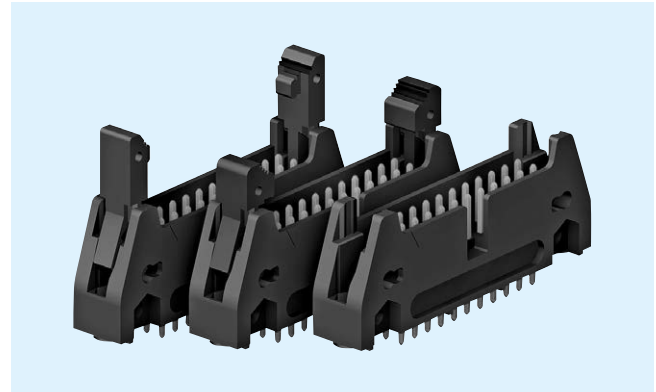
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5 \mu\text{m Au}$ on $1.25 \mu\text{m Ni}$ /
MIL-G-45 204 Class 00
Termination area: $2.0 \mu\text{m Sn}$ on $1.25 \mu\text{m Ni}$
Insulator material: LCP black
Combustibility according to
UL94 V-0
Contact material: Copper alloy



THR latch header, Series 511

High-temperature resistant,
straight with solder pins

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.060.803.010.010	511.061.803.010.010	511.062.803.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.060.803.014.010	511.061.803.014.010	511.062.803.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.060.803.016.010 ²⁾	511.061.803.016.010 ²⁾	511.062.803.016.010 ²⁾	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.060.803.020.010 ²⁾	511.061.803.020.010	511.062.803.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.060.803.026.010	511.061.803.026.010	511.062.803.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.060.803.034.010	511.061.803.034.010 ²⁾	511.062.803.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.060.803.040.010 ²⁾	511.061.803.040.010	511.062.803.040.010 ²⁾	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.060.803.050.010 ²⁾	511.061.803.050.010	511.062.803.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.060.803.060.010 ²⁾	511.061.803.060.010	511.062.803.060.010 ²⁾	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.060.803.064.010	511.061.803.064.010	511.062.803.064.010 ²⁾	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

THR latch header, Series 511

High-temperature resistant,
angled with solder pins

Features

- DIN EN 60603-13 (DIN 41651)
- Pitch 2.54×2.54 mm
- 2-row design
- Closed style
- Central polarisation
- Angled contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- Available with short or long latch
- High-temperature resistant
- approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

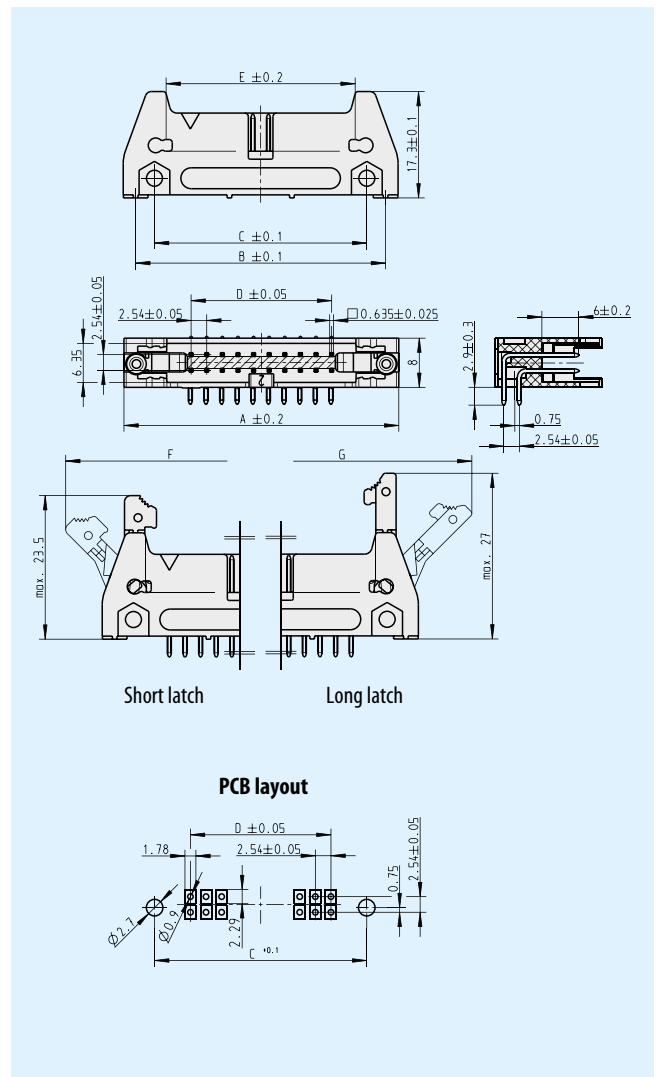
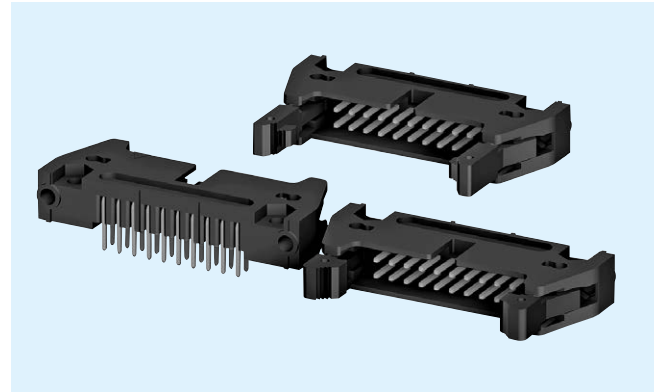
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5 \mu\text{m Au}$ on $1.25 \mu\text{m Ni}$ /
MIL-G-45 204 Class 00
Termination area: $2.0 \mu\text{m Sn}$ on $1.25 \mu\text{m Ni}$
Insulator material: LCP black
Combustibility according
to UL94 V-0
Contact material: Copper alloy



THR latch header, Series 511

High-temperature resistant,
angled with solder pins

Order information and dimensional table (All dimensions are in mm)

Number of contacts	Part number ¹⁾			Dimension A	Dimension B	Dimension C	Dimension D	Dimension E	Dimension F	Dimension G
	Without latch	With short latch	With long latch							
10	511.260.803.010.010	511.261.803.010.010	511.262.803.010.010	32.0	27.94	21.84	10.16	18.05	48.0	52.0
14	511.260.803.014.010 ²⁾	511.261.803.014.010 ²⁾	511.262.803.014.010	37.1	33.02	26.92	15.24	23.15	53.1	57.1
16	511.260.803.016.010 ²⁾	511.261.803.016.010 ²⁾	511.262.803.016.010	39.6	35.56	29.46	17.78	25.65	55.6	59.6
20	511.260.803.020.010 ²⁾	511.261.803.020.010	511.262.803.020.010	44.7	40.64	34.54	22.86	30.75	60.7	64.7
26	511.260.803.026.010 ²⁾	511.261.803.026.010	511.262.803.026.010	52.3	48.26	42.16	30.48	38.35	68.3	72.3
34	511.260.803.034.010 ²⁾	511.261.803.034.010	511.262.803.034.010	62.5	58.42	52.32	40.64	48.55	78.5	82.5
40	511.260.803.040.010 ²⁾	511.261.803.040.010 ²⁾	511.262.803.040.010	70.1	66.04	59.94	48.26	56.15	86.1	90.1
50	511.260.803.050.010 ²⁾	511.261.803.050.010 ²⁾	511.262.803.050.010	82.8	78.74	72.64	60.96	68.85	98.8	102.8
60	511.260.803.060.010 ²⁾	511.261.803.060.010 ²⁾	511.262.803.060.010 ²⁾	95.5	91.44	85.34	73.66	81.55	111.5	115.5
64	511.260.803.064.010	511.261.803.064.010	511.262.803.064.010 ²⁾	100.6	96.52	90.42	78.74	86.65	116.6	120.6

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

THR low profile header, Series 511

High-temperature resistant,
straight, space-saving design with solder pins

Features

- Pitch 2.54 × 2.54 mm
- 2-row design
- Closed, space-saving style
- Central polarisation
- Straight contacts, cross-section 0.64 × 0.64 mm
- 10 to 64 contacts
- High-temperature resistant
-  approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

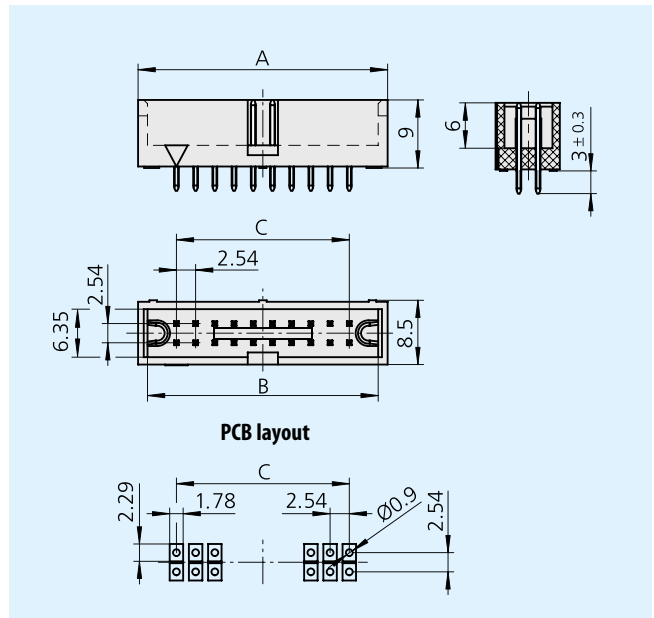
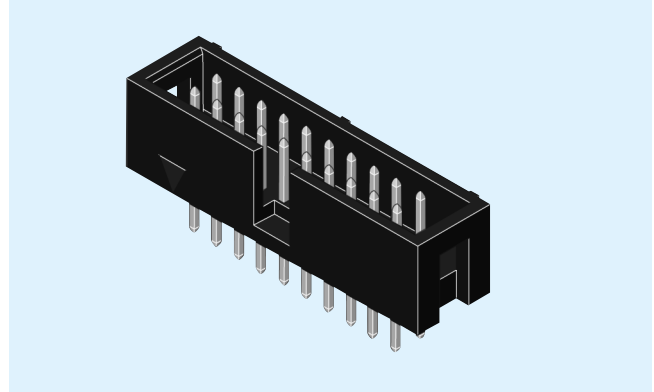
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C
SMT solder temperature: (max. 30 s)
on the solder point
260 °C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material und surface plating

Contact surface
Mating area: 0.5 µm Au on 1.25 µm Ni /
MIL-G-45 204 Class 00
Termination area: 2.0 µm Sn on 1.25 µm Ni
Insulator material: LCP black
Combustibility according
to UL94 V-0
Contact material: Copper alloy



THR low profile header, Series 511

High-temperature resistant,
straight, space-saving design with solder pins

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Dimension C
10	511.066.803.010.010	20.3	17.8	10.16
14	511.066.803.014.010	25.4	22.9	15.24
16	511.066.803.016.010	27.9	25.4	17.78
20	511.066.803.020.010	33.0	30.5	22.86
26	511.066.803.026.010	40.6	38.1	30.48
34	511.066.803.034.010	50.8	48.3	40.64
40	511.066.803.040.010	58.4	55.8	48.26
50	511.066.803.050.010	71.1	68.6	60.96
60	511.066.803.060.010	83.8	81.3	73.66
64	511.066.803.064.010 ²⁾	88.9	86.4	78.74

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

THR low profile header, Series 511

High-temperature resistant,
angled, space-saving design with solder pins

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Closed, space-saving style
- Central polarisation
- Angled contacts, cross-section 0.64×0.64 mm
- 10 to 64 contacts
- High-temperature resistant
-  approved
- For PCB thickness up to 1.6 mm

Technical data

Electrical specification

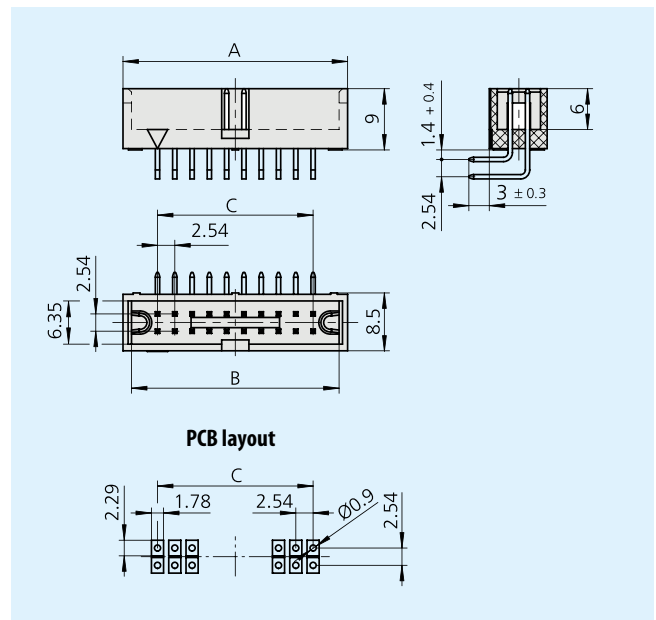
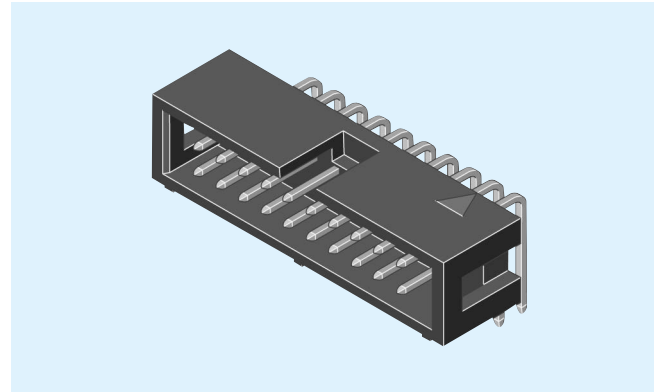
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5\ \mu\text{m}$ Au on $1.25\ \mu\text{m}$ Ni /
MIL-G-45 204 Class 00
Termination area: $2.0\ \mu\text{m}$ Sn on $1.25\ \mu\text{m}$ Ni
Insulator material: LCP black
Combustibility according to
UL94 V-0
Contact material: Copper alloy



THR low profile header, Series 511

High-temperature resistant,
angled, space-saving design with solder pins

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Dimension C
10	511.266.803.010.010	20.3	17.8	10.16
14	511.266.803.014.010	25.4	22.9	15.24
16	511.266.803.016.010	27.9	25.4	17.78
20	511.266.803.020.010	33.0	30.5	22.86
26	511.266.803.026.010	40.6	38.1	30.48
34	511.266.803.034.010	50.8	48.3	40.64
40	511.266.803.040.010	58.4	55.8	48.26
50	511.266.803.050.010	71.1	68.6	60.96
60	511.266.803.060.010	83.8	81.3	73.66
64	511.266.803.064.010 ²⁾	88.9	86.4	78.74

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

THR pin header, Series 511

High-temperature resistant,
without plug-in frame, straight design

Features

- Pitch 2.54 × 2.54 mm
- 2-row design
- Straight contacts, cross-section 0.64 × 0.64 mm
- Mating length 6.0 mm
- High-temperature resistant
-  approved

Technical data

Electrical specification

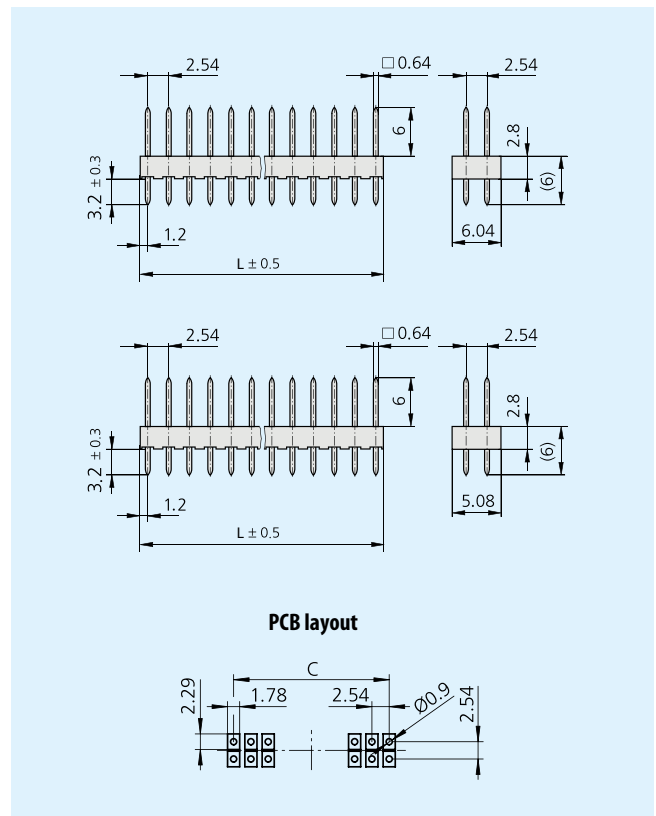
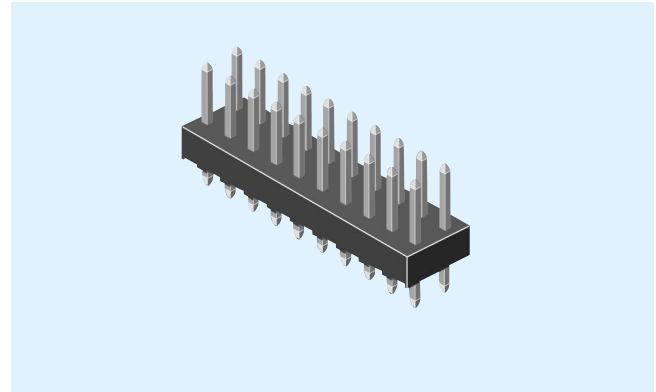
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55 °C to +125 °C
SMT solder temperature: (max. 30 s)
on the solder point
260 °C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: 0.5 µm Au on 1.25 µm Ni /
MIL-G-45 204 Class 00
Termination area: 2.0 µm Sn on 1.25 µm Ni
Insulator material: LCP black
Combustibility according
to UL94 V-0
Contact material: Copper alloy



THR pin header, Series 511

High-temperature resistant,
without plug-in frame, straight design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾		Dimension C	Dimension L
	Insulator 6.04 × 2.8 mm	Insulator 5.08 × 2.8 mm		
10	511.030.803.010.000	511.032.803.010.000 ²⁾	10.16	12.56
14	511.030.803.014.000	511.032.803.014.000 ²⁾	15.24	17.64
16	511.030.803.016.000 ²⁾	511.032.803.016.000 ²⁾	17.78	20.18
20	511.030.803.020.000	511.032.803.020.000 ²⁾	22.86	25.26
26	511.030.803.026.000	511.032.803.026.000 ²⁾	30.48	32.88
34	511.030.803.034.000	511.032.803.034.000 ²⁾	40.64	43.04
40	511.030.803.040.000 ²⁾	511.032.803.040.000 ²⁾	48.26	50.66
50	511.030.803.050.000 ²⁾	511.032.803.050.000 ²⁾	60.96	63.36
60	511.030.803.060.000 ²⁾	511.032.803.060.000	73.66	76.06
64	511.030.803.064.000 ²⁾	not available	78.74	81.14

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

THR pin header, Series 511

High-temperature resistant,
without plug-in frame, angled design

Features

- Pitch 2.54×2.54 mm
- 2-row design
- Angled contacts, cross-section 0.64×0.64 mm
- Mating length 6.5 mm
- High-temperature resistant
-  approved

Technical data

Electrical specification

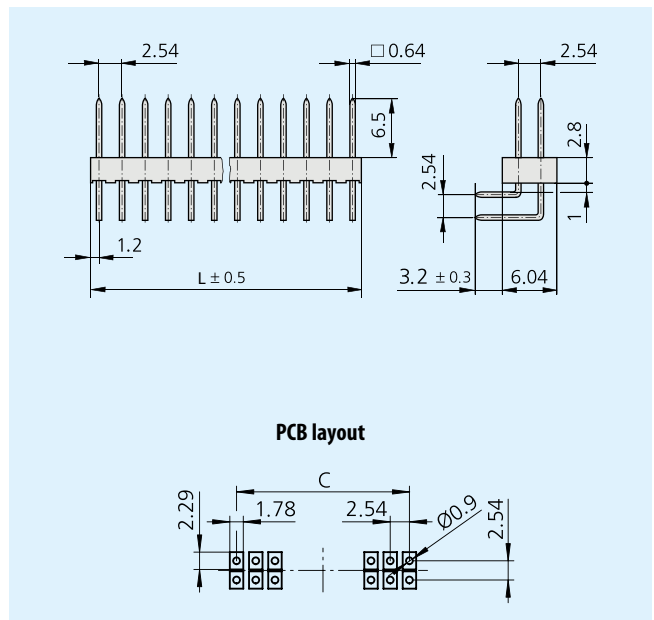
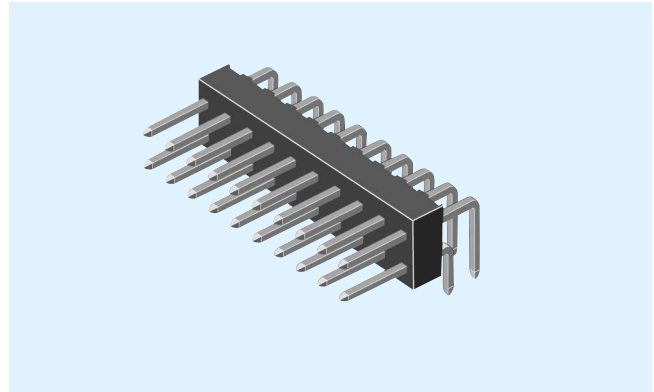
Contact load: ≤ 5 A
Test voltage: 1,000 V eff.

Mechanical specification

Operating temperature: -55°C to $+125^{\circ}\text{C}$
SMT solder temperature: (max. 30 s)
on the solder point
 260°C
Humidity level: 93 % rel. humidity in
accordance with
DIN EN 60603-13

Material and surface plating

Contact surface
Mating area: $0.5\ \mu\text{m}$ Au on $1.25\ \mu\text{m}$ Ni /
MIL-G-45 204 Class 00
Termination area: $2.0\ \mu\text{m}$ Sn on $1.25\ \mu\text{m}$ Ni
Insulator material: LCP
Combustibility according to
UL94 V-0
Contact material: Copper alloy



THR pin header, Series 511

High-temperature resistant,
without plug-in frame, angled design

Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension C	Dimension L
10	511.270.803.010.000	10.16	12.56
14	511.270.803.014.000 ²⁾	15.24	17.64
16	511.270.803.016.000 ²⁾	17.78	20.18
20	511.270.803.020.000 ²⁾	22.86	25.26
26	511.270.803.026.000 ²⁾	30.48	32.88
34	511.270.803.034.000 ²⁾	40.64	43.04
40	511.270.803.040.000 ²⁾	48.26	50.66
50	511.270.803.050.000 ²⁾	60.96	63.36
60	511.270.803.060.000 ²⁾	73.66	76.06
64	511.270.803.064.000 ²⁾	78.74	81.14

¹⁾ For __ please enter the required surface plating:

03 = 0.5 µm Au on Ni (standard)

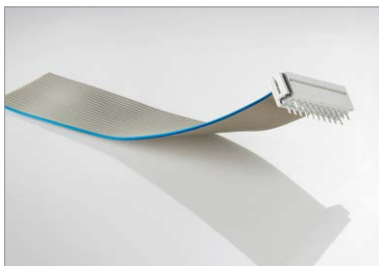
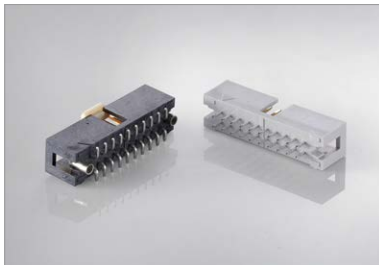
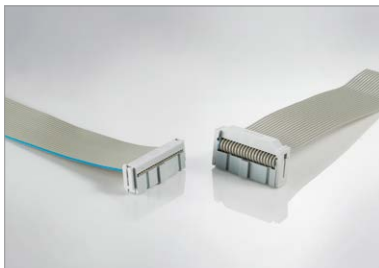
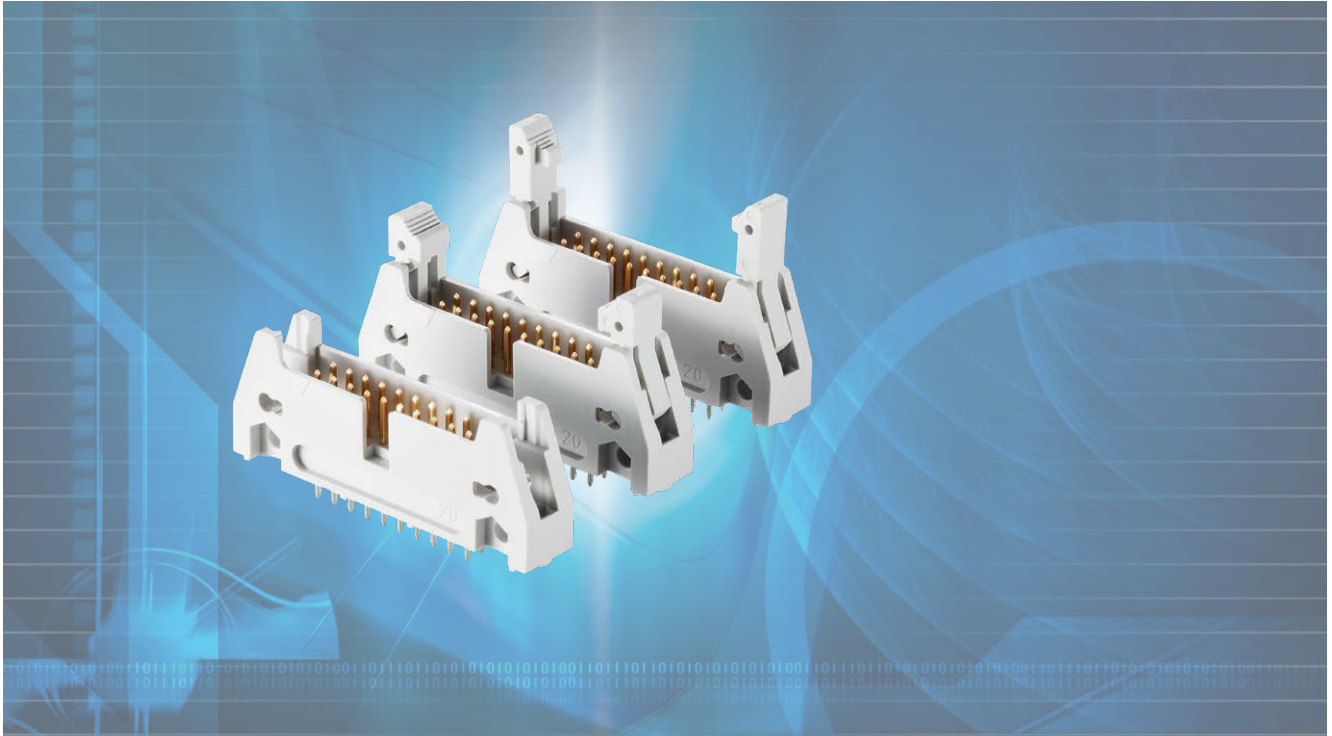
09 = Flash-gold-plated (upon request)

35 = 0.75 µm Au on Ni (upon request)

²⁾ Upon request

Number codes, see page 12.

ODU FLAKAFIX IDC PCB connector Series 533



IDC PCB connector, Series 533

2-row design

Features

- 2-row PCB connector for standard PCBs from 1.5 to 2.0 mm
- Space-saving (reduced space requirements)
- Pitch 2.54×2.54 mm
- Reliable transfer with the highest capacity
- 10 to 64 contacts
-  approved

Technical data

Electrical specification

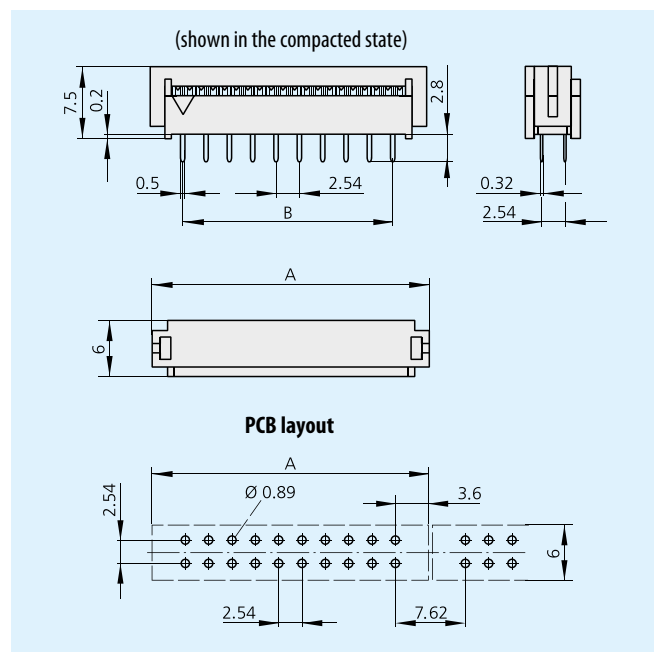
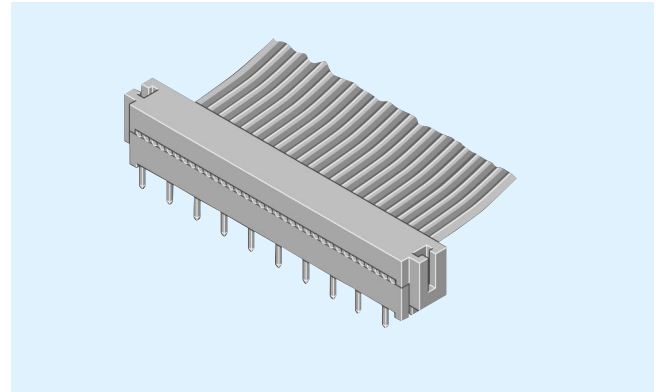
Contact load:	≤ 1 A at wire cross-section 0.08 mm^2 (AWG 28) ≤ 1.5 A at wire cross-section 0.14 mm^2 (AWG 26)
Test voltage:	1,000 V eff.

Mechanical specification

Operating temperature:	-20°C to $+105^\circ\text{C}$
Humidity level:	93 % rel. humidity in accordance with DIN EN 60603-13

Material and surface plating

Contact surface	
Termination area:	$1.0 \mu\text{m}$ Sn on $1.25 \mu\text{m}$ Ni
Insulator material:	PBT grey, fibre-glass reinforced Combustibility according to UL94 V-0
Contact material:	Copper alloy



IDC PCB connector, Series 533

2-row design

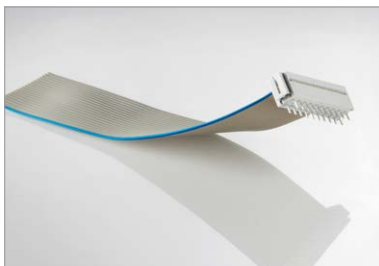
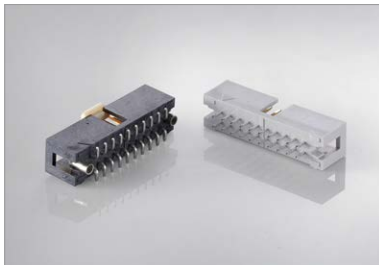
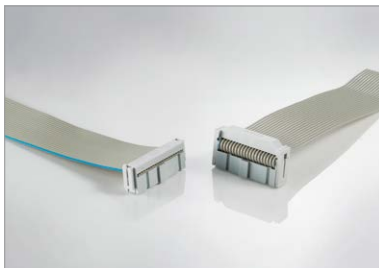
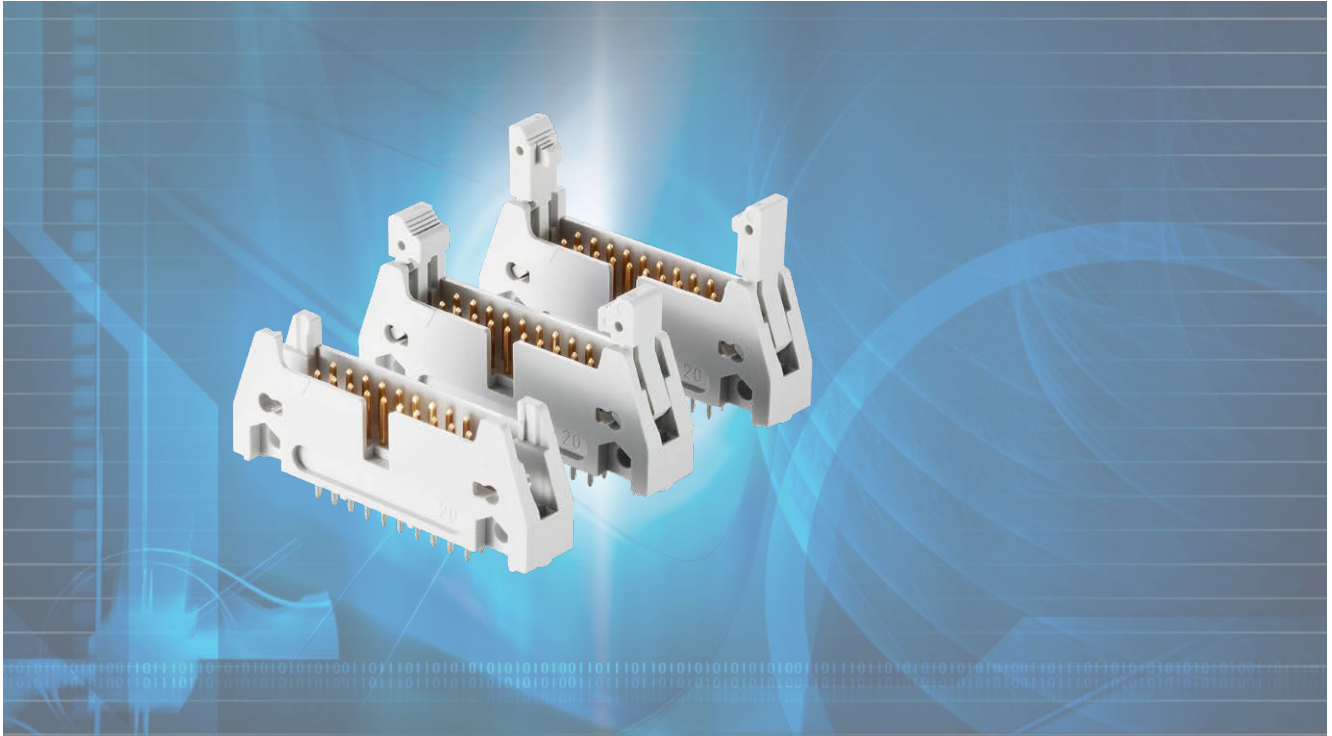
Order information and dimensional table

(All dimensions are in mm)

Number of contacts	Part number ¹⁾	Dimension A	Dimension B
10	533.065.024.010.010	17.3	10.16
14	533.065.024.014.010	22.4	15.24
16	533.065.024.016.010	24.9	17.78
20	533.065.024.020.010	30.0	22.86
26	533.065.024.026.010	37.6	30.48
34	533.065.024.034.010	47.8	40.64
40	533.065.024.040.010	55.4	48.26
50	533.065.024.050.010	68.1	60.96
60	533.065.024.060.010	80.8	73.66
64	533.065.024.064.010	85.8	78.74

¹⁾ 010 (last block) = Packaging: cardboard box

ODU FLAKAFIX Flat cable and processing tools



Contents

FLAKAFIX flat cable and processing tools

Chapter		From page	
1	FLAKAFIX flat cable	52	
	Flat cable AWG 28	52	
	Flat cable AWG 26	53	
2	FLAKAFIX processing tools	54	
	FLAKAFIX benchtop press, sizes 1 and 2	54	
	Tool inserts for benchtop press	55	
	FLAKAFIX hand cutting tool	55	

FLAKAFIX flat cable AWG 28

Monochrome grey, in 1.27-mm pitch

Features

- Pitch 1.27 mm
- Stranded wire
- AWG 28
- Extruded flat cable
- Easily separated wires
- 9 to 64 contacts
- approved

Technical data

Electrical specification

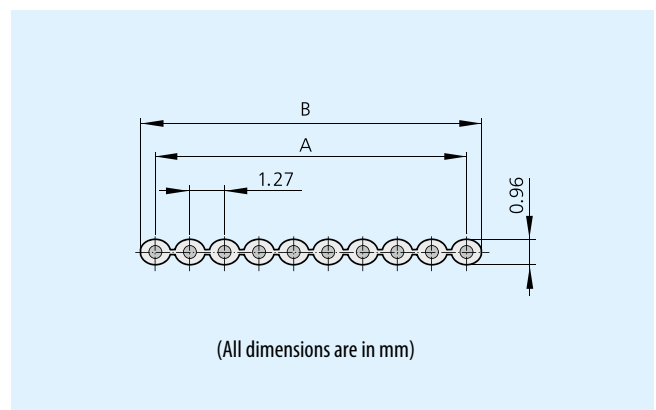
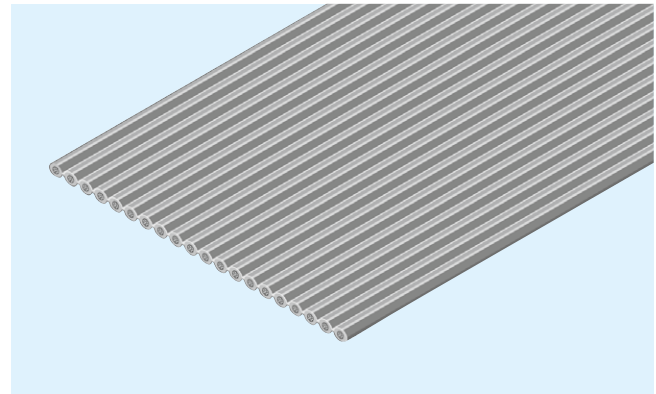
Cross-section:	approx. 0.09 mm ²
Conductor diameter:	approx. 0.39 mm
Conductor structure:	7 pieces with Ø 0.127 mm
Test voltage:	2,000 V
Operating voltage:	300 V max.
Current carrying capacity:	max. 2.1 A at 25 °C
Conductor resistance:	230 Ω / km max.
Insulation resistance:	> 20 MΩ × km
Capacitance (1kHz) GSG:	60 pF / m

Mechanical specification

Operating temperature: -20 °C to +105 °C

Material and surface plating

Conductors:	Cu flexible lead, tin-plated (AWG 28)
Insulation:	Special PVC, similar to Y18 acc. to VDE 0207;
Colour:	grey with edge wire in different colour
Flame resistance:	in accordance with UL VW-1 / CSA FT-1
Shore hardness A:	94 ± 3



Order information¹⁾ and dimensional table

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Tolerance in dimensions A and B
09	921.659.016.009.000	10.16	11.43	± 0.20
10	921.659.016.010.000	11.43	12.70	± 0.20
14	921.659.016.014.000	16.51	17.78	± 0.20
15	921.659.016.015.000	17.78	19.05	± 0.20
16	921.659.016.016.000	19.05	20.32	± 0.20
20	921.659.016.020.000	24.13	25.40	± 0.20
25	921.659.016.025.000	30.48	31.75	± 0.25
26	921.659.016.026.000	31.75	33.02	± 0.25
34	921.659.016.034.000	41.91	43.18	± 0.30
37	921.659.016.037.000	45.72	46.99	± 0.30
40	921.659.016.040.000	49.53	50.80	± 0.30
50	921.659.016.050.000	62.23	63.50	± 0.40
60	921.659.016.060.000	74.93	76.20	± 0.50
64	921.659.016.064.000	80.01	81.28	± 0.50

¹⁾ On request

FLAKAFIX flat cable AWG 26

Monochrome grey, in pitch 1.27 mm

Features

- Pitch 1.27 mm
- Stranded wire
- AWG 26
- Extruded ribbon conductor
- Easily separated wires
- 9 to 64 contacts
- approved

Technical data

Electrical specification

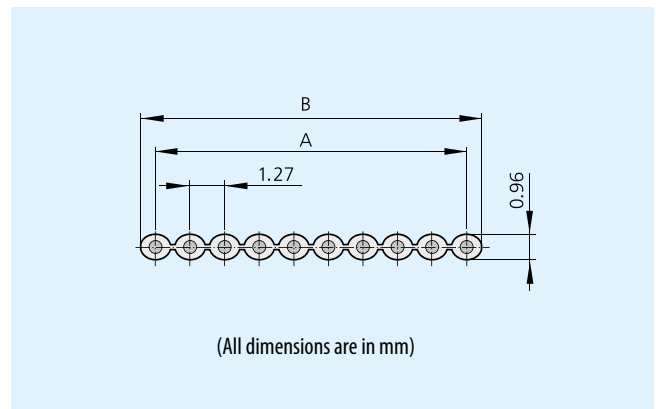
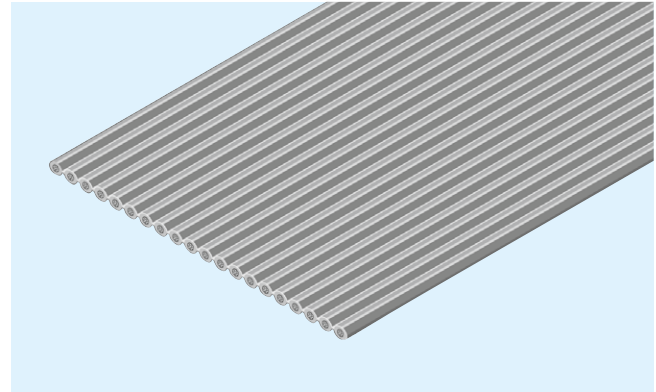
Cross-section:	approx. 0.14 mm ²
Conductor diameter:	approx. 0.48 mm
Conductor structure:	7 pieces with Ø 0.16 mm
Test voltage:	2,000 V
Operating voltage:	300 V max.
Current carrying capacity:	max. 2.8 A at 25 °C
Conductor resistance:	150 Ω / km max.
Insulation resistance:	100 MΩ × km
Capacitance (1 kHz):	60 pF / m

Mechanical specification

Operating temperature: -20 °C to +105 °C

Material and surface plating

Conductors:	Cu flexible lead, tin-plated (AWG 26)
Insulation:	Special PVC, similar to Y18 acc. to VDE 0207;
Colour:	grey with edge wire in different colour
Flame resistance:	in accordance with UL VW-1/CSA FT-1
Shore hardness A:	94 ± 3



Order information¹⁾ and dimensional table

Number of contacts	Part number ¹⁾	Dimension A	Dimension B	Tolerance in dimensions A and B
09	921.659.017.009.000 ²⁾	10.16	11.43	± 0.20
10	921.659.017.010.000	11.43	12.70	± 0.20
14	921.659.017.014.000	16.51	17.78	± 0.20
15	921.659.017.015.000 ²⁾	17.78	19.05	± 0.20
16	921.659.017.016.000	19.05	20.32	± 0.20
20	921.659.017.020.000	24.13	25.40	± 0.20
25	921.659.017.025.000	30.48	31.75	± 0.25
26	921.659.017.026.000	31.75	33.02	± 0.25
34	921.659.017.034.000	41.91	43.18	± 0.30
37	921.659.017.037.000	45.72	46.99	± 0.30
40	921.659.017.040.000	49.53	50.80	± 0.30
50	921.659.017.050.000	62.23	63.50	± 0.40
60	921.659.017.060.000	74.93	76.20	± 0.50
64	921.659.017.064.000	80.01	81.28	± 0.50

¹⁾ Upon request

²⁾ Upon request

Processing tools

For time-saving and reliable processing of the different ODU FLAKAFIX products, we offer high quality, functional, tested tools coordinated for the application area. They guarantee the user the simplest handling and effortless work thanks to optimal transmission. Trouble-free retrofitting in just seconds by replacing the press inserts for various connector types requires a minimum of time.

It is also possible to press the connector parallel or at an angle of 90° to the tool. Thanks to its compact construction, the FLAKAFIX benchtop press is also suitable for especially high demands. This simplifies the tool selection for the user and also ensures that no bad investments result from tool compromises.

Cable processing tools / assembly tools

For attaching to flat cable

**FLAKAFIX benchtop press, size 2,
mounted on a base plate,
with tooling plate**

Features

- Manual toggle press
- Suitable for processing small series from the entire ODU FLAKAFIX programme

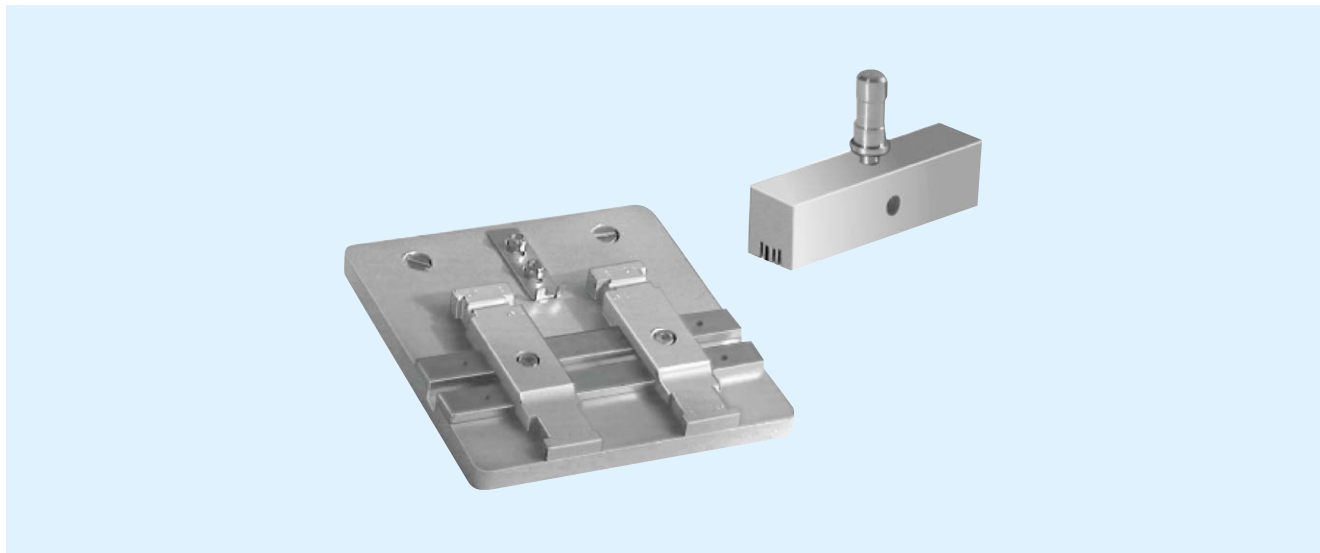
Order information

FLAKAFIX benchtop press, size 2
Part number: 099.100.000.000.000



Tool inserts suitable for the FLAKAFIX benchtop press

Size 1 and size 2



Order information and dimensional table

Model	For series	Benchtop press		Assembly plate	Upper die
IDC PCB connector, 2-row	533.065..	099.100...		598.120.001.600.000	598.110.021.600.000
IDC sockets	517.075/175 ..	099.100..		598.120.001.600.000	598.110.016.600.000

Hand tools

FLAKAFIX hand cutting tool

Features

- For trimming flat cable, up to 64 contacts
- Easy to handle
- With lateral cable stop
- Cutting at precision angles

Order information

FLAKAFIX hand cutting tool

Part number: 080.001.001.000.000



All dimensions are in mm.
Some figures are for illustrative purposes only. Subject to change without notice. Errors and omissions excepted. We reserve the right to change our products and their technical specifications at any time in the interest of technical improvement. This publication supersedes all prior publications.

ODU FLAKAFIX - PCB Connectors / C / 0324 / EN

This publication is also available as a PDF file that can be downloaded from www.odu-connectors.com