



# ODU FLAKAFIX

Socket Connectors with  
IDC Contacts, grid spacing 2,54 mm  
Headers for Solder-In, SMT, Press-Fit and  
Pin-in-Paste Technology



The latest version of this catalogue  
is posted on our websites:

**[www.odu.de](http://www.odu.de)**

**[www.odu-usa.com](http://www.odu-usa.com)**

**[www.odu-china.com](http://www.odu-china.com)**

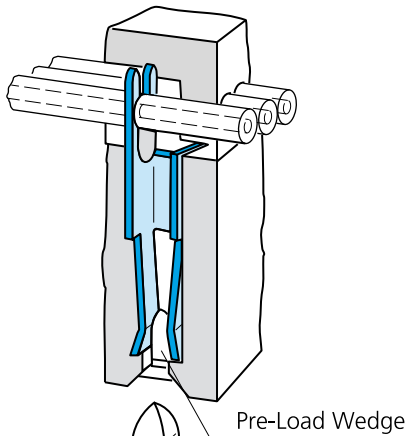
All data and specifications subject  
to change without notice.  
All dimensions in mm.  
All pictures are illustrations.

<b>FLAKAFIX®-System</b> .....	<b>4</b>
ODU U-Shaped IDC Contact .....	4
Termination Technologies on the PCB .....	5
Typical using area .....	6
<b>Socket connectors Series 517</b> .....	<b>7 - 10</b>
<b>Header Series 511</b> .....	<b>11 - 42</b>
<b>-Solder-In Technology</b> .....	<b>11 - 20</b>
<b>-SMT (Surface Mounting Technology)</b> .....	<b>21 - 26</b>
<b>-Press-Fit Technology</b> .....	<b>27 - 30</b>
<b>-Pin-in-Paste Technology</b> .....	<b>31 - 40</b>
<b>-Accessories Series 511</b> .....	<b>41 - 42</b>
<b>Transition Series 533, Ribbon Connector Series 538</b> .....	<b>43 - 46</b>
<b>-Ribbon Connector DIN 41612/C 64F</b> .....	<b>45 - 46</b>
<b>FLAKAFIX® Ribbon Cable Series 659</b> .....	<b>47 - 50</b>
<b>Application Tooling for FLAKAFIX®-Connectors</b> .....	<b>51 - 56</b>
<b>Part Number Keys/Packing units</b> .....	<b>57 - 60</b>

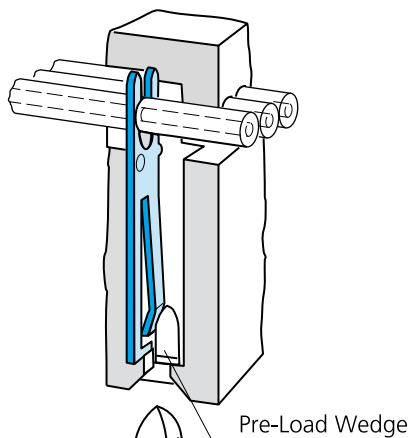
## FLAKAFIX®-System

For most of today's electronic applications a modular approach is very desirable. The FLAKAFIX® system is a mass-termination insulation displacement (IDC) connector system for parallel wiring. Its modular design offers reliable yet cost effective solutions to common circuit board interconnect problems. Outstanding features are high contact reliability, long operating life, low contact resistance, and gas-tight connections at the conductor.

When used with proper hand-held or automatic termination equipment it meets all requirements for maximum efficiency and highest quality.



Single-U, double-action  
wiping IDC contact



Single-U, single-action  
wiping IDC contact

### ODU U-shaped IDC contact:

The most significant feature of the FLAKAFIX® -System is the U-shaped cutting blade (IDC) contact. When combined with sockets, spring contacts, wirewrap posts or solder pins it provides a fast and reliable termination method.

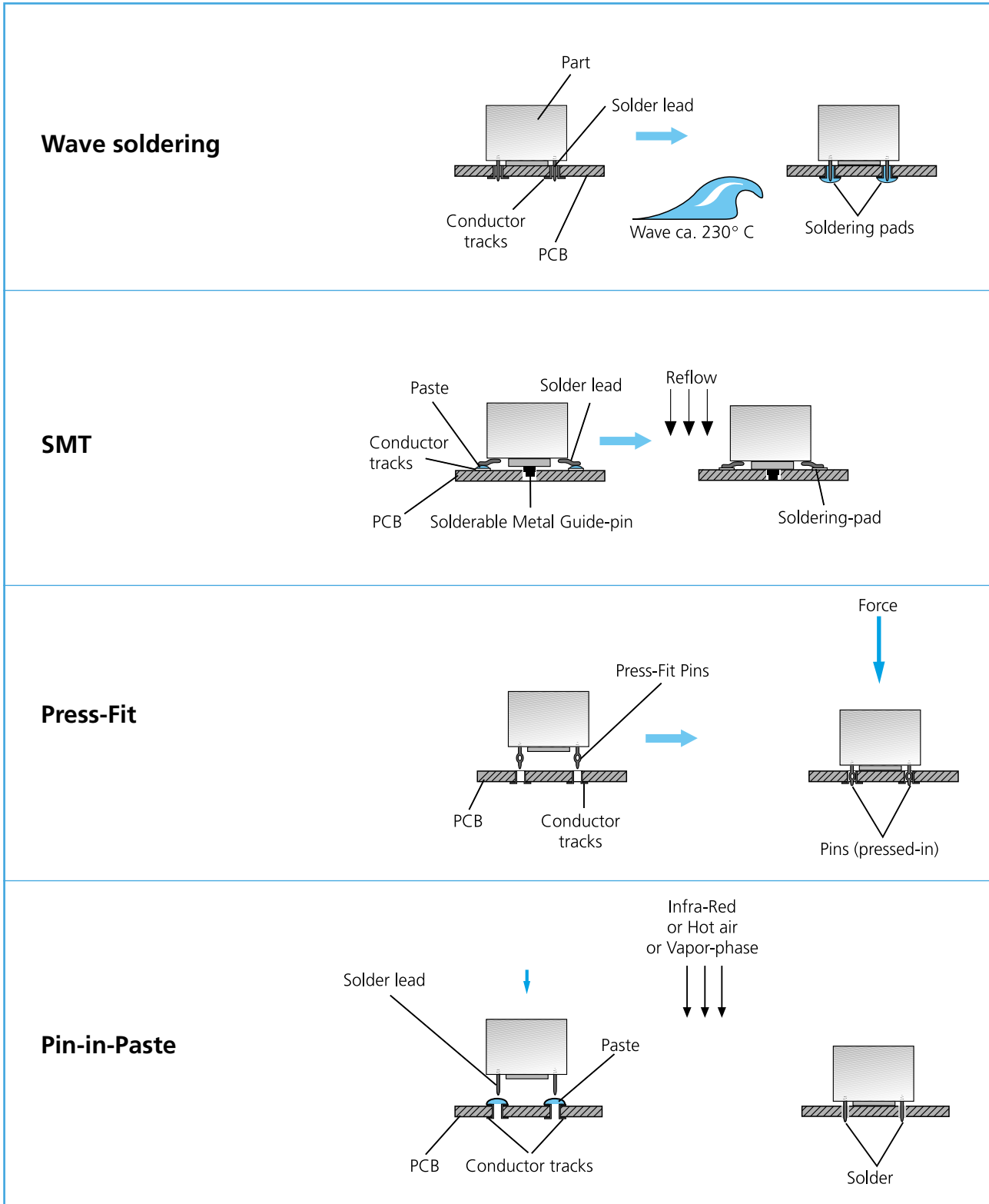
FLAKAFIX® connectors with IDC termination can be used for:

- Wire-to-board devices to connect cable and PCB circuitry.
- Separable connections between sockets and headers.
- Dual-in-Line plugs for permanent connection of ribbon cable to PCBs or separable connections between boards and DIP sockets.

In-house and independent tests, as well as many actual applications of the FLAKAFIX® system have demonstrated its high quality and reliability.

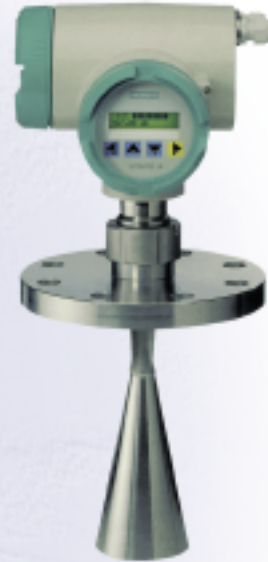
Test reports are available upon request.

# Termination Technologies on the PCB



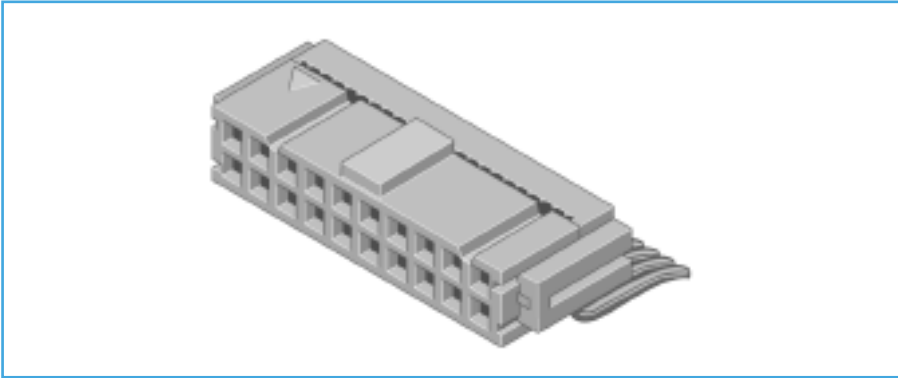
- ODU has a wide experience with all technologies shown.
- Main focus are SMT and Solder-In Technology.

# Typical using area for the ODU FLAKAFIX® System



- All areas of medium data technique
- Measuring- and control technique
- Automation
- Telecommunication and mobile phones
- Electrical measuring devices
- Machine- and equipment building
- Test-equipment
- Consumer electronics

# ODU FLAKAFIX®

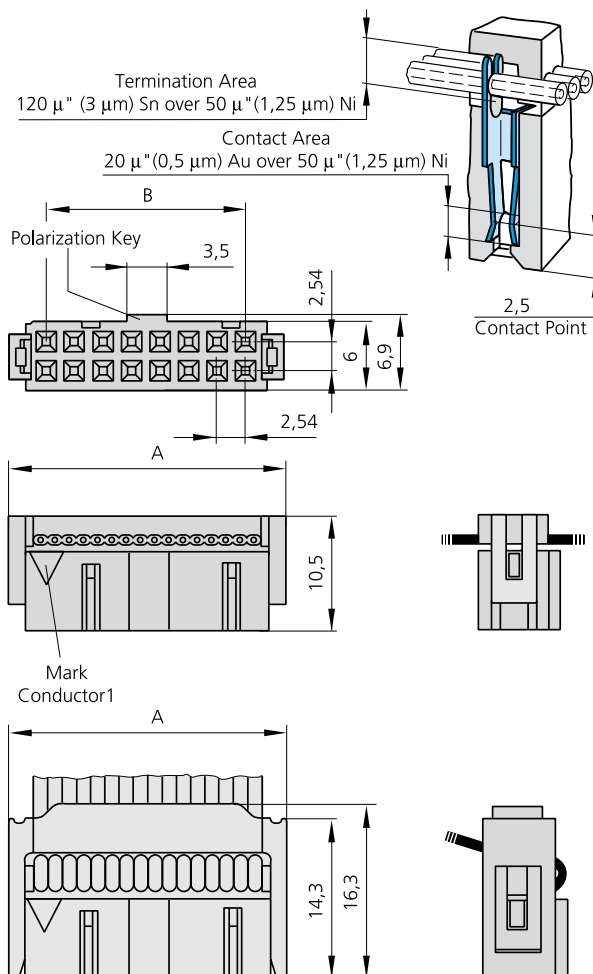
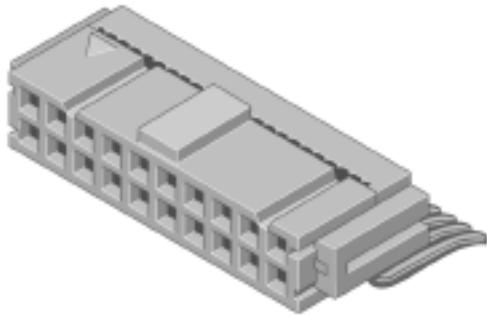


## Socket connectors Series 517


Single U-IDC Contact, Double Action Wiping Spring Contact . . . . .	8
Single U-IDC Contact, Single Action Wiping Spring Contact . . . . .	9
Strain relief . . . . .	10
Locking latches . . . . .	10



## Socket connectors SERIES 517 with Single-U IDC Contact, Double-action Wiping spring contact



### Features

- Mates with headers pins .025" (.64 mm)
- Compatible with other leading manufacturers
- Available with or without strain relief
- 10 - 64 positions
- With polarization key
- Acc. to DIN EN60603-13 (DIN 41 651)
- Available with metal spring locking clip
-  US recognized

### Technical Data

#### Electrical Specifications

Current Rating:	≤ 1 A max. for conductor 0,08 mm <sup>2</sup> (AWG 28)
	≤ 1,5 A max. for conductor 0,14 mm <sup>2</sup> (AWG 26)
Test Voltage:	1000 Volt eff.

#### Mechanical Specifications

Operating Temperature:	-55°C to +125°C
Humidity:	93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact Finish	
Contact Area:	20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni MIL-G-45 204 Class 00
Termination Area:	120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni
Insulation Body:	PBT glass-filled grey UL flammability rated 94 V-O
Contact:	Cu alloy

### Ordering Information and Dimensions (All Dimensions in mm)


Pos.	Part Number without strain relief	Part Number with strain relief	Dim. A	Dim. B	Additional ordering information
10	517.075.003.010.XXX	517.076.003.010.XXX	17,3	10,16	For other versions with different surface finishes please see page 58
14	517.075.003.014.XXX	517.076.003.014.XXX	22,4	15,24	
16	517.075.003.016.XXX	517.076.003.016.XXX	24,9	17,78	
20	517.075.003.020.XXX	517.076.003.020.XXX	30,0	22,86	
26	517.075.003.026.XXX	517.076.003.026.XXX	37,6	30,48	
34	517.075.003.034.XXX	517.076.003.034.XXX	47,8	40,64	
40	517.075.003.040.XXX	517.076.003.040.XXX	55,4	48,26	
50	517.075.003.050.XXX	517.076.003.050.XXX	68,1	60,96	
60	517.075.003.060.XXX	517.076.003.060.XXX	80,8	73,66	
64	517.075.003.064.XXX	517.076.003.064.XXX	85,8	78,74	

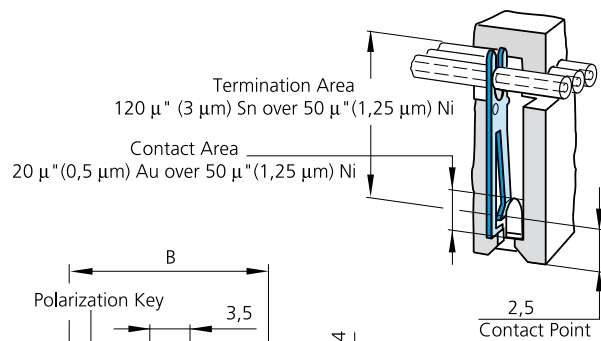
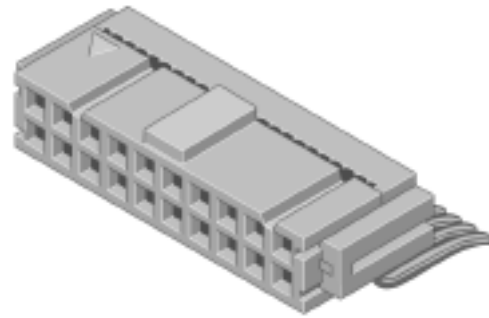
XXX = see page 60



## Socket connectors SERIES 517 with Single-U IDC Contact, Single-Action Wiping Spring Contact

### Features

- Mates with headers pins .025" (.64 mm)
- Compatible with other leading manufacturers
- Available with or without strain relief
- 10 - 64 positions
- With polarization key
- Acc. to DIN EN60603-13 (DIN 41 651)
- Available with metal spring locking clip
-  us recognized



### Technical Data

#### Electrical Specifications

Current Rating: ≤ 1 A max. for conductor  
0,08 mm<sup>2</sup> (AWG 28)  
≤ 1,5 A max. for conductor  
0,14 mm<sup>2</sup> (AWG 26)

Test Voltage: 1000 Volt eff.

#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
Humidity: 93% rel. humidity acc. to  
DIN EN 60603-13

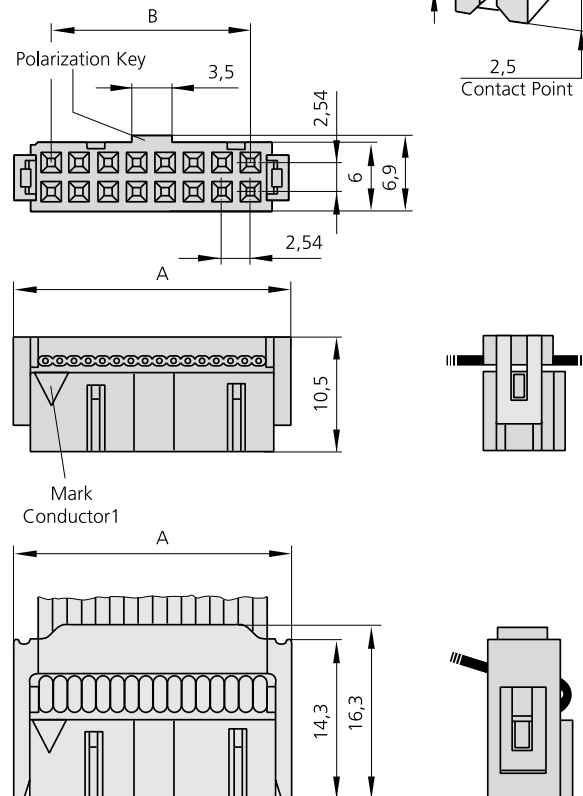
#### Materials and Surface Finish

Contact Finish  
Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00

Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni

Insulation Body: PBT glass-filled  
grey  
UL flammability rated 94 V-0

Contact: Cu alloy

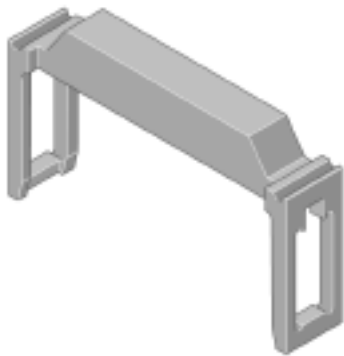


### Ordering Information and Dimensions (All Dimensions in mm)

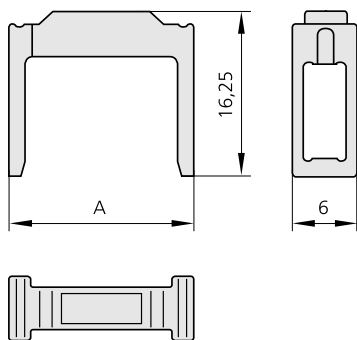
Pos.	Part Number without strain relief	Part Number with strain relief	Dim. A	Dim. B	Additional ordering information
10	517.065.003.010.XXX	517.066.003.010.XXX	17,3	10,16	For other versions with different surface finishes please see page 58
14	517.065.003.014.XXX	517.066.003.014.XXX	22,4	15,24	
16	517.065.003.016.XXX	517.066.003.016.XXX	24,9	17,78	
20	517.065.003.020.XXX	517.066.003.020.XXX	30,0	22,86	
26	517.065.003.026.XXX	517.066.003.026.XXX	37,6	30,48	
34	517.065.003.034.XXX	517.066.003.034.XXX	47,8	40,64	
40	517.065.003.040.XXX	517.066.003.040.XXX	55,4	48,26	
50	517.065.003.050.XXX	517.066.003.050.XXX	68,1	60,96	
60	517.065.003.060.XXX	517.066.003.060.XXX	80,8	73,66	
64	517.065.003.064.XXX	517.066.003.064.XXX	85,8	78,74	

XXX = see page 60

### Strain Relief for Socket Connectors SERIES 517



#### Dimensions

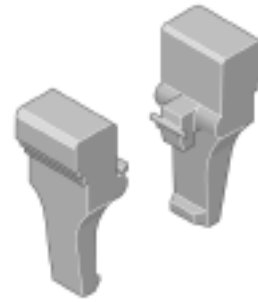


(All Dimensions in mm)

#### Ordering Information and Dimensions

Pos.	Part Number	Dim. 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 Socket Connectors SERIES 517



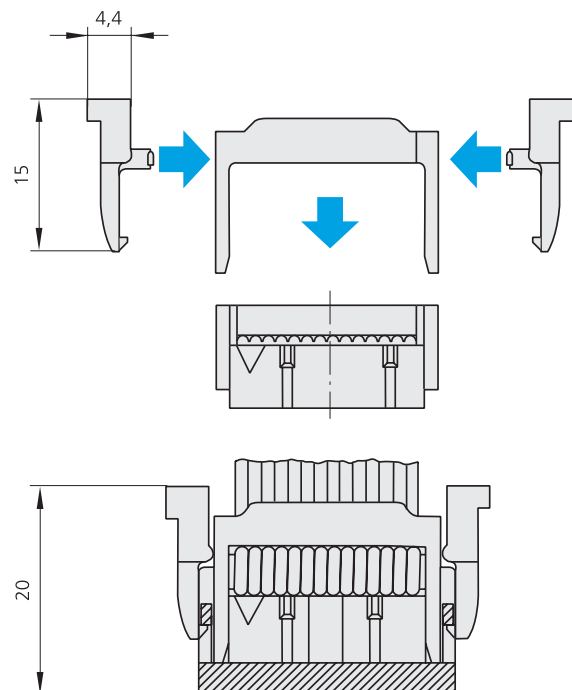
#### Features

- Can be added after connector assembly
- Serves as additional locking mechanism
- For low profile designs
- recognized

latches for socket connectors SERIES 517 and low profile headers can be installed in the strain relief without the use of special tools.

The latches serve also as ejectors. They can be installed after the IDC termination process.

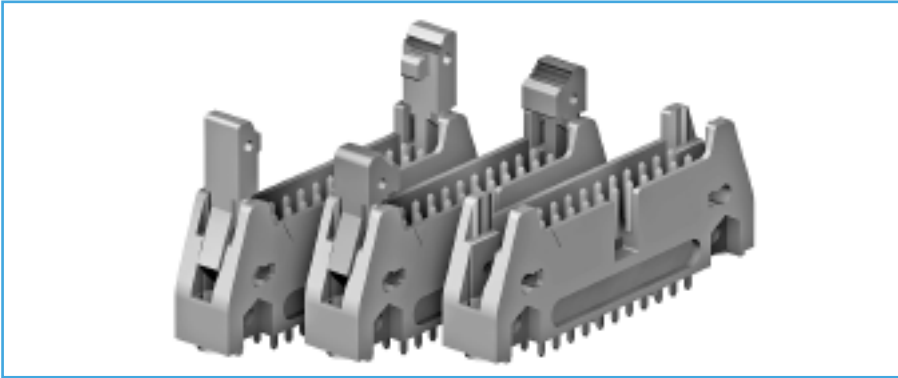
Attachment of the latches to the completed connector is simple and without special skill requirements.



#### Ordering Information

Part Number
517.063.105.923.000

# ODU FLAKAFIX®



## Headers Solder-In Technology


Header 2-rows DIN EN 60 603-13, straight with Solder Pins L = 3.2 mm, without, short or long latches. . . . .	12
Header 2-rows DIN EN 60 603-13, straight with Solder Pins L = 4.5 mm, without, short or long latches. . . . .	13
Header 2-rows DIN EN 60 603-13, right-angle with Solder Pins L = 3.2 mm, without, short or long latches . . . . .	14
Header 2-rows DIN EN 60 603-13, right-angle with Solder Pins L = 4.5 mm, without, short or long latches . . . . .	15
Header 2-rows low Profile, straight with Solder Pins L = 3.2 or 4.5 mm . . . . .	16
Header 2-rows low Profile, right-angle with Solder Pins L = 3.2 or 4.5 mm . . . . .	17
Header 2-rows, unprotected, straight . . . . .	18
Header 2-rows, unprotected, right-angle . . . . .	19

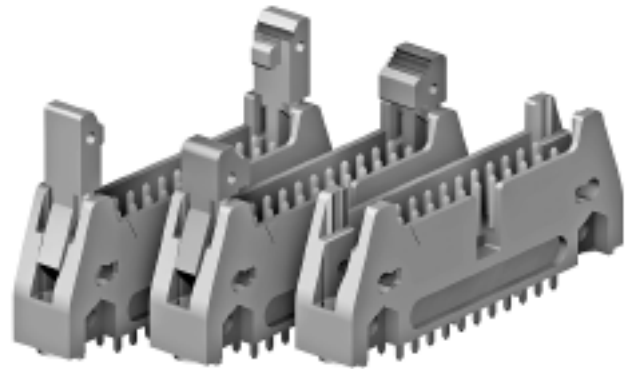


## Header Series 511

DIN EN 60 603-13 (DIN 41651), straight with solder pins – for PCB Thickness up to 1,6 mm

### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
-  recognized



### Technical Data

#### Electrical Specifications

Current Rating: ≤ 5 A  
 Test Voltage: 1000 Volt eff.

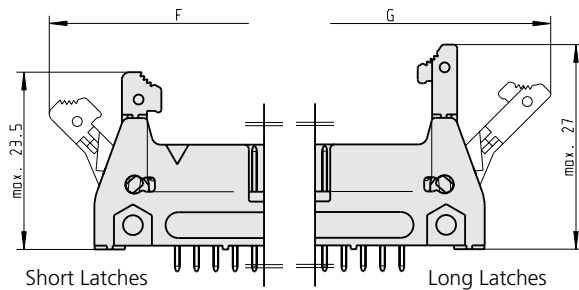
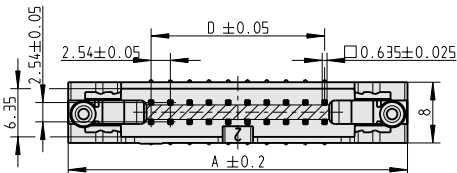
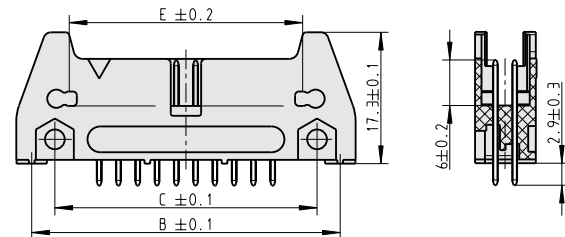
#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 Humidity: 93% rel. humidity acc. to DIN EN 60603-13

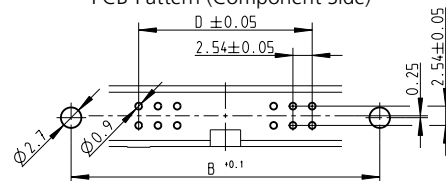
#### Materials and Surface Finish

Contact Finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59



PCB-Pattern (Component Side)



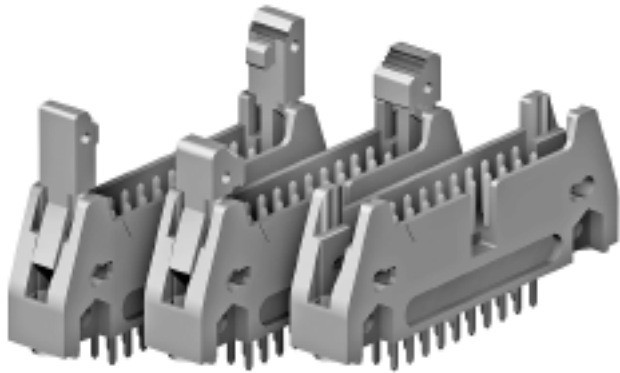
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Bestell-Nummer mit Auswerfer kurz	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.060.003.010.XXX	511.061.003.010.XXX	511.062.003.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.060.003.014.XXX	511.061.003.014.XXX	511.062.003.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.060.003.016.XXX	511.061.003.016.XXX	511.062.003.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.060.003.020.XXX	511.061.003.020.XXX	511.062.003.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.060.003.026.XXX	511.061.003.026.XXX	511.062.003.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.060.003.034.XXX	511.061.003.034.XXX	511.062.003.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.060.003.040.XXX	511.061.003.040.XXX	511.062.003.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.060.003.050.XXX	511.061.003.050.XXX	511.062.003.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.060.003.060.XXX	511.061.003.060.XXX	511.062.003.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.060.003.064.XXX	511.061.003.064.XXX	511.062.003.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6


XXX = see page 60

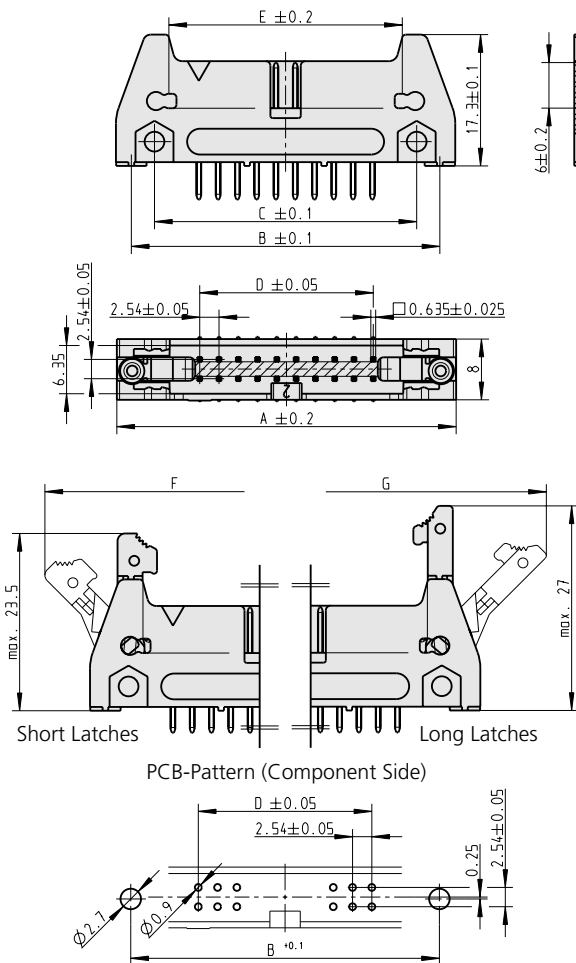
## Header Series 511

DIN EN 60 603-13 (DIN 41651), straight with solder pins – for PCB Thickness up to 3,2 mm



### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
-  recognized



### Technical Data

#### Electrical Specifications

Current Rating: ≤ 5 A  
 Test Voltage: 1000 Volt eff.

#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact Finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59

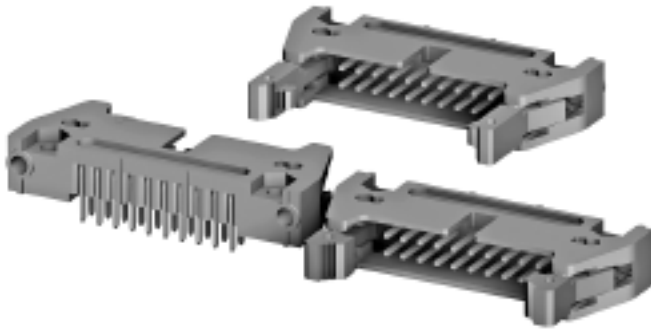
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Bestell-Nummer mit Auswerfer kurz	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.052.003.010.XXX	511.053.003.010.XXX	511.054.003.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.052.003.014.XXX	511.053.003.014.XXX	511.054.003.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.052.003.016.XXX	511.053.003.016.XXX	511.054.003.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.052.003.020.XXX	511.053.003.020.XXX	511.054.003.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.052.003.026.XXX	511.053.003.026.XXX	511.054.003.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.052.003.034.XXX	511.053.003.034.XXX	511.054.003.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.052.003.040.XXX	511.053.003.040.XXX	511.054.003.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.052.003.050.XXX	511.053.003.050.XXX	511.054.003.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.052.003.060.XXX	511.053.003.060.XXX	511.054.003.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.052.003.064.XXX	511.053.003.064.XXX	511.054.003.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6


XXX = see page 60

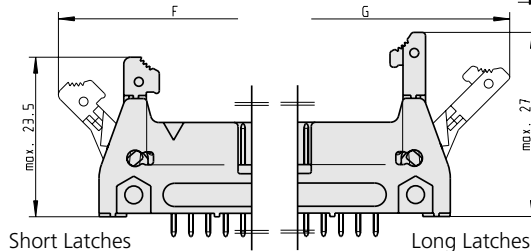
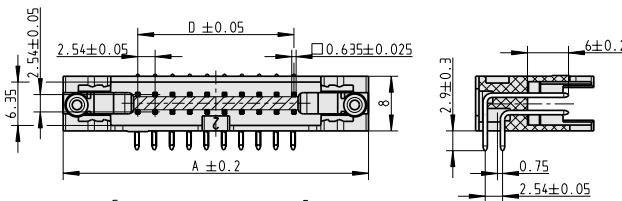
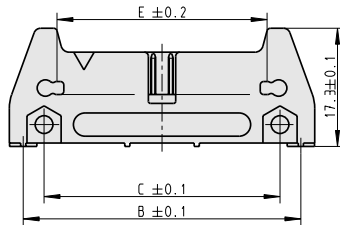
## Header Series 511

DIN EN 60 603-13 (DIN 41651), right angled with solder pins – for PCB Thickness up to 1,6 mm

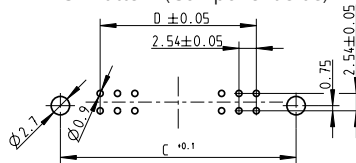


### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
-  recognized



PCB-Pattern (Component Side)



### Technical Data

#### Electrical Specifications

Current Rating: ≤ 5 A  
 Test Voltage: 1000 Volt eff.

#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact Finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59

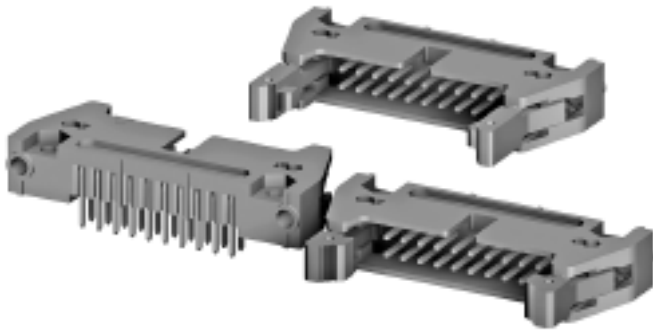
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.260.003.010.XXX	511.261.003.010.XXX	511.262.003.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.260.003.014.XXX	511.261.003.014.XXX	511.262.003.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.260.003.016.XXX	511.261.003.016.XXX	511.262.003.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.260.003.020.XXX	511.261.003.020.XXX	511.262.003.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.260.003.026.XXX	511.261.003.026.XXX	511.262.003.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.260.003.034.XXX	511.261.003.034.XXX	511.262.003.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.260.003.040.XXX	511.261.003.040.XXX	511.262.003.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.260.003.050.XXX	511.261.003.050.XXX	511.262.003.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.260.003.060.XXX	511.261.003.060.XXX	511.262.003.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.260.003.064.XXX	511.261.003.064.XXX	511.262.003.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6


XXX = see page 60

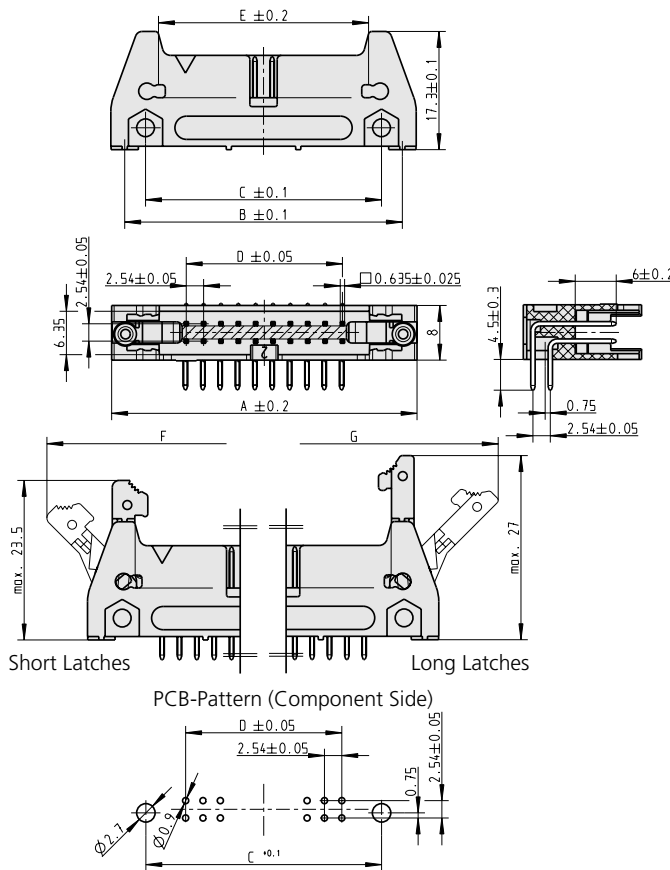
## Header Series 511

DIN EN 60 603-13 (DIN 41651), right angled with solder pins – for PCB Thickness up to 3,2 mm



### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
-  recognized



### Technical Data

#### Electrical Specifications

Current Rating: ≤ 5 A  
 Test Voltage: 1000 Volt eff.

#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact Finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled grey  
 UL flammability rated 94 V-0  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59

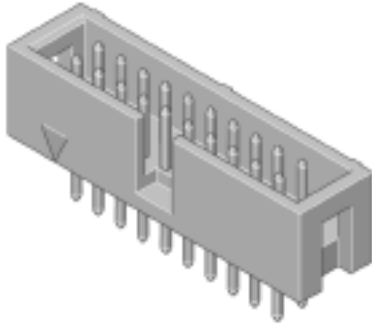
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.252.003.010.XXX	511.253.003.010.XXX	511.254.003.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.252.003.014.XXX	511.253.003.014.XXX	511.254.003.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.252.003.016.XXX	511.253.003.016.XXX	511.254.003.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.252.003.020.XXX	511.253.003.020.XXX	511.254.003.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.252.003.026.XXX	511.253.003.026.XXX	511.254.003.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.252.003.034.XXX	511.253.003.034.XXX	511.254.003.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.252.003.040.XXX	511.253.003.040.XXX	511.254.003.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.252.003.050.XXX	511.253.003.050.XXX	511.254.003.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.252.003.060.XXX	511.253.003.060.XXX	511.254.003.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.252.003.064.XXX	511.253.003.064.XXX	511.254.003.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6


XXX = see page 60

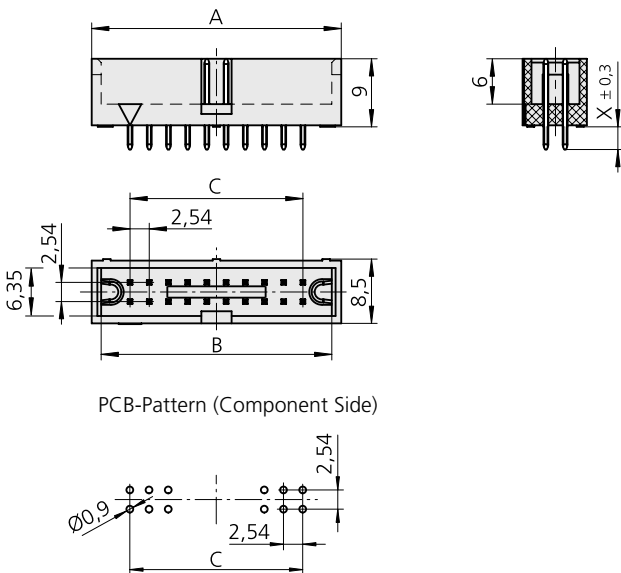
## Header Series 511

### Low Profile, Straight



### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded low profile design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- Solder pins available in two lengths 3 mm and 4 mm
- 10 to 64 positions
-  recognized



### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

#### Mechanical Specifications

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

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

### Ordering Information and Dimensions (All Dimensions in mm)

For PCB Thickness up to 1,6 mm / for PCB Thickness up to 3,2 mm


Pos.	Part Number Solder Pin (X) = 3 mm	Part Number Solder Pin (X) = 4 mm	Dim. A	Dim. B	Dim. C	Additional ordering information
10	511.066.003.010.XXX	511.073.003.010.XXX	20,3	17,8	10,16	For other versions with different surface finishes please see page 59.
14	511.066.003.014.XXX	511.073.003.014.XXX	25,4	22,9	15,24	
16	511.066.003.016.XXX	511.073.003.016.XXX	27,9	25,4	17,78	
20	511.066.003.020.XXX	511.073.003.020.XXX	33,0	30,5	22,86	
26	511.066.003.026.XXX	511.073.003.026.XXX	40,6	38,1	30,48	
34	511.066.003.034.XXX	511.073.003.034.XXX	50,8	48,3	40,64	
40	511.066.003.040.XXX	511.073.003.040.XXX	58,4	55,8	48,26	
50	511.066.003.050.XXX	511.073.003.050.XXX	71,1	68,6	60,96	
60	511.066.003.060.XXX	511.073.003.060.XXX	83,8	81,3	73,66	
64	511.066.003.064.XXX	511.073.003.064.XXX	88,9	86,4	78,74	

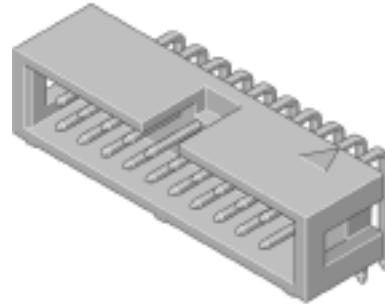
XXX = see page 60



## Header Series 511 Low Profile, Right-Angle

### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded Low Profile design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- Solder pins available in 2 lengths 3 mm and 4 mm
- 10 to 64 positions
-  recognized



### Technical Data

#### Electrical Specifications

Current rating:  $\leq 5$  A  
Test voltage: 1000 Volt eff.

#### Mechanical Specifications

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

Humidity: 93% rel. humidity acc. to  
DIN EN 60603-13

#### Materials and Surface Finish

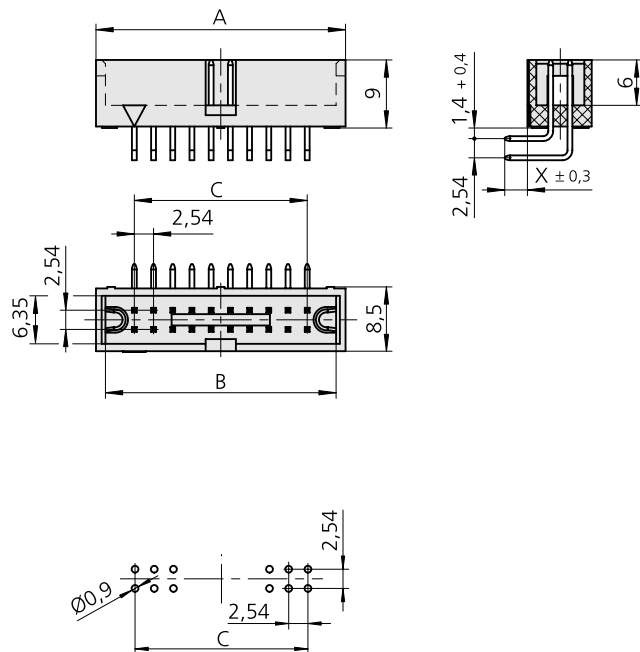
Contact finish

Contact Area: 20  $\mu$ " (0,5  $\mu$ m) Au over 50  $\mu$ "  
(1,25  $\mu$ m) Ni  
MIL-G-45 204 Class 00

Termination Area: 120  $\mu$ " (3,0  $\mu$ m) Sn over 50  $\mu$ "  
(1,25  $\mu$ m) Ni

Insulation Body: PBT glass-filled  
grey

Contact: UL flammability rated 94 V-0  
Cu alloy

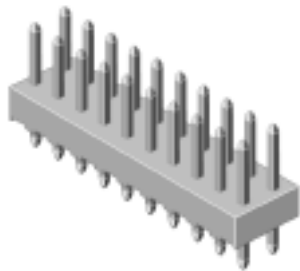



### Ordering Information and Dimensions (All Dimensions in mm)

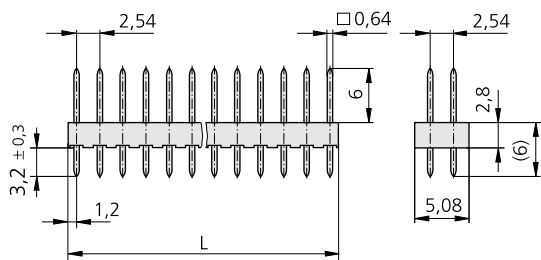
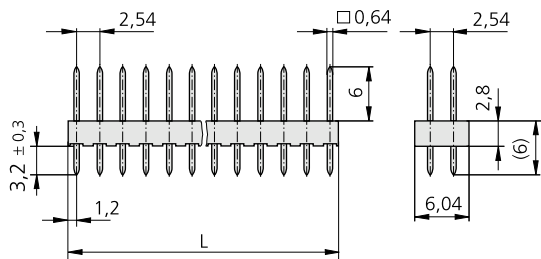
For PCB Thickness up to 1,6 mm / for PCB Thickness up to 3,2 mm

Pos.	Part Number Solder Pin (X) = 3 mm	Part Number Solder Pin (X) = 4 mm	Dim. A	Dim. B	Dim. C	Additional ordering information
10	511.266.003.010.XXX	511.273.003.010.XXX	20,3	17,8	10,16	For other versions with different surface finishes please see page 59.
14	511.266.003.014.XXX	511.273.003.014.XXX	25,4	22,9	15,24	
16	511.266.003.016.XXX	511.273.003.016.XXX	27,9	25,4	17,48	
20	511.266.003.020.XXX	511.273.003.020.XXX	33,0	30,5	22,86	
26	511.266.003.026.XXX	511.273.003.026.XXX	40,6	38,1	30,48	
34	511.266.003.034.XXX	511.273.003.034.XXX	50,8	48,3	40,64	
40	511.266.003.040.XXX	511.273.003.040.XXX	58,4	55,8	48,26	
50	511.266.003.050.XXX	511.273.003.050.XXX	71,1	68,6	60,96	
60	511.266.003.060.XXX	511.273.003.060.XXX	83,8	81,3	73,66	
64	511.266.003.064.XXX	511.273.003.064.XXX	88,9	86,4	78,74	

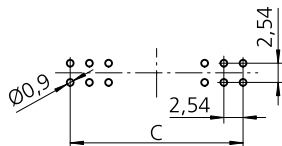
XXX = see page 60

**Headers SERIES 511**  
 Unprotected, straight

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Straight contacts, cross-section 0,64 x 0,64 mm
- Insertion depth 6,0 mm
-  recognized



PCB Pattern (Component Side)


**Technical Data**
**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

**Mechanical Specifications**

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

Humidity: 93% rel. humidity acc. to  
 DIN EN 60603-13

**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled, grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy


**Ordering Information and Dimensions** (All Dimensions in mm)

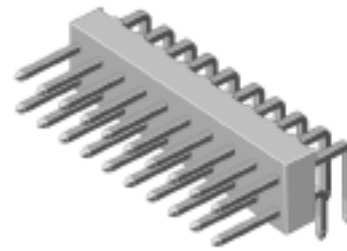
Pos.	Part Number Ins. body 6,04 x 2,8 mm	Part Number Ins. body 5,08 x 2,8 mm	Dim. C	Dim. L	Additional ordering information
10	511.030.003.010.XXX	511.032.003.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.030.003.014.XXX	511.032.003.014.XXX	15,24	17,64	
16	511.030.003.016.XXX	511.032.003.016.XXX	17,48	20,18	
20	511.030.003.020.XXX	511.032.003.020.XXX	22,86	25,26	
26	511.030.003.026.XXX	511.032.003.026.XXX	30,48	32,88	
34	511.030.003.034.XXX	511.032.003.034.XXX	40,46	43,04	
40	511.030.003.040.XXX	511.032.003.040.XXX	48,26	50,66	
50	511.030.003.050.XXX	511.032.003.050.XXX	60,96	63,36	
60	511.030.003.060.XXX	511.032.003.060.XXX	73,66	76,06	
64	511.030.003.064.XXX	not available	78,74	81,14	

XXX = see page 60

## Headers SERIES 511 Unprotected, Right-Angle

### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- Insertion depth 6,5 mm
-  recognized



### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

#### Mechanical Specifications

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

Humidity: 93% rel. humidity acc. to  
DIN EN 60603-13

#### Materials and Surface Finish

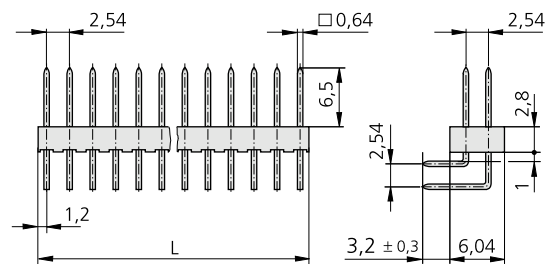
Contact finish

Contact Area: 20 μ" (0,5 μm) Au over 50 μ"  
( 1,25 μm) Ni  
MIL-G-45 204 Class 00

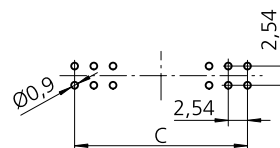
Termination Area: 120 μ" (3,0 μm) Sn over 50 μ"  
( 1,25 μm) Ni

Insulation Body: PBT glass-filled, grey

Contact: UL flammability rated 94 V-O  
Cu alloy



PCB Pattern (Component Side)

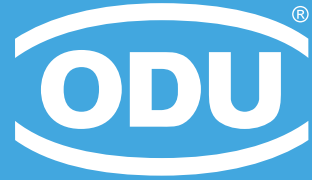
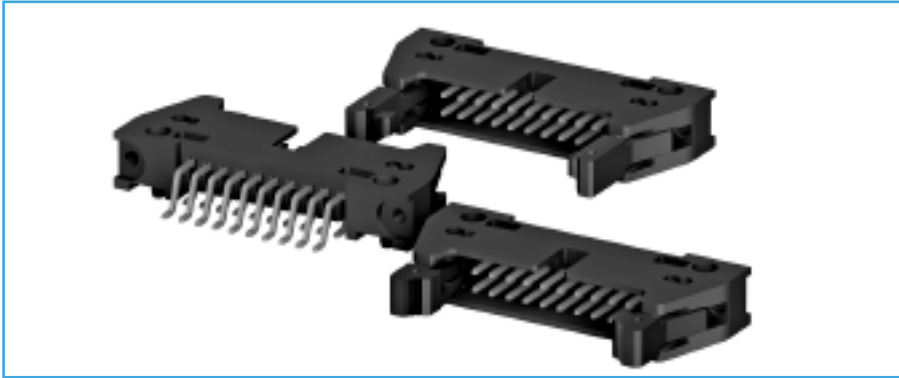


### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number	Dim. C	Dim. L	Additional ordering information
10	511.270.003.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.270.003.014.XXX	15,24	17,64	
16	511.270.003.016.XXX	17,48	20,18	
20	511.270.003.020.XXX	22,86	25,26	
26	511.270.003.026.XXX	30,48	32,88	
34	511.270.003.034.XXX	40,46	43,04	
40	511.270.003.040.XXX	48,26	50,66	
50	511.270.003.050.XXX	60,96	63,36	
60	511.270.003.060.XXX	73,66	76,06	
64	511.270.003.064.XXX	78,74	81,14	

XXX = see page 60

# ODU FLAKAFIX®



## Headers SMT (Surface Mounting Technology)

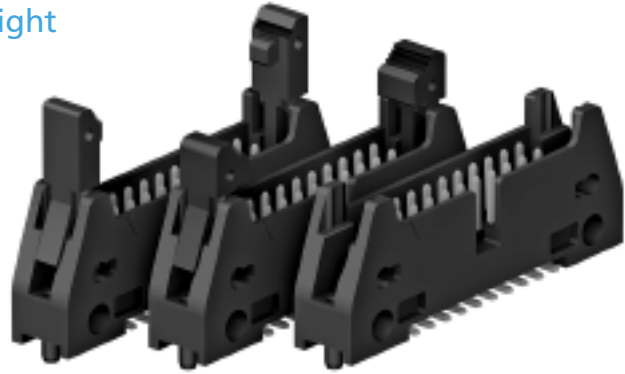
Header 2-rows DIN EN 60 603-13, straight, without, short or long latches . . . . .	22
Header 2-rows DIN EN 60 603-13, right-angle, without, short or long latches . . . . .	23
Header 2-rows low Profile, straight . . . . .	24
Header 2-rows, unprotected, straight . . . . .	25
Header 2-rows, unprotected, right-angle . . . . .	26



**Header Series 511**  
**DIN EN 60 603-13 (DIN 41651) in SMT straight**

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight SMT-contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- with solderable Metal Guide-Pins



**Technical Data**

**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

**Mechanical Specifications**

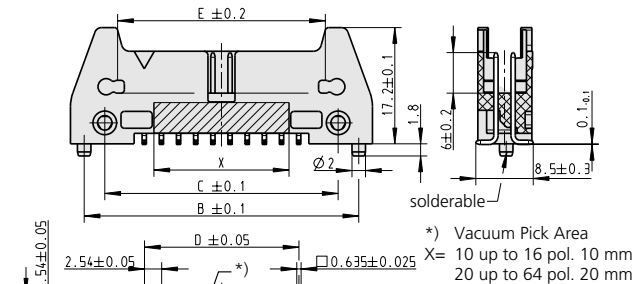
Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

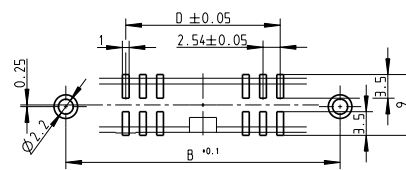
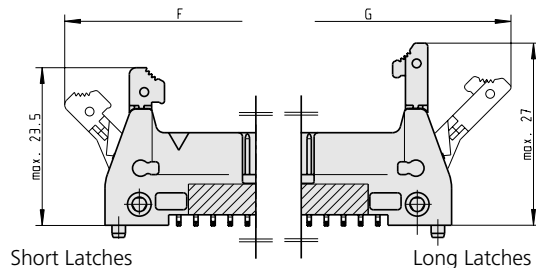
**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 Contact: UL flammability rated 94 V-0  
 Cu alloy

For other versions with different surface finishes please see page 59



\*) Vacuum Pick Area  
 X= 10 up to 16 pol. 10 mm  
 20 up to 64 pol. 20 mm



PCB Pattern (Component Side)

**Ordering Information and Dimensions (All Dimensions in mm)**

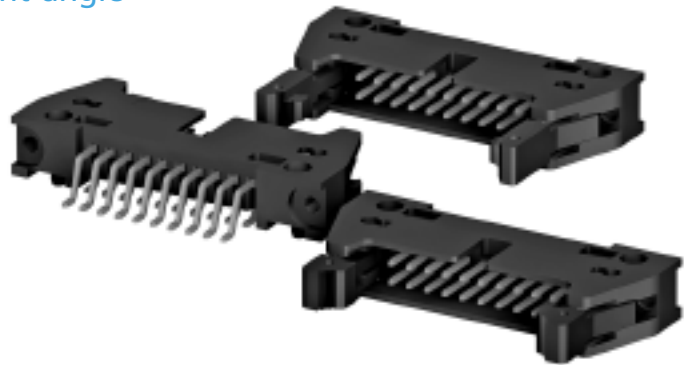
Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.150.803.010.XXX	511.151.803.010.XXX	511.152.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.150.803.014.XXX	511.151.803.014.XXX	511.152.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.150.803.016.XXX	511.151.803.016.XXX	511.152.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.150.803.020.XXX	511.151.803.020.XXX	511.152.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.150.803.026.XXX	511.151.803.026.XXX	511.152.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.150.803.034.XXX	511.151.803.034.XXX	511.152.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.150.803.040.XXX	511.151.803.040.XXX	511.152.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.150.803.050.XXX	511.151.803.050.XXX	511.152.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.150.803.060.XXX	511.151.803.060.XXX	511.152.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.150.803.064.XXX	511.151.803.064.XXX	511.152.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60

## Header Series 511 DIN EN 60 603-13 (DIN 41651) in SMT right-angle

### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Right-angle SMT-contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- with solderable Metal Guide-Pins



### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

#### Mechanical Specifications

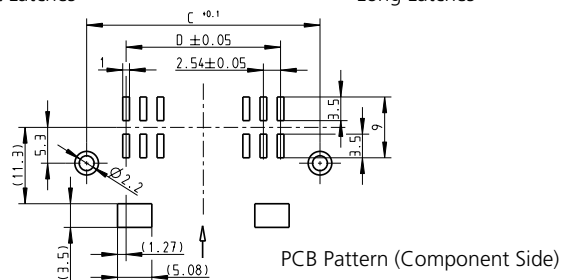
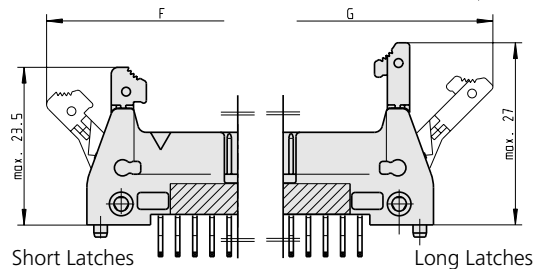
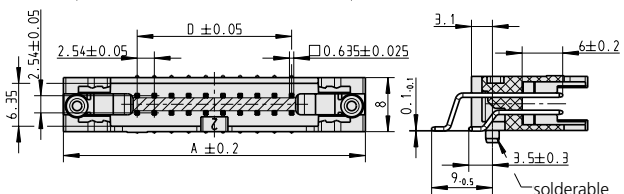
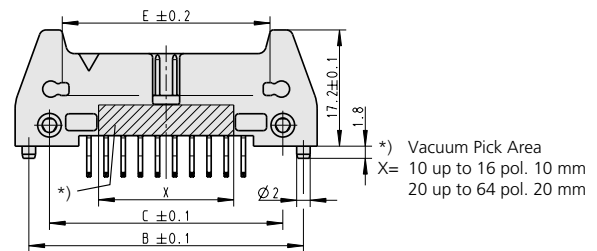
Operating Temperature: -55°C to +125°C  
SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

Contact finish  
Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00  
Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
Insulation Body: LCP black  
Contact: UL flammability rated 94 V-0  
Cu alloy

For other versions with different surface finishes please see page 59



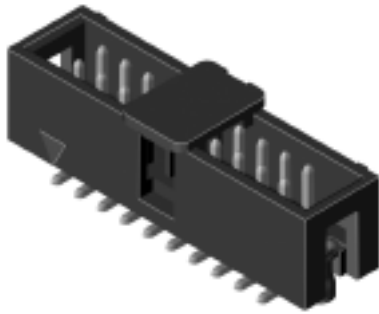
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.110.803.010.XXX	511.111.803.010.XXX	511.112.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.110.803.014.XXX	511.111.803.014.XXX	511.112.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.110.803.016.XXX	511.111.803.016.XXX	511.112.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.110.803.020.XXX	511.111.803.020.XXX	511.112.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.110.803.026.XXX	511.111.803.026.XXX	511.112.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.110.803.034.XXX	511.111.803.034.XXX	511.112.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.110.803.040.XXX	511.111.803.040.XXX	511.112.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.110.803.050.XXX	511.111.803.050.XXX	511.112.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.110.803.060.XXX	511.111.803.060.XXX	511.112.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.110.803.064.XXX	511.111.803.064.XXX	511.112.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60

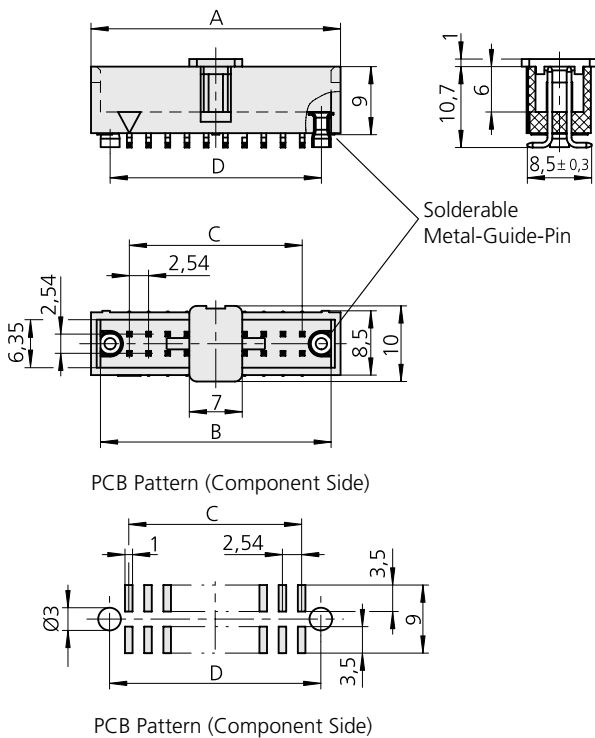
## Header Series 511

### Low Profile in SMT, straight



### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded, low profile design
- Center polarization
- Straight SMT-contacts
- 10 to 64 positions
- With solderable SMT-Metal-Guide-Pins



### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

#### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature  
 (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to  
 DIN EN 60603-13

#### Materials and Surface Finish

Contact finish

Contact Area: 20 μ" (0,5 μm) Au over 50 μ"  
 ( 1,25 μm) Ni  
 MIL-G-45 204 Class 00

Termination Area: 120 μ" (3,0 μm) Sn over 50 μ"  
 ( 1,25 μm) Ni

Insulation Body: LCP black

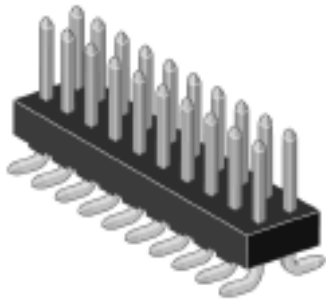
Contact: UL flammability rated 94 V-O  
 Cu alloy

### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number	Dim. A	Dim. B	Dim. C	Dim. D	Additional ordering information
10	511.068.803.010.XXX	20,3	17,8	10,16	15,24	For other versions with different surface finishes please see page 59
14	511.068.803.014.XXX	25,4	22,9	15,24	20,32	
16	511.068.803.016.XXX	27,9	25,4	17,78	22,86	
20	511.068.803.020.XXX	33,0	30,5	22,86	27,94	
26	511.068.803.026.XXX	40,6	38,1	30,48	35,56	
34	511.068.803.034.XXX	50,8	48,3	40,64	45,72	
40	511.068.803.040.XXX	58,4	55,8	48,26	53,34	
50	511.068.803.050.XXX	71,1	68,6	60,96	66,04	
60	511.068.803.060.XXX	83,8	81,3	73,66	78,74	
64	511.068.803.064.XXX	88,88	86,4	78,74	83,82	

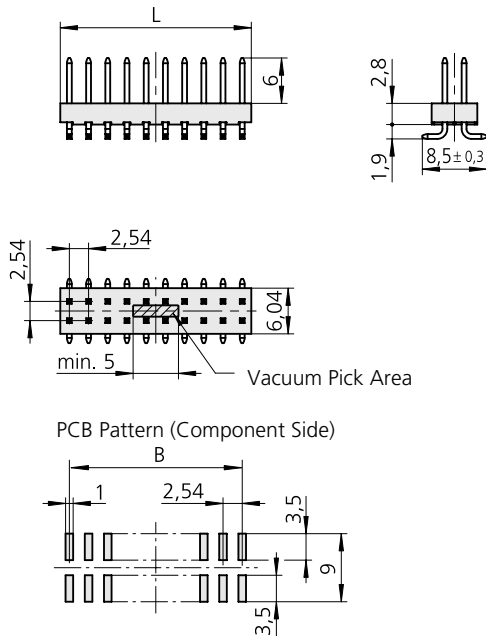
XXX = see page 60

**Headers SERIES 511**  
unprotected in SMT, straight



**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Straight SMT-contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions



**Technical Data**

**Electrical Specifications**

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

**Mechanical Specifications**

Operating Temperature: -55°C to +125°C  
SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

**Materials and Surface Finish**

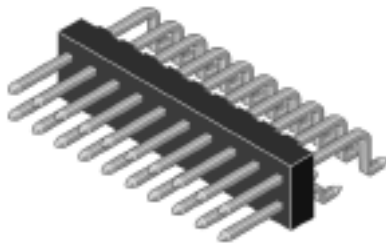
Contact finish  
Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00  
Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
Insulation Body: LCP black  
UL flammability rated 94 V-O  
Contact: Cu alloy

**Ordering Information and Dimensions** (All Dimensions in mm)

Pos.	Part Number	Dim. B	Dim. L	Additional ordering information
10	511.302.803.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.302.803.014.XXX	15,24	17,64	
16	511.302.803.016.XXX	17,78	20,18	
20	511.302.803.020.XXX	22,86	25,26	
26	511.302.803.026.XXX	30,48	32,88	
34	511.302.803.034.XXX	40,64	43,04	
40	511.302.803.040.XXX	48,26	50,66	
50	511.302.803.050.XXX	60,96	63,36	
60	511.302.803.060.XXX	73,66	76,06	
64	511.302.803.064.XXX	78,74	81,14	

XXX = see page 60



**Headers SERIES 511**  
 unprotected in SMT, right-angle

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Right-angle SMT-contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions

**Technical Data**
**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

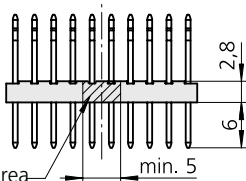
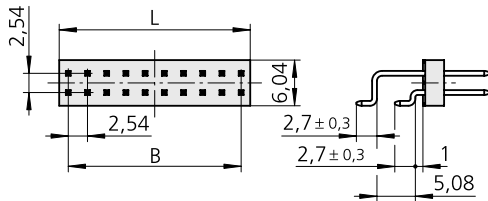
**Mechanical Specifications**

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature  
 (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to  
 DIN EN 60603-13

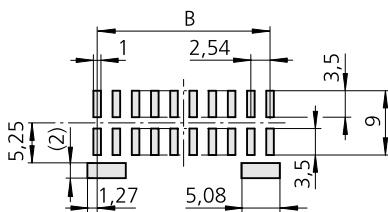
**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-O  
 Contact: Cu alloy



Vacuum Pick Area

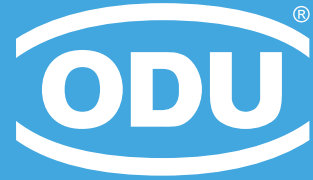
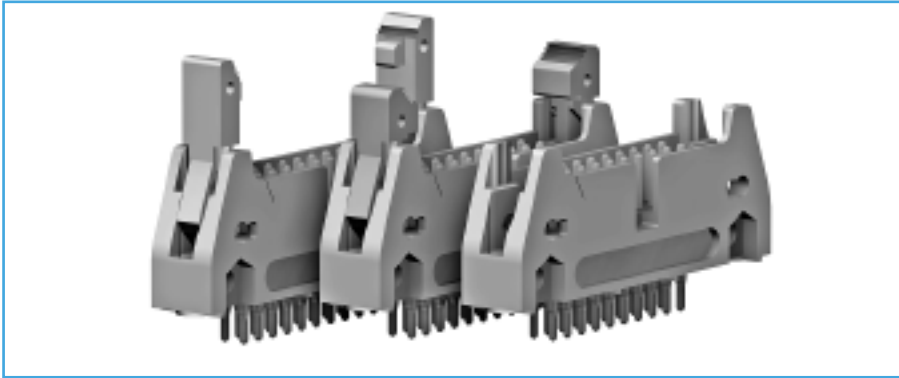
PCB Pattern (Component Side)


**Ordering Information and Dimensions** (All Dimensions in mm)

Pos.	Part Number	Dim. B	Dim. L	Additional ordering information
10	511.301.803.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.301.803.014.XXX	15,24	17,64	
16	511.301.803.016.XXX	17,78	20,18	
20	511.301.803.020.XXX	22,86	25,26	
26	511.301.803.026.XXX	30,48	32,88	
34	511.301.803.034.XXX	40,64	43,04	
40	511.301.803.040.XXX	48,26	50,66	
50	511.301.803.050.XXX	60,96	63,36	
60	511.301.803.060.XXX	73,66	76,06	
64	511.301.803.064.XXX	78,74	81,14	

XXX = see page 60

# ODU FLAKAFIX®

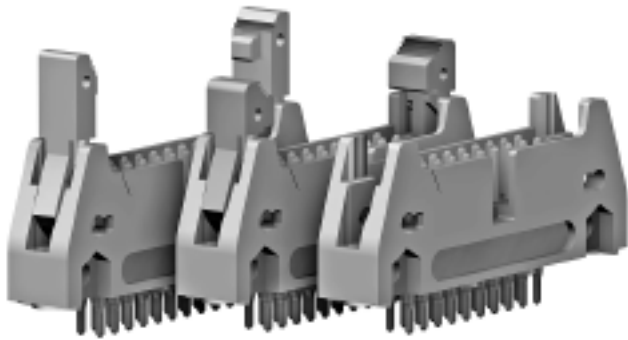


## Headers Press-Fit Technology


Header 2-rows DIN EN 60 603-13, straight, without, short or long latches . . . . .	28
Header 2-rows low Profile, straight . . . . .	29
Header 2-rows, unprotected, straight . . . . .	30



## Header Series 511 DIN EN 60 603-13 (DIN 41651) with PRESS-FIT PINS, straight



### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight Press-Fit contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
-  recognized

### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

#### Mechanical Specifications

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

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

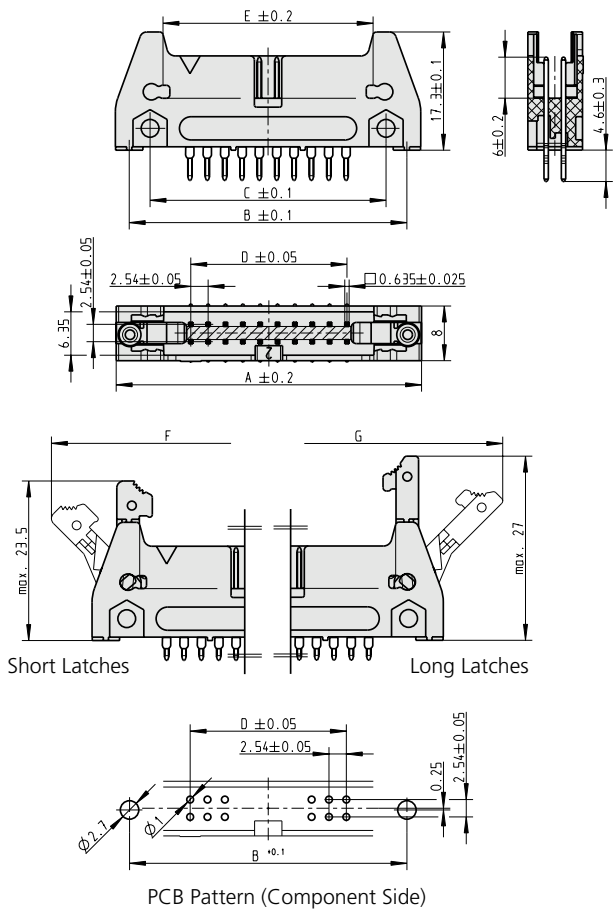
Contact finish

Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00

Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni

Insulation Body: PBT glass-filled grey  
UL flammability rated 94 V-0  
Contact: Cu alloy

For other versions with different surface finishes please see page 59



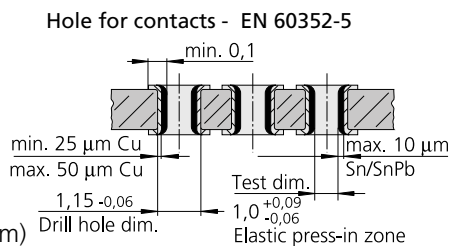
PCB Thickness 1.5 mm up to 4 mm

### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. D	Dim. E	Dim. F	Dim. G
10	511.090.003.010.XXX	511.091.003.010.XXX	511.092.003.010.XXX	32,0	27,94	10,16	18,05	48,0	52,0
14	511.090.003.014.XXX	511.091.003.014.XXX	511.092.003.014.XXX	37,1	33,02	15,24	23,15	53,1	57,1
16	511.090.003.016.XXX	511.091.003.016.XXX	511.092.003.016.XXX	39,6	35,56	17,78	25,65	55,6	59,6
20	511.090.003.020.XXX	511.091.003.020.XXX	511.092.003.020.XXX	44,7	40,64	22,86	30,75	60,7	64,7
26	511.090.003.026.XXX	511.091.003.026.XXX	511.092.003.026.XXX	52,3	48,26	30,48	38,35	68,3	72,3
34	511.090.003.034.XXX	511.091.003.034.XXX	511.092.003.034.XXX	62,5	58,42	40,64	48,55	78,5	82,5
40	511.090.003.040.XXX	511.091.003.040.XXX	511.092.003.040.XXX	70,1	66,04	48,26	56,15	86,1	90,1
50	511.090.003.050.XXX	511.091.003.050.XXX	511.092.003.050.XXX	82,8	78,74	60,96	68,85	98,8	102,8
60	511.090.003.060.XXX	511.091.003.060.XXX	511.092.003.060.XXX	95,5	91,44	73,66	81,55	111,5	115,5
64	511.090.003.064.XXX	511.091.003.064.XXX	511.092.003.064.XXX	100,6	96,52	78,74	86,65	116,6	120,6


XXX = see page 60

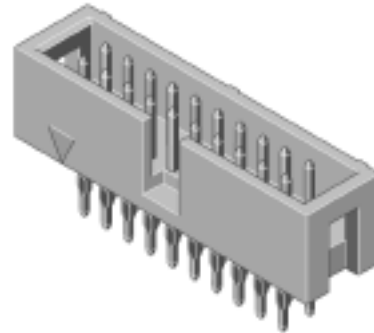
Press in tools on request



## Header Series 511 Low Profile with PRESS-FIT PINS, straight

### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded low profile design
- Center polarization
- Straight Press-Fit contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
-  recognized



### Technical Data

#### Electrical Specifications

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

#### Mechanical Specifications

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

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

#### Materials and Surface Finish

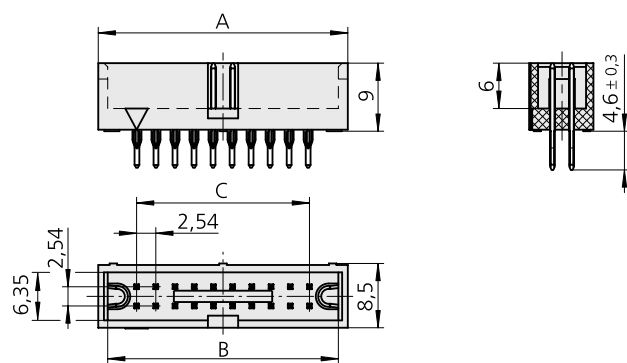
Contact finish

Contact Area: 20 μm (0,5 μm) Au over 50 μm (1,25 μm) Ni  
MIL-G-45 204 Class 00

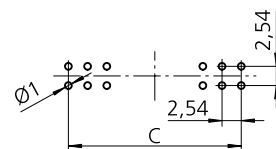
Termination Area: 120 μm (3,0 μm) Sn over 50 μm (1,25 μm) Ni

Insulation Body: PBT glass-filled grey

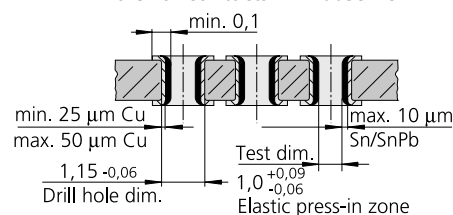
Contact: UL flammability rated 94 V-O  
Cu alloy



PCB Pattern (Component Side)



Hole for contacts - EN 60352-5



PCB Thickness 1.5 mm up to 4 mm

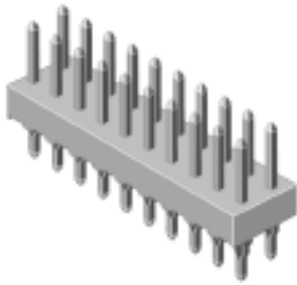
### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number	Dim. A	Dim. B	Dim. C	Additional ordering information
10	511.106.003.010.XXX	20,3	17,8	10,16	For other versions with different surface finishes please see page 59.
14	511.106.003.014.XXX	25,4	22,9	15,24	
16	511.106.003.016.XXX	27,9	25,4	17,78	
20	511.106.003.020.XXX	33,0	30,5	22,86	
26	511.106.003.026.XXX	40,6	38,1	30,48	
34	511.106.003.034.XXX	50,8	48,3	40,64	
40	511.106.003.040.XXX	58,4	55,8	48,26	
50	511.106.003.050.XXX	71,1	68,6	60,96	
60	511.106.003.060.XXX	83,8	81,3	73,66	
64	511.106.003.064.XXX	88,9	86,4	78,74	

XXX = see page 60

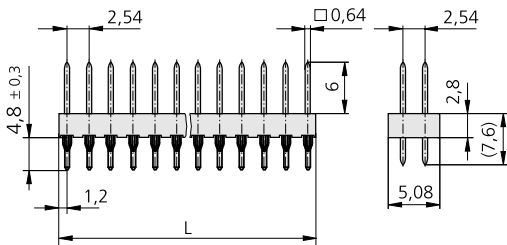
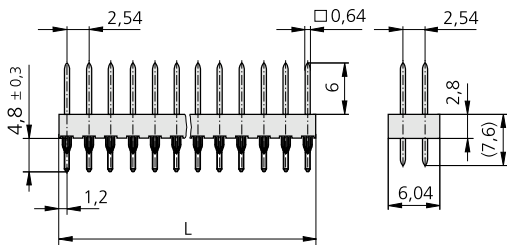
Press in tools on request

**Headers SERIES 511**  
 Unprotected, with PRESS-FIT PINS, straight

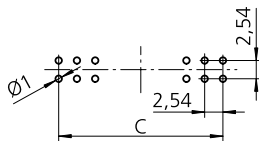


**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Straight Press-Fit contacts, cross-section 0,64 x 0,64 mm
- Insertion depth 6,0 mm
- recognized



PCB Pattern (Component Side)



**Technical Data**

**Electrical Specifications**

Current rating: ≤ 2 A  
 Test voltage: 1500 Volt eff.

**Mechanical Specifications**

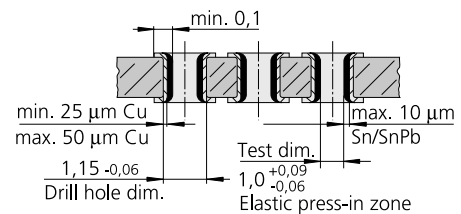
Operating Temperature: -55°C to +125°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: PBT glass-filled, grey  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

**Hole for contacts - EN 60352-5**



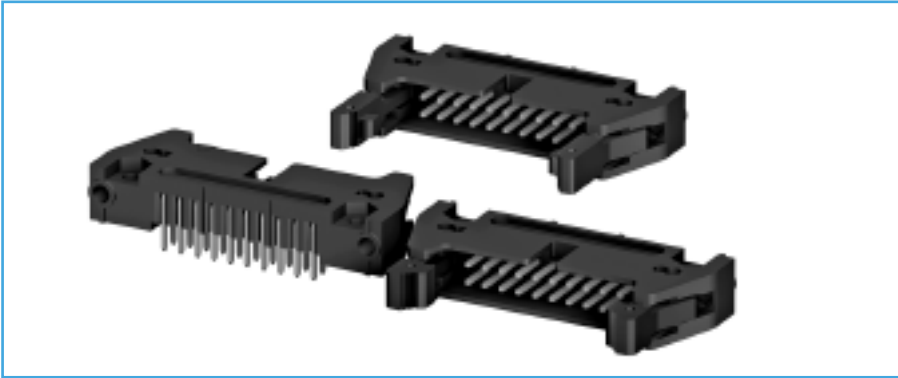
**PCB Thickness 1.5 mm up to 4 mm**

For other versions with different surface finishes please see page 59

Pos.	Dim. C	Dim. L	Part Number	
			Ins. body 6,04 x 2,8 mm	Ins. body 5,08 x 2,8 mm
10	10,16	12,56	511.130.003.010.000	511.132.003.010.000
14	15,24	17,64	511.130.003.014.000	511.132.003.014.000
16	17,78	20,18	511.130.003.016.000	511.132.003.016.000
20	22,86	25,26	511.130.003.020.000	511.132.003.020.000
26	30,48	32,88	511.130.003.026.000	511.132.003.026.000
34	40,64	43,04	511.130.003.034.000	511.132.003.034.000
40	48,26	50,66	511.130.003.040.000	511.132.003.040.000
50	60,96	63,36	511.130.003.050.000	511.132.003.050.000
60	73,66	76,06	511.130.003.060.000	511.132.003.060.000
64	78,74	81,14	511.130.003.064.000	nicht lieferbar

Press in tools on request

# ODU FLAKAFIX®



## Headers Pin-in-Paste Technology

Header 2-rows DIN EN 60 603-13, straight, High Temperature resistance, with Solder Pins L = 3.2 mm, without, short or long latches . . . . .	32
Header 2-rows DIN EN 60 603-13, straight, High Temperature resistance, with Solder Pins L = 4.5 mm, without, short or long latches . . . . .	33
Header 2-rows DIN EN 60 603-13, right-angle, High Temperature resistance, with Solder Pins L = 3.2 mm, without, short or long latches . . . . .	34
Header 2-rows DIN EN 60 603-13, right-angle, High Temperature resistance, with Solder Pins L = 4.5 mm, without, short or long latches . . . . .	35
Header 2-rows low Profile, straight, High Temperature resistance, with Solder Pins L = 3.2 or 4.5 mm . . . . .	36
Header 2-rows low Profile, right-angle, High Temperature resistance, with Solder Pins L = 3.2 or 4.5 mm . . . . .	37
Header 2-rows low Profile, straight, High Temperature resistance, unprotected . . . . .	38
Header 2-rows low Profile, right-angle, High Temperature resistance, unprotected . . . . .	39




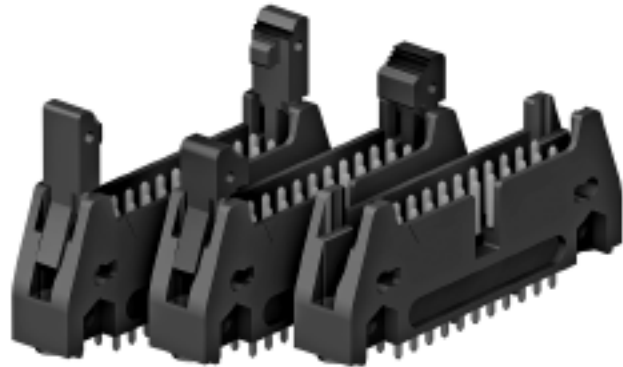
**Header Series 511**

**High Temperature, Through-Hole (Pin in Paste)**

DIN EN 60 603-13 (DIN 41651), straight with solder pins – for PCB Thickness up to 1,6 mm

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- High Temperature Resistance
-  recognized



**Technical Data**

**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

**Mechanical Specifications**

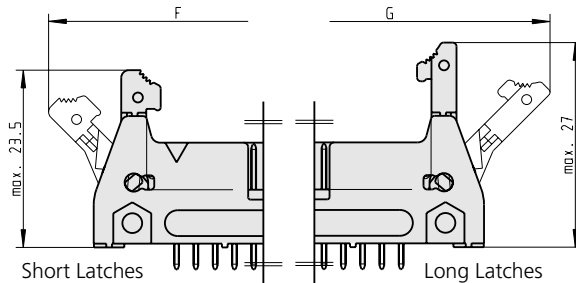
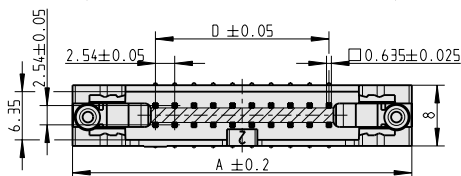
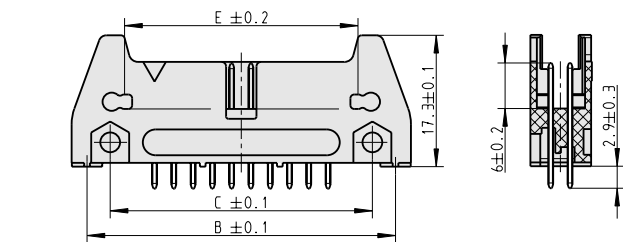
Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

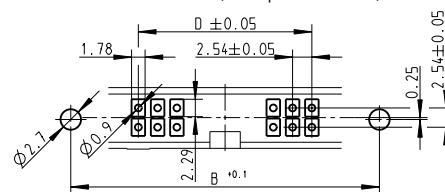
**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-0  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59



PCB-Pattern (Component Side)



**Ordering Information and Dimensions (All Dimensions in mm)**

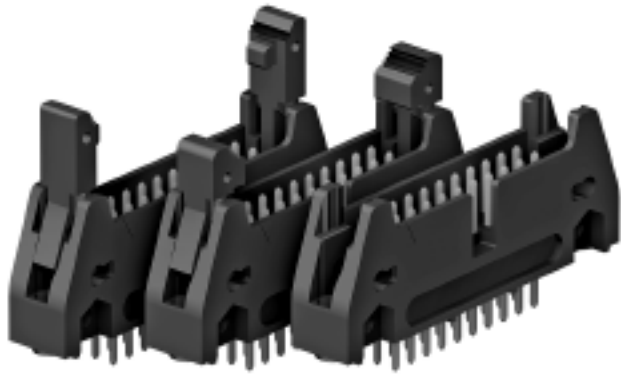
Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.060.803.010.XXX	511.061.803.010.XXX	511.062.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.060.803.014.XXX	511.061.803.014.XXX	511.062.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.060.803.016.XXX	511.061.803.016.XXX	511.062.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.060.803.020.XXX	511.061.803.020.XXX	511.062.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.060.803.026.XXX	511.061.803.026.XXX	511.062.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.060.803.034.XXX	511.061.803.034.XXX	511.062.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.060.803.040.XXX	511.061.803.040.XXX	511.062.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.060.803.050.XXX	511.061.803.050.XXX	511.062.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.060.803.060.XXX	511.061.803.060.XXX	511.062.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.060.803.064.XXX	511.061.803.064.XXX	511.062.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60


## Header Series 511

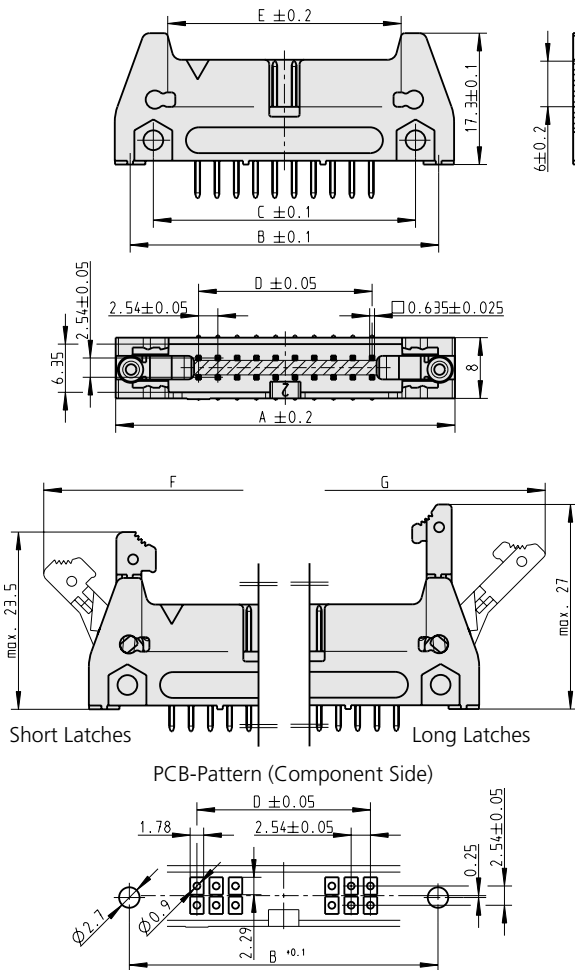
### High Temperature, Through-Hole (Pin in Paste)

DIN EN 60 603-13 (DIN 41651), straight with solder pins – for PCB Thickness up to 3,2 mm



#### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- High Temperature Resistance
-  US recognized



#### Technical Data

##### Electrical Specifications

Current rating: ≤ 5 A  
Test voltage: 1000 Volt eff.

##### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

##### Materials and Surface Finish

Contact finish  
Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00  
Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
Insulation Body: LCP black  
UL flammability rated 94 V-O  
Contact: Cu alloy

For other versions with different surface finishes please see page 59

## Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.052.803.010.XXX	511.053.803.010.XXX	511.054.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.052.803.014.XXX	511.053.803.014.XXX	511.054.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.052.803.016.XXX	511.053.803.016.XXX	511.054.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.052.803.020.XXX	511.053.803.020.XXX	511.054.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.052.803.026.XXX	511.053.803.026.XXX	511.054.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.052.803.034.XXX	511.053.803.034.XXX	511.054.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.052.803.040.XXX	511.053.803.040.XXX	511.054.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.052.803.050.XXX	511.053.803.050.XXX	511.054.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.052.803.060.XXX	511.053.803.060.XXX	511.054.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.052.803.064.XXX	511.053.803.064.XXX	511.054.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60




## Header Series 511

### High Temperature, Through-Hole (Pin in Paste)

DIN EN 60 603-13 (DIN 41651), right angled with solder pins – for PCB Thickness up to 1,6 mm



#### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- High Temperature Resistance
-  recognized

#### Technical Data

##### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

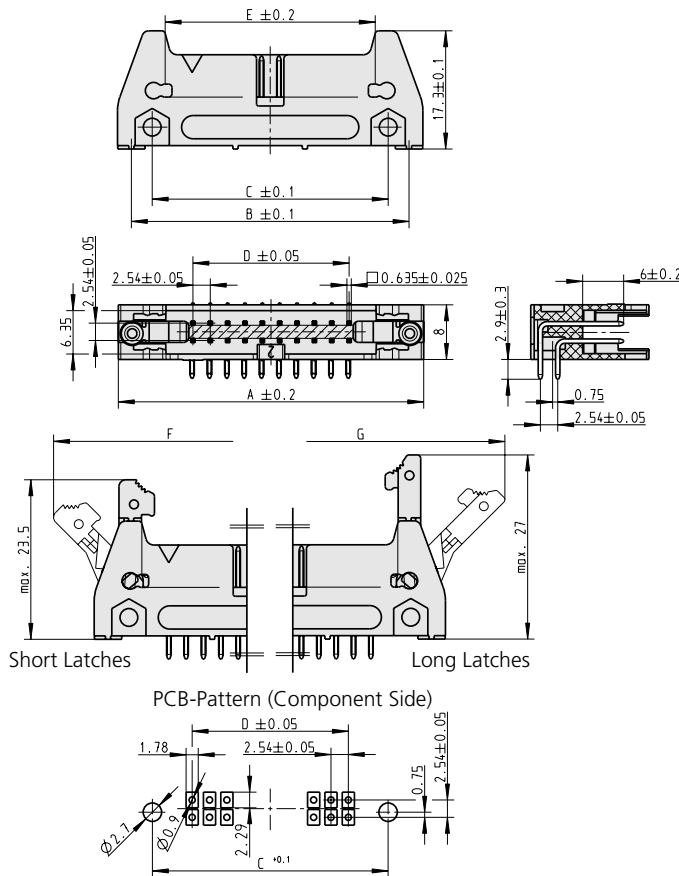
##### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

##### Materials and Surface Finish

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-0  
 Contact: Cu alloy  
 For other versions with different surface finishes please see page 59



#### Ordering Information and Dimensions (All Dimensions in mm)

Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.260.803.010.XXX	511.261.803.010.XXX	511.262.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.260.803.014.XXX	511.261.803.014.XXX	511.262.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.260.803.016.XXX	511.261.803.016.XXX	511.262.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.260.803.020.XXX	511.261.803.020.XXX	511.262.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.260.803.026.XXX	511.261.803.026.XXX	511.262.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.260.803.034.XXX	511.261.803.034.XXX	511.262.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.260.803.040.XXX	511.261.803.040.XXX	511.262.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.260.803.050.XXX	511.261.803.050.XXX	511.262.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.260.803.060.XXX	511.261.803.060.XXX	511.262.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.260.803.064.XXX	511.261.803.064.XXX	511.262.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60


## Header Series 511

### High Temperature, Through-Hole (Pin in Paste)

DIN EN 60 603-13 (DIN 41651), right angled with solder pins – for PCB Thickness up to 3,2 mm



#### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- 10 to 64 positions
- Available without, short or long latches
- High Temperature Resistance
-  recognized

#### Technical Data

##### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

##### Mechanical Specifications

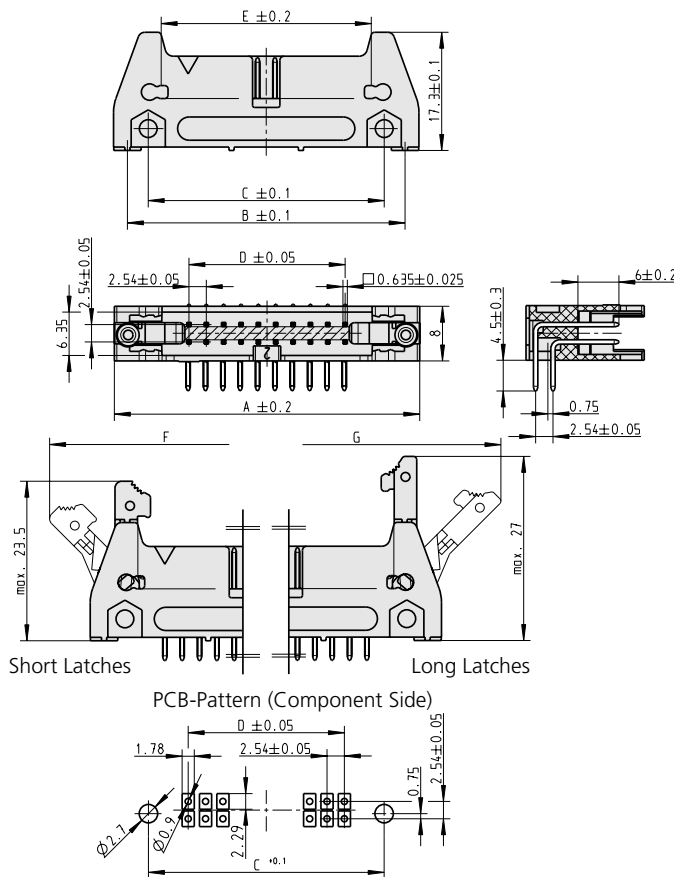
Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

##### Materials and Surface Finish

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-O  
 Contact: Cu alloy

For other versions with different surface finishes please see page 59



#### Ordering Information and Dimensions (All Dimensions in mm)

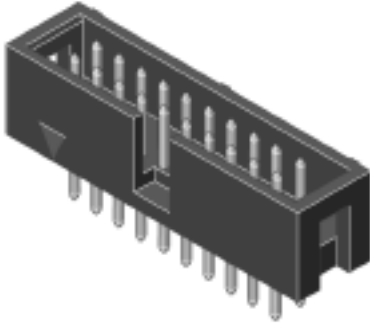
Pos.	Part Number without latches	Part Number with short latches	Part Number with long latches	Dim. A	Dim. B	Dim. C	Dim. D	Dim. E	Dim. F	Dim. G
10	511.252.803.010.XXX	511.253.803.010.XXX	511.254.803.010.XXX	32,0	27,94	21,84	10,16	18,05	48,0	52,0
14	511.252.803.014.XXX	511.253.803.014.XXX	511.254.803.014.XXX	37,1	33,02	26,92	15,24	23,15	53,1	57,1
16	511.252.803.016.XXX	511.253.803.016.XXX	511.254.803.016.XXX	39,6	35,56	29,46	17,78	25,65	55,6	59,6
20	511.252.803.020.XXX	511.253.803.020.XXX	511.254.803.020.XXX	44,7	40,64	34,54	22,86	30,75	60,7	64,7
26	511.252.803.026.XXX	511.253.803.026.XXX	511.254.803.026.XXX	52,3	48,26	42,16	30,48	38,35	68,3	72,3
34	511.252.803.034.XXX	511.253.803.034.XXX	511.254.803.034.XXX	62,5	58,42	52,32	40,64	48,55	78,5	82,5
40	511.252.803.040.XXX	511.253.803.040.XXX	511.254.803.040.XXX	70,1	66,04	59,94	48,26	56,15	86,1	90,1
50	511.252.803.050.XXX	511.253.803.050.XXX	511.254.803.050.XXX	82,8	78,74	72,64	60,96	68,85	98,8	102,8
60	511.252.803.060.XXX	511.253.803.060.XXX	511.254.803.060.XXX	95,5	91,44	85,34	73,66	81,55	111,5	115,5
64	511.252.803.064.XXX	511.253.803.064.XXX	511.254.803.064.XXX	100,6	96,52	90,42	78,74	86,65	116,6	120,6

XXX = see page 60


## Header Series 511

### High Temperature, Through-Hole (Pin in Paste)

Low Profile, straight



#### Features

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded low profile design
- Center polarization
- Straight contacts, cross-section 0,64 x 0,64 mm
- Solder pins available in two lengths 3 mm and 4 mm
- 10 to 64 positions
- High Temperature Resistance
-  recognized

#### Technical Data

##### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

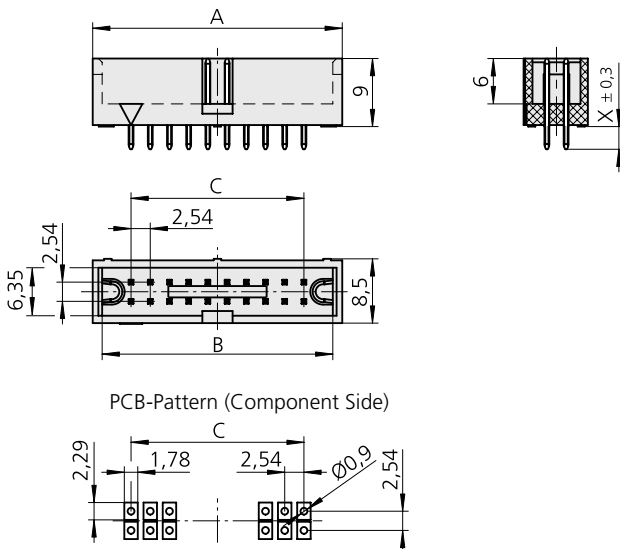
##### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature: (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

##### Materials and Surface Finish

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-0  
 Contact: Cu alloy



#### Ordering Information and Dimensions (All Dimensions in mm)


For PCB Thickness up to 1,6 mm / for PCB Thickness up to 3,2 mm

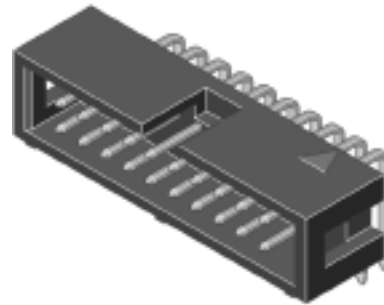
Pos.	Part Number Solder Pin (X) = 3 mm	Part Number Solder Pin (X) = 4 mm	Dim. A	Dim. B	Dim. C	Additional ordering information
10	511.066.803.010.XXX	511.073.803.010.XXX	20,3	17,8	10,16	For other versions with different surface finishes please see page 59
14	511.066.803.014.XXX	511.073.803.014.XXX	25,4	22,9	15,24	
16	511.066.803.016.XXX	511.073.803.016.XXX	27,9	25,4	17,78	
20	511.066.803.020.XXX	511.073.803.020.XXX	33,0	30,5	22,86	
26	511.066.803.026.XXX	511.073.803.026.XXX	40,6	38,1	30,48	
34	511.066.803.034.XXX	511.073.803.034.XXX	50,8	48,3	40,64	
40	511.066.803.040.XXX	511.073.803.040.XXX	58,4	55,8	48,26	
50	511.066.803.050.XXX	511.073.803.050.XXX	71,1	68,6	60,96	
60	511.066.803.060.XXX	511.073.803.060.XXX	83,8	81,3	73,66	
64	511.066.803.064.XXX	511.073.803.064.XXX	88,9	86,4	78,74	

XXX = see page 60

**Header Series 511**  
**High Temperature, Through-Hole (Pin in Paste)**  
**Low Profile, right-angle**

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Shrouded low profile design
- Center polarization
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- Solder pins available in 2 lengths 3 mm and 4 mm
- 10 to 64 positions
- High Temperature Resistance
-  recognized



**Technical Data**

**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

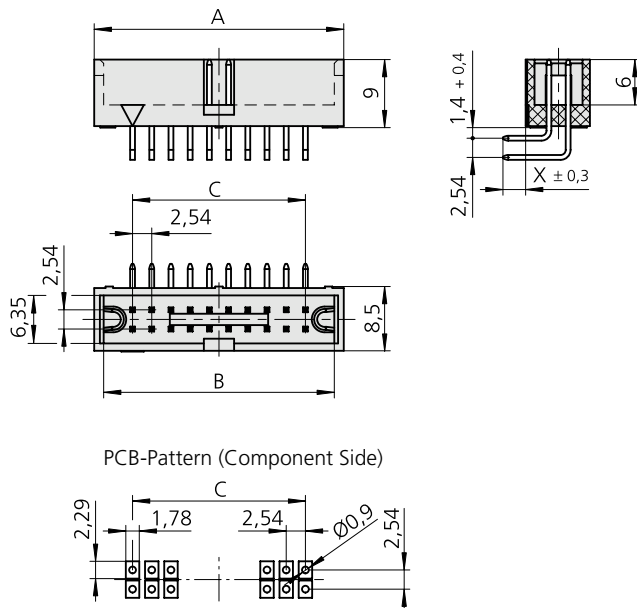
**Mechanical Specifications**

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

**Materials and Surface Finish**

Contact finish: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 Contact Area: MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-0  
 Contact: Cu alloy



**Ordering Information and Dimensions (All Dimensions in mm)**

For PCB Thickness up to 1,6 mm / for PCB Thickness up to 3,2 mm

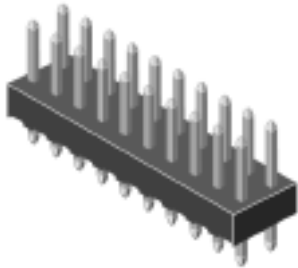
Pos.	Part Number Solder Pin (X) = 3 mm	Part Number Solder Pin (X) = 4 mm	Dim. A	Dim. B	Dim. C	Additional ordering information
10	511.266.803.010.XXX	511.273.803.010.XXX	20,3	17,8	10,16	For other versions with different surface finishes please see page 59
14	511.266.803.014.XXX	511.273.803.014.XXX	25,4	22,9	15,24	
16	511.266.803.016.XXX	511.273.803.016.XXX	27,9	25,4	17,78	
20	511.266.803.020.XXX	511.273.803.020.XXX	33,0	30,5	22,86	
26	511.266.803.026.XXX	511.273.803.026.XXX	40,6	38,1	30,48	
34	511.266.803.034.XXX	511.273.803.034.XXX	50,8	48,3	40,64	
40	511.266.803.040.XXX	511.273.803.040.XXX	58,4	55,8	48,26	
50	511.266.803.050.XXX	511.273.803.050.XXX	71,1	68,6	60,96	
60	511.266.803.060.XXX	511.273.803.060.XXX	83,8	81,3	73,66	
64	511.266.803.064.XXX	511.273.803.064.XXX	88,9	86,4	78,74	

XXX = see page 60


## Header Series 511

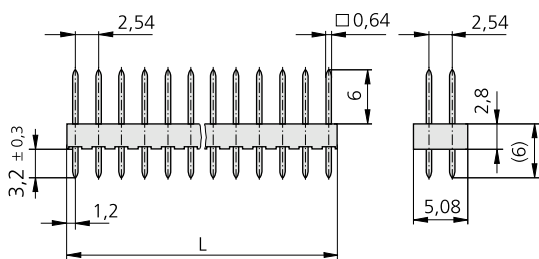
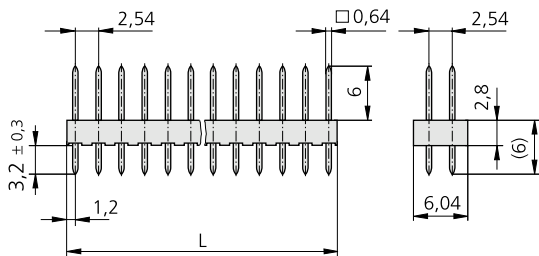
### High Temperature, Through-Hole (Pin in Paste)

unprotected, straight

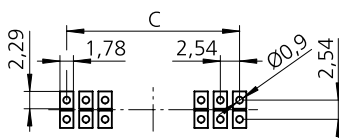


#### Merkmale

- Grid 2,54 x 2,54 mm
- 2-rows
- Straight contacts, cross-section 0,64 x 0,64 mm
- Insertion depth 6,0 mm
- High Temperature Resistance
-  recognized



PCB-Pattern (Component Side)



#### Technical Data

##### Electrical Specifications

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

##### Mechanical Specifications

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature: (max. 30s) on the solder area: 260°C

Humidity: 93% rel. humidity acc. to DIN EN 60603-13

##### Materials and Surface Finish

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-O  
 Contact: Cu alloy


#### Ordering Information and Dimensions (All Dimensions in mm)

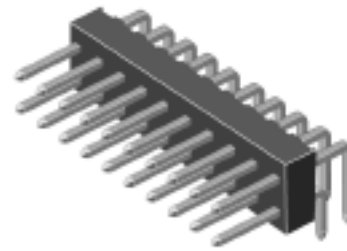
Pos.	Part Number Ins. body 6,04 x 2,8 mm	Part Number Ins. body 5,08 x 2,8 mm	Dim. C	Dim. L	Additional ordering information
10	511.030.803.010.XXX	511.032.803.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.030.803.014.XXX	511.032.803.014.XXX	15,24	17,64	
16	511.030.803.016.XXX	511.032.803.016.XXX	17,78	20,18	
20	511.030.803.020.XXX	511.032.803.020.XXX	22,86	25,26	
26	511.030.803.026.XXX	511.032.803.026.XXX	30,48	32,88	
34	511.030.803.034.XXX	511.032.803.034.XXX	40,64	43,04	
40	511.030.803.040.XXX	511.032.803.040.XXX	48,26	50,66	
50	511.030.803.050.XXX	511.032.803.050.XXX	60,96	63,36	
60	511.030.803.060.XXX	511.032.803.060.XXX	73,66	76,06	
64	511.030.803.064.XXX	not available	78,74	81,14	

XXX = see page 60

**Header Series 511**  
**High Temperature, Through-Hole (Pin in Paste)**  
 unprotected, right-angle

**Features**

- Grid 2,54 x 2,54 mm
- 2-rows
- Right-angle contacts, cross-section 0,64 x 0,64 mm
- Insertion depth 6,5 mm
- High Temperature Resistance
-  recognized



**Technical Data**

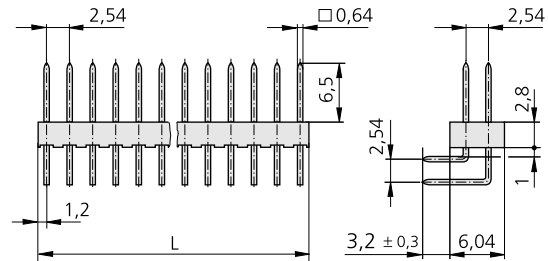
**Electrical Specifications**

Current rating: ≤ 5 A  
 Test voltage: 1000 Volt eff.

**Mechanical Specifications**

Operating Temperature: -55°C to +125°C  
 SMT-Solder Temperature: (max. 30s) on the solder area: 260°C

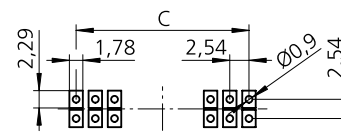
Humidity: 93% rel. humidity acc. to DIN EN 60603-13



**Materials and Surface Finish**

Contact finish  
 Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
 MIL-G-45 204 Class 00  
 Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
 Insulation Body: LCP black  
 UL flammability rated 94 V-0  
 Contact: Cu alloy

PCB-Pattern (Component Side)

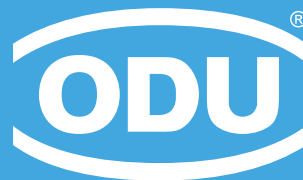
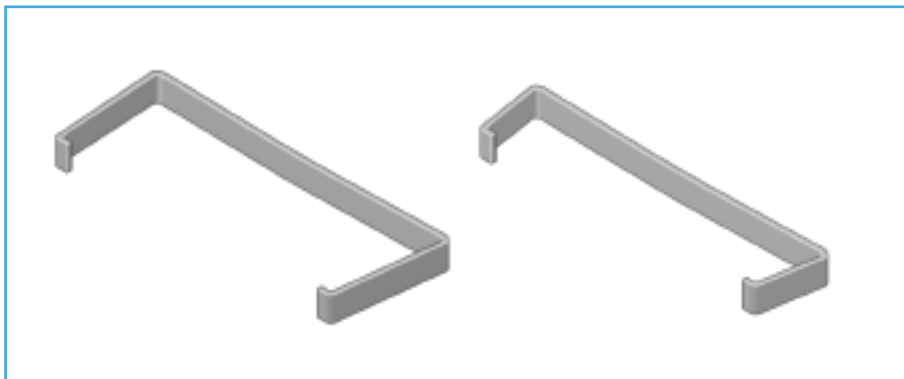


**Ordering Information and Dimensions (All Dimensions in mm)**

Pos.	Part Number	Dim. C	Dim. L	Additional ordering information
10	511.270.803.010.XXX	10,16	12,56	For other versions with different surface finishes please see page 59
14	511.270.803.014.XXX	15,24	17,64	
16	511.270.803.016.XXX	17,78	20,18	
20	511.270.803.020.XXX	22,86	25,26	
26	511.270.803.026.XXX	30,48	32,88	
34	511.270.803.034.XXX	40,64	43,04	
40	511.270.803.040.XXX	48,26	50,66	
50	511.270.803.050.XXX	60,96	63,36	
60	511.270.803.060.XXX	73,66	76,06	
64	511.270.803.064.XXX	78,74	81,14	

XXX = see page 60

# ODU FLAKAFIX®

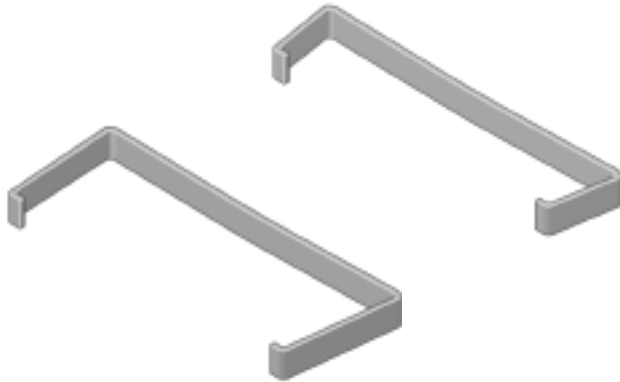


## Accessories


Metal Locking Clips . . . . . 42



**Metal Locking Clips for Headers - SERIES 511**  
 Low Profile Design



**Features**

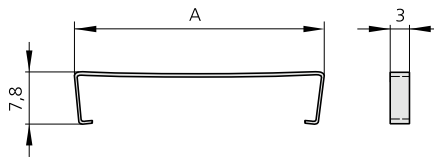
- Simple installation
- Cost effective
- Secure locking
- Simple removal
- For socket connectors Series 517 with or without strain relief
-  recognized

**General Information**

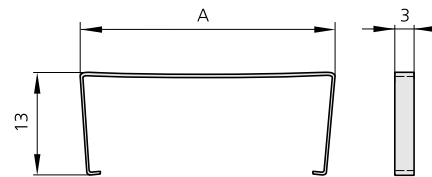
The metal locking clips are made of high-grade spring steel. Reliable locking, simple attachment and removal are the outstanding features of this product.

The locking clips are designed for socket connectors Series 517 with or without strain relief

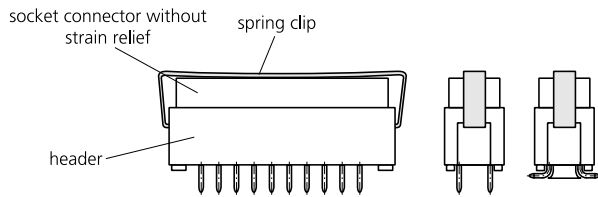
Series 511.065.7xx.700.000



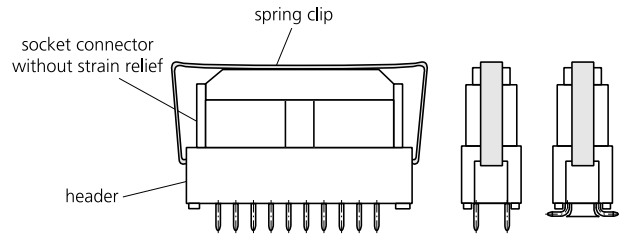
Series 511.066.7xx.700.000



**Assembly Drawing**



**Assembly Drawing**

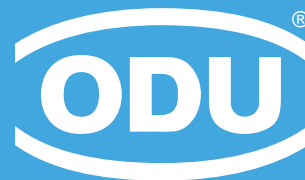
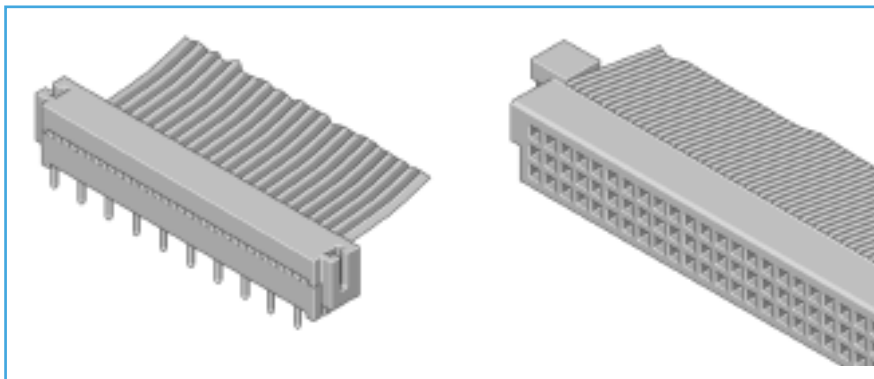


**Ordering Information and Dimensions (All Dimensions in mm)**

Pos.	Part Number Without Strain Relief	Part Number With Strain Relief	Dim. A	Bemerkung
10	511.065.710.700.000	511.066.710.700.000	21,1	Socket connectors Series 517 see page 8 to 9
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®



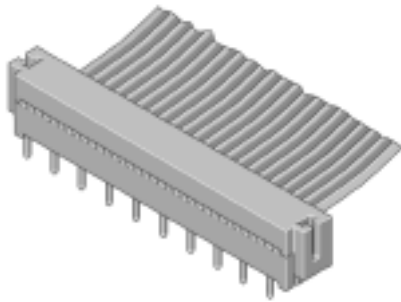
## Transitions Ribbon Connector

Transitions 2-rows . . . . .	44
RIBBON Connector, 64 positions, acc. to DIN 41612/C 64F Series 538. . . . .	45




## Transitions - SERIES 533

### 2-rows



### Features

- 2-row transition for standard PCBs from 1,5 mm to 2,0 mm
- Low profile
- Grid 2,54 x 2,54 mm
- Reliable connection at maximum load
- 10 to 64 positions
-  recognized

### Technical Data

#### Electrical Specifications

Current Rating:	≤ 1 A max. for conductor 0,08 mm <sup>2</sup> (AWG 28)
	≤ 1,5 A max. for conductor 0,14 mm <sup>2</sup> (AWG 26)
Test voltage:	1000 Volt eff.

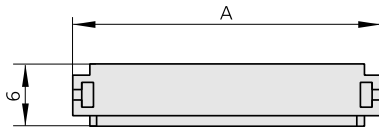
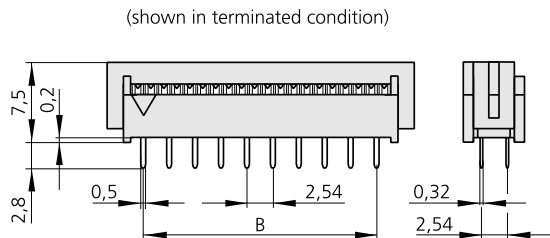
#### Mechanical Specifications

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

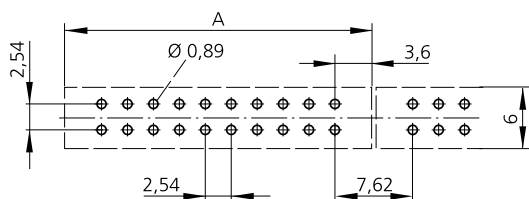
Humidity: 93% rel. humidity acc. to  
DIN EN 60603-13

#### Materials and Surface Finish

Contact finish	
Contact Area:	120 μ" (30 μm) Sn over 50 μ" (1,25 μm) Ni
	MIL-G-45 204 Class 00
Termination Area:	120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni
Insulation Body:	PBT glass-filled grey
	UL flammability rated 94 V-O
Contact:	Cu alloy



#### Solder Pattern




### Ordering Information and Dimensions (All Dimensions in mm)

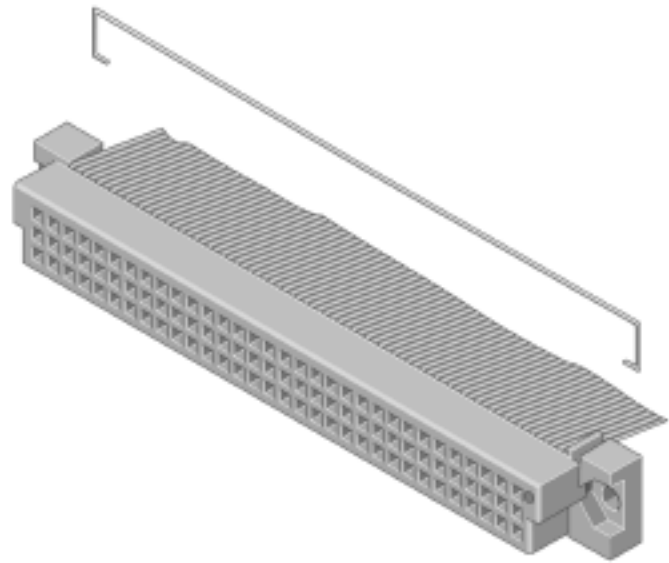
Pos.	Part Number	Dim. A	Dim. B	Additional ordering information
10	533.065.024.010.XXX	17,3	10,16	
14	533.065.024.014.XXX	22,4	15,24	
16	533.065.024.016.XXX	24,9	17,78	
20	533.065.024.020.XXX	30,0	22,86	
26	533.065.024.026.XXX	37,6	30,48	
34	533.065.024.034.XXX	47,8	40,64	
40	533.065.024.040.XXX	55,4	48,26	
50	533.065.024.050.XXX	68,1	60,96	
60	533.065.024.060.XXX	80,8	73,66	
64	533.065.024.064.XXX	85,8	78,74	

XXX = see page 60

**Ribbon Connector - SERIES 538**  
64-Positions, meets DIN 41612/C 64F

**Features**

- According to DIN 41612/C 64F
- Type C Female
- 64-positions in A & C
- Strain relief
- Single-U double-action wiping contact
- Highest contact security
-  recognized



**Technical Data**

**Electrical Specifications**

Current Rating: ≤ 1 A max. for conductor  
0,08 mm<sup>2</sup> (AWG 28)  
≤ 1,5 A max. for conductor  
0,14 mm<sup>2</sup> (AWG 26)

Test voltage: 1000 Volt eff.

**Mechanical Specifications**

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

Humidity: 93% rel. humidity acc. to  
DIN EN 60603-13

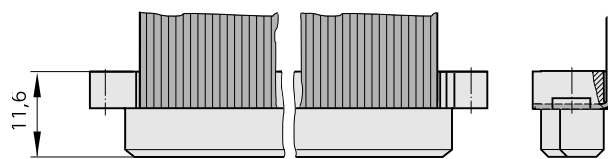
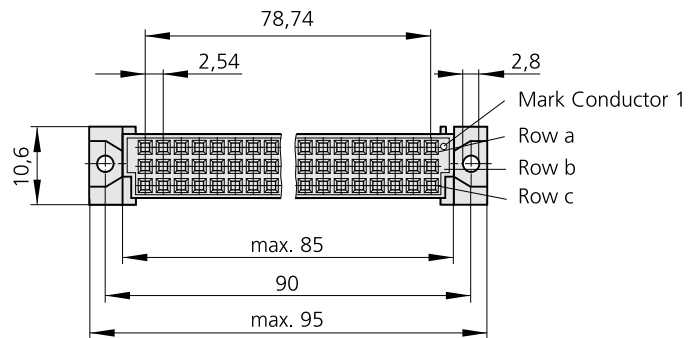
**Materials and Surface Finish**

Contact finish  
Contact Area: 20 μ" (0,5 μm) Au over 50 μ" (1,25 μm) Ni  
MIL-G-45 204 Class 00

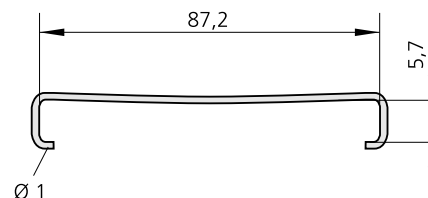
Termination Area: 120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni

Insulation Body: PBT glass-filled grey  
UL flammability rated 94 V-0

Contact: Cu alloy, hardened



**Strain Relief Clip**



**Ordering Information and Dimensions** (All Dimensions in mm)

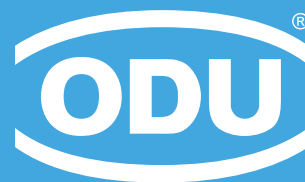
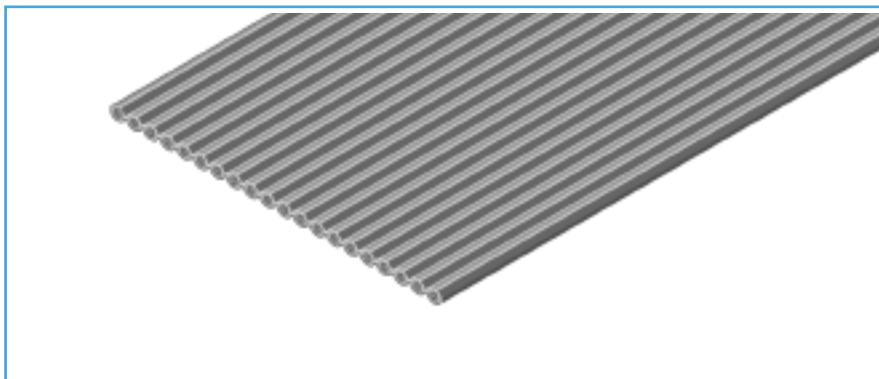
Pos.	Part Number Connector, Single-U*	Part Number Strain Relief	
64	538.075.003.064.XXX	538.075.764.700.000	* Single-U double-action wiping contact

XXX = see page 60



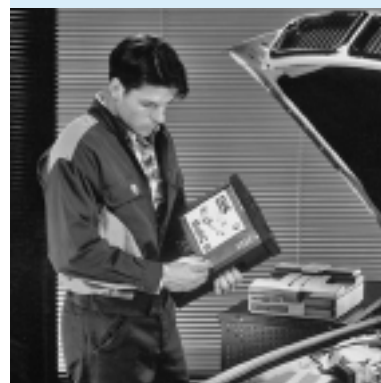
For Your Notes

# ODU FLAKAFIX®

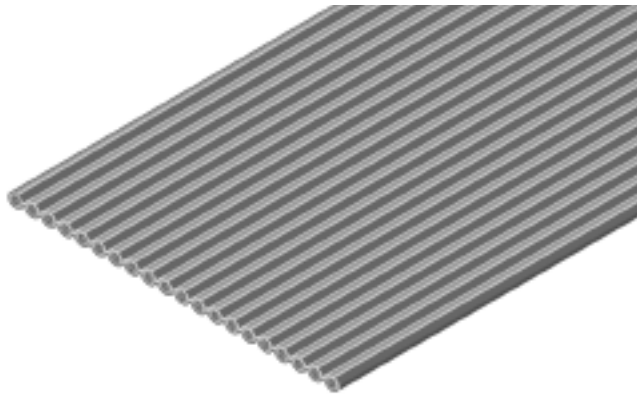


## Ribbon Cable

Cable AWG 28, grey, Grid 1,27 mm .....	48
Cable AWG 26, grey, Grid 1,27 mm .....	49



**FLAKAFIX Ribbon cable AWG 28**  
 Grey (.050") 1,27 mm



**Features**

- Conductor Spacing (.050") 1,27 mm
- Stranded conductors
- AWG 28
- Extruded plastic
- Easy separation of plastic cable conductors
- 09 to 64 positions
- recognized

**Technical Data**

**Electrical Specifications**

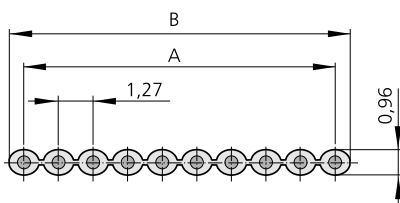
- Cross section: ~ 0,09 mm<sup>2</sup>
- Conductor diameter: ~ 0,39 mm
- Conductor design: 7 strands of Ø 0,127 mm ea.
- Test voltage: 2000 V
- Operating voltage: 300 V max.
- Current load: ca. 1 A
- Resistance: 230 Ω/km max.
- Insulation resistance: > 20 MΩ x km
- Capacity (1kHz) GSG: 45 pF/m
- Inductance: 0,46 µH/m
- Impedance (1MHz) GSG: 104 Ω
- Crosstalk
  - near end (1MHz): 60 dB
  - far end (1MHz): 50 dB

**Mechanical Specifications**

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

**Material and surface finish**

- Conductor: Cu-strands, tinned, (AWG 28)
- Insulation: Special PVC, similar Y18 acc. to VDE 0207;  
 Color: grey with blue edge mark  
 Flammability rating  
 VDE 0472, § 804 and UL  
 Shore-hardness A: 90 ± 5




(All Dimensions in mm)

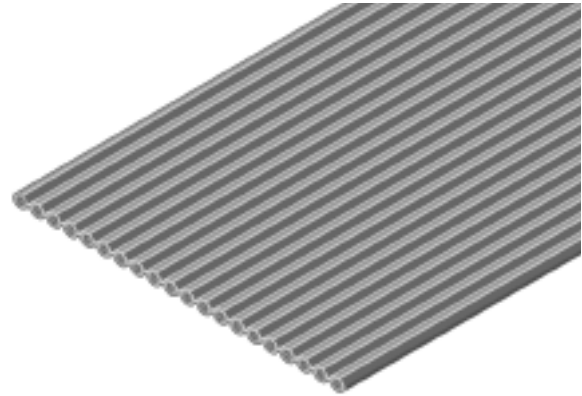
**Ordering Information and Dimensions**

Pos.	Part Number	Dim. A	Dim. B	Toleranz Dim. A u. B	Additional ordering information
09	921.659.016.009.000	10,16	11,43	± 0,2	Supplied in rolls (100') 30,5 m
10	921.659.016.010.000	11,43	12,70	± 0,2	
14	921.659.016.014.000	16,51	17,78	± 0,2	
15	921.659.016.015.000	17,78	19,05	± 0,2	
16	921.659.016.016.000	19,05	20,32	± 0,2	
20	921.659.016.020.000	24,13	25,40	± 0,2	
25	921.659.016.025.000	30,48	31,75	± 0,2	
26	921.659.016.026.000	31,75	33,02	± 0,2	
34	921.659.016.034.000	41,91	43,18	± 0,3	
37	921.659.016.037.000	45,72	46,99	± 0,3	
40	921.659.016.040.000	49,53	50,80	± 0,3	
50	921.659.016.050.000	62,23	63,50	± 0,3	
60	921.659.016.060.000	74,93	76,20	± 0,3	
64	921.659.016.064.000	80,01	81,28	± 0,4	

**FLAKAFIX Ribbon cable AWG 26**  
**Grey (.050") 1,27 mm**

**Features**

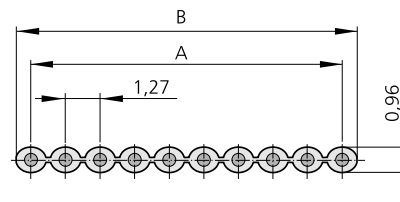
- Conductor Spacing (.050") 1,27 mm
- Stranded conductors
- AWG 26
- Extruded
- Easy separation of plastic cable conductors
- 09 to 64 positions
-  recognized



**Technical Data**

**Electrical Specifications**

Cross section:	~ 0,14 mm <sup>2</sup>
Conductor diameter:	~ 0,48 mm
Conductor design:	7 strands with Ø 0,16 mm ea.
Test voltage:	2000 V
Operating voltage:	300 V max.
Current load:	~ 3 A
Resistance:	150 Ω/km max.
Insulation resistance:	100 MΩ x km
Capacity at 1kHz	
Symmetrical*:	42 pF/m
Non-symmetrical*:	72 pF/m
Inductance at 10kHz	
Symmetrical*:	0,8 µH/m
Non-symmetrical*:	0,5 µH/m
Characteristic impedance	
Symmetrical*:	136 Ω
Non-symmetrical*:	90 Ω



**Mechanical Specifications**

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

**Materials and surface finishes:**

Conductor:	Cu-strand, tinned, (AWG 26)
Insulation:	Special PVC, similar Y18 acc. to VDE 0207; Color: Gray with yellow edge mark Flammability rating VDE 0472, § 804 and UL Shore-Hardness A: 90 ± 5

(All Dimensions in mm)

\* = Standard values

**Ordering Information and Dimensions**

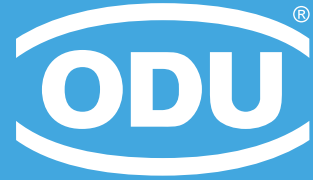
Pos.	Part Number	Dim. A	Dim. B	Toleranz Dim. A u. B	Additional ordering information
09	921.659.017.009.000	10,16	11,43	± 0,2	Supplied in rolls of (305')100 m
10	921.659.017.010.000	11,43	12,70	± 0,2	
14	921.659.017.014.000	16,51	17,78	± 0,2	
15	921.659.017.015.000	17,78	19,05	± 0,2	
16	921.659.017.016.000	19,05	20,32	± 0,2	
20	921.659.017.020.000	24,13	25,40	± 0,2	
25	921.659.017.025.000	30,48	31,75	± 0,2	
26	921.659.017.026.000	31,75	33,02	± 0,2	
34	921.659.017.034.000	41,91	43,18	± 0,3	
37	921.659.017.037.000	45,72	46,99	± 0,3	
40	921.659.017.040.000	49,53	50,80	± 0,3	
50	921.659.017.050.000	62,23	63,50	± 0,3	
60	921.659.017.060.000	74,93	76,20	± 0,3	
64	921.659.017.064.000	80,01	81,28	± 0,4	



For Your Notes



# ODU FLAKAFIX®



## Application Tooling

FLAKAFIX® Heavy Duty Bench Press, Size I . . . . .	52
FLAKAFIX® Bench Press, Size II . . . . .	52
Platen & Base Plate Sets for FLAKAFIX®-Bench Press Size I and Size II . . . . .	53
Cable termination hand tools . . . . .	54
Flakafix® hand held cable cutters . . . . .	54
Flakafix® cable assembly . . . . .	55



## Application Tooling for FLAKAFIX® Connectors

ODU offers a range of application tooling for cost effective and correct one-step termination of FLAKAFIX® connectors to ribbon cable. Simple operations are designed to provide optimum one-step termination procedures.

Change-over from one tool set for one connector series to another requires only a few seconds and can be performed without special skills. Selection of correct platen and base plate set for each connector series is easy and prevents the user from having to invest in unnecessary tooling.

Connectors can be terminated in parallel or in 90° position for daisy-chaining.

The compact and sturdy design of the FLAKAFIX® bench press makes it ideally suited for medium to high volume production runs.

### Application Tooling

For termination to ribbon cable:

**FLAKAFIX® Heavy Duty Bench Press, Size I**  
mounted on a table base, with tool nest plate.

#### Features

- Angled press handle
- Optimum design for easy, non-tiring operations
- Can be used for all ODU FLAKAFIX® connector series

#### Ordering Information

FLAKAFIX® Bench Press, Size I  
Part Number: **099.101.000.000.000**



**FLAKAFIX® Bench Press, Size II**  
mounted on a table base, with tool nest plate.

#### Features

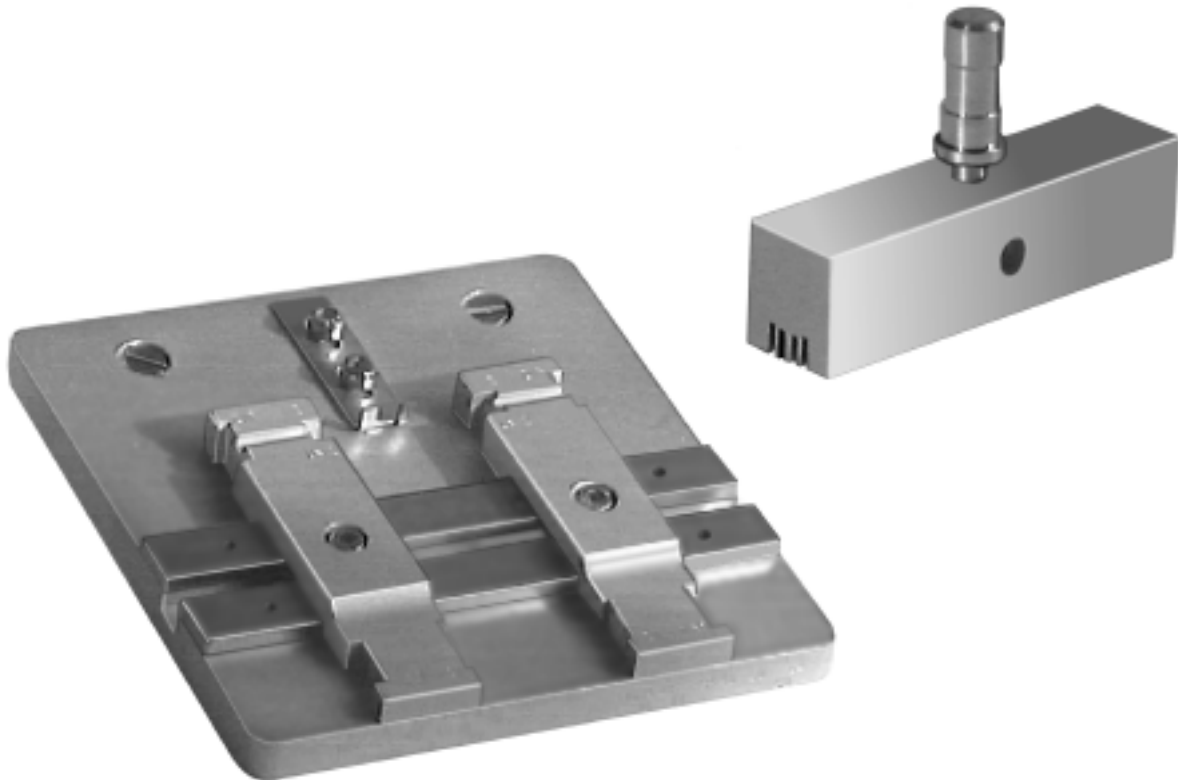
- Angled press handle
- For low volume production for ODU FLAKAFIX® connector series

#### Ordering Information

FLAKAFIX® Bench Press, Size II  
Part Number: **099.100.000.000.000**



Platen & Base Plate Sets  
for FLAKAFIX®-Bench Press  
Size I and Size II



Ordering Information and Dimensions

Description	For Series	Bench Press		Base Plate	Platen
Transition 2-row	533.065..	099.100..	099.101..	598.120.001.600.000	598.110.021.600.000
Transition 4-row	533.061..	099.100..	099.101..	598.120.001.600.000	598.110.016.600.000
IC-Sockelverbinder	533.060..	099.100..	099.101..	598.120.001.600.000	598.110.016.600.000
Socket Connectors, Single-U IDC Contact	517.065..	099.100..	099.101..	598.120.001.600.000	598.110.016.600.000
Socket Connectors, Single-U IDC Contact, Dbl. Sprg. Cnt.	517.075..	099.100..	099.101..	598.120.001.600.000	598.110.016.600.000
DIN Connectors 64 positions (only for Size I + Electrical Bench Press)	538.075..	XXX	099.101..	598.120.006.600.000	598.120.016.600.000

## Assembly tools

### FLAKAFIX® Hand Held Press

#### Features

- used for the processing of socket connectors (up to 50-pole)
- suitable for the processing of smaller number of items
- many application areas, service, repairs and mountings
- easy and safe tool handling



#### Ordering Information

FLAKAFIX® Hand Held Press

Part Number: **080.000.016.000.000**

#### Ordering Information/ Tooling inserts for FLAKAFIX® Hand Held Press

Design	for series	Tooling insert	Stopper Set
IC socket connector	533.060	080.000.016.852.000	080.000.016.853.000
Transition Connectors 2-row	533.065	080.000.016.852.000	080.000.016.853.000
Transition Connectors 4-row	533.061	080.000.016.852.000	080.000.016.853.000
Socket connectors - Single U-Contact	517.065	080.000.016.852.000	080.000.016.853.000
Socket connectors - Single U-Contact, Double Action	517.075	080.000.016.852.000	080.000.016.853.000
Wiping Spring Contact			

### FLAKAFIX® Hand Held Cable Cutters

#### Features

- Cut ribbon cable up to 64 conductors
- Easy to handle
- Feed cable from the side
- Accurate right-angle cuts



#### Ordering Information

FLAKAFIX® Hand Held Cable Cutters

Part Number: **080.001.001.000.000**

## FLAKAFIX® Cable Assembly

ODU can also provide complete cable assemblies.

All cable assemblies are tested according to AQL.

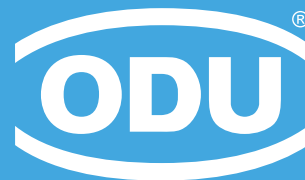
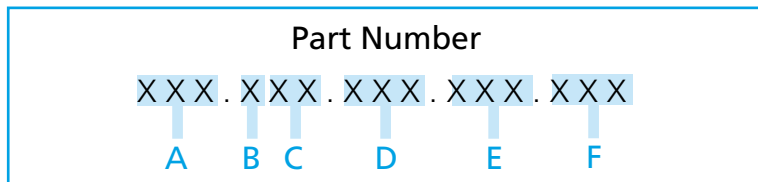
100% testing is available.

Please send your cable assembly drawings.



For Your Notes

# ODU FLAKAFIX®



## Part Number Key Packing units

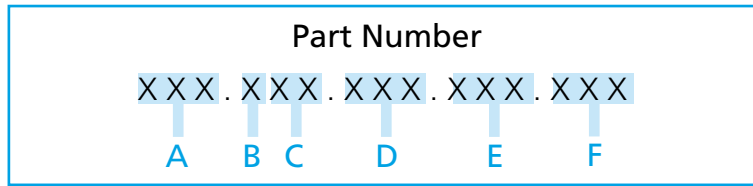
### Part Number Key

Series 517 .....	58
Series 511 .....	59

Packing units Series 511, 517, 533 .....	60
--	----



Part Number Key for Series 517



Page

**A = SERIES**

517 Socket Connectors

8 to 9

**B = Version**

- 0 = Cover separate
- 1 = Cover pre-assembled

**C = Type**

- 65 = Single-U IDC contact, single-action wiping spring contact
- 66 = Single-U IDC contact, single-action wiping spring contact with strain relief
- 68 = Single-U IDC contact, single-action wiping spring contact without polarization key
- 75 = Single-U IDC contact, double-action wiping spring contact
- 76 = Single-U IDC contact, double-action wiping spring contact with strain relief

**D = Surface Finish**

- 003 = 20 μ" (0,5 μm) Au over Ni **(Standard)**
- 009 = Flash gold **(Standard)**
- 035 = 30 μ" (0,75 μm) Au over Ni

**E = Positions**

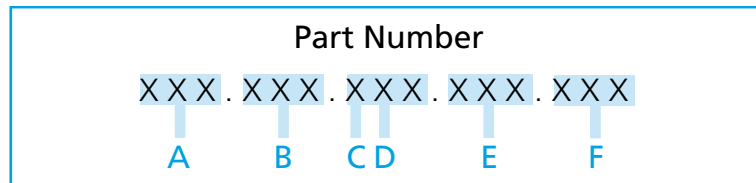
- 010 = 10 positions

**F = Packing unit see page 60**

Example: 5 1 7 . 0 6 5 . 0 0 3 . 0 1 0 . 0 1 0  
A    B C    D    E    F



Part Number Key for Series 511



**A = SERIE**

511 Header

Page  
11 bis 42

**B = Type (Straight Version)**

030 = Unprotected, insulation body 6,04 / 2,8 mm	18/38
032 = Unprotected, nsulation body 5,08 / 2,8 mm	18/38
052 = Solder pin 4,5 mm without latches	13/33
053 = Solder pin 4,5 mm with latches short	13/33
054 = Solder pin 4,5 mm with latches long	13/33
060 = Solder pin 3,2 mm without latches	12/32
061 = Solder pin 3,2 mm with latches short	12/32
062 = Solder pin 3,2 mm with latches long	12/32
066 = Solder pin 3,2 mm, low profile	16/36
068 = SMT-low profile	24
073 = Solder pin 4,5 mm, low profile	16/36
090 = Press fit, without latches	28
091 = Press fit, with latches short	28
092 = Press fit, with latches long	28
106 = Press fit, low profile	29
130 = Press fit, 2-rows unprotected, insulation body 6,04 / 2,8 mm	30
132 = Press fit, 2-rows unprotected, insulation body 5,08 / 2,8 mm	30
150 = SMT, without latches	22
151 = SMT, with short latches	22
152 = SMT, with long latches	22
302 = Unprotected SMT	25

**B = Type (Right-Angle Version)**

110 = SMT, without latches	23
111 = SMT, with short latches	23
112 = SMT, with long latches	23
252 = Solder pin 4,5 mm without latches	15/35
253 = Solder pin 4,5 mm with latches short	15/35
254 = Solder pin 4,5 mm with latches long	15/35
260 = Solder pin 3,2 mm without latches	14/34
261 = Solder pin 3,2 mm with latches short	14/34
262 = Solder pin 3,2 mm with latches long	14/34
266 = Solder pin 3,2 mm, low profile	17/37
270 = Unprotected, insulation body 6,04 / 2,8 mm	19/39
273 = Solder pin 4,5 mm, low profile	17/37
301 = Unprotected SMT	26

**C = High Temperature resistance**

- 0 = Standard
- 8 = Ins. body LCP High Temperature resistance (SMT-compatible)

**D = Surface Finish**

- 003 = 20 μ" (0,5 μm) Au over Ni (Contact Area)  
120 μ" (3,0 μm) Sn over 50 μ" (1,25 μm) Ni  
**(Standard)**

- 009 = Flash gold **(Standard)**
- 035 = 30 μ" (0,75 μm) Au over Ni

Example: 5 1 1 . 0 6 0 . 0 0 3 . 0 1 0 . 0 1 0

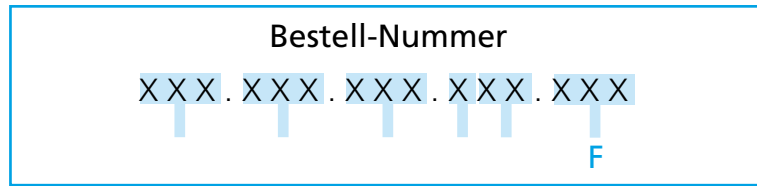
A
B
C D
E
F

**E = Positions**

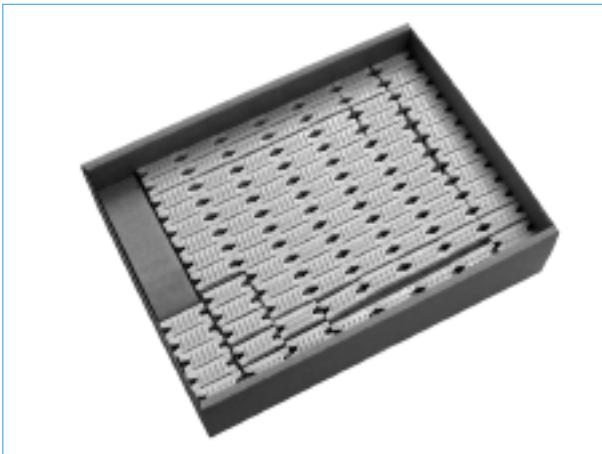
- 010 = 10 positions

**F = Packing units** – see page 60

### Part Number Key for Packing Units



F = Packing Units



010 = Card box



050 = Tape/Reel



070 = Tray

# Please visit us in the Internet

[www.odu.de](http://www.odu.de)  
[www.odu-usa.com](http://www.odu-usa.com)  
[www.odu-china.com](http://www.odu-china.com)



On our website you can find a lot of applications. For example: Medical, Measurement and Testing, Telecommunication, Industrial Electronic, etc. .





For Your Notes



For Your Notes



For Your Notes

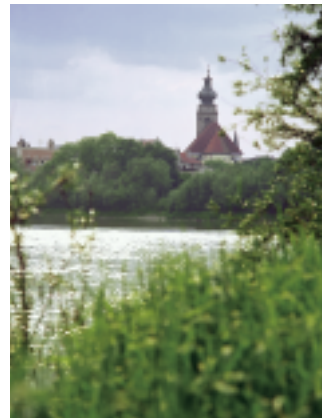
For Your Notes



ODU's headquarters and factory are located in Mühldorf, at the river Inn, approximately 50 miles east of Munich, at the foothills of the Bavarian Alps.



Photo of City Mühldorf/Inn



Mühldorf, an idyllic small town with its typical Inn-Salzach architecture.



## Steckverbindingssysteme

ODU Steckverbindingssysteme GmbH & Co. KG  
Otto Dunkel GmbH

Pregelstraße 11 · D-84453 Mühldorf/Inn  
Telefon +49/86 31/61 56-0  
Fax +49/86 31/61 56 49  
Internet: <http://www.odu.de>  
E-Mail: [zentral@odu.de](mailto:zentral@odu.de)

**ODU France**  
Téléphone: 01.39.35.46.90  
Télécopie: 01.39.35.46.91  
E-Mail:  
[jean-nicolas.vikelas@odu.fr](mailto:jean-nicolas.vikelas@odu.fr)

**ODU USA Inc.**  
Tel. 805.484.0540  
Fax 805.484.7458  
E-Mail:  
[joe.cisi@odu-usa.com](mailto:joe.cisi@odu-usa.com)  
[www.odu-usa.com](http://www.odu-usa.com)

**ODU UK Ltd.**  
Tel. 01509 266 433  
Fax 01509 266 777  
E-Mail:  
[sales@odu-uk.co.uk](mailto:sales@odu-uk.co.uk)

**ODU (Shanghai) Int. Trading Co. Ltd**  
Tel. +86/21-5834 78 28  
Fax +86/21-5834 44 39  
E-Mail:  
[oduchina@odu.com.cn](mailto:oduchina@odu.com.cn)  
[www.odu-china.com](http://www.odu-china.com)

**ODU Scandinavia AB**  
Tel. +46/176-182 61  
Fax +46/176-182 62  
E-Mail:  
[peter.biloch@odu.se](mailto:peter.biloch@odu.se)

**ODU (Shanghai) Connectors Manufacturing Co. Ltd**  
Tel. +86/21-5834 78 28  
Fax +86/21-5834 44 39  
E-Mail:  
[markus.bernhuber@odu.com.cn](mailto:markus.bernhuber@odu.com.cn)  
[www.odu-china.com](http://www.odu-china.com)