

# ODU-CARD

## Board- to Board Connectors

2.54 mm (.100")



**The latest version of this  
catalogue is also in the internet  
[www.odu.de](http://www.odu.de)**

All shown connectors are according to DIN EN 61984:2009  
connectors without breaking capacity (COC)

All dimensions in mm.  
All figures are illustrations.  
Changes reserved.

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Attention:  
The SMT connectors ODU MINI-CARD (1,27 x 2,54)  
are in a separate catalogue

Socket and Pin Strips for stacking and magazine design as medium- and high-pole, mateable contact elements. 1- and 2-row with straight and angled contacts. High pcb packing density due to geometrically efficient design. Square as well as rectangular socket/pin combinations are available.

### A multitude of applications in:

- Data Processing
- Large and Small Computers
- Programming Devices
- Electronical Measuring Devices
- Control Technics
- Process Automation
- Telecommunications

### Contact Principle:

ODU-CARD socket contact elements of all designs are provided with a minimum of 2 independantly resilient contact tags. The contacts of Socket Strips ODU-CARD 254 are based on a 4 point contact principle. Incorrect mating of Pin and Socket Strips is impossible due to the special wire shape of contact sockets in the area of socket opening.

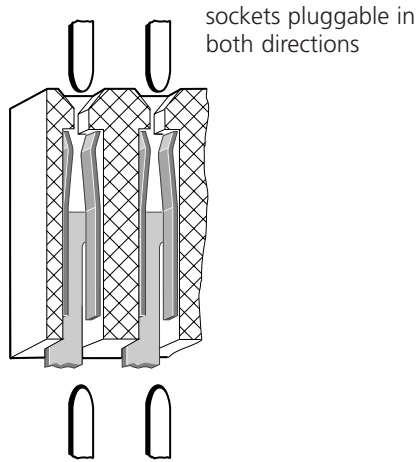
The pins 0,64 x 0,64 mm of Pin Strips ODU-CARD 254 – quadratically drawn in cross section – are thermally drawn to the various lengths and thus they have an ideal shape of insertion tip.

Both pin versions are free of tough edges and so they can as well be used for applications in the field of high frequency technology.

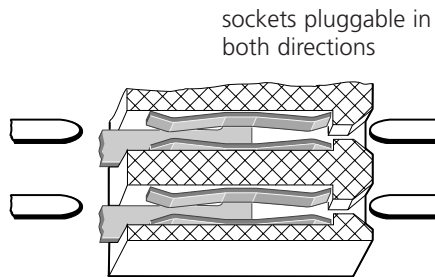
Protection against corrosion, low transition resistance and contact security are achieved by the efficient selective plating of surface with hard gold in the individual contact giving area.

The solderable termination points of contacts are galvanically tinned.

2 point contacting between pin-socket with ODU-CARD 254 vertical version



4 point contacting between pin-socket with ODU-CARD 254 horizontal version



**Short Description:**

Pin Strips ODU-CARD 254, series 511 – mateable as opposite part for the Socket Strips ODU-CARD 254 – are constructed in a mating and solder grid spacing of 2,54 x 2,54 mm. Most of the types of this construction range can be butted end to end or side to side. They are available in straight and right-angle design for horizontal and vertical assembly and with various pin lengths for plugging through for sandwich-construction type of pcb's.

The insulation material is heat-resistant and withstands the usually existing temperatures of the solder machines.

The pins are made of heavy brass alloy and drawn to the cross-section of 0,64 x 0,64 mm as well as thermically torn to the various lengths. Using this method an optimum shape of pin tip is achieved which is necessary for insertion into the socket contact. Therefore they are also free of edges and spray edges.

For opposite part of the Pin Strips construction range ODU-CARD 254 all usual Socket Strips with corresponding grid spacings can be used, also all short circuit transitions and similar.

As special design Pin Strips with a lot of pin lengths on the plugging and solder side are available. Pin lengths of 6,0 resp. 6,5 mm on the plugging side is most frequently used.

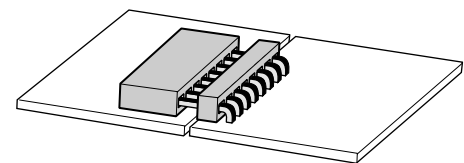
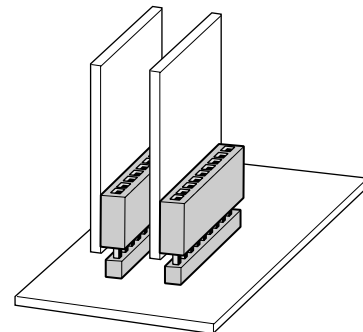
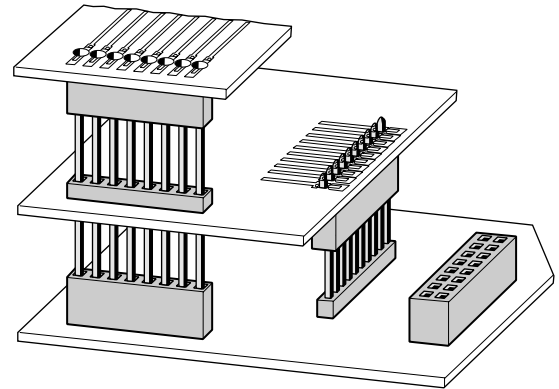
There are also strips with a distance-keeping, second insulation body which protects the long pins against bending and deviation of the corresponding spacing.

Pins of the standard versions are selectively gold-plated in the mating area and tinned in the solder area.

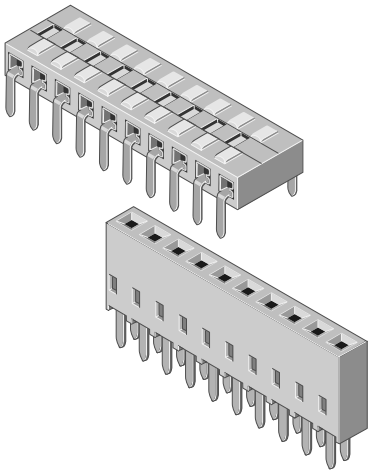
They are available in straight and right-angle version for horizontal and vertical assembly and with various pin lengths for plugging through for sandwich-construction type of pcb's.

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**  
 Grid spacing 2,54 mm with solder square pins 0,64 x 0,64 mm

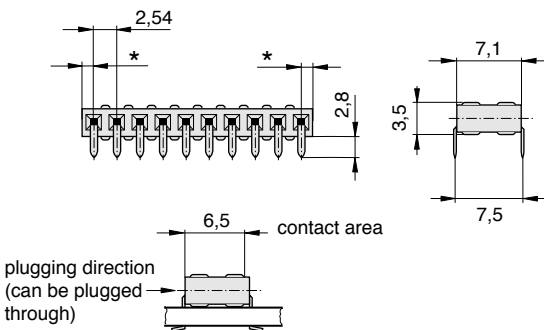
**Examples of Application:**



**Socket Strips ODU-CARD 254, Series 517**  
**for Pin Strips in cross-section 0,64 x 0,64 mm**  
 1-row, grid spacing 2,54 mm, for horizontal and vertical assembly

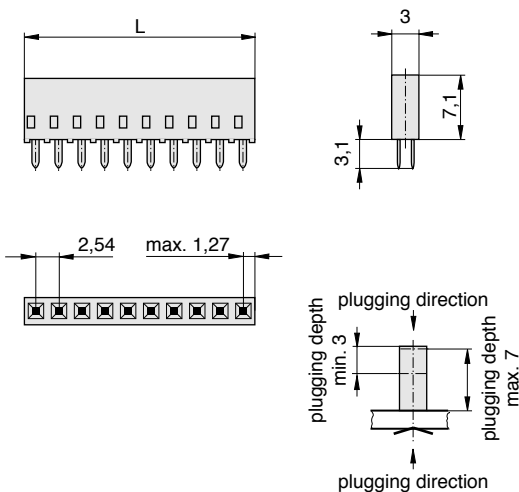


**assembly dimensions for horizontal assembly**



solder picture see page 30

**assembly dimensions for vertical assembly**



solder picture see page 30

**Short Description:**

1-row Socket Strips – designed for horizontal as well as vertical assembly on printed boards – fitting for the 1-row Pin Strips ODU-CARD 254 with pins 0,64 x 0,64 mm.

The contact points of the sockets in the mating area are selectively gold plated. Contacts of horizontal version show 4 contact points, vertical versions show 2 contact points.

The version for vertical assembly can be plugged through and can be mated from both sides.

Solder grid for horizontal version is 7,5 x 2,54 mm.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

no. of poles	L = length	horizontal assembly	vertical assembly
		part-number	part-numer
1	2,54	517.220.003.001	517.022.003.001
2	5,08	517.220.003.002	517.022.003.002
3	7,62	517.220.003.003	517.022.003.003
4	10,16	517.220.003.004	517.022.003.004
5	12,70	517.220.003.005	517.022.003.005
6	15,24	517.220.003.006	517.022.003.006
7	17,78	517.220.003.007	517.022.003.007
8	20,32	517.220.003.008	517.022.003.008
9	22,86	517.220.003.009	517.022.003.009
10	25,40	517.220.003.010	517.022.003.010
11	27,94	517.220.003.011	517.022.003.011
12	30,48	517.220.003.012	517.022.003.012
13	33,02	517.220.003.013	517.022.003.013
14	35,56	517.220.003.014	517.022.003.014
15	38,10	517.220.003.015	517.022.003.015
16	40,64	517.220.003.016	517.022.003.016
17	43,18	517.220.003.017	517.022.003.017
18	45,72	517.220.003.018	517.022.003.018
19	48,26	517.220.003.019	517.022.003.019
20	50,80	517.220.003.020	517.022.003.020
21	53,34	517.220.003.021	517.022.003.021
22	55,88	517.220.003.022	517.022.003.022
23	58,42	517.220.003.023	517.022.003.023
24	60,96	517.220.003.024	517.022.003.024
25	63,50	517.220.003.025	517.022.003.025
26	66,04	517.220.003.026	517.022.003.026
27	68,58	517.220.003.027	517.022.003.027
28	71,12	517.220.003.028	517.022.003.028
29	73,66	517.220.003.029	517.022.003.029
30	76,20	517.220.003.030	517.022.003.030

**Short Description:**

Socket Strips 1-row are made for pcb's that require a grid spacing of 2,54 mm.

The solder tags are cranked for this dimension.

They are fitting for the Pin-Strips ODU-CARD 254 1-row with pins of a cross-section of 0,64 x 0,64 mm.

Contact points of the sockets are selectively gold-plated and the solder tags are tin-plated.

**Socket Strips ODU-CARD 254, Series 517  
for Pin Strips in cross-section 0,64 x 0,64 mm**

1-row, for vertical assembly with cranked solder tags,  
in solder grid 2,54 mm

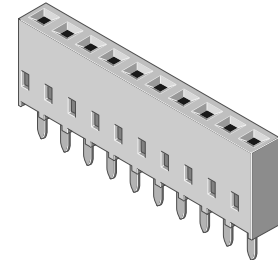
**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

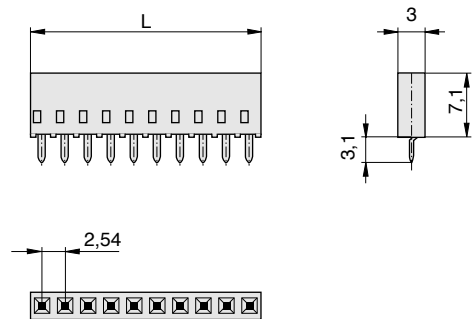
\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

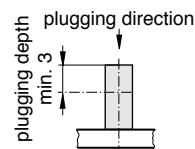


**assembly dimensions 1-row**



**Socket Strip 1-row**

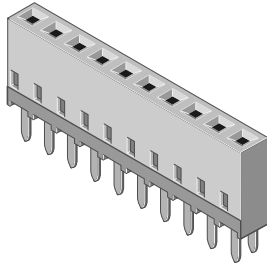
no. of poles	L = length	part-number
1	2,54	517.032.003.001
2	5,08	517.032.003.002
3	7,62	517.032.003.003
4	10,16	517.032.003.004
5	12,70	517.032.003.005
6	15,24	517.032.003.006
7	17,78	517.032.003.007
8	20,32	517.032.003.008
9	22,86	517.032.003.009
10	25,40	517.032.003.010
11	27,94	517.032.003.011
12	30,48	517.032.003.012
13	33,02	517.032.003.013
14	35,56	517.032.003.014
15	38,10	517.032.003.015
16	40,64	517.032.003.016
17	43,18	517.032.003.017
18	45,72	517.032.003.018
19	48,26	517.032.003.019
20	50,80	517.032.003.020
21	53,34	517.032.003.021
22	55,88	517.032.003.022
23	58,42	517.032.003.023
24	60,96	517.032.003.024
25	63,50	517.032.003.025
26	66,04	517.032.003.026
27	68,58	517.032.003.027
28	71,12	517.032.003.028
29	73,66	517.032.003.029
30	76,20	517.032.003.030



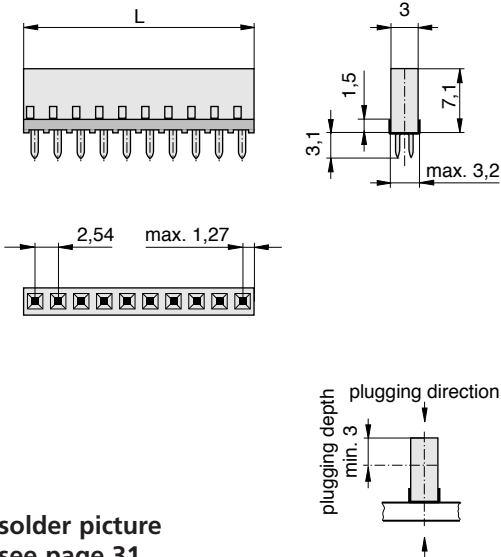
**solder picture  
see page 30**

**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**

1-row, grid spacing 2,54 mm, for vertical assembly, foil (solder proof)



**assembly dimensions:**



solder picture see page 31

**Short Description:**

1-row Socket Strips – designed for vertical assembly on printed boards – fitting for the 1-row Pin Strips ODU-CARD 254 with pins 0,64 x 0,64 mm.

The contact points of the sockets in the mating area are selectively gold plated. Contacts of vertical versions show 2 contact points.

The version can be plugged through and can be mated from both sides.

The Socket Strip has a covering foil to avoid contacts being damaged by solder vapours.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 29**

no. of poles	L = length	part-number
1	2,54	517.055.722.001
2	5,08	517.055.722.002
3	7,62	517.055.722.003
4	10,16	517.055.722.004
5	12,70	517.055.722.005
6	15,24	517.055.722.006
7	17,78	517.055.722.007
8	20,32	517.055.722.008
9	22,86	517.055.722.009
10	25,40	517.055.722.010
11	27,94	517.055.722.011
12	30,48	517.055.722.012
13	33,02	517.055.722.013
14	35,56	517.055.722.014
15	38,10	517.055.722.015
16	40,64	517.055.722.016
17	43,18	517.055.722.017
18	45,72	517.055.722.018
19	48,26	517.055.722.019
20	50,80	517.055.722.020
21	53,34	517.055.722.021
22	55,88	517.055.722.022
23	58,42	517.055.722.023
24	60,96	517.055.722.024
25	63,50	517.055.722.025
26	66,04	517.055.722.026
27	68,58	517.055.722.027
28	71,12	517.055.722.028
29	73,66	517.055.722.029
30	76,20	517.055.722.030



**Short Description:**

Socket Strips 1 -row are made for pcb's that require a grid spacing of 2,54 mm.

The solder tags are cranked for this dimension.

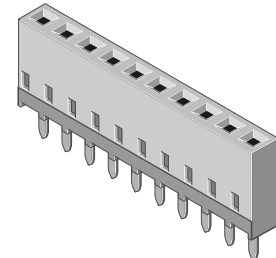
They are fitting for the Pin Strips ODU-CARD 254 1-row with pins of a cross-section of 0,64 x 0,64 mm.

Contact points of the sockets are selectively gold-plated and the solder tags are tin-plated.

The Socket Strip has a covering foil to avoid contacts being damaged by solder vapours.

**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**

1-row, for vertical assembly with cranked solder tags, foil (solder proof), in solder grid 2,54



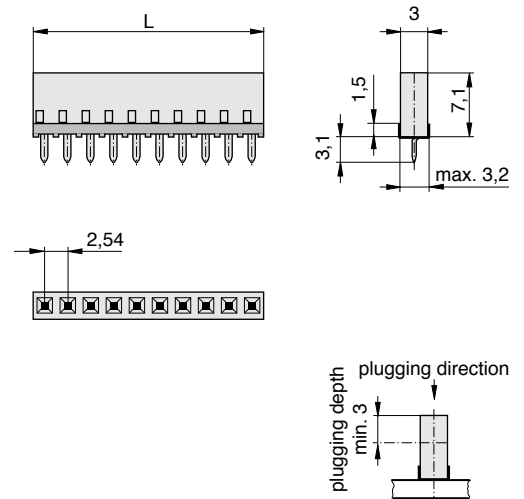
**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**assembly dimensions:**

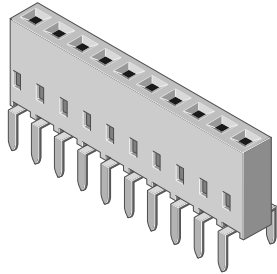


**solder picture see page 31**

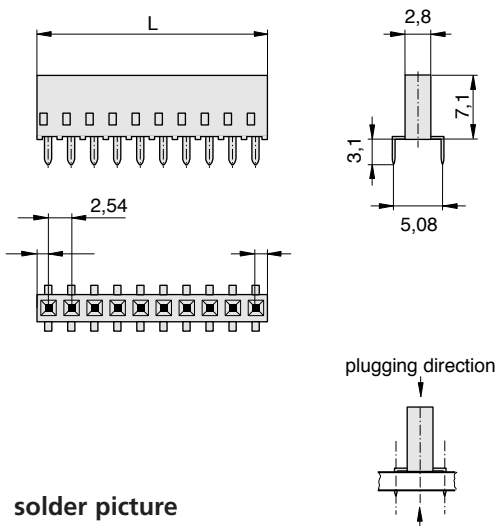
**Part Number Key see page 29**

no. of poles	L = length	part-number
1	2,54	517.055.742.001
2	5,08	517.055.742.002
3	7,62	517.055.742.003
4	10,16	517.055.742.004
5	12,70	517.055.742.005
6	15,24	517.055.742.006
7	17,78	517.055.742.007
8	20,32	517.055.742.008
9	22,86	517.055.742.009
10	25,40	517.055.742.010
11	27,94	517.055.742.011
12	30,48	517.055.742.012
13	33,02	517.055.742.013
14	35,56	517.055.742.014
15	38,10	517.055.742.015
16	40,64	517.055.742.016
17	43,18	517.055.742.017
18	45,72	517.055.742.018
19	48,26	517.055.742.019
20	50,80	517.055.742.020
21	53,34	517.055.742.021
22	55,88	517.055.742.022
23	58,42	517.055.742.023
24	60,96	517.055.742.024
25	63,50	517.055.742.025
26	66,04	517.055.742.026
27	68,58	517.055.742.027
28	71,12	517.055.742.028
29	73,66	517.055.742.029
30	76,20	517.055.742.030

**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**  
 1-row, for vertical assembly with right-angle solder tags



**assembly dimensions 1-row:**



solder picture see page 30

plugging depth min. 6,5 mm

**Short Description:**

Socket Strips 1-row – in a version that can be plugged through – with 2,54 mm grid spacing, fitting for Pin Strips ODU-CARD 254. Solder tags are right-angle, solder drilling is beside the mating drilling. Here are the advantages of this Socket Strip version:

No soldering by hand, as these connectors can be soldered together with other components in a splash bath. No covering of socket contacts, as they are not touched due to the solder material coming up. No special drillings as solder tags are made with grid spacing 5,08.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**Socket Strip 1-row**

no. of poles	L = length	part-number
1	2,54	517.027.003.001
2	5,08	517.027.003.002
3	7,62	517.027.003.003
4	10,16	517.027.003.004
5	12,70	517.027.003.005
6	15,24	517.027.003.006
7	17,78	517.027.003.007
8	20,32	517.027.003.008
9	22,86	517.027.003.009
10	25,40	517.027.003.010
11	27,94	517.027.003.011
12	30,48	517.027.003.012
13	33,02	517.027.003.013
14	35,56	517.027.003.014
15	38,10	517.027.003.015
16	40,64	517.027.003.016
17	43,18	517.027.003.017
18	45,72	517.027.003.018
19	48,26	517.027.003.019
20	50,80	517.027.003.020
21	53,34	517.027.003.021
22	55,88	517.027.003.022
23	58,42	517.027.003.023
24	60,96	517.027.003.024
25	63,50	517.027.003.025
26	66,04	517.027.003.026
27	68,58	517.027.003.027
28	71,12	517.027.003.028
29	73,66	517.027.003.029
30	76,20	517.027.003.030

**Short Description:**

2-row Socket Strips – designed for horizontal or vertical assembly on printed boards – fitting for the 2-row Pin Strips ODU-CARD 254 with pins 0,64 x 0,64 mm.

Contact points of sockets in the mating area are selectively gold-plated.

Contacts of horizontal version show 4 contact points, vertical version 2 contact points.

The version for vertical assembly can be plugged through and can be mated from both sides.

Solder grid for horizontal version is 7,5 x 2,54 mm and for vertical version 4,0 x 2,54 mm.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G -45204, cl. 00\*)

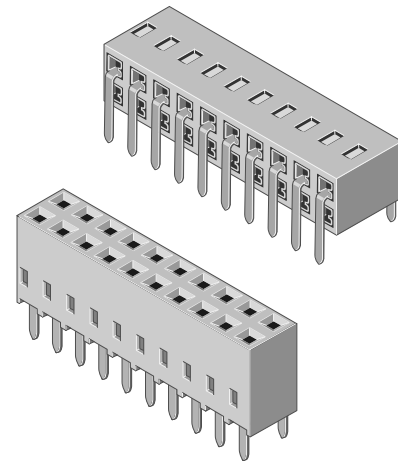
\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5 A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

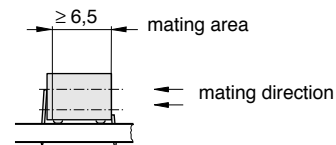
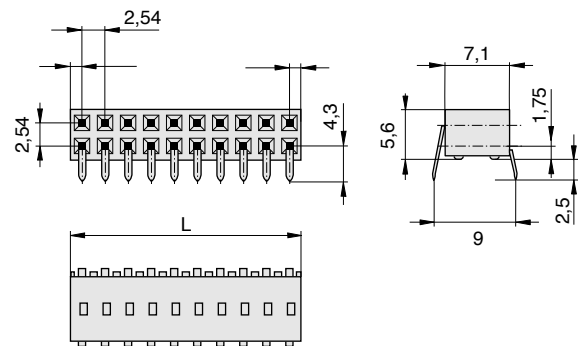
**Part Number Key see page 28**

no. of poles	L = length	horizontal assembly	vertical assembly
		part-number	part-number
2	2,54	517.221.003.002	517.023.003.002
4	5,08	517.221.003.004	517.023.003.004
6	7,62	517.221.003.006	517.023.003.006
8	10,16	517.221.003.008	517.023.003.008
10	12,70	517.221.003.010	517.023.003.010
12	15,24	517.221.003.012	517.023.003.012
14	17,78	517.221.003.014	517.023.003.014
16	20,32	517.221.003.016	517.023.003.016
18	22,86	517.221.003.018	517.023.003.018
20	25,40	517.221.003.020	517.023.003.020
22	27,94	517.221.003.022	517.023.003.022
24	30,48	517.221.003.024	517.023.003.024
26	33,02	517.221.003.026	517.023.003.026
28	35,56	517.221.003.028	517.023.003.028
30	38,10	517.221.003.030	517.023.003.030
32	40,64	517.221.003.032	517.023.003.032
34	43,18	517.221.003.034	517.023.003.034
36	45,72	517.221.003.036	517.023.003.036
38	48,26	517.221.003.038	517.023.003.038
40	50,80	517.221.003.040	517.023.003.040
42	53,34	517.221.003.042	517.023.003.042
44	55,88	517.221.003.044	517.023.003.044
46	58,42	517.221.003.046	517.023.003.046
48	60,96	517.221.003.048	517.023.003.048
50	63,50	517.221.003.050	517.023.003.050
52	66,04	517.221.003.052	517.023.003.052
54	68,58	517.221.003.054	517.023.003.054
56	71,12	517.221.003.056	517.023.003.056
58	73,66	517.221.003.058	517.023.003.058
60	76,20	517.221.003.060	517.023.003.060

**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**  
 2-row, grid spacing 2,54 mm, for horizontal and vertical assembly

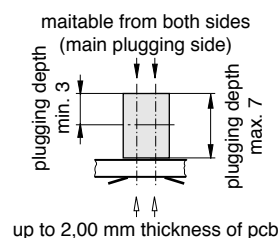
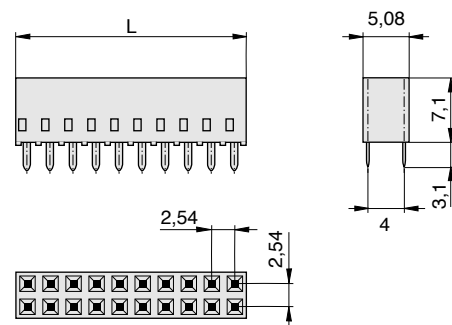


**assembly dimensions for horizontal assembly**



solder picture see page 30

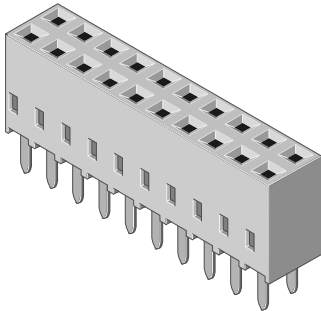
**assembly dimensions for vertical assembly**



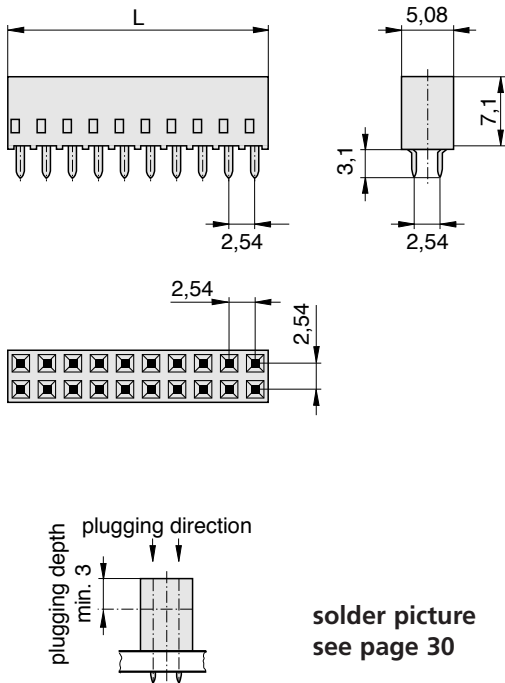
solder picture see page 30

**Socket Strips ODU-CARD 254, Series 517 for pin strips in cross-section 0,64 x 0,64 mm**

2-row, for vertical assembly with cranked solder tags, in solder grid 2,54 x 2,54 mm



**assembly dimensions 2-row:**



**solder picture see page 30**

**Short Description:**

Socket Strips 2-row with a solder grid of 2,54 x 2,54 mm are made for pcb's that require a grid spacing of 2,54 mm.

The solder tags are cranked for this dimension.

They are fitting for the pin strips ODU-CARD 254 2-row with pins of a cross-section of 0,64 x 0,64 mm.

Contact points of the sockets are selectively gold-plated and the solder tags are tin-plated.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45 204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**Socket Strip 2-row**

no. of poles	L = length	part-number
2	2,54	517.033.003.002
4	5,08	517.033.003.004
6	7,62	517.033.003.006
8	10,16	517.033.003.008
10	12,70	517.033.003.010
12	15,24	517.033.003.012
14	17,78	517.033.003.014
16	20,32	517.033.003.016
18	22,86	517.033.003.018
20	25,40	517.033.003.020
22	27,94	517.033.003.022
24	30,48	517.033.003.024
26	33,02	517.033.003.026
28	35,56	517.033.003.028
30	38,10	517.033.003.030
32	40,64	517.033.003.032
34	43,18	517.033.003.034
36	45,72	517.033.003.036
38	48,26	517.033.003.038
40	50,80	517.033.003.040
42	53,34	517.033.003.042
44	55,88	517.033.003.044
46	58,42	517.033.003.046
48	60,96	517.033.003.048
50	63,50	517.033.003.050
52	66,04	517.033.003.052
54	68,58	517.033.003.054
56	71,12	517.033.003.056
58	73,66	517.033.003.058
60	76,20	517.033.003.060

**Short Description:**

2-row Socket Strips – designed for horizontal or vertical assembly on printed boards – fitting for the 2-row Pin Strips ODU-CARD 254 with pins 0,64 x 0,64 mm.

Contact points of sockets in the mating area are selectively gold-plated.

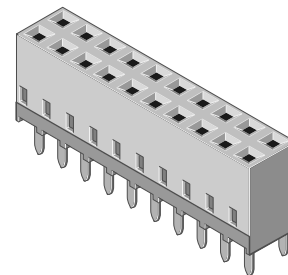
Contacts of vertical versions show 2 contact points.

The version can be plugged through and can be mated from both sides.

The Socket Strip has a covering foil to avoid contacts being damaged by solder vapours.

**Socket Strips ODU-CARD 254, Series 517  
for Pin Strips in cross-section 0,64 x 0,64 mm**

2-row, grid spacing 2,54 mm, for vertical assembly,  
foil (solder proof)



**Technical Data:**

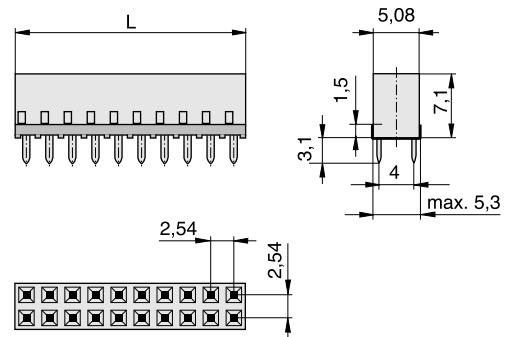
Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µm Au on 1,25 µm Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

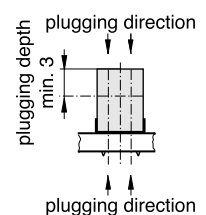
Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 29**

**assembly dimensions:**



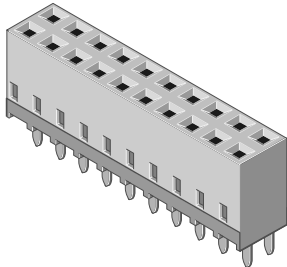
**solder picture see page 31**



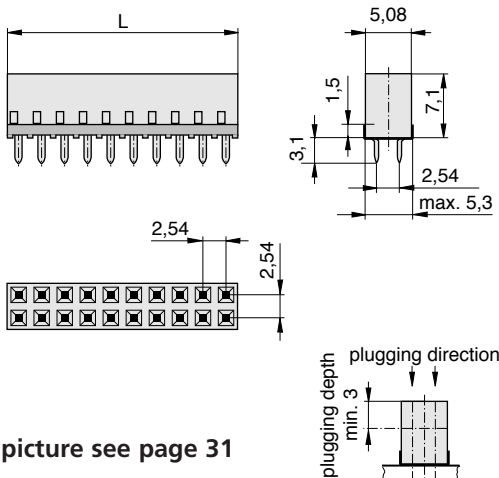
no. of poles	L = length	part number
2	2,54	517.055.762.002
4	5,08	517.055.762.004
6	7,62	517.055.762.006
8	10,16	517.055.762.008
10	12,70	517.055.762.010
12	15,24	517.055.762.012
14	17,78	517.055.762.014
16	20,32	517.055.762.016
18	22,86	517.055.762.018
20	25,40	517.055.762.020
22	27,94	517.055.762.022
24	30,48	517.055.762.024
26	33,02	517.055.762.026
28	35,56	517.055.762.028
30	38,10	517.055.762.030
32	40,64	517.055.762.032
34	43,18	517.055.762.034
36	45,72	517.055.762.036
38	48,26	517.055.762.038
40	50,80	517.055.762.040
42	53,34	517.055.762.042
44	55,88	517.055.762.044
46	58,42	517.055.762.046
48	60,96	517.055.762.048
50	63,50	517.055.762.050
52	66,04	517.055.762.052
54	68,58	517.055.762.054
56	71,12	517.055.762.056
58	73,66	517.055.762.058
60	76,20	517.055.762.060

**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**

2-row, for vertical assembly with cranked solder tags, foil (solder proof), in solder grid 2,54 x 2,54



**assembly dimensions:**



solder picture see page 31

**Short Description:**

Socket Strips 2-row with a solder grid of 2,54 x 2,54 mm are made for pcb's that require a grid spacing of 2,54 mm.

The solder tags are cranked for this dimension.

They are fitting for the Pin Strips ODU-CARD 254 2-row with pins of a cross-section of 0,64 x 0,64 mm.

Contact points of the sockets are selectively gold-plated and the solder tags are tin-plated.

The Socket Strip has a covering foil to avoid contacts being damaged by solder vapours.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 29**

no. of poles	L = length	part-number
2	2,54	517.055.782.002
4	5,08	517.055.782.004
6	7,62	517.055.782.006
8	10,16	517.055.782.008
10	12,70	517.055.782.010
12	15,24	517.055.782.012
14	17,78	517.055.782.014
16	20,32	517.055.782.016
18	22,86	517.055.782.018
20	25,40	517.055.782.020
22	27,94	517.055.782.022
24	30,48	517.055.782.024
26	33,02	517.055.782.026
28	35,56	517.055.782.028
30	38,10	517.055.782.030
32	40,64	517.055.782.032
34	43,18	517.055.782.034
36	45,72	517.055.782.036
38	48,26	517.055.782.038
40	50,80	517.055.782.040
42	53,34	517.055.782.042
44	55,88	517.055.782.044
46	58,42	517.055.782.046
48	60,96	517.055.782.048
50	63,50	517.055.782.050
52	66,04	517.055.782.052
54	68,58	517.055.782.054
56	71,12	517.055.782.056
58	73,66	517.055.782.058
60	76,20	517.055.782.060

**Short Description:**

Socket Strips 2-row – in a version that can be plugged through – with 2,54 mm grid spacing, fitting for Pin Strips ODU-CARD 254. Solder tags are right-angle, solder drilling is beside the mating drilling. Here are the advantages of this Socket Strip version:

No soldering by hand, as these connectors can be soldered together with other components in a splash bath. No covering of socket contacts, as they are not touched due to the solder material coming up. No special drillings as solder tags are made with grid spacing 7,62.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

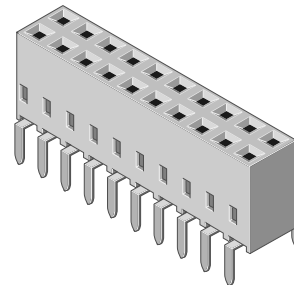
Terminations: Solder Contacts  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 1 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

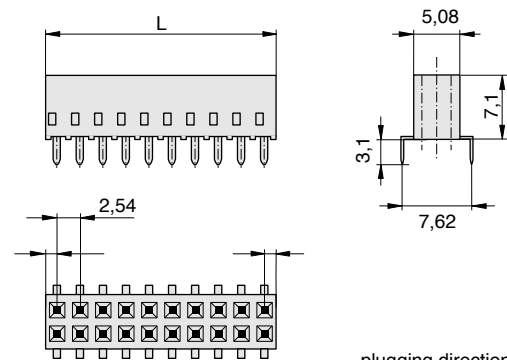
**Socket Strip 2-row**

no. of poles	L = length	part-number
2	2,54	517.028.003.002
4	5,08	517.028.003.004
6	7,62	517.028.003.006
8	10,16	517.028.003.008
10	12,70	517.028.003.010
12	15,24	517.028.003.012
14	17,78	517.028.003.014
16	20,32	517.028.003.016
18	22,86	517.028.003.018
20	25,40	517.028.003.020
22	27,94	517.028.003.022
24	30,48	517.028.003.024
26	33,02	517.028.003.026
28	35,56	517.028.003.028
30	38,10	517.028.003.030
32	40,64	517.028.003.032
34	43,18	517.028.003.034
36	45,72	517.028.003.036
38	48,26	517.028.003.038
40	50,80	517.028.003.040
42	53,34	517.028.003.042
44	55,88	517.028.003.044
46	58,42	517.028.003.046
48	60,96	517.028.003.048
50	63,50	517.028.003.050
52	66,04	517.028.003.052
54	68,58	517.028.003.054
56	71,12	517.028.003.056
58	73,66	517.028.003.058
60	76,20	517.028.003.060

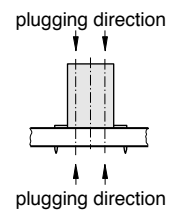
**Socket Strips ODU-CARD 254, Series 517 for Pin Strips in cross-section 0,64 x 0,64 mm**  
 2-row, for vertical assembly with right-angle solder tags



**assembly dimensions 2-row:**



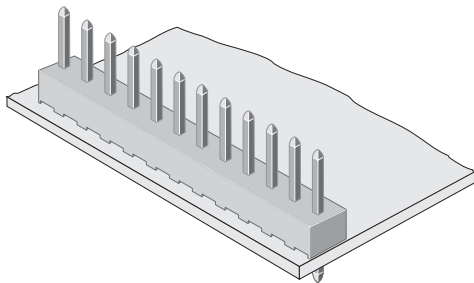
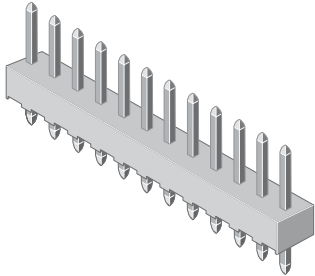
**solder picture see page 30**



**plugging depth min. 6,5 mm**

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

1-row, grid spacing 2,54 mm, with straight solder pins,  
 plugging length 6,0 mm



**Technical Data:**

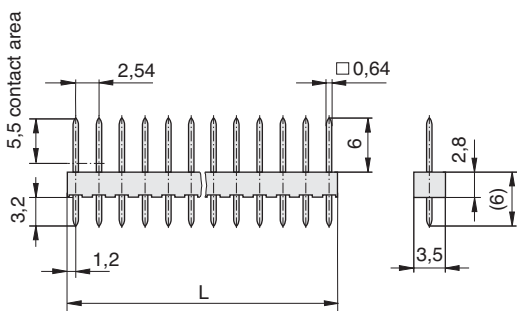
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

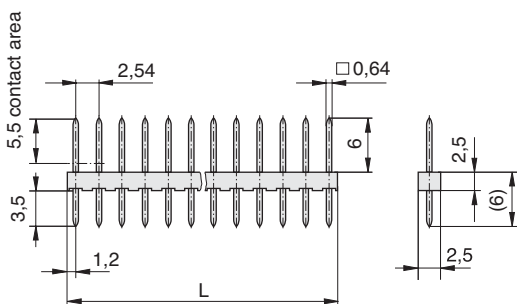
Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**assembly dimensions:**



**solder picture**  
 see page 32



no. of poles	L = length	part-number insulation body 3,5/2,8	part-number insulation body 2,5/2,5
1	2,40	511.020.003.001	511.024.003.001
2	4,94	511.020.003.002	511.024.003.002
3	7,48	511.020.003.003	511.024.003.003
4	10,02	511.020.003.004	511.024.003.004
5	12,56	511.020.003.005	511.024.003.005
6	15,10	511.020.003.006	511.024.003.006
7	17,64	511.020.003.007	511.024.003.007
8	20,18	511.020.003.008	511.024.003.008
9	22,72	511.020.003.009	511.024.003.009
10	25,26	511.020.003.010	511.024.003.010
11	27,80	511.020.003.011	511.024.003.011
12	30,34	511.020.003.012	511.024.003.012
13	32,88	511.020.003.013	511.024.003.013
14	35,42	511.020.003.014	511.024.003.014
15	37,96	511.020.003.015	511.024.003.015
16	40,50	511.020.003.016	511.024.003.016
17	43,03	511.020.003.017	511.024.003.017
18	45,58	511.020.003.018	511.024.003.018
19	48,12	511.020.003.019	511.024.003.019
20	50,66	511.020.003.020	511.024.003.020
21	53,20	511.020.003.021	511.024.003.021
22	55,74	511.020.003.022	511.024.003.022
23	58,28	511.020.003.023	511.024.003.023
24	60,82	511.020.003.024	511.024.003.024
25	63,36	511.020.003.025	511.024.003.025
26	65,90	511.020.003.026	511.024.003.026
27	68,44	511.020.003.027	511.024.003.027
28	70,98	511.020.003.028	511.024.003.028
29	73,52	511.020.003.029	511.024.003.029
30	76,06	511.020.003.030	511.024.003.030



**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**  
 1-row, grid spacing 2,54 mm, with straight solder pins,  
 plugging length 18,0 mm

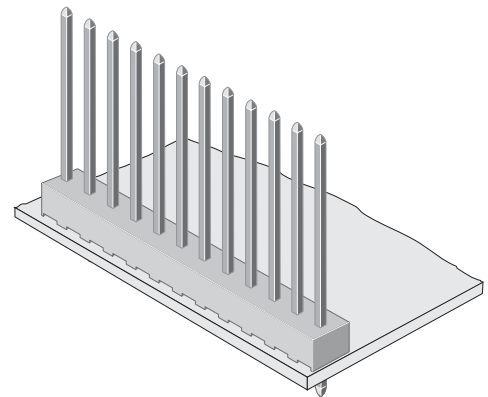
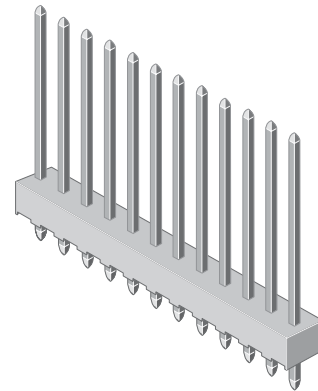
**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

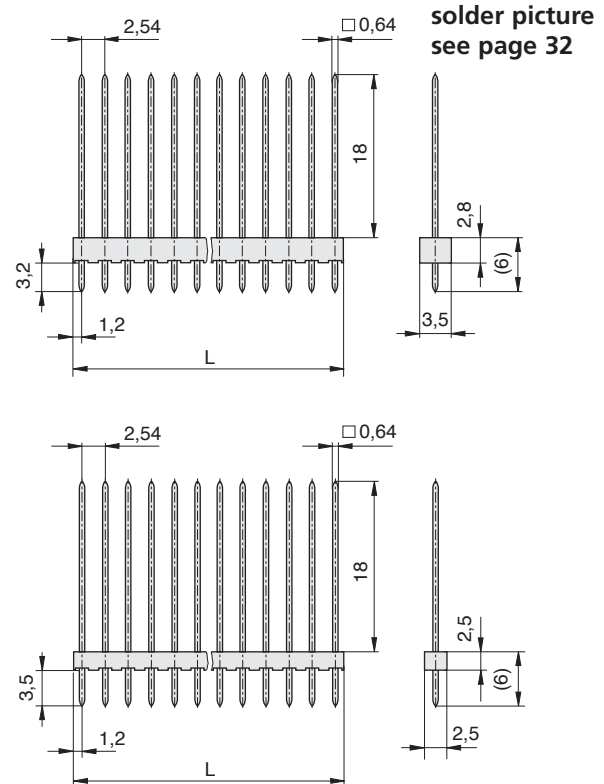
Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40040 MIL-C-21097 B

**Part Number Key see page 28**



no. of poles	L = length	part-number insulation body 3,5/2,8	part-number insulation body 2,5/2,5
1	2,40	511.021.003.001	511.025.003.001
2	4,94	511.021.003.002	511.025.003.002
3	7,48	511.021.003.003	511.025.003.003
4	10,02	511.021.003.004	511.025.003.004
5	12,56	511.021.003.005	511.025.003.005
6	15,10	511.021.003.006	511.025.003.006
7	17,64	511.021.003.007	511.025.003.007
8	20,18	511.021.003.008	511.025.003.008
9	22,72	511.021.003.009	511.025.003.009
10	25,26	511.021.003.010	511.025.003.010
11	27,80	511.021.003.011	511.025.003.011
12	30,34	511.021.003.012	511.025.003.012
13	32,88	511.021.003.013	511.025.003.013
14	35,42	511.021.003.014	511.025.003.014
15	37,96	511.021.003.015	511.025.003.015
16	40,50	511.021.003.016	511.025.003.016
17	43,03	511.021.003.017	511.025.003.017
18	45,58	511.021.003.018	511.025.003.018
19	48,12	511.021.003.019	511.025.003.019
20	50,66	511.021.003.020	511.025.003.020
21	53,20	511.021.003.021	511.025.003.021
22	55,74	511.021.003.022	511.025.003.022
23	58,28	511.021.003.023	511.025.003.023
24	60,82	511.021.003.024	511.025.003.024
25	63,36	511.021.003.025	511.025.003.025
26	65,90	511.021.003.026	511.025.003.026
27	68,44	511.021.003.027	511.025.003.027
28	70,98	511.021.003.028	511.025.003.028
29	73,52	511.021.003.029	511.025.003.029
30	76,06	511.021.003.030	511.025.003.030

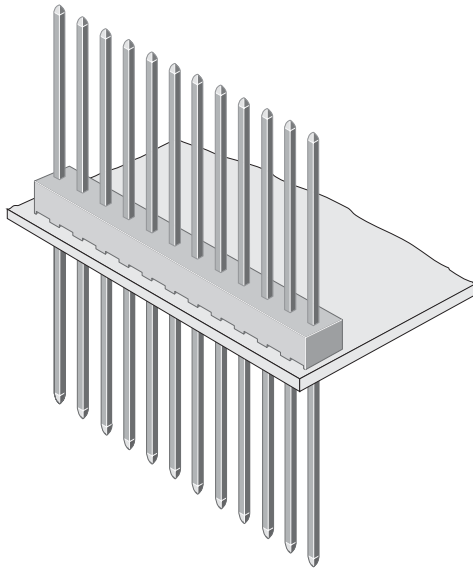
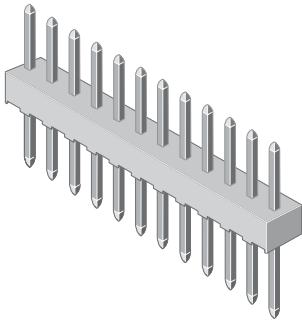
**assembly dimensions:**



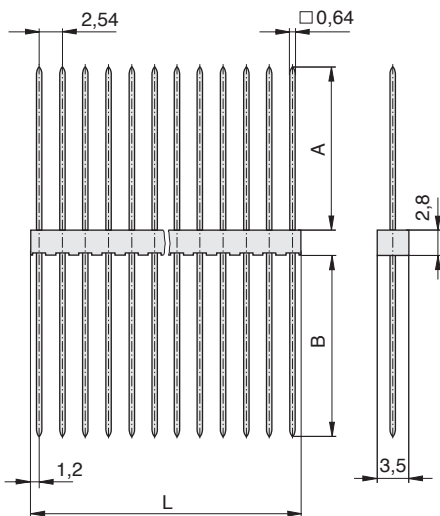
solder picture  
 see page 32

**Different plugging lengths available on request.**

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm,**  
**Pin Strips mateable from both sides**  
 1-row, grid spacing 2,54 mm, solder pin with 2 mating sides



**assembly dimensions:**



**solder picture**  
**see page 32**

**Different plugging lengths available on request.**

**Short Description:**

Headers – mateable from both sides – are provided for connecting two pcb's with vertically equipped ODU-CARD Socket Strips.

They can be used as an adaptor as well.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

no. of poles	L = length	mateable from both sides plugging length A=18,0 mm B=20,0 mm	mateable from both sides plugging length A=6,5 mm B=8,0 mm
		part-number	part-number
1	2,40	511.179.008.001	511.180.008.001
2	4,94	511.179.008.002	511.180.008.002
3	7,48	511.179.008.003	511.180.008.003
4	10,02	511.179.008.004	511.180.008.004
5	12,56	511.179.008.005	511.180.008.005
6	15,10	511.179.008.006	511.180.008.006
7	17,64	511.179.008.007	511.180.008.007
8	20,18	511.179.008.008	511.180.008.008
9	22,72	511.179.008.009	511.180.008.009
10	25,26	511.179.008.010	511.180.008.010
11	27,80	511.179.008.011	511.180.008.011
12	30,34	511.179.008.012	511.180.008.012
13	32,88	511.179.008.013	511.180.008.013
14	35,42	511.179.008.014	511.180.008.014
15	37,96	511.179.008.015	511.180.008.015
16	40,50	511.179.008.016	511.180.008.016
17	43,04	511.179.008.017	511.180.008.017
18	45,58	511.179.008.018	511.180.008.018
19	48,12	511.179.008.019	511.180.008.019
20	50,66	511.179.008.020	511.180.008.020
21	53,20	511.179.008.021	511.180.008.021
22	55,74	511.179.008.022	511.180.008.022
23	58,28	511.179.008.023	511.180.008.023
24	60,82	511.179.008.024	511.180.008.024
25	63,36	511.179.008.025	511.180.008.025
26	65,90	511.179.008.026	511.180.008.026
27	68,44	511.179.008.027	511.180.008.027
28	70,98	511.179.008.028	511.180.008.028
29	73,52	511.179.008.029	511.180.008.029
30	76,06	511.179.008.030	511.180.008.030

**Short Description:**

ODU-CARD Pin Strips of special design with two insulation bodies are mainly used for sandwich construction of assembly groups. The relatively long pins are fixed at the correct separation by the second insulation body. These two insulation bodies are also fixing the distance between the pcb's. Grid spacing is 2,54 mm.

This special version fits Socket Strips ODU-CARD 254, series 517 as well.

Pins are selectively gold-plated at the contact points and tin-plated at the solder side.

In most cases, only the 1-row version is used with this special design, but it is available in 2-row version as well.

Apart from that also those special headers are available with different pin lengths and different distances between the two insulation bodies.

**Technical Data:**

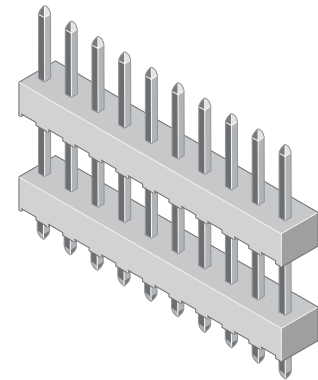
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

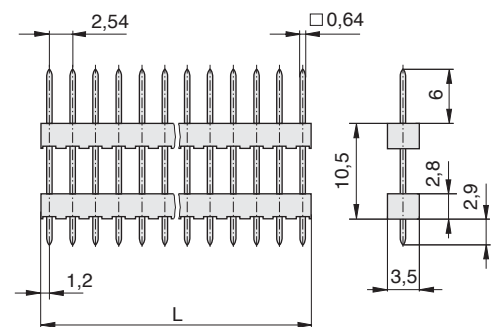
1-row, grid spacing 2,54 mm,  
 with straight solder pins



**Part Number Key see page 28**

no. of poles	L = length	1-row
		part-number
1	2,40	511.026.003.001
2	4,94	511.026.003.002
3	7,48	511.026.003.003
4	10,02	511.026.003.004
5	12,56	511.026.003.005
6	15,10	511.026.003.006
7	17,64	511.026.003.007
8	20,18	511.026.003.008
9	22,72	511.026.003.009
10	25,26	511.026.003.010
11	27,80	511.026.003.011
12	30,34	511.026.003.012
13	32,88	511.026.003.013
14	35,42	511.026.003.014
15	37,96	511.026.003.015
16	40,50	511.026.003.016
17	43,03	511.026.003.017
18	45,58	511.026.003.018
19	48,12	511.026.003.019
20	50,66	511.026.003.020
21	53,20	511.026.003.021
22	55,74	511.026.003.022
23	58,28	511.026.003.023
24	60,82	511.026.003.024
25	63,36	511.026.003.025
26	65,90	511.026.003.026
27	68,44	511.026.003.027
28	70,98	511.026.003.028
29	73,52	511.026.003.029
30	76,06	511.026.003.030

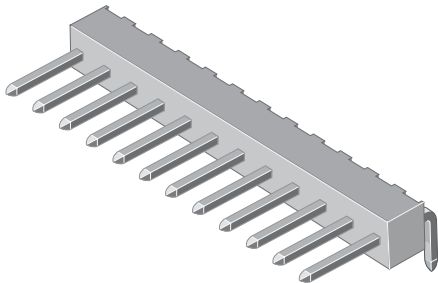
**assembly dimensions:**



**solder picture**  
 see page 33

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

1-row, grid spacing 2,54 mm,  
 with right-angle solder pins, plugging length 6,5 mm



**Technical Data:**

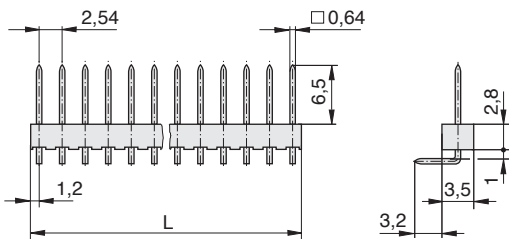
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 μ m Au on 1,25 μ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**assembly dimensions 1-row:**



**solder picture**  
 see page 33

no. of poles	L = length	plugging length 6,5 mm 1-row right-angle
		part-number
1	2,40	511.280.003.001
2	4,94	511.280.003.002
3	7,48	511.280.003.003
4	10,02	511.280.003.004
5	12,56	511.280.003.005
6	15,10	511.280.003.006
7	17,64	511.280.003.007
8	20,18	511.280.003.008
9	22,72	511.280.003.009
10	25,26	511.280.003.010
11	27,80	511.280.003.011
12	30,34	511.280.003.012
13	32,88	511.280.003.013
14	35,42	511.280.003.014
15	37,96	511.280.003.015
16	40,50	511.280.003.016
17	43,03	511.280.003.017
18	45,58	511.280.003.018
19	48,12	511.280.003.019
20	50,66	511.280.003.020
21	53,20	511.280.003.021
22	55,74	511.280.003.022
23	58,28	511.280.003.023
24	60,82	511.280.003.024
25	63,36	511.280.003.025
26	65,90	511.280.003.026
27	68,44	511.280.003.027
28	70,98	511.280.003.028
29	73,52	511.280.003.029
30	76,06	511.280.003.030

**Short Description:**

Compared with the usually used right angle Pin Strips, these insulation bodies – additionally staggered at 90° – of this special type provide a higher stability. This construction prevents the pins from twisting, especially for larger pin lengths, and eliminates problems in mating.

As well as all other ODU-CARD 254 Pin Strips they have to be processed in splash bath or have to be soldered by hand. The contact points are gold-plated.

Pin cross-section 0,64 x 0,64 mm.

**Technical Data:**

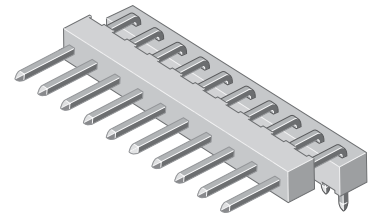
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or SN on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Pin Strips ODU-CARD 254, Series 511  
 cross-section 0,64 x 0,64 mm**

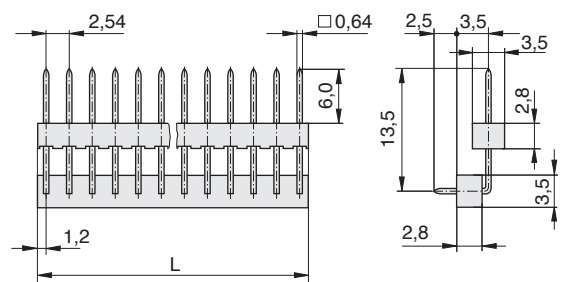
1-row, grid spacing 2,54 mm,  
 with right-angle solder pins and stabilizing insulation bodies



**Part Number Key see page 28**

no. of poles	L = length	1-row
		part-number
1	2,40	511.226.003.001
2	4,94	511.226.003.002
3	7,48	511.226.003.003
4	10,02	511.226.003.004
5	12,56	511.226.003.005
6	15,10	511.226.003.006
7	17,64	511.226.003.007
8	20,18	511.226.003.008
9	22,72	511.226.003.009
10	25,26	511.226.003.010
11	27,80	511.226.003.011
12	30,34	511.226.003.012
13	32,88	511.226.003.013
14	35,42	511.226.003.014
15	37,96	511.226.003.015
16	40,50	511.226.003.016
17	43,03	511.226.003.017
18	45,58	511.226.003.018
19	48,12	511.226.003.019
20	50,66	511.226.003.020
21	53,20	511.226.003.021
22	55,74	511.226.003.022
23	58,28	511.226.003.023
24	60,82	511.226.003.024
25	63,36	511.226.003.025
26	65,90	511.226.003.026
27	68,44	511.226.003.027
28	70,98	511.226.003.028
29	73,52	511.226.003.029
30	76,06	511.226.003.030

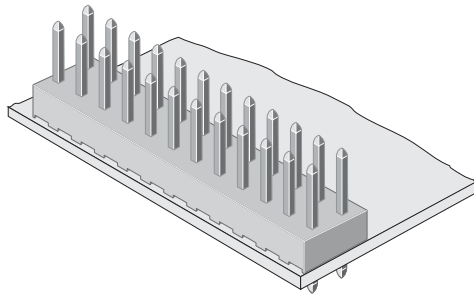
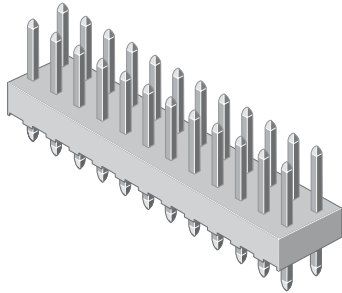
**assembly dimensions 1-row:**



**solder picture  
 see page 33**

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

2-row, grid spacing 2,54 mm, with straight solder pins,  
 plugging length 6,0 mm



**Technical Data:**

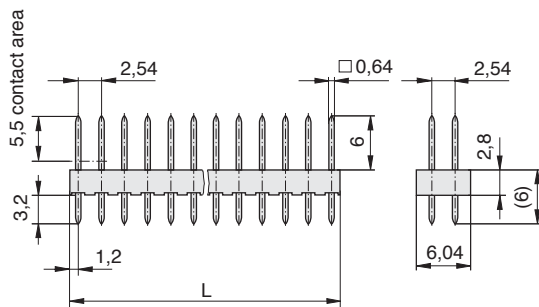
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

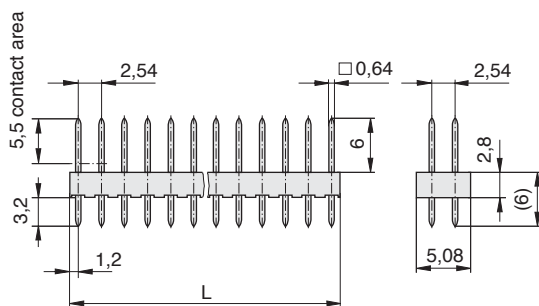
Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**assembly dimensions:**



**solder picture**  
 see page 33



no. of poles	L = length	part-number	part-number
		insulation body 6,04/2,8	insulation body 5,08/2,8
2	2,40	511.030.003.002	511.032.003.002
4	4,94	511.030.003.004	511.032.003.004
6	7,48	511.030.003.006	511.032.003.006
8	10,02	511.030.003.008	511.032.003.008
10	12,56	511.030.003.010	511.032.003.010
12	15,10	511.030.003.012	511.032.003.012
14	17,64	511.030.003.014	511.032.003.014
16	20,18	511.030.003.016	511.032.003.016
18	22,72	511.030.003.018	511.032.003.018
20	25,26	511.030.003.020	511.032.003.020
22	27,80	511.030.003.022	511.032.003.022
24	30,34	511.030.003.024	511.032.003.024
26	32,88	511.030.003.026	511.032.003.026
28	35,42	511.030.003.028	511.032.003.028
30	37,96	511.030.003.030	511.032.003.030
32	40,50	511.030.003.032	511.032.003.032
34	43,03	511.030.003.034	511.032.003.034
36	45,58	511.030.003.036	511.032.003.036
38	48,12	511.030.003.038	511.032.003.038
40	50,66	511.030.003.040	511.032.003.040
42	53,20	511.030.003.042	511.032.003.042
44	55,74	511.030.003.044	511.032.003.044
46	58,28	511.030.003.046	511.032.003.046
48	60,82	511.030.003.048	511.032.003.048
50	63,36	511.030.003.050	511.032.003.050
52	65,90	511.030.003.052	511.032.003.052
54	68,44	511.030.003.054	511.032.003.054
56	70,98	511.030.003.056	511.032.003.056
58	73,52	511.030.003.058	511.032.003.058
60	76,06	511.030.003.060	511.032.003.060

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**  
 2-row, grid spacing 2,54 mm, with straight solder pins,  
 plugging length 18,0 mm

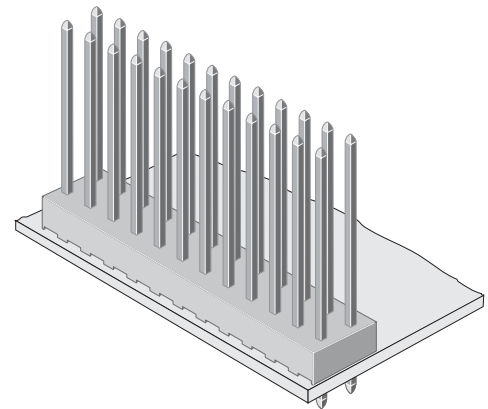
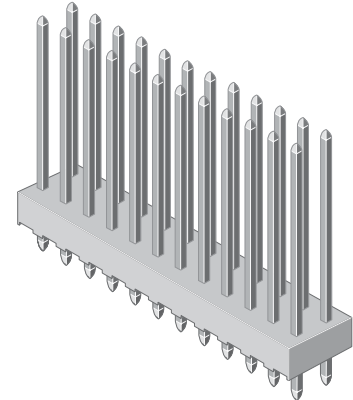
**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Contacts: Springhard Bronze Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

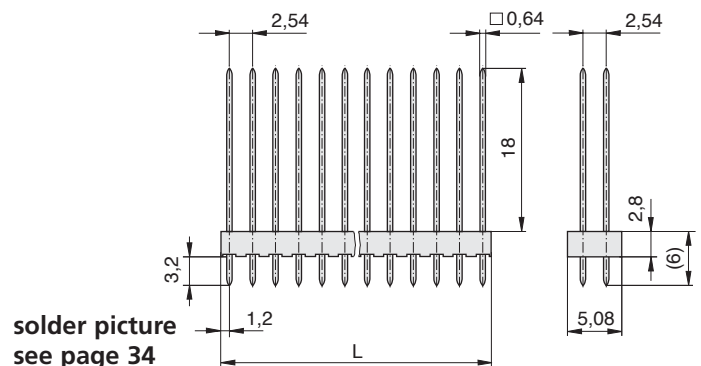
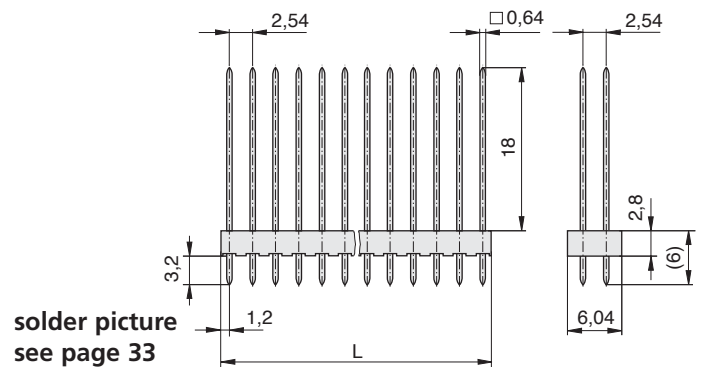
Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**



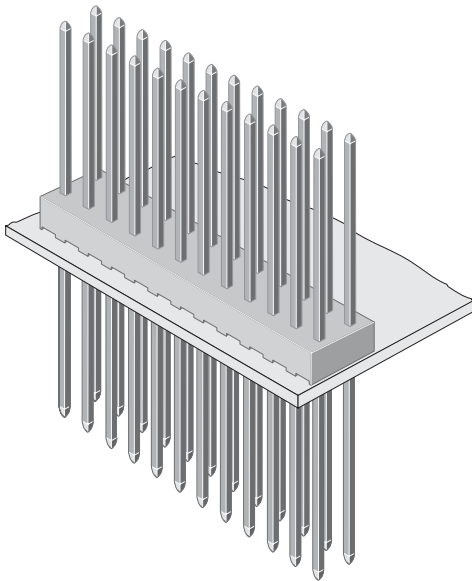
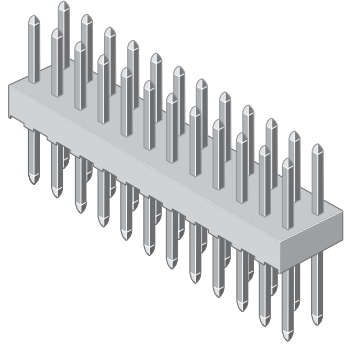
**assembly dimensions:**

no. of poles	L = length	part-number	
		insulation body 6,04/2,8	insulation body 5,08/2,8
2	2,40	511.031.003.002	511.037.003.002
4	4,94	511.031.003.004	511.037.003.004
6	7,48	511.031.003.006	511.037.003.006
8	10,02	511.031.003.008	511.037.003.008
10	12,56	511.031.003.010	511.037.003.010
12	15,10	511.031.003.012	511.037.003.012
14	17,64	511.031.003.014	511.037.003.014
16	20,18	511.031.003.016	511.037.003.016
18	22,72	511.031.003.018	511.037.003.018
20	25,26	511.031.003.020	511.037.003.020
22	27,80	511.031.003.022	511.037.003.022
24	30,34	511.031.003.024	511.037.003.024
26	32,88	511.031.003.026	511.037.003.026
28	35,42	511.031.003.028	511.037.003.028
30	37,96	511.031.003.030	511.037.003.030
32	40,50	511.031.003.032	511.037.003.032
34	43,03	511.031.003.034	511.037.003.034
36	45,58	511.031.003.036	511.037.003.036
38	48,12	511.031.003.038	511.037.003.038
40	50,66	511.031.003.040	511.037.003.040
42	53,20	511.031.003.042	511.037.003.042
44	55,74	511.031.003.044	511.037.003.044
46	58,28	511.031.003.046	511.037.003.046
48	60,82	511.031.003.048	511.037.003.048
50	63,36	511.031.003.050	511.037.003.050
52	65,90	511.031.003.052	511.037.003.052
54	68,44	511.031.003.054	511.037.003.054
56	70,98	511.031.003.056	511.037.003.056
58	73,52	511.031.003.058	511.037.003.058
60	76,06	511.031.003.060	511.037.003.060

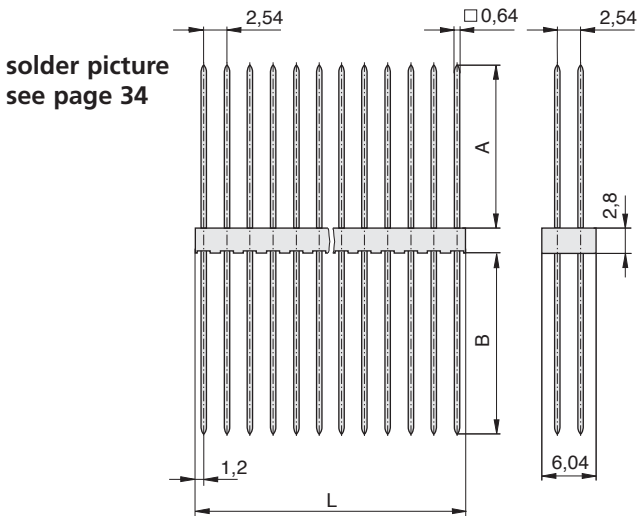


**Different plugging lengths available on request.**

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm,**  
**Pin Strips mateable from both sides**  
 2-row, grid spacing 2,54 mm, solder pin with 2 plugging sides



**assembly dimensions:**



**Different plugging lengths available on request.**

**Short Description:**

Headers – mateable from both sides – are provided for connecting two pcb's with vertically equipped ODU-CARD Socket Strips.

They can be used as an adaptor as well.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

no. of poles	L = length	mateable from both sides	mateable from both sides
		plugging length A=18,0 mm B=20,0 mm	plugging length A=6,5 mm B=8,0 mm
		part-number	part-number
2	2,40	511.169.008.002	511.170.008.002
4	4,94	511.169.008.004	511.170.008.004
6	7,48	511.169.008.006	511.170.008.006
8	10,02	511.169.008.008	511.170.008.008
10	12,56	511.169.008.010	511.170.008.010
12	15,10	511.169.008.012	511.170.008.012
14	17,64	511.169.008.014	511.170.008.014
16	20,18	511.169.008.016	511.170.008.016
18	22,72	511.169.008.018	511.170.008.018
20	25,26	511.169.008.020	511.170.008.020
22	27,80	511.169.008.022	511.170.008.022
24	30,34	511.169.008.024	511.170.008.024
26	32,88	511.169.008.026	511.170.008.026
28	35,42	511.169.008.028	511.170.008.028
30	37,96	511.169.008.030	511.170.008.030
32	40,50	511.169.008.032	511.170.008.032
34	43,04	511.169.008.034	511.170.008.034
36	45,58	511.169.008.036	511.170.008.036
38	48,12	511.169.008.038	511.170.008.038
40	50,66	511.169.008.040	511.170.008.040
42	53,20	511.169.008.042	511.170.008.042
44	55,74	511.169.008.044	511.170.008.044
46	58,28	511.169.008.046	511.170.008.046
48	60,82	511.169.008.048	511.170.008.048
50	63,36	511.169.008.050	511.170.008.050
52	65,90	511.169.008.052	511.170.008.052
54	68,44	511.169.008.054	511.170.008.054
56	70,98	511.169.008.056	511.170.008.056
58	73,52	511.169.008.058	511.170.008.058
60	76,06	511.169.008.060	511.170.008.060



**Short Description:**

ODU-CARD Pin Strips of special design with two insulation bodies are mainly used for sandwich construction of assembly groups. The relatively long pins are fixed at the correct separation by the second insulation body. These two insulation bodies are also fixing the distance between the pcb's. Grid spacing is 2,54 mm.

This special version fits Socket Strips ODU-CARD 254, series 517 as well.

Pins are selectively gold-plated at the contact points and tin-plated at the solder side.

Apart from that also those special headers are available with different pin lengths and different distances between the two insulation bodies.

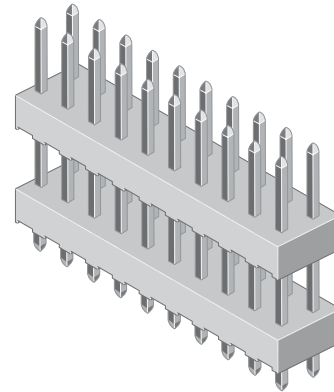
**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

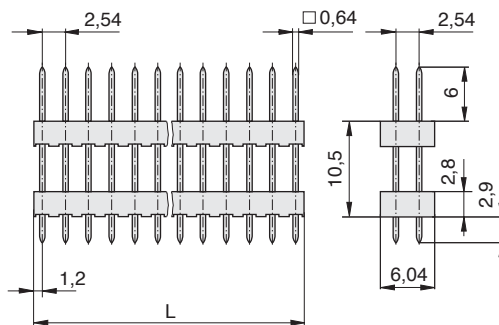
**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**  
 2-row, grid spacing 2,54 mm,  
 with straight solder pins



**Part Number Key see page 28**

		2-row
no. of poles	L = length	part-number
2	2,40	511.036.003.002
4	4,94	511.036.003.004
6	7,48	511.036.003.006
8	10,02	511.036.003.008
10	12,56	511.036.003.010
12	15,10	511.036.003.012
14	17,64	511.036.003.014
16	20,18	511.036.003.016
18	22,72	511.036.003.018
20	25,26	511.036.003.020
22	27,80	511.036.003.022
24	30,34	511.036.003.024
26	32,88	511.036.003.026
28	35,42	511.036.003.028
30	37,96	511.036.003.030
32	40,50	511.036.003.032
34	43,03	511.036.003.034
36	45,58	511.036.003.036
38	48,12	511.036.003.038
40	50,66	511.036.003.040
42	53,20	511.036.003.042
44	55,74	511.036.003.044
46	58,28	511.036.003.046
48	60,82	511.036.003.048
50	63,36	511.036.003.050
52	65,90	511.036.003.052
54	68,44	511.036.003.054
56	70,98	511.036.003.056
58	73,52	511.036.003.058
60	76,06	511.036.003.060

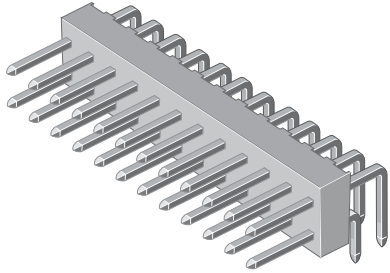
**assembly dimensions:**



**solder picture see page 34**

**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

2-row, grid spacing 2,54 mm,  
 with right-angle solder pins, plugging length 6,5 mm



**Technical Data:**

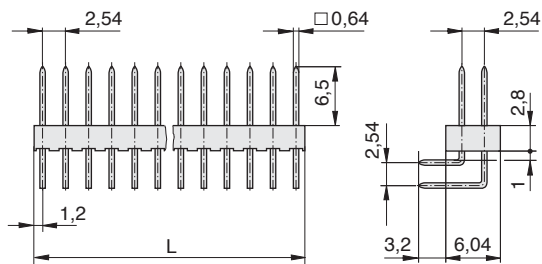
Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µ m Au on 1,25 µ m Ni/  
 MIL-G-45204, cl. 00\*)

\*) Valid for contact point in mating area  
 Remaining surface flash-gold or Sn on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 m Ω pin/socket  
 Insulation Resistance: > 5 G Ω  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

**assembly dimensions 2-row:**



**solder picture**  
 see page 34

plugging length 6,5 mm  
 2-row  
 right-angle

no. of poles	L = length	part-number
2	2,40	511.270.003.002
4	4,94	511.270.003.004
6	7,48	511.270.003.006
8	10,02	511.270.003.008
10	12,56	511.270.003.010
12	15,10	511.270.003.012
14	17,64	511.270.003.014
16	20,18	511.270.003.016
18	22,72	511.270.003.018
20	25,26	511.270.003.020
22	27,80	511.270.003.022
24	30,34	511.270.003.024
26	32,88	511.270.003.026
28	35,42	511.270.003.028
30	37,96	511.270.003.030
32	40,50	511.270.003.032
34	43,03	511.270.003.034
36	45,58	511.270.003.036
38	48,12	511.270.003.038
40	50,66	511.270.003.040
42	53,20	511.270.003.042
44	55,74	511.270.003.044
46	58,28	511.270.003.046
48	60,82	511.270.003.048
50	63,36	511.270.003.050
52	65,90	511.270.003.052
54	68,44	511.270.003.054
56	70,98	511.270.003.056
58	73,52	511.270.003.058
60	76,06	511.270.003.060

**Short Description:**

Compared with the usually used right angle Pin Strips, these insulation bodies – additionally staggered at 90° – of this special type provide a higher stability. This construction prevents the pins from twisting, especially for larger pin lengths, and eliminates problems in mating.

As well as all other ODU-CARD 254 Pin Strips they have to be processed in splash bath or have to be soldered by hand. The contact points are gold-plated.

Pin cross-section 0,64 x 0,64 mm.

**Technical Data:**

Insulation Material: PBT fibre glass reinforced  
 Pins: Springhard Copper Alloy  
 Surface: 0,5 µm Au on 1,25 µm Ni/  
 MIL-G-45204, cl. 00\*)

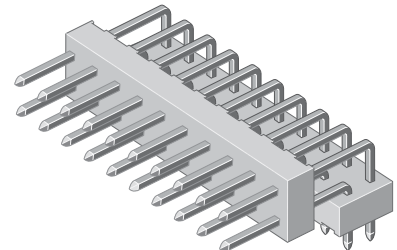
\*) Valid for contact point in mating area  
 Remaining surface flash-gold or SN on Ni.

Terminations: Solder Pins  
 Contact Load: 5A  
 Transition Resistance: ≤ 4 mΩ pin/socket  
 Insulation Resistance: > 5 GΩ  
 Test Voltage: 1500 V ~  
 Temperature Area: -40°C up to +125°C  
 Humidity Load: 75% rel. humidity,  
 DIN 40 040 MIL-C-21 097 B

**Part Number Key see page 28**

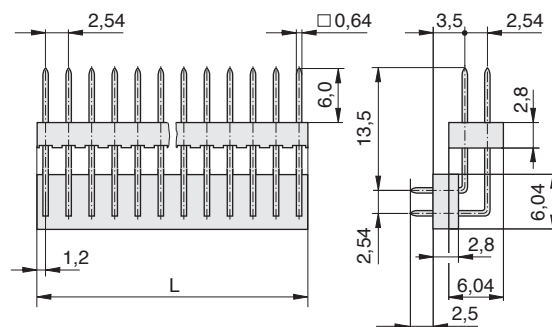
**Pin Strips ODU-CARD 254, Series 511**  
**cross-section 0,64 x 0,64 mm**

2-row, grid spacing 2,54 mm,  
 with right-angle solder pins and stabilizing insulation bodies



no. of poles	L = length	2-row	
			part-number
2	2,40		511.236.003.002
4	4,94		511.236.003.004
6	7,48		511.236.003.006
8	10,02		511.236.003.008
10	12,56		511.236.003.010
12	15,10		511.236.003.012
14	17,64		511.236.003.014
16	20,18		511.236.003.016
18	22,72		511.236.003.018
20	25,26		511.236.003.020
22	27,80		511.236.003.022
24	30,34		511.236.003.024
26	32,88		511.236.003.026
28	35,42		511.236.003.028
30	37,96		511.236.003.030
32	40,50		511.236.003.032
34	43,03		511.236.003.034
36	45,58		511.236.003.036
38	48,12		511.236.003.038
40	50,66		511.236.003.040
42	53,20		511.236.003.042
44	55,74		511.236.003.044
46	58,28		511.236.003.046
48	60,82		511.236.003.048
50	63,36		511.236.003.050
52	65,90		511.236.003.052
54	68,44		511.236.003.054
56	70,98		511.236.003.056
58	73,52		511.236.003.058
60	76,06		511.236.003.060

**assembly dimensions 2-row:**



**solder picture**  
 see page 34

**Part Number Key:**

**Series ODU-CARD 254, grid spacing 2,54 mm for cross-section 0,64 x 0,64 mm**

**Socket Strips:**

art.-No. xxx . xxx . xxx . xxx  
A B C D

A = series  
517 Socket Strips, grid spacing 2,54 mm

B = type

		1-row	2-row	page
022	vertical assembly 2-point contact	x		6
023	vertical assembly 2-point contact		x	11
027	vertical assembly, with right-angle solder tags, 4-point contact	x		10
028	vertical assembly, with right-angle solder tags, 4-point contact		x	15
032	vertical assembly, with cranked solder tag, 2-point contact	x		7
033	vertical assembly, with cranked solder tag, 2-point contact		x	12
220	horizontal assembly 4-point contact	x		6
221	horizontal assembly 4-point contact		x	11

C = surface

003 = 0,5 µ m Au on Ni  
termination area 3,0 µ m Sn on Ni

007 = 0,75 µ m Au on Ni

008 = 0,5 µ m Au on Ni

009 = flash-gold

024 = 3,0 µ m Sn on Ni

035 = 0,75 µ m Au auf Ni  
termination area 3,0 µ m Sn on Ni

D = number of poles

010 = 10-ways

**example: 517 . 022 . 003 . 010**

**A B C D**

article-No. for special versions on request

**Pin Strips:**

art.-No. xxx . xxx . xxx . xxx  
A B C D

A = series  
511 Pin Strips, grid spacing 2,54 mm

B = type

		1-row	2-row	straight	right-angle	page
020	mateable from one side insulation body 3,5/2,8 mm plugging length 6,0 mm	x		x		16
024	mateable from one side insulation body 2,5/2,5 mm plugging length 6,0 mm	x		x		16
021	mateable from one side insulation body 3,5/2,8 mm plugging length 18,0 mm	x		x		17
025	mateable from one side insulation body 2,5/2,5 mm plugging length 18,0 mm	x		x		17
026	with 2 insulation bodies plugging length 6,0/2,9 mm	x		x		19
030	mateable from one side insulation body 6,04/2,8 mm plugging length 6,0 mm		x	x		22
032	mateable from one side insulation body 5,08/2,8 mm plugging length 6,0 mm		x	x		22
031	mateable from one side insulation body 6,04/2,8 mm plugging length 18,0 mm		x	x		23
037	mateable from one side insulation body 5,08/2,8 mm plugging length 18,0 mm		x	x		23
036	with 2 insulation bodies plugging length 6,0/10,5/2,9 mm		x	x		25
169	mateable from both sides plugging length 18,0/20,0 mm		x	x		24
170	mateable from both sides plugging length 6,5/8,0 mm		x	x		24
179	mateable from both sides plugging length 18,0/20,0 mm	x		x		18
180	mateable from both sides plugging length 6,5/8,0 mm	x		x		18
226	with 2 insulation bodies plugging length 6,0 mm	x			x	21
236	with 2 insulation bodies plugging length 6,0 mm		x		x	27
270	mateable from one side plugging length 6,5 mm		x		x	26
280	mateable from one side plugging length 6,5 mm	x			x	20

C = surface (see Socket Strips)

D = number of poles

010 = 10-ways

**example: 511 . 020 . 003 . 010**

**A B C D**

**Part Number Key:**

**Series ODU-CARD 254 , grid spacing 2,54 mm for cross-section 0,64 x 0,64 mm**

**Socket Strips: with foil (solder proof)**

art.-no.  $\frac{xxx}{A} . \frac{xxx}{B} . \frac{xxx}{BCD} . \frac{xxx}{E}$

A = series

517 . 055

B = foil

6 = Polyesterfoil (short-term solder protected)

7 = Polyimid-siliconfoil (resistant to high temperature)

C = type

		1-row	2-row	page
2	vertical assembly 2-point contact	x		8
4	vertical assembly, with cranked solder tags, 2-point contact	x		9
6	vertical assembly 2-point contact		x	13
8	vertical assembly, with cranked solder tags, 2-point contact		x	14

D = surface

1 = flash-gold

2 = 0,50  $\mu$  m Au on Ni  
termination area 3,0  $\mu$  m Sn on Ni

3 = 0,75  $\mu$  m Au on Ni  
termination area 3,0  $\mu$  m Sn on Ni

4 = 3,00  $\mu$  m Sn on Ni

5 = 1,25  $\mu$  m Ni + Sn

E = number of poles

010 = 10-ways

**example: 517.055.6 4 5.010**

$\frac{517}{A} . \frac{055}{B} . \frac{6}{C} . \frac{4}{D} . \frac{5.010}{E}$

article-No. for special versions on request

**Survey on Assembly Dimensions**  
**Series ODU-CARD 254, grid spacing 2,54 mm for cross-section 0,64 x 0,64 mm**


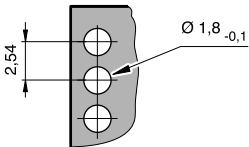

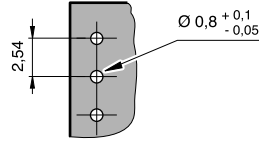
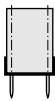
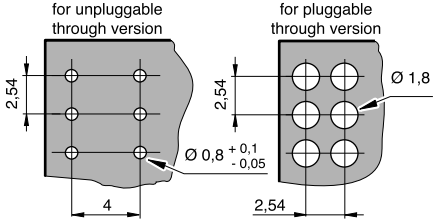

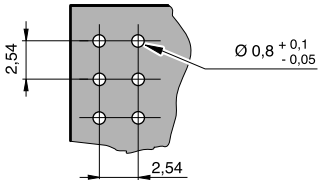
**Socket Strips:**

part-number	design		assembly dimension (solder pict.)	page
517.022	1- row for vertical assembly 2-point contact			6
517.032	1-row for vertical assembly with cranked solder tag 2-point contact			7
517.027	1-row for vertical assembly with right-angle solder tags 4-point contact			10
517.220	1-row for horizontal assembly 4-point contact			6
517.023	2-row for vertical assembly 2-point contact			11
517.033	2-row for vertical assembly with cranked solder tags 2-point contact			12
517.028	2-row for vertical assembly with right-angle solder tags 4-point contact			15
517.221	2-row for horizontal assembly 4-point contact			11

**Survey on Assembly Dimensions**

**Series ODU-CARD 254, grid spacing 2,54 mm for cross-section 0,64 x 0,64 mm**


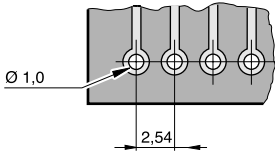

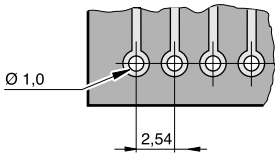

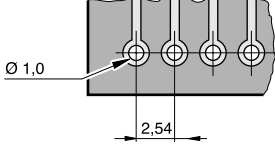

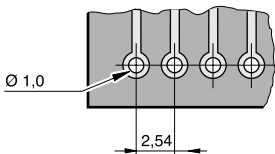

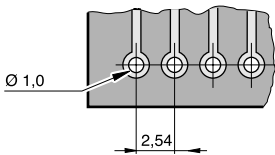
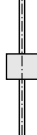
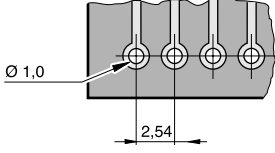
**Socket Strips: with foil (solder proof)**

part-number	design		assembly dimension (solder pict.)	page
517 .055. x 2	1-row for vertical assembly 2-point contact			8
517 .055. x 4	1-row for vertical assembly with cranked solder tag 2-point contact			9
517 .055. x 6	2-row for vertical assembly 2-point contact			13
517 .055. x 8	2-row for vertical assembly with cranked solder tag 2-point contact			14


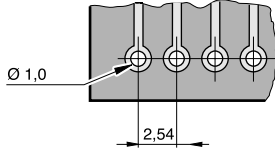

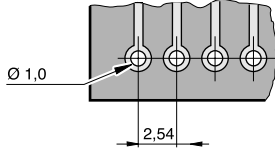
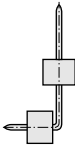
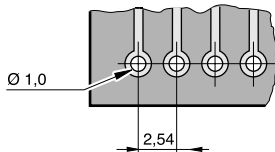
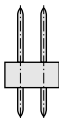
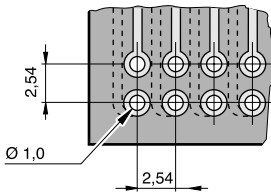
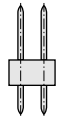
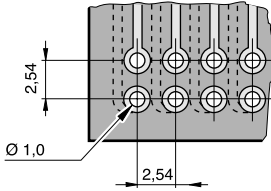
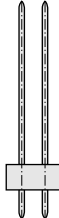
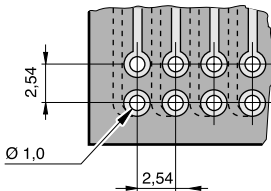
**Survey on Assembly Dimensions**


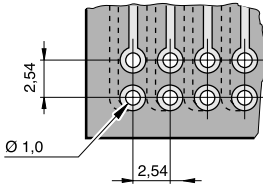
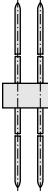
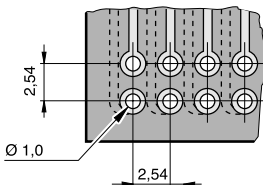
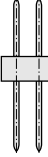
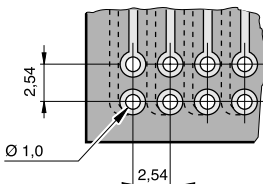
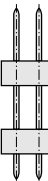
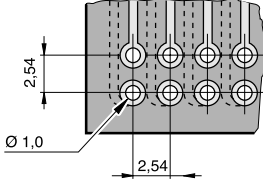
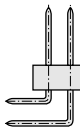
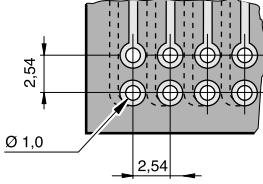
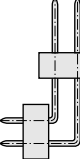
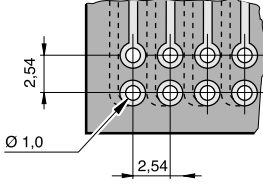
**Series ODU-CARD 254, grid spacing, 2,54 mm for cross-section 0,64 x 0 64 mm**

**Pin Strips:**

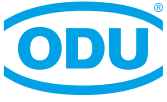
part-number	design		assembly dimension (solder pict.)	page
511.020	1-row straight version mateable from one side insulation body 3,5 / 2,8 mm plugging length 6,0 mm			16
511.021	1-row straight version mateable from one side insulation body 3,5 / 2,8 mm plugging length 18,0 mm			17
511.024	1-row straight version mateable from one side insulation body 2,5 / 2,5 mm plugging length 6,0 mm			16
511.025	1-row straight version mateable from one side insulation body 2,5 / 2,5 mm plugging length 18,0 mm			17
511.179	1-row straight version mateable from both sides plugging length 18,0 / 20,0 mm			18
511.180	1-row straight version mateable from both sides plugging length 6,5 / 8,0 mm			18



part-number	design		assembly dimension (solder pict.)	page
511.026	1-row straight version with 2 insulation bodies plugging length 6,0/ 10,5/ 2,9 mm			19
511.280	1-row right-angle version mateable from one side plugging length 6,5 mm			20
511.226	1-row right-angle version with 2 insulation bodies plugging length 6,0 mm			21
511.030	2-row straight version mateable from one side insulation body 6,04 / 2,8 mm plugging length 6,0 mm			22
511.032	2-row straight version mateable from one side insulation body 5,08 / 2,8 mm plugging length 6,0 mm			22
511.031	2-row straight version mateable from one side insulation body 6,04 / 2,8 mm plugging length 18,0 mm			23

part-number	design		assembly dimension (solder pict. )	page
511.037	2-row straight version mateable from one side insulation body 5,08/ 2,8 mm plugging length 18,0 mm			23
511.169	2-row straight version mateable from both sides plugging length 18,0 / 20,0 mm			24
511.170	2-row straight version mateable from both sides plugging length 6,5 / 8,0 mm			24
511.036	2-row straight version with 2 insulation bodies plugging length 6,0 / 10,5 / 2,9 mm			25
511.270	2-row right-angle version mateable from one side plugging length 6,5 mm			26
511.236	2-row right-angle version with 2 insulation bodies plugging length 6,0 mm			27

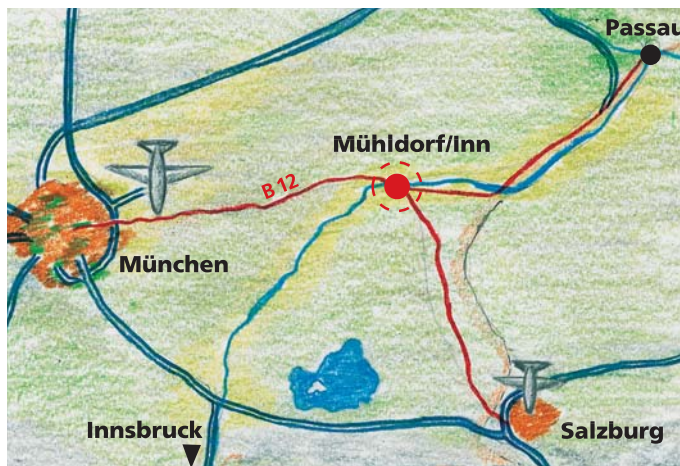




ODU's headquarters and factory are located in Mühldorf, at the river Inn, approximately 50 miles east of Munich, at the foothills of the Bavarian Alps.



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



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