## Extract from the online catalog

Headers, 3.5 mm pitch, color: black, plug-in direction parallel to the PCB

The figure shows a 10-position version of the product

| | |
|---|---|
| Order No. | 1937525 |
| Ord designation | MC 1,5/ 5-G-3,5 THT |
| EAN | 4017918895143 |
| Pack | 50 Pcs. |
| Customs tariff | 85366990 |
| Weight/Piece | 0.002892 KG |
| Catalog page information | Page 138 (CC-2007) |

## Product notes

WEEE/RoHS-compliant since: 01/01/2003

**IMPORTANT : This date is valid for Customers in Germany only. Date Format is MM/DD/YYYY.Please contact your local in-country Phoenix Contact location or designated business partner for a Logistics Compliant date in your area.In order to guarantee delivery of RoHS-Compliant product, please purchase Phoenix Contact parts from authorized Phoenix Contact representatives and distributors.**

## Technical data

## Dimensions / positions

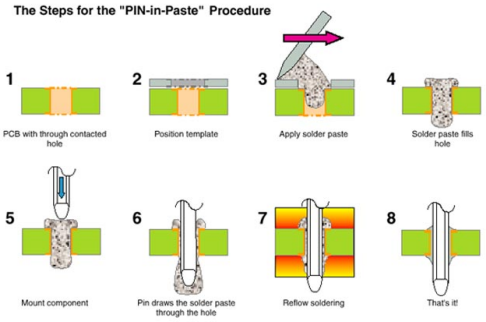
| | |
|---|---|
| Pitch | 3.5 mm |
| Dimension a | 14 mm |
| Number of positions | 5 |
| Pin dimensions | 0,8 x 0,8 mm |
| Hole diameter | 1.4 mm |

## Technical data

| | |
|---|---|
| Insulating material group | IIIa |
| Rated surge voltage (III/3) | 2.5 kV |
| Rated surge voltage (III/2) | 2.5 kV |
| Rated surge voltage (II/2) | 2.5 kV |
| Rated voltage (III/2) | 160 V |
| Rated voltage (II/2) | 320 V |
| Connection in acc. with standard | EN-VDE |
| Nominal current $I_N$ | 8 A |
| Nominal voltage $U_N$ | 160 V |
| Maximum load current | 8 A (per position) |
| Insulating material | PA-F |
| Inflammability class acc. to UL 94 | V0 |

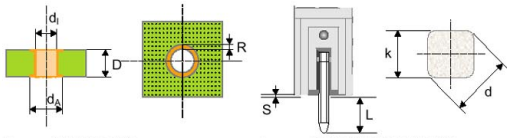
# Drawings

## Application drawing




### Tips and Recommendations for Users

**Hole and Pad Dimensions/Pin Geometries**




| | |
|---|---|
| $d_I$ | Inside diameter of hole |
| $d_O$ | Outside diameter of solder eyelet |
| Th | Thickness of the PCB |
| R | Rest ring width |
| L | Pin length (from lower edge of housing) |
| k | Edge length of pin |
| d | Diagonal pin |
| S | Support/offset |

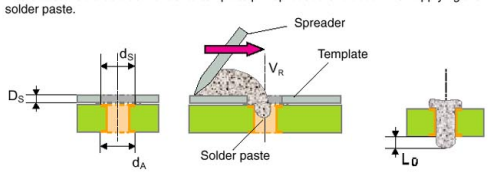
| | Actual dimensions | | | Recommendations | |
|---|---|---|---|---|---|
| MINI COMBICON | d = 1.15 mm | k = 0.8 mm | S = 0.3 mm | $d_I$ = 1.3 mm[1] | R = 0.5 mm[2] |

[1] Hole diameter acc. to DIN IEC 60 352-5 and taking into account the mounting accuracy of automatic mounting machines.

[2] The recommended rest ring width of 0.5 mm refers to case II/2 on the PCB (surge voltage category/contamination class) assuming a rated voltage of 160 V (IMC 1,5) for the component. When the rest ring width is determined, the requirements for air and creepage distances acc. to the respective equipment standards must be taken into account; smaller rest ring widths or other pad geometries must be used if necessary.

**Applying Solder Paste**

It is assumed that a conventional template print procedure is used when applying the solder paste.

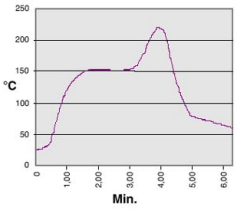



| | | |
|---|---|---|
| $d_O$ | Outside diameter of solder eyelet | = Outer diameter of hole -0.1 mm |
| $d_t$ | Template diameter | |
| $Th_t$ | Template thickness | = recommended thickness of template 150 µm |
| $V_r$ | Spreader speed | = 30-150 mm/sec. [1] |
| $S_O$ | Solder paste overhang | = up to 1/2 printed circuit board thickness |

[1] Speed of spreader and pressure depend on the type of screen printer and the solder paste: e.g. Sn 62 Pb 36 Ag 2 with 20-40 µm grain (VS = approx. 50 mm/sec.).

**Reference Profile for Reflow-Solder Processes**

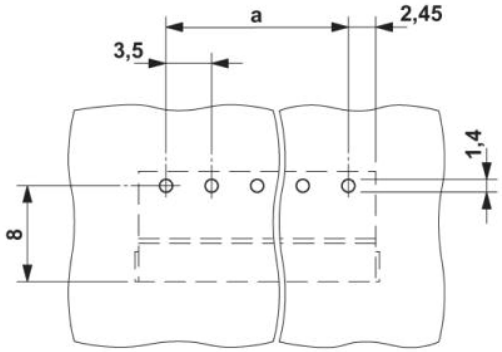
A temperature profile based on EN 61 760-1 is recommended:



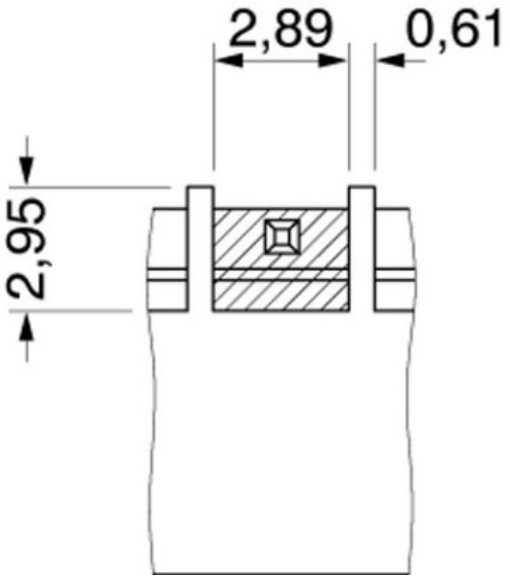

Parameters/Settings:

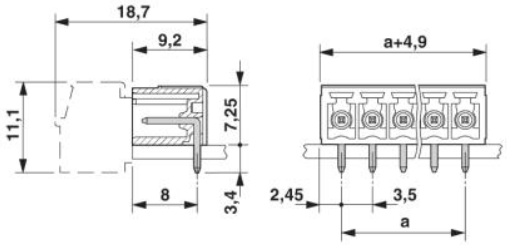
- Creating temperature profile: Preferably with forced convection or vapor phase furnace.
- The use of infra-red radiation should be avoided if possible.
- Maximum temperature/time ranges: 215°C for 30 seconds and 230°C for 15 seconds
- Profiles with temperature loads that last considerably longer than 4.5 min. until the peak temperatures are reached should be avoided.
- The whole profile cycle should take approx. 5 min.
- Preheating to achieve even heating up of the components: 210 to 240 sec.
- Cooling down phase: min. 4°C/sec.

## Drilling diagram




## Dimensioned drawing




Bottom view, free space for solder paste, 0.3 mm deep

## Address

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