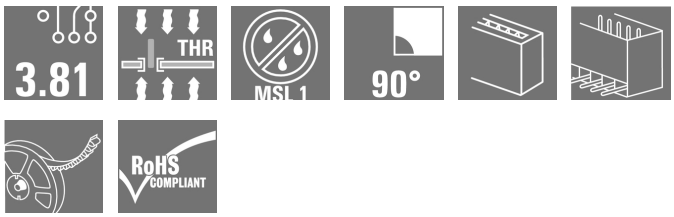
# OMNIMATE Signal – serie BC/SC 3.81
# SC-SMT 3.81/10/90G 3.2SN BK RL

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

## Produktillustration



Avbildning liknande




Temperaturbeständig stiftlist (SC-SMT 90G) i delning 3,81 mm (0.15")
• Anslutningsriktning parallellt med kretskort (liggande)
• sluten (G)
• Utförande förpackad i kartong (BX) eller antistatiskt på rulle (Tape-on-Reel, RL)
• Valfri sticklängd 1,5 mm eller 3,2 mm
Weidmüller stiftlister i delning 3,81 mm (0.15") har en layout som är kompatibel med vanligen förekommande stiftlister och har plats för märkning samt kan kodas.

### Allmänna beställningsdata

| | |
|---|---|
| Typ | SC-SMT 3.81/10/90G 3.2SN BK RL |
| Art.nr. | 1862930000 |
| Artikelbeteckning | Kretskortsstickanslutning, Stiftlist, stängd på sidan, THT/THR lödanslutning, 3.81 mm, Antal poler: 10, 90°, Lödstiftlängd (l): 3.2 mm, förtennad, svart, Tape |
| GTIN (EAN) | 4032248428052 |
| Frp | 400 Stück |
| Produktparametrar | IEC: 320 V / 17.5 A<br>UL: 300 V / 10 A |
| Förpackning | Tape |

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## Tekniska data

### Mått och vikter

| | | | |
|---|---|---|---|
| Bredd | 38,79 mm | Byggbredd (tum) | 1,527 inch |
| Höjd | 10,27 mm | Bygghöjd (tum) | 0,404 inch |
| Höjd lägstbyggande | 7,07 mm | Djup | 9,2 mm |
| Byggdjup (tum) | 0,362 inch | Nettovikt | 3,48 g |

### Packaging

| | | | |
|---|---|---|---|
| Förpackning | Tape | VPE-längd | 60 mm |
| VPE-bredd | 360 mm | VPE-höjd | 360 mm |
| Tape depth (T2) | 11,1 mm | Tape width (W) | 56 mm |
| Tape pocket depth (K0) | 10,6 mm | Tape pocket height (A0) | 9,5 mm |
| Tape pocket width (B0) | 39,1 mm | Tape pocket separation (P1) | 16 mm |
| Tape hole separation (E) | 1,75 mm | Tape pocket separation (F) | 26,2 mm |
| Tape reel diameter ⌀ (A) | 330 mm | Surface resistance | Rs = $10^9$ - $10^{12}$ Ω |

### Systemparametrar

| | | | |
|---|---|---|---|
| Produktfamilj | OMNIMATE Signal – serie BC/SC 3.81 | Anslutningstyp | Kretskortanslutning |
| Montering på kretskortet | THT/THR lödanslutning | Delning i mm (P) | 3,81 mm |
| Delning i tum (P) | 0,15 inch | Anslutningsvinkel | 90° |
| Antal poler | 10 | Antal lödstift per pol | 1 |
| Lödstiftlängd (l) | 3,2 mm | Tolerans för stiftlängd | 0 / -0,02 mm |
| Tolerans för lödstiftsposition | ± 0,15 mm | Dimensioner för lödstift | d = 1,0 mm, oktagonal |
| Dimensioner för lödstift = d-tolerans | 0 / -0,04 mm | Diameter bestyckningshål (D) | 1,3 mm |
| Tolerans diameter bestyckningshål (D) | + 0,1 mm | Ytterdiameter för löddyna | 2,1 mm |
| Schablonhålsdiameter | 1,9 mm | L1 i mm | 34,29 mm |
| L1 i tum | 1,35 inch | Antal rader | 1 |
| Polradstal | 1 | Beröringsskydd enligt DIN VDE 57 | fingersäker |
| Beröringsskydd enligt DIN VDE 0470 | IP 20 | Genomgångsmotstånd (6) | 6,00 mΩ |
| Koderbar | Ja | Stickcykler | 25 |

### Materialdata

| | | | |
|---|---|---|---|
| Isoleringsmaterial | LCP GF | Färgkod | svart |
| Färgtabell (jämförbar) | RAL 9011 | Isoleringsmaterialgrupp | IIIa |
| CTI | ≥ 175 | Isolationshållfasthet | ≥ $10^8$ Ω |
| Moisture Level (MSL) | 1 | Brännbarhetsklass enligt UL 94 | V-0 |
| GWIT | 930 °C | GWFI | 960 °C |
| Kontaktmaterial | Kopparlegering | Kontaktyta | förtennad |
| Lagertemperatur, min. | -25 °C | Lagertemperatur, max. | 55 °C |
| relativ fuktighet vid lagring, max | 80 % | Driftstemperatur, min. | -50 °C |
| Driftstemperatur, max | 120 °C | Temperaturområde Montage, min. | -25 °C |
| Temperaturområde Montage, max. | 120 °C | | |

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## Tekniska data

### Märkdata enligt CSA

| | | | |
|---|---|---|---|
| Institut (CSA) | | Certifikat nr. (CSA) | 200039-1121690 |
| Märkspänning (användargrupp B / CSA) | 300 V | Märkström (användargrupp B / CSA) | 8 A |
| Hänvisning till godkännandevärden | Specifikationerna avser maxvärden. För detaljer – se typgodkännandeintyg. | | |

### Märkdata enligt UL 1059

| | | | |
|---|---|---|---|
| Institut (cURus) | | Certifikat nr (cURus) | E60693 |
| Märkspänning (användargrupp B / UL 1059) | 300 V | Märkspänning (användargrupp D / UL 1059) | 300 V |
| Märkström (användargrupp B / UL 1059) | 10 A | Märkström (användargrupp D / UL 1059) | 10 A |
| Hänvisning till godkännandevärden | Specifikationerna avser maxvärden. För detaljer – se typgodkännandeintyg. | | |

### Märkdata enligt IEC

| | | | |
|---|---|---|---|
| testad enligt standard | IEC 60664-1, IEC 61984 | Märkström, min. antal poler (Tu=20°C) | 17,5 A |
| Märkström, max. antal poler (Tu=20°C) | 13,9 A | Märkström, min. antal poler (Tu=40°C) | 17 A |
| Märkström, max. antal poler (Tu=40°C) | 12,4 A | Märkspänning vid överspänningsk./ Nedsmutsningsgrad II/2 | 320 V |
| Märkspänning vid överspänningsk./ Nedsmutsningsgrad III/2 | 160 V | Märkspänning vid överspänningskat./ Nedsmutsningsgrad III/3 | 160 V |
| Märkspänning vid överspänningsk./ Nedsmutsningsgrad II/2 | 2,5 kV | Märkspänning vid överspänningsk./ Nedsmutsningsgrad III/2 | 2,5 kV |
| Märkstötspänning vid överspänningsk./ Nedsmutsningsgrad III/3 | 2,5 kV | Korttidströmhållfasthet | 3 x 1s mit 76 A |

### Klassificeringar

| | | | |
|---|---|---|---|
| ETIM 3.0 | EC001284 | ETIM 4.0 | EC002637 |
| ETIM 5.0 | EC002637 | ETIM 6.0 | EC002637 |
| UNSPSC | 30-21-18-10 | eClass 5.1 | 27-26-07-04 |
| eClass 6.2 | 27-26-07-04 | eClass 7.1 | 27-44-04-02 |
| eClass 8.1 | 27-44-04-02 | eClass 9.0 | 27-44-04-02 |
| eClass 9.1 | 27-44-04-02 | | |

### Anmärkningar

| | |
|---|---|
| Anmärkningar | • Märkström relaterad till märkarea och min. antal poler.<br>• Märkdata avser respektive byggdel. Luft- och krypsträckor till andra byggdelar skall utformas i enlighet med de relevanta normerna.<br>• P på ritningen = raster |
| IPC-konformitet | Konformitet: Produkterna utvecklas, tillverkas och levereras i enlighet med internationellt erkända standarder och normer, och uppfyller de egenskaper som garanteras i databladet resp. har designegenskaper i enlighet med IPC-A-610 "Klass 2". Övriga anspråk gällande produkterna kan bedömas på begäran. |

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## Tekniska data

### Godkännanden

| | |
|---|---|
| Godkännanden | |
| ROHS | Uppfyllelse |

### Downloads

| | |
|---|---|
| Broschyr/Katalog | FL DRIVES EN<br>MB SMT EN<br>FL DRIVES DE<br>MB DEVICE MANUF. EN<br>CAT 2 PORTFOLIOGUIDE EN<br>FL BUILDING SAFETY EN<br>FL APPL LED LIGHTING EN<br>FL INDUSTR.CONTROLS EN<br>FL MACHINE SAFETY EN<br>FL HEATING ELECTR EN<br>FL APPL_INVERTER EN<br>FL_BASE_STATION_EN<br>FL ELEVATOR EN<br>FL POWER SUPPLY EN<br>FL 72H SAMPLE SER EN<br>PO OMNIMATE EN |
| Godkännande/Certifikat/Dokument om överensstämmelse | Declaration of the Manufacturer |
| SMT, white paper | Download Whitepaper |

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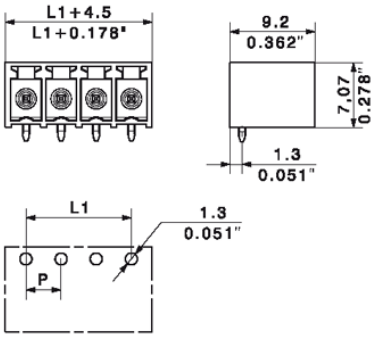
## Ritningar

### Dimensional drawing




### Exempel på användning



# OMNIMATE Signal – serie BC/SC 3.81
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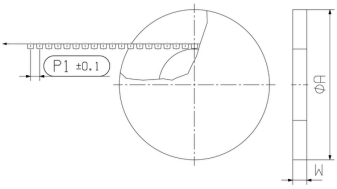
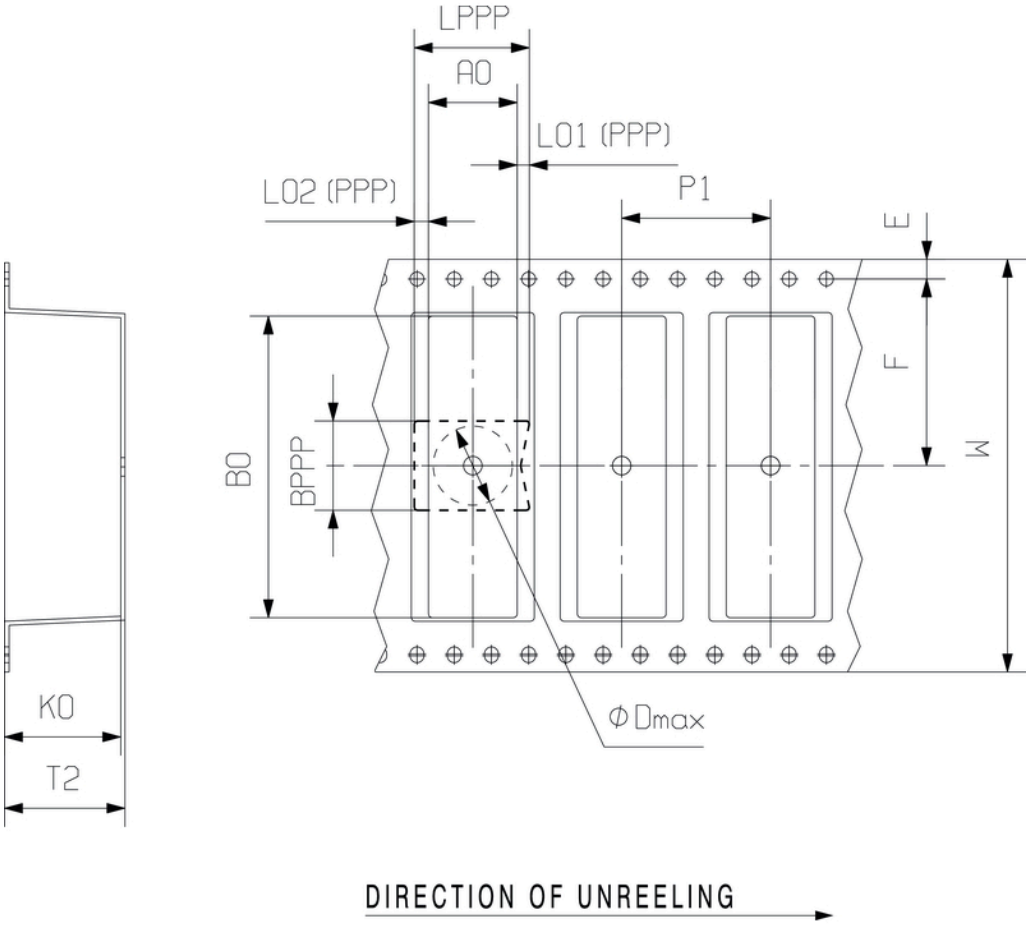
## Ritningar

### Dimensional drawing

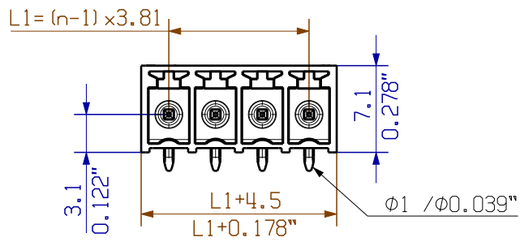


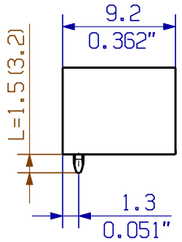

### Dimensional drawing

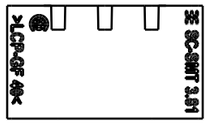


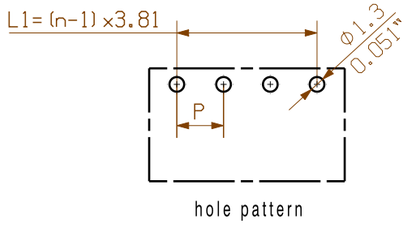
Dimensions without tolerances are no check dimensions

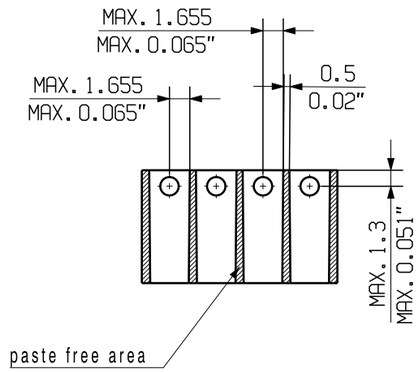
The English version is binding




1:1



| pin length l | tolerance | n | L1 [mm] | L1 [Inch] |
|---|---|---|---|---|
| | | 16 | 57,15 | 2,252 |
| | | 15 | 53,34 | 2,102 |
| | | 14 | 49,53 | 1,951 |
| | | 13 | 45,72 | 1,801 |
| | | 12 | 41,91 | 1,651 |
| | | 11 | 38,1 | 1,501 |
| | | 10 | 34,29 | 1,351 |
| | | 9 | 30,48 | 1,201 |
| | | 8 | 26,67 | 1,051 |
| | | 7 | 22,86 | 0,901 |
| 1,5 | 0,0 | 6 | 19,05 | 0,751 |
| | -0,2 | 5 | 15,24 | 0,600 |
| 3,2 | 0,0 | 4 | 11,43 | 0,450 |
| | -0,2 | 3 | 7,62 | 0,300 |
| 2.1 | 0,1 | 2 | 3,81 | 0,150 |
| | -0,2 | | | |

P= Raster/pitch
n= Polzahl/no of poles
shown: SC-SMT3.81/04/90G

For the mounting of PCBs, it should be noted that the rated data relates only to the PCB components alone.
The neccessary creepage and clearance paths must be observed in connection with the respective applicant in accordance to IEC 664 / VDE 0110.
The current-carrying capacity and pitch tolerance is to be determined according to DIN IEC 326 part 3 very fine.

Weidmüller PCB components are tested to the DIN EN 61984 standard, and are valid for its field of application. Provided that the components are used to the intended purpose, all requirements with respect to the occuring of electrical, mechanical, thermic and corrosive stress will be satisfied.

GENERAL TOLERANCE:
DIN ISO 2768-m

RoHS COMPLIANT

106980/5
02.08.18 HELIS_MA
.
00

Modification

Cat.no.: .

Weidmüller

3 36136 27
Drawing no. Issue no.

Sheet 02 of 05 sheets

| | Date | Name |
|---|---|---|
| Drawn | 11.11.2004 | POCTA_C |
| Responsible | | AMANN_A |
| Checked | 29.08.2018 | HELIS_MA |
| Approved | | LANG_T |

Scale: 5:1

Supersedes: .

# SC-SMT 3.81/02...16/90...

STIFTLEISTE
MALE HEADER

Product file: SC-SMT 3.81 7278

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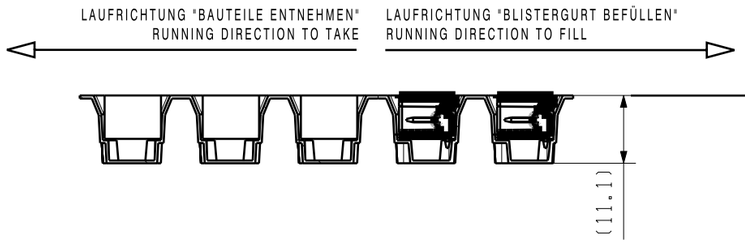
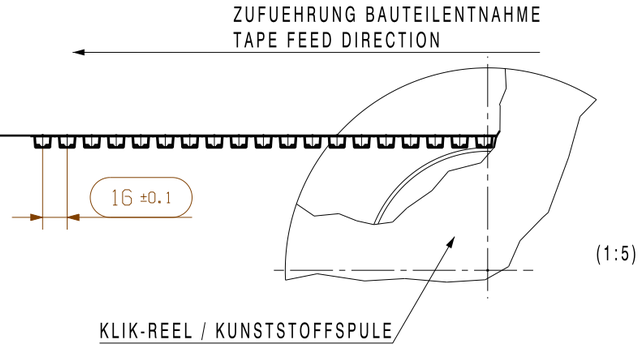
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

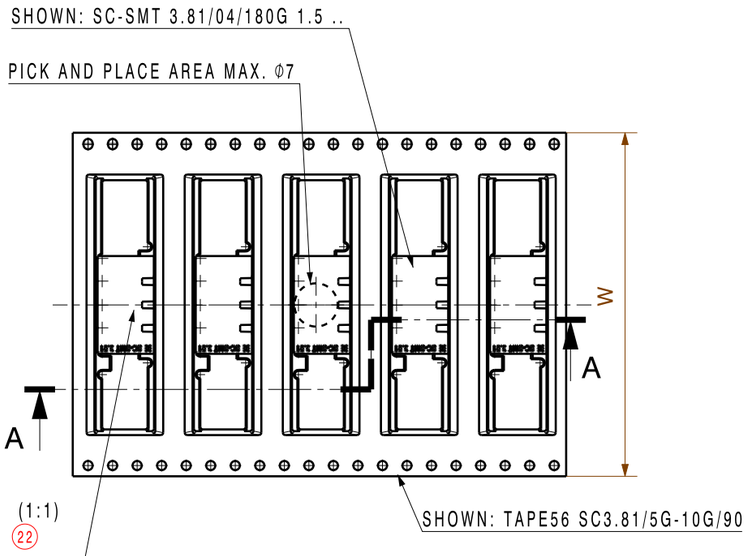
DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

# New Universal-Tape

A - A




GERADE POLZAHL DARGESTELLT/
EVEN POLE NUMBER SHOWN

UNGERADE POLZAHL DREHUNG STIFTLEISTE UM 180°/
UNEVEN POLE NUMBER PIN HEADER ROTATED 180°

STIFTLEISTEN MÜSSEN MITTIG IM TAPE SITZEN /
PIN HEADER ASSEMBLED IN THE MIDDLE

22

| TAPEBREITE/ TAPEWIDTH (MAT.NR.) | POL ZAHL NO OF POLS | SC-SMT 3.81/../90.. **1.5 BK** | | SC-SMT 3.81/../90.. **3.2 BK** | | SC-SMT 3.81/../90.. **2.1 BK** | | SC-SMT 3.81/../90.. **1.5 OR** | |
|---|---|---|---|---|---|---|---|---|---|
| | | BESTELLNR./CAT.NO. | | BESTELLNR./CAT.NO. | | BESTELLNR./CAT.NO. | | BESTELLNR./CAT.NO. | |
| W | n | G | LF | G | LF | G | LF | G | LF |
| 32 (1437290000) | 2 | 1863140000 | 1862720000 | 1862810000 | 1863890000 | 2429820000 | | 1105060000 | |
| | 3 | 1863150000 | / | 1862840000 | / | 2128630000 | / | | / |
| | 4 | 1863160000 | / | 1862860000 | / | | / | | / |
| 44 (2017990000) | 3 | / | 1862750000 | / | 1863970000 | / | | / | |
| | 4 | / | 1862770000 | / | 1863980000 | / | | / | |
| | 5 | 1863170000 | 1862790000 | 1862870000 | | | | | |
| | 6 | 1863180000 | 1862820000 | 1862880000 | | | | | |
| | 7 | 1863190000 | / | | / | | / | | / |
| | 8 | 1863200000 | / | 1862900000 | / | | / | | / |
| 56 (1348070000) | 7 | / | 1862830000 | / | | / | | / | |
| | 8 | / | 1862850000 | / | | / | | / | |
| | 9 | 1863210000 | / | | / | | / | | / |
| | 10 | 1863220000 | / | 1862930000 | / | | / | | / |
| 88 (1396710000) | 9 | / | 1430360000 | / | 1430370000 | / | | / | |
| | 10 | / | 1430380000 | / | 1430390000 | / | | / | |
| | 11 | 1430230000 | 1430400000 | | 1430420000 | | | | |
| | 12 | 1430250000 | 1430430000 | 1430240000 | 1359450000 | | | | |
| | 13 | 1430270000 | 1430440000 | 1430260000 | 1430450000 | | | | |
| | 14 | 1430290000 | 1430470000 | 1430280000 | 1430480000 | | | | |
| | 15 | 1430330000 | 1430490000 | 1430320000 | 1430500000 | | | | |
| | 16 | 1430350000 | 1430510000 | 1430340000 | 1430520000 | | | | |

TAPE UND REEL GEMAESS IEC 286-3 (EN 60286-3) /
TAPE AND REEL ACCORDING TO IEC 286-3 (EN 60286-3)

84755/5
04.11.15 AMANN_A 02
MODIFICATION

CAT.NO.:.

Weidmüller

3 36136 22
DRAWING NO. ISSUE NO.

SHEET 05 OF 05 SHEETS

| | DATE | NAME |
|---|---|---|
| DRAWN | 11.11.2004 | POCTA_C |
| RESPONSIBLE | | AMANN_A |
| CHECKED | | |
| APPROVED | | LANG_T |

SCALE: 5:1
SUPERSEDES: .

SC-SMT 3.81/02...16/90..
STIFTLEISTE
MALE PLUG
In Prüfung / Verification

PRODUCT FILE: SC-SMT 3.81 7278


WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.
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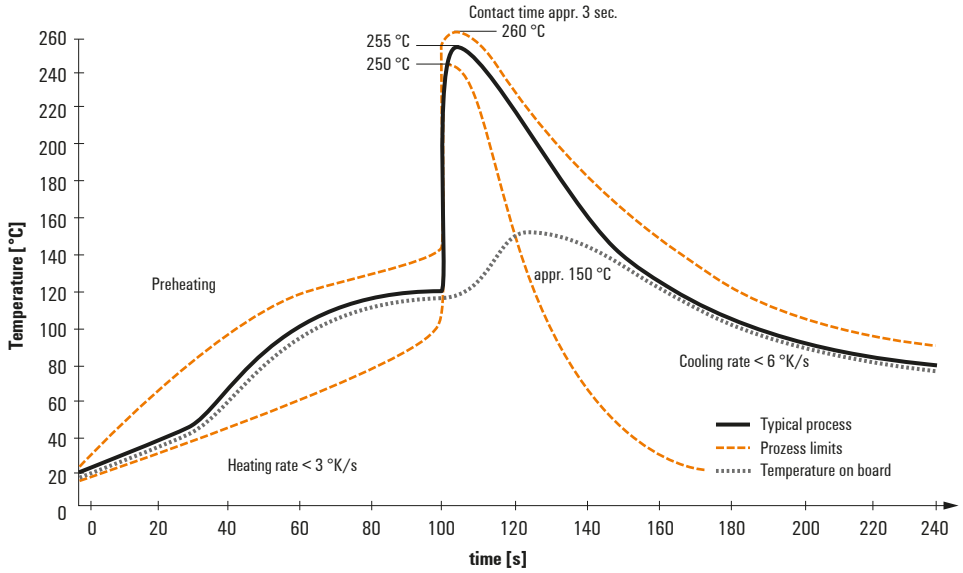
# Wave Solder Profile

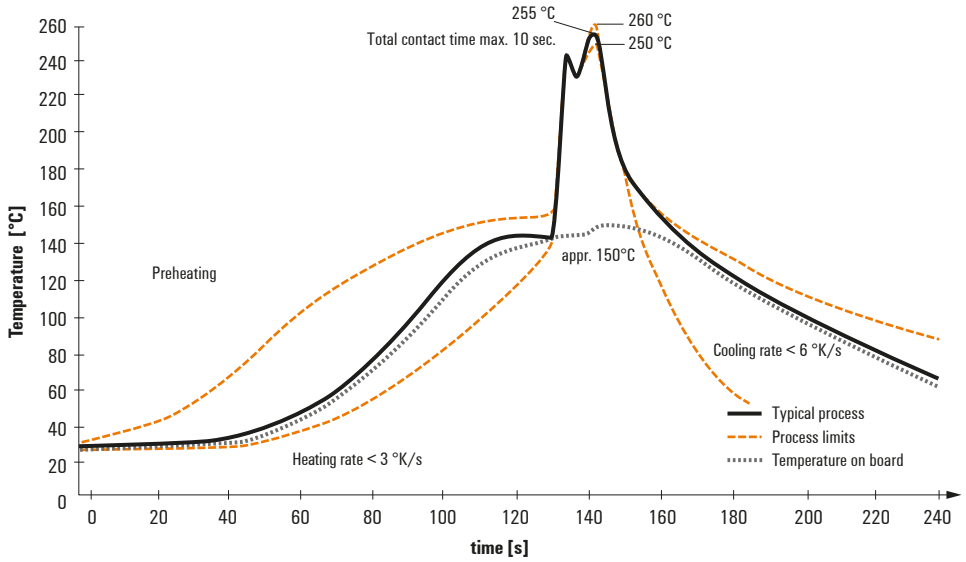
## Recommended wave solderding profiles

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com

**Single Wave:**




**Double Wave:**




**Wave soldering profiles**

Wired connection elements should be processed in accordance with the DIN EN 61760-1 standard. We have included two recommendations for practical wave soldering profiles, with which Weidmüller PCB terminals and connectors are qualified.

When choosing a suitable profile for your application, the following factors also need to be considered:
- PCB thickness
- Proportion of Cu in the layers
- Single/double-sided assembly
- Product range
- Heating and cooling rates

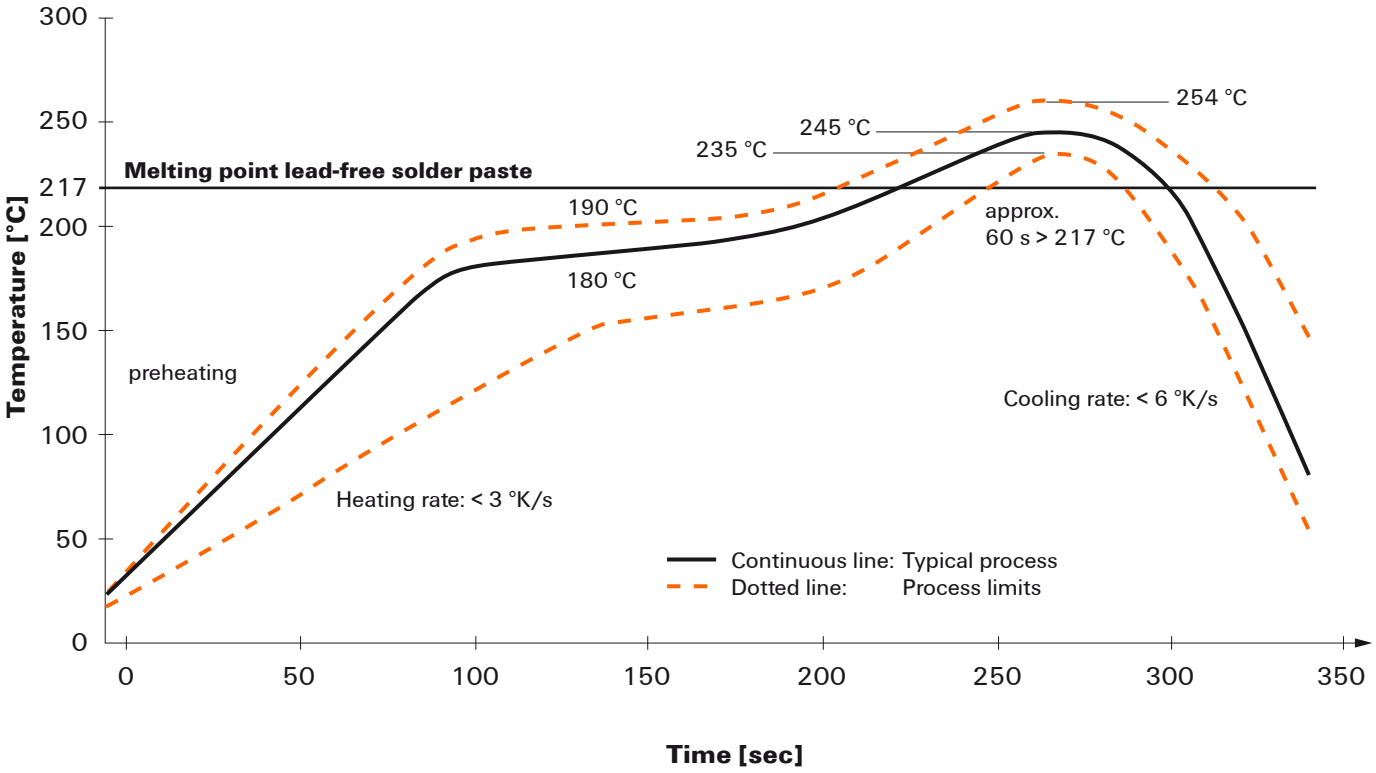
The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

We reserve the right to make technical changes.

# Reflow Solder Profile

## Recommended reflow soldering profile

**Weidmüller Interface GmbH & Co. KG**
Klingenbergstraße 16
D-32758 Detmold
Germany
Fon: +49 5231 14-0
Fax: +49 5231 14-292083
www.weidmueller.com




**Reflow soldering profile**

The perfect soldering profile for SMT Surface Mount Technology is one the most exiting question in SMT production. But there are more than one correct answer: The diagram of temperature-on-time is related to processing features of solder paste and to maximum load of components.

We have to consider the following parameters:
- Time for pre heating
- Maximum temperature
- Time above melting point
- Time for cooling
- Maximum heating rate
- Maximum cooling rate

We recommend a typical solder profile with associated process limits. With preheating components and board are prepared smoothly for the solder phase. Heating rate is typically ≤ +3K/s. In parallel the solder paste is ‚activated'. The time above melting point of 217°C the paste gets liquid and components and boards begin to connect. The maximum temperature of 245°C to 254°C should stay between 10 and 40 seconds. In the cooling phase at ≥ -6K/s solder is cured. Board and components cool down while avoiding cold cracks.

We reserve the right to make technical changes.