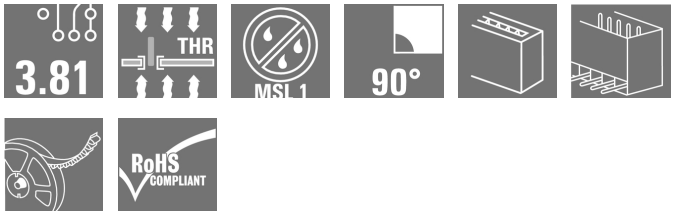
# OMNIMATE Signal - Serie BC/SC 3.81
# SC-SMT 3.81/08/90G 1.5SN BK RL

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

## Illustrazione del prodotto






Connettore maschio resistente alle alte temperature (SC-SMT 90G) in passo 3,81 mm (0,15 pollici)
• Direzione di innesto parallela al circuito stampato (orizzontale)
• chiuso (G)
• Versione con imballo in cartone (BX) o antistatica su rullo (Tape-on-Reel, RL)
• Lunghezza codolo a scelta 1,5mm o 3,2mm
I connettori Weidmüller nel passo 3,81 mm (0,15 pollici) hanno un layout compatibile con i connettori più diffusi e offrono uno spazio per siglatura e codifica.

### Dati generali per l'ordinazione

| | |
|---|---|
| Tipo | SC-SMT 3.81/08/90G 1.5SN BK RL |
| Nr.Cat. | 1863200000 |
| Versione | Connettore per circuito stampato, Connettore maschio, chiuso lateralmente, Collegamento a saldare THT/THR, 3.81 mm, Numero di poli: 8, 90°, Lunghezza spina a saldare (l): 1.5 mm, stagnato, Nero, Tape |
| GTIN (EAN) | 4032248428397 |
| CPZ | 400 Pezzo |
| Parametri prodotto | IEC: 320 V / 17.5 A<br>UL: 300 V / 11 A |
| Imballaggio | Tape |

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## Dati tecnici

### Dimensioni e peso

| | | | |
|---|---|---|---|
| Larghezza | 31,17 mm | Larghezza (pollici) | 1,227 inch |
| Posizione verticale | 8,57 mm | Altezza (pollici) | 0,337 inch |
| Altezza minima | 7,07 mm | Profondità | 9,2 mm |
| Profondità (pollici) | 0,362 inch | Peso netto | 2,975 g |

### Specifiche di sistema

| | | | |
|---|---|---|---|
| Famiglia prodotti | OMNIMATE Signal - Serie BC/SC 3.81 | Tipo di collegamento | Collegamento al circuito stampato |
| Montaggio su circuito stampato | Collegamento a saldare THT/THR | Passo in mm (P) | 3,81 mm |
| Passo in pollici (P) | 0,15 inch | Angolo di uscita | 90° |
| Numero di poli | 8 | Numero di codoli a saldare per polo | 1 |
| Lunghezza spina a saldare (l) | 1,5 mm | Tolleranza della lunghezza del codolo a saldare | 0 / -0,02 mm |
| Tolleranza della posizione del codolo a saldare | ± 0,1 mm | Dimensioni del codolo a saldare | d = 1,0 mm, ottagonale |
| Dimensioni del codolo a saldare = tolleranza d | 0 / -0,04 mm | Diametro foro di equipaggiamento (D) | 1,3 mm |
| Tolleranza diametro di equipaggiamento (D) | + 0,1 mm | Diametro esterno del pad di saldatura | 2,1 mm |
| Diametro del foro della sagoma | 1,9 mm | L1 in mm | 26,67 mm |
| L1 in pollici | 1,05 inch | Numero di serie | 1 |
| Numero di serie di poli | 1 | Protezione da contatto accidentale DIN VDE 57 106 | sicurezza per le dita |
| Protezione da contatto accidentale secondo DIN VDE 0470 | IP 20 | Resistenza di passaggio | 6,00 mΩ |
| Codificabile | Sì | Cicli di inserimento | 25 |

### Dati del materiale

| | | | |
|---|---|---|---|
| Materiale isolante | LCP GF | Colori | Nero |
| Tabella dei colori (simile) | RAL 9011 | Gruppo materiali isolanti | IIIa |
| CTI | ≥ 175 | Resistenza contro l'isolamento | ≥ $10^8$ Ω |
| Moisture Level (MSL) | 1 | Classe d'infiammabilità UL 94 | V-0 |
| GWIT | 930 °C | GWFI | 960 °C |
| Materiale dei contatti | Lega di rame | Superficie dei contatti | stagnato |
| Temperatura di magazzinaggio, min. | -25 °C | Temperatura di magazzinaggio, max. | 55 °C |
| Umidità relativa durante l'immagazzinaggio, max. | 80 % | Temperatura d'esercizio , min. | -50 °C |
| Temperatura d'esercizio , max. | 120 °C | Campo della temperatura di montaggio, min. | -25 °C |
| Campo della temperatura di montaggio, max. | 120 °C | | |

# OMNIMATE Signal - Serie BC/SC 3.81
# SC-SMT 3.81/08/90G 1.5SN BK RL

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## Dati tecnici

### Dati di dimensionamento secondo IEC

| | | | |
|---|---|---|---|
| Testato secondo lo standard | IEC 60664-1, IEC 61984 | Corrente di dimensionamento, numero minimo di poli (Tu=20 °C) | 17,5 A |
| Corrente di dimensionamento, numero massimo di poli (Tu=20 °C) | 13,9 A | Corrente di dimensionamento, numero minimo di poli (Tu=40 °C) | 17 A |
| Corrente di dimensionamento, numero massimo di poli (Tu = 40°C) | 12,4 A | Tensione di dimensionamento con classe di sovratensione/grado di lordura II/2 | 320 V |
| Tensione di dimensionamento con classe di sovratensione/grado di lordura III/2 | 160 V | Tensione nominale con classe di sovratensione/grado di lordura III/3 | 160 V |
| Tensione di dimensionamento con classe di sovratensione/grado di lordura II/2 | 2,5 kV | Tensione di dimensionamento con classe di sovratensione/grado di lordura III/2 | 2,5 kV |
| Sovratensione nominale con classe di sovratensione/grado di lordura III/3 | 2,5 kV | Portata transitoria | 3 x 1s mit 76 A |

### Dati di dimensionamento secondo CSA

| | | | |
|---|---|---|---|
| Istituto (CSA) | | N° certificato (CSA) | 200039-1121690 |
| Tensione nominale (Gruppo B / CSA) | 300 V | Corrente nominale (Gruppo B / CSA) | 11 A |
| Riferimento ai valori di omologazione | Le specifiche indicano i valori massimi, per i dettagli fare riferimento al certificato di conformità. | | |

### Dati di dimensionamento sec. UL 1059

| | | | |
|---|---|---|---|
| Istituto (cURus) | | N° certificato (cURus) | E60693 |
| Tensione nominale (Gruppo B / UL 1059) | 300 V | Tensione nominale (Gruppo D / UL 1059) | 300 V |
| Corrente nominale (Gruppo B / UL 1059) | 11 A | Corrente nominale (Gruppo D / UL 1059) | 11 A |
| Riferimento ai valori di omologazione | Le specifiche indicano i valori massimi, per i dettagli fare riferimento al certificato di conformità. | | |

### Imballaggio

| | | | |
|---|---|---|---|
| Imballaggio | Tape | Lunghezza VPE | 60 mm |
| Larghezza VPE | 330 mm | Altezza VPE | 330 mm |
| Profondità nastro (T2) | 11,1 mm | Larghezza nastro (W) | 56 mm |
| Profondità tasca nastro (K0) | 10,6 mm | Altezza tasca nastro (A0) | 9,5 mm |
| Larghezza tasca nastro (B0) | 41,2 mm | Separazione tasca nastro (P1) | 16 mm |
| Separazione foro nastro (E) | 1,75 mm | Separazione tasca nastro (F) | 26,2 mm |
| Diametro ⌀ bobina nastro (A) | 330 mm | Resistenza superficiale | Rs = $10^9$ - $10^{12}$ Ω |

# OMNIMATE Signal - Serie BC/SC 3.81
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## Dati tecnici

### Classificazioni

| | | | |
|---|---|---|---|
| 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 | | |

### Note

| | |
|---|---|
| Note | • Corrente nominale relativa alla sezione nominale e al numero min. di poli<br>• I dati di dimensionamento si riferiscono ai singoli componenti. Per le distanze in aria e superficiali rispetto agli altri componenti, fare riferimento alle relative norme in funzione dell'applicazione.<br>• P su disegno = passo |
| Conformità IPC | Conformità: i prodotti sono sviluppati, prodotti e forniti secondo standard e normative internazionali riconosciuti, sono conformi alle caratteristiche indicate nel foglio dati e soddisfano le caratteristiche decorative in accordo con IPC-A-610 "Classe 2". Ulteriori richieste relative al prodotto potranno essere valutate su richiesta. |

### Approvazioni

| | |
|---|---|
| Omologazioni | |
| ROHS | Conforme |

### Downloads

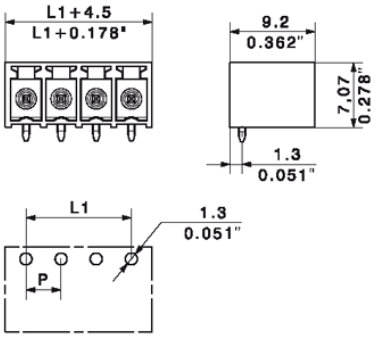
| | |
|---|---|
| Brochure/Catalogo | FL DRIVES EN<br>MB SMT EN<br>FL DRIVES DE<br>MB DEVICE MANUF. EN<br>CAT 2 PORTFOLIOGUIDE EN<br>FL BUILDING SAFETY EN<br>FL APPL LED LIGHTING EN<br>FL INDUSTR.CONTROLS EN<br>FL MACHINE SAFETY EN<br>FL HEATING ELECTR EN<br>FL APPL_INVERTER EN<br>FL_BASE_STATION_EN<br>FL ELEVATOR EN<br>FL POWER SUPPLY EN<br>FL 72H SAMPLE SER EN<br>PO OMNIMATE EN |
| Carta bianca SMT | Download Whitepaper |
| Omologazione/Certificato/Documento di conformità | Declaration of the Manufacturer |

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## Disegni

### Dimensional drawing




### Esempio d'uso

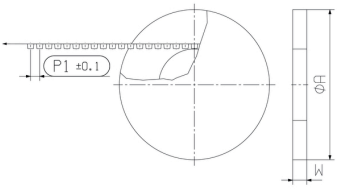


# OMNIMATE Signal - Serie BC/SC 3.81
# SC-SMT 3.81/08/90G 1.5SN BK RL

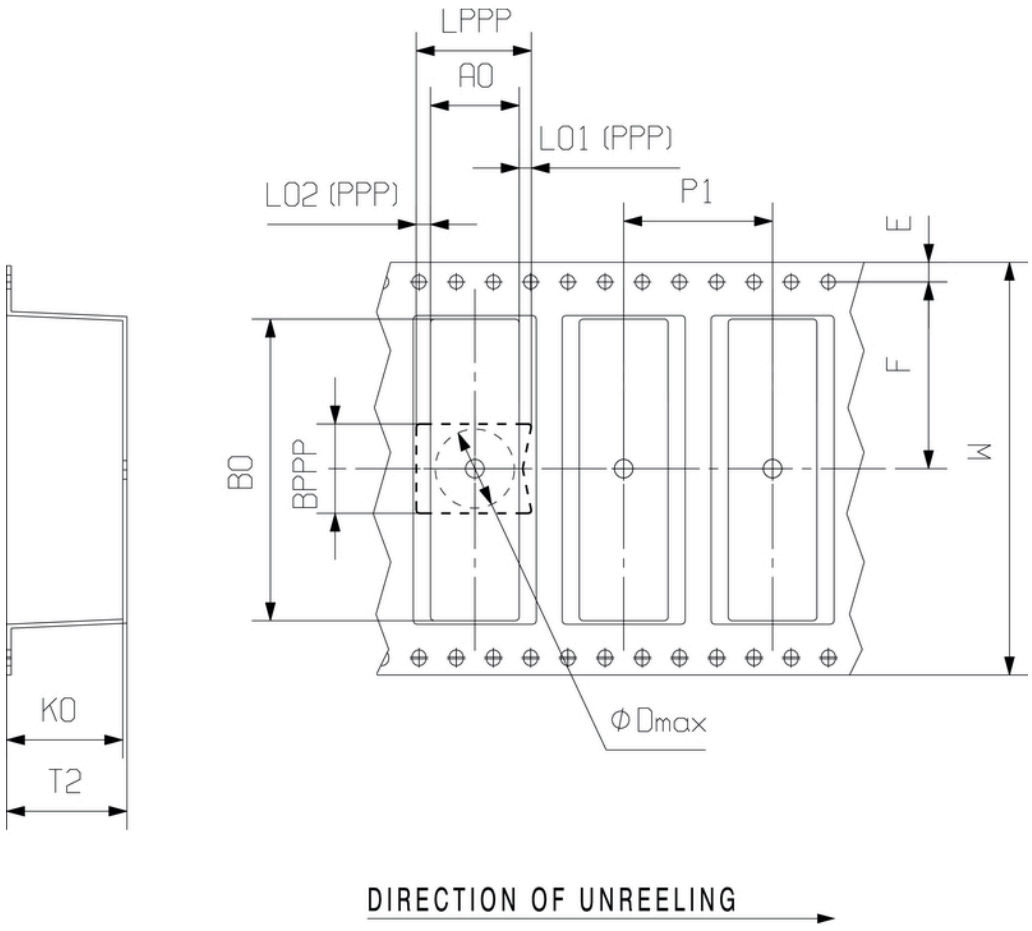
**Weidmüller Interface GmbH & Co. KG**
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## Disegni

### Dimensional drawing

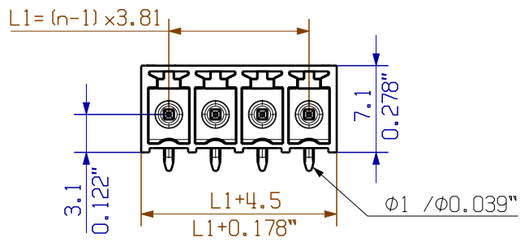


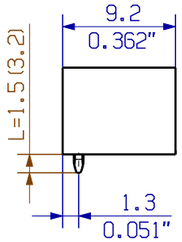

### Dimensional drawing

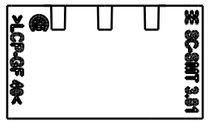


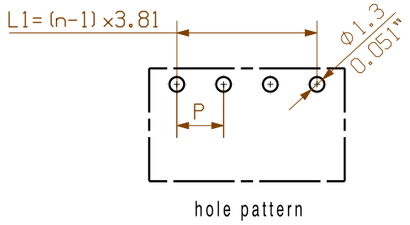
Dimensions without tolerances are no check dimensions

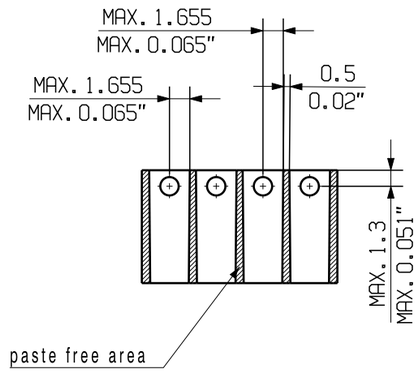
The English version is binding




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

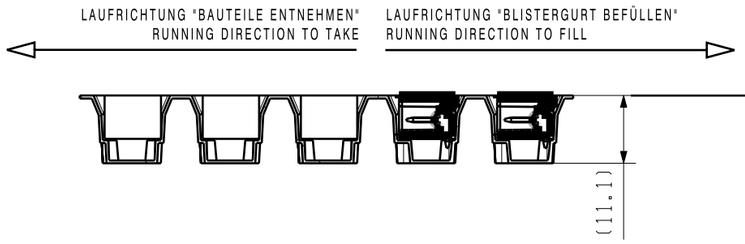
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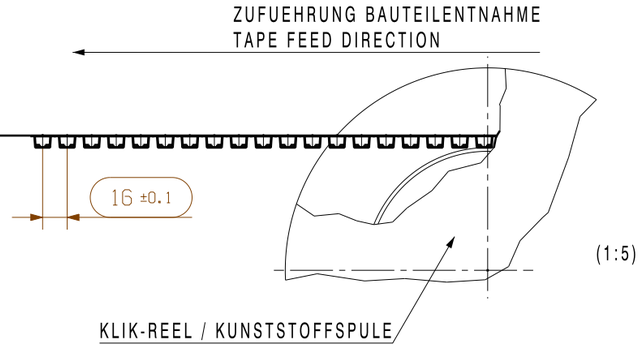
MASSE OHNE TOLERANZ SIND KEINE PRUEFMASSE
DIMS. WITHOUT TOLERANCE ARE NOT CONTROL DIMS.

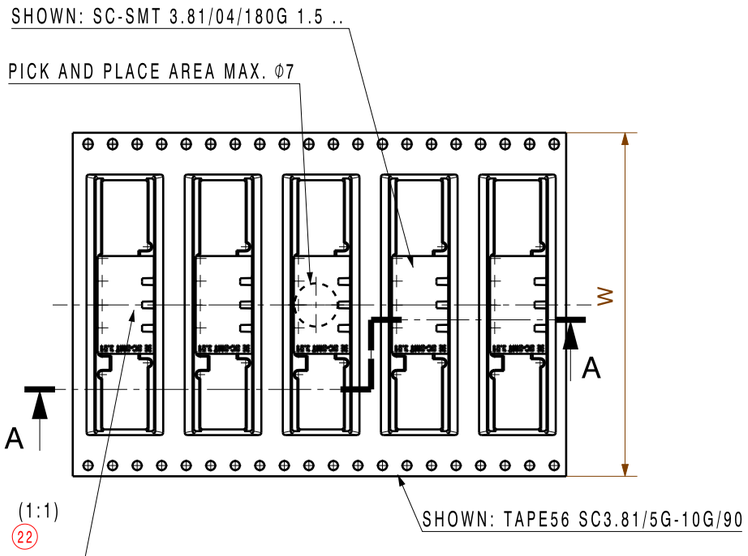
DIE DEUTSCHE VERSION IST VERBINDLICH
THE GERMAN VERSION IS BINDING

# 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

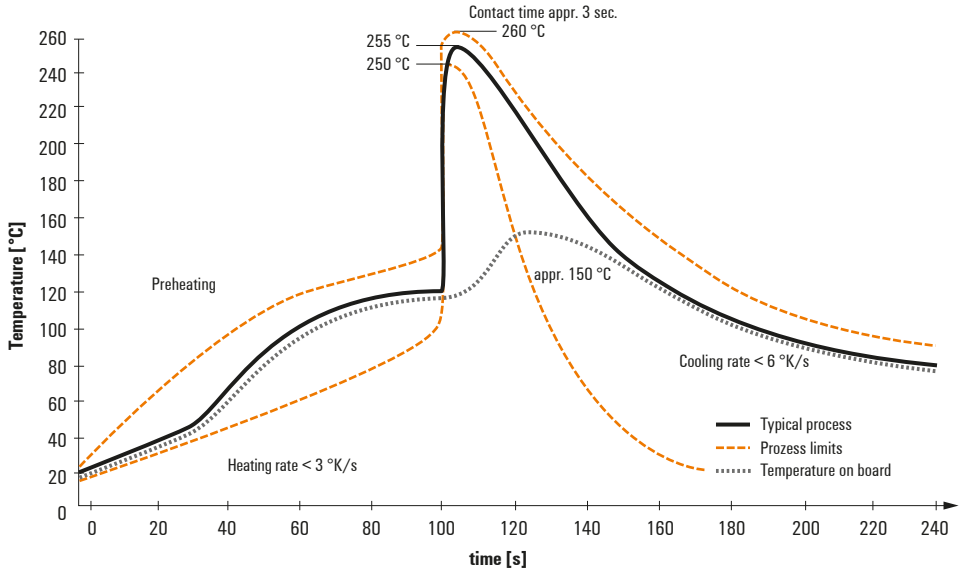

WEITERGABE SOWIE VERVIELFAELTIGUNG DIESES DOKUMENTS, VERWERTUNG UND MITTEILUNG SEINES INHALTS SIND VERBOTEN, SOWEIT NICHT AUSDRUECKLICH GESTATTET.
ZUWIDERHANDLUNGEN VERPFLICHTEN ZU SCHADENERSATZ. ALLE RECHTE FUER DEN FALL DER PATENT-, GEBRAUCHSMUSTER- ODER GESCHMACKSMUSTEREINTRAGUNG VORBEHALTEN.
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#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

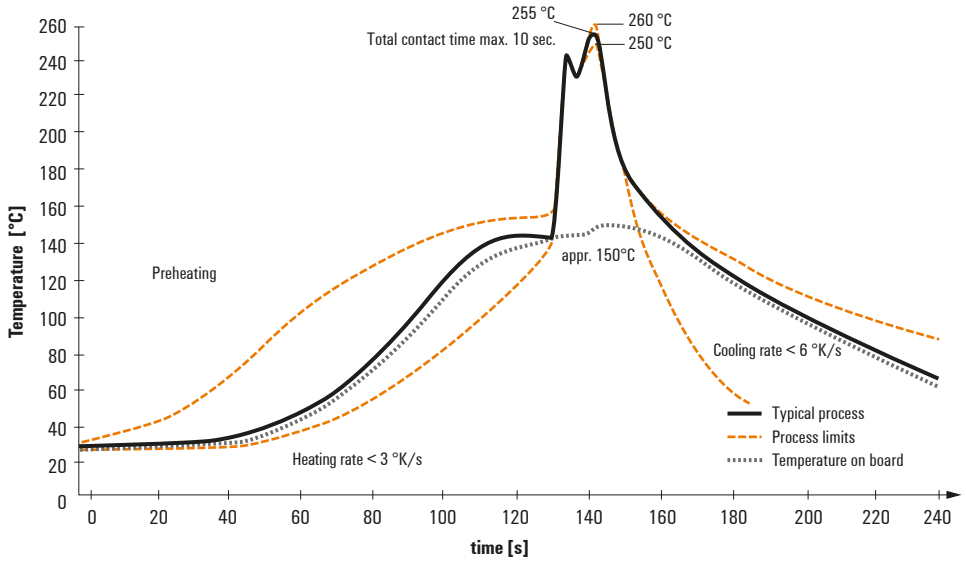
## Recommended wave solderding profiles

**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

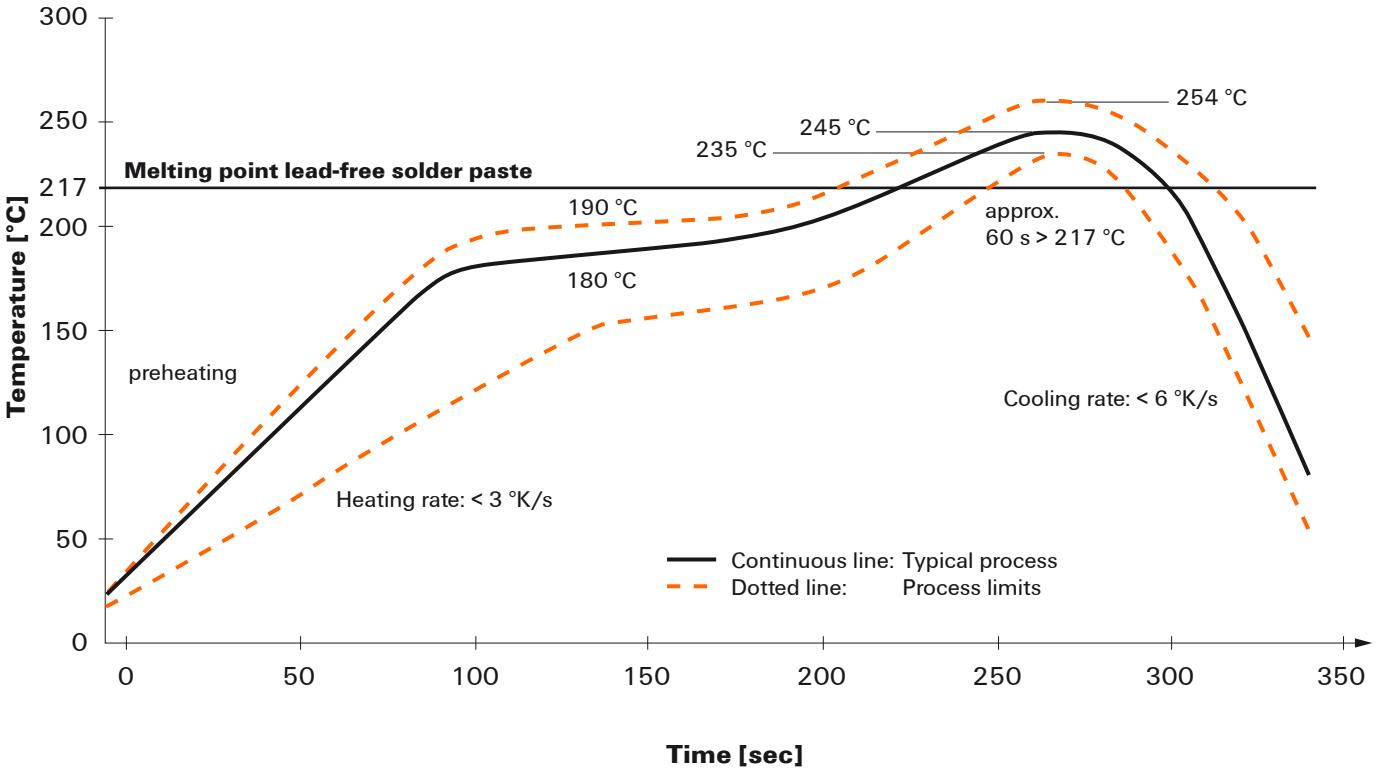
The single and double wave profiles each indicate the recommended operating range, including the maximum soldering temperature of 260°C. In practice, the maximum soldering temperature is quite often well below the above maximum profile.

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
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**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.