

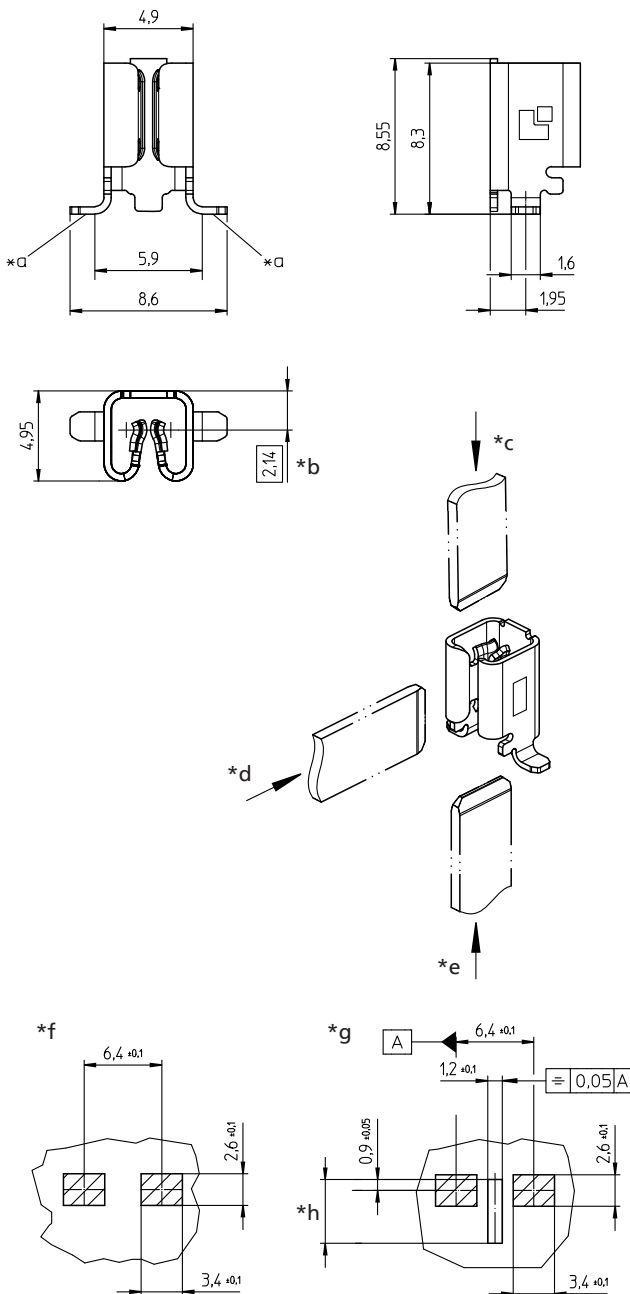
45 4580 01 OP T0,8

High-current contact elements



High-current contact bush, in surface mount technology (SMT), mateable from top, bottom or lateral direction, for tab contacts 0.8 mm, for printed circuit boards or busbars

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Environmental conditions

Temperature range -40 °C/+120 °C

Materials

Contact CuCr alloy, tin-plated

Mechanical data

Mating with tab contact 2.8–6.3 mm x 0.8 mm (0.5 mm in preparation)
applicable for reflow soldering on printed circuit board
applicable for laser welding on a busbar or lead frame

Mating cycles 5
Insertion force tab contact 0.8 mm
32 N ± 15 N – top entry
18 N ± 10 N – lateral entry
32 N ± 15 N – bottom entry¹

Withdrawal force tab contact 0.8 mm
32 N ± 10 N – top entry
15 N ± 10 N – lateral entry
32 N ± 10 N – bottom entry¹

¹ measured with a tin-plated test tab

Electrical data (at T_{amb} 20 °C)

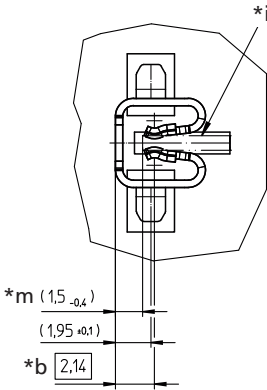
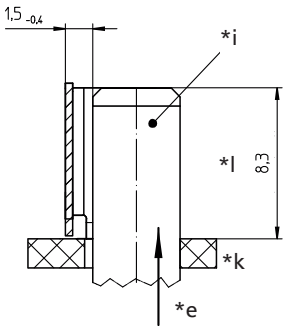
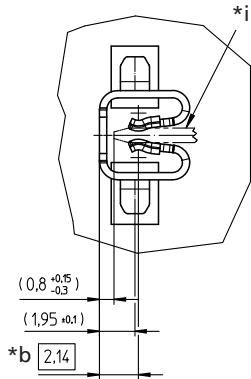
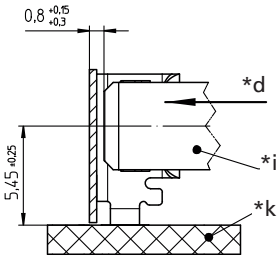
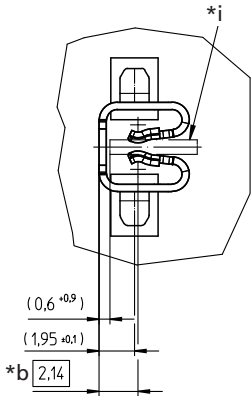
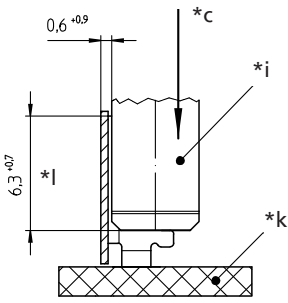
Contact resistance < 1 mΩ

Rated current ≤ 56 A¹

¹ depending on the connection to the printed circuit board/busbar, installation situation and heat dissipation

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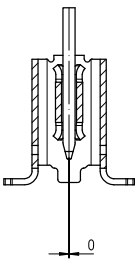


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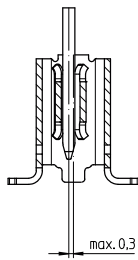
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Assembly tolerances for top and bottom entry
 - tab dimensions 4.8 mm x 0.8 mm x length 8 mm
 - larger assembly tolerances possible for lengths > 15 mm

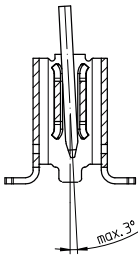
Montagetoleranzen für Steckrichtung von oben und unten
 - Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm
 - bei Länge > 15 mm größere Montagetoleranzen möglich



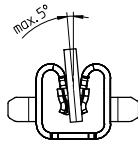
typical mating
typische Kontaktierung



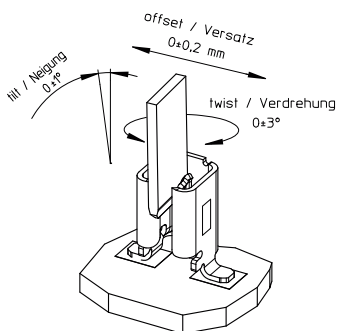
permissible lateral offset
zulässiger seitlicher Versatz



permissible tilt
zulässige Neigung



permissible twist
zulässige Verdrehung



permissible combined tolerances
zulässige kombinierte Toleranzen

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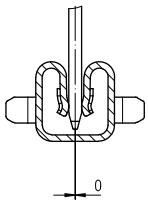
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Assembly tolerances for lateral entry

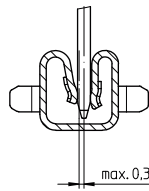
- tab dimensions 4.8 mm x 0.8 mm x length 8 mm
- larger assembly tolerances possible for lengths > 15 mm

Montagetoleranzen für Steckrichtung von der Seite

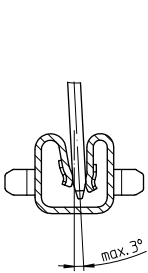
- Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm
- bei Länge > 15 mm größere Montagetoleranzen möglich



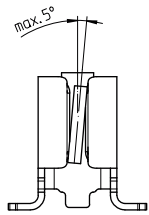
typical mating
typische Kontaktierung



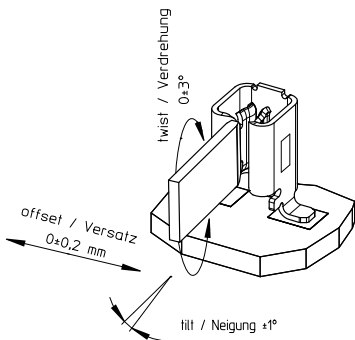
permissible lateral offset
zulässiger seitlicher Versatz



permissible tilt
zulässige Neigung



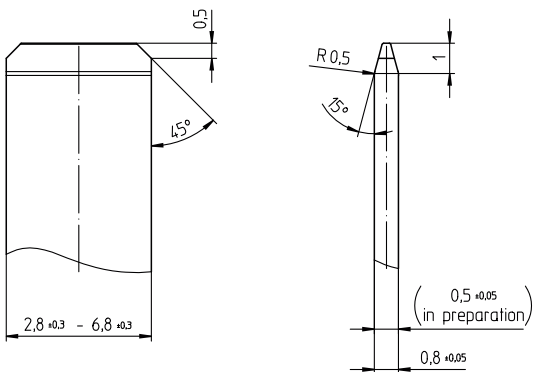
permissible twist
zulässige Verdrehung



permissible combined tolerances
zulässige kombinierte Toleranzen

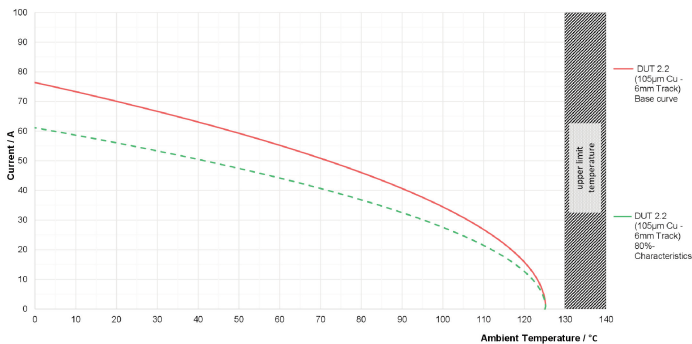
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Geometry of the mating tab contact
Geometrie des Kontaktmessers



Material to be coordinated with Lumberg.
Das Material ist mit Lumberg abzustimmen.

Derating diagram
Derating-Diagramm



Test setup: application example of a closed system, no air circulation, no heat dissipation

- tab contact: CuZn37, tin-plated, 4.8 mm x 0.8 mm (corresponding to a cross section of 4 mm²)
 - connected wire: section 6 mm²
 - PCB: double-sided, conductor thickness 105 µm, track width 6 mm
 - ambient temperature: 20 °C
- Further test configurations and details upon request.

Testaufbau: Anwendungsbeispiel eines geschlossenen Systems, keine Luftzirkulation, keine Wärmeabfuhr

- Messerkontakt: CuZn37, verzinkt, 4,8 mm x 0,8 mm (entspricht einem Querschnitt von 4 mm²)
- angeschlossene Leitung: Querschnitt 6 mm²
- Leiterplatte: doppelseitig, Leiterbahndicke 105 µm, -breite 6 mm
- Umgebungstemperatur: 20 °C

Weitere Testaufbauten und -details auf Anfrage.

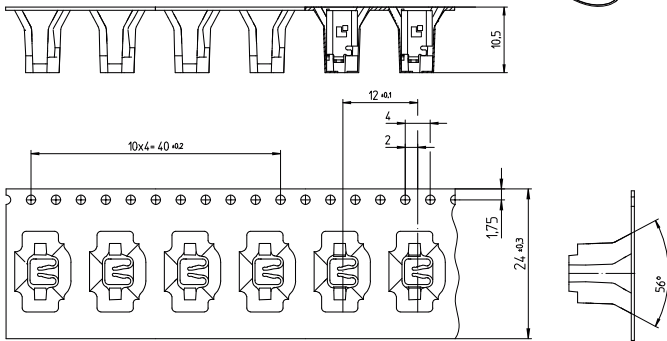
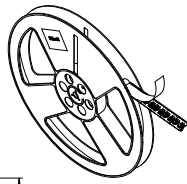
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Packaging

reel: 330 mm/110 mm/24,5 mm
leader: 408 mm, 34 empty cavities
trailer: 168 mm, 14 empty cavities

Verpackung

Rolle: 330 mm/110 mm/24,5 mm
Vorlauf: 408 mm, 34 Leerfächer
Nachlauf: 168 mm, 14 Leerfächer



- *a SMT solder area
- *b contact point
- *c mating from top direction
- *d mating from lateral direction
- *e mating from bottom direction
- *f printed circuit board layout (example) for mating from top or lateral direction
- *g printed circuit board layout (example) for mating from bottom direction
- *h slot in the printed circuit board min. 0.5 mm wider than tab
- *i contact tab
- *k printed circuit board
- *l insertion depth

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| Designation | Pole Number | PU (Pieces) | MDQ (Pieces) |
|-------------------------|-------------|-------------|--------------|
| 4580 01 OP T0,8 V12VP12 | 1 | 500 | |

Packaging:

on reel