

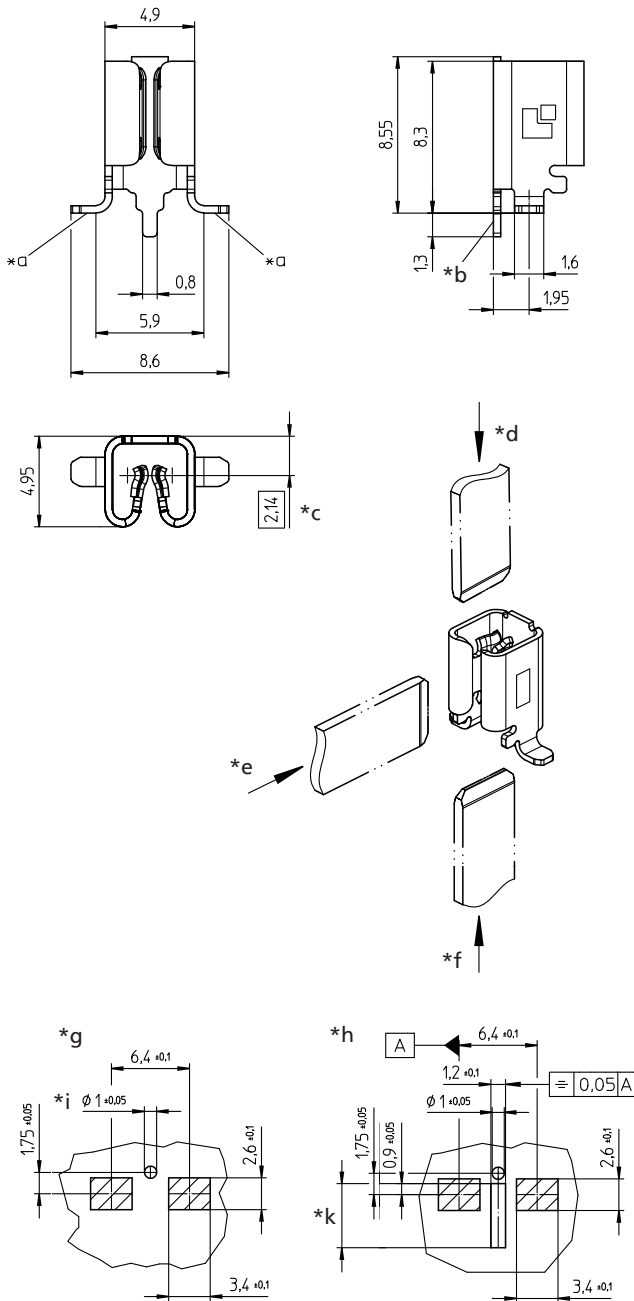
45 4580 01 MP T0,8

High-current contact elements



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

**45 4580 01 MP T0,8**



**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 entry<sup>1</sup>

Withdrawal force tab contact 0.8 mm  
32 N ± 10 N – top entry  
15 N ± 10 N – lateral entry  
32 N ± 10 N – bottom entry<sup>1</sup>

<sup>1</sup> measured with a tin-plated test tab

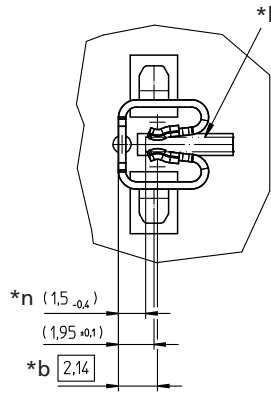
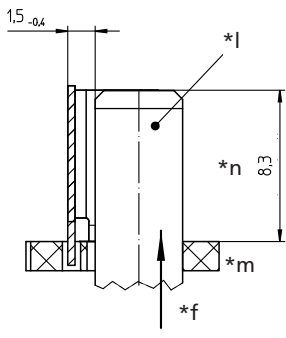
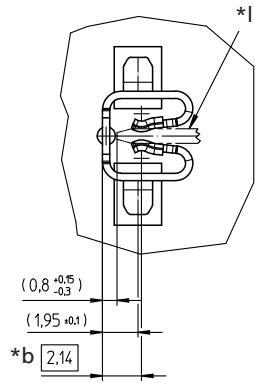
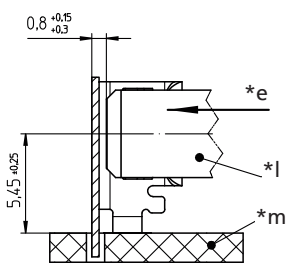
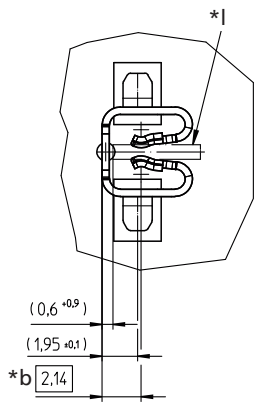
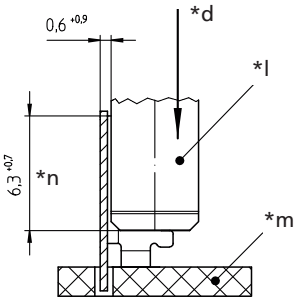
**Electrical data (at T<sub>amb</sub> 20 °C)**

Contact resistance < 1 mΩ

Rated current ≤ 56 A<sup>1</sup>

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

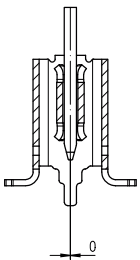
45 4580 01 MP T0,8



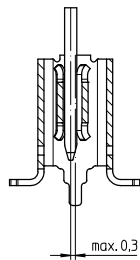
**45 4580 01 MP T0,8**

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

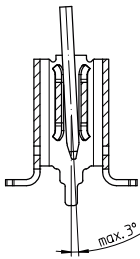
Montagetoleranzen für Steckrichtung von oben und unten  
 - Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm  
 - bei Länge > 15 mm größere Montagetoleranzen möglich



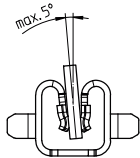
typical mating  
 typische Kontaktierung



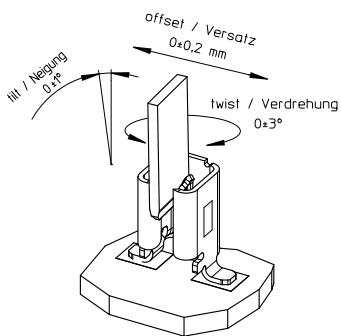
permissible lateral offset  
 zulässiger seitlicher Versatz



permissible tilt  
 zulässige Neigung



permissible twist  
 zulässige Verdrehung

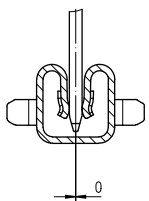


permissible combined tolerances  
 zulässige kombinierte Toleranzen

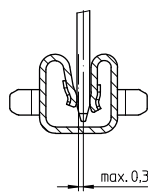
45 4580 01 MP T0,8

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

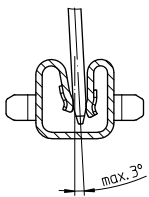
Montagetoleranzen für Steckrichtung von der Seite  
 - Messerkontaktmaße 4,8 mm x 0,8 mm x Länge 8 mm  
 - bei Länge > 15 mm größere Montagetoleranzen möglich



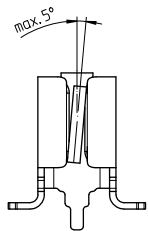
typical mating  
typische Kontaktierung



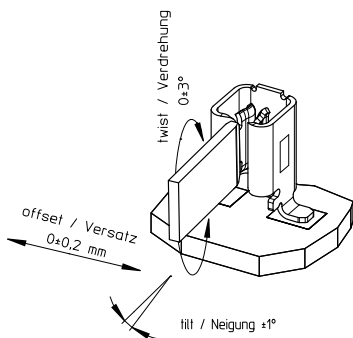
permissible lateral offset  
zulässiger seitlicher Versatz



permissible tilt  
zulässige Neigung



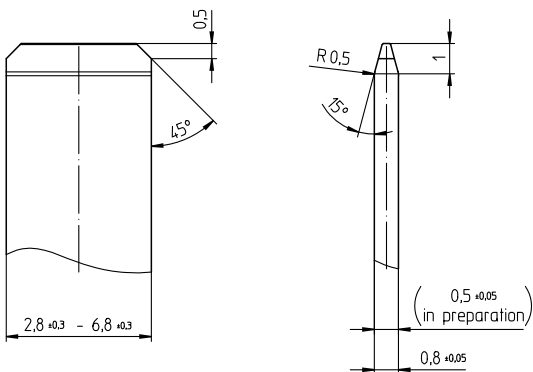
permissible twist  
zulässige Verdrehung



permissible combined tolerances  
zulässige kombinierte Toleranzen

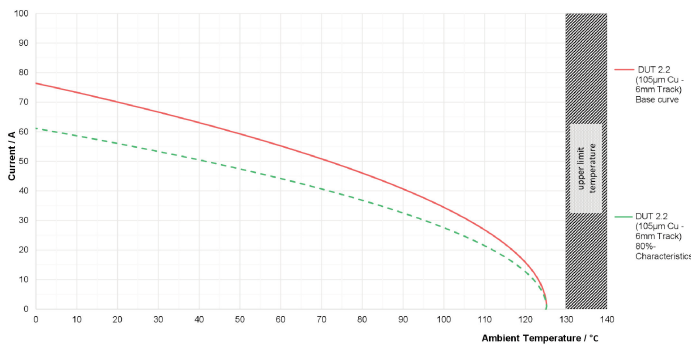
45 4580 01 MP T0,8

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 mm<sup>2</sup>)
- connected wire: section 6 mm<sup>2</sup>
- 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 mm<sup>2</sup>)
- angeschlossene Leitung: Querschnitt 6 mm<sup>2</sup>
- Leiterplatte: doppelseitig, Leiterbahndicke 105 µm, -breite 6 mm
- Umgebungstemperatur: 20 °C

Weitere Testaufbauten und -details auf Anfrage.

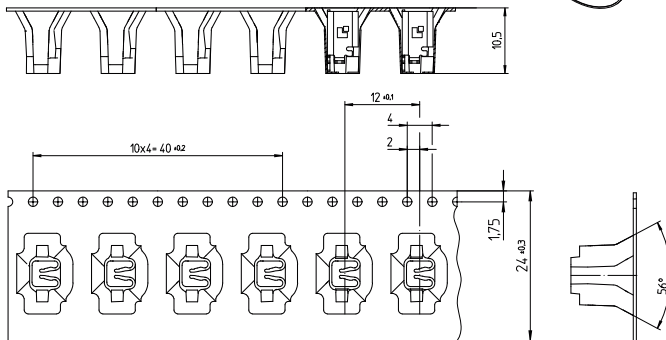
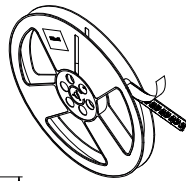
45 4580 01 MP T0,8

**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 positioning peg
- \*c contact point
- \*d mating from top direction
- \*e mating from lateral direction
- \*f mating from bottom direction
- \*g printed circuit board layout (example) for mating from top or lateral direction
- \*h printed circuit board layout (example) for mating from bottom direction
- \*i bore hole for positioning peg
- \*k slot in the printed circuit board min. 0.5 mm wider than tab
- \*k printed circuit board
- \*l contact tab
- \*m printed circuit board
- \*n insertion depth

45

4580 01 MP T0,8

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

**Packaging:**

on reel