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4580 01 SP

High-current contact elements



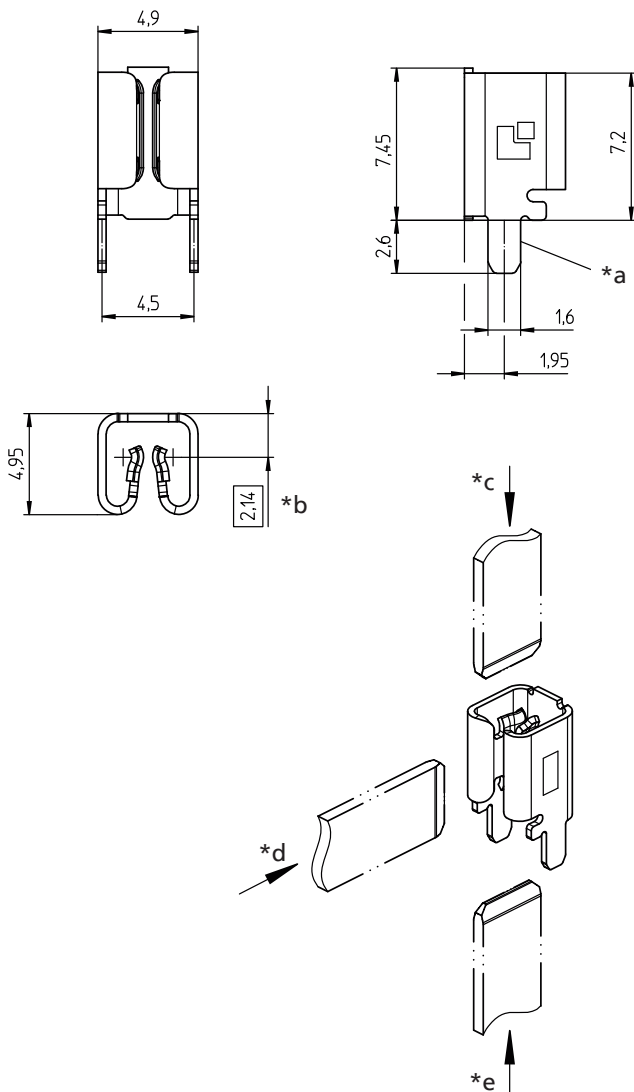
High-current contact bush, in through hole technology (THT), mateable from top, bottom or lateral direction, for tab contacts 0.5–0.8 mm, for printed circuit boards

Approvals:

LV215

VW
80332

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Environmental conditions

Temperature range -40 °C/+125 °C

Materials

Contact CuCr alloy, tin-plated

Mechanical data

Mating with tab contact 2.8–6.8 mm x 0.5 mm – 4580 01 SP T0,5
tab contact 2.8–6.8 mm x 0.6 mm – 4580 01 SP T0,6
tab contact 2.8–6.8 mm x 0.8 mm – 4580 01 SP T0,8
applicable for reflow soldering on printed circuit board
applicable for laser welding on a busbar or lead frame

Mating cycles ≤ 5

Insertion force
tab 0.5/0.6 mm
25 N ± 15 N – top/bottom entry
18 N ± 10 N – lateral entry
tab 0.8 mm
35 N ± 15 N – top/bottom entry
18 N ± 10 N – lateral entry¹

Withdrawal force
tab 0.5/0.6 mm
25 N ± 12 N – top/bottom entry
15 N ± 10 N – lateral entry
tab 0.8 mm
35 N ± 10 N – top/bottom entry
15 N ± 10 N – lateral entry¹

¹ measured with a tin-plated test tab

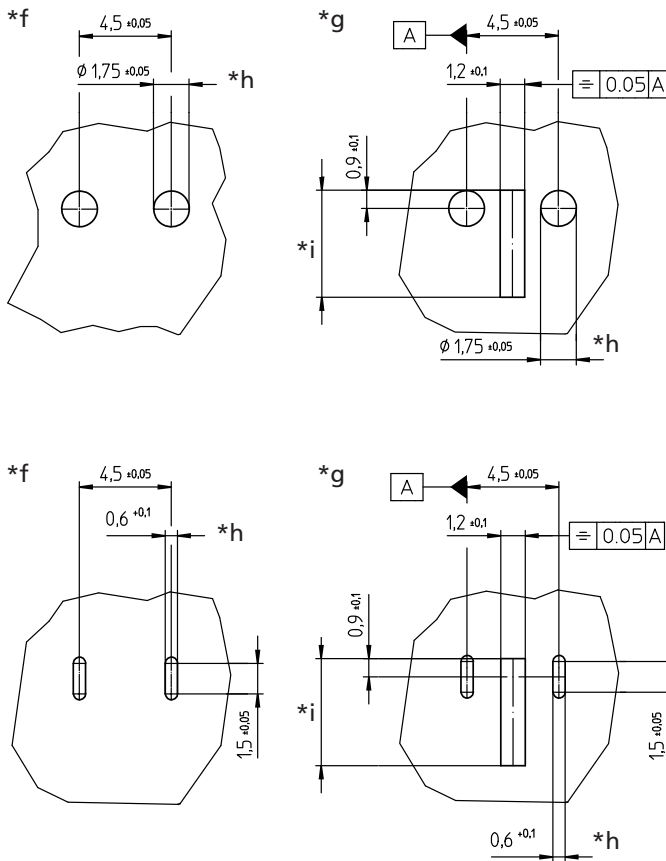
Electrical data (at T_{amb} 20 °C)

Contact resistance < 1 mΩ

Rated current ≤ 56 A¹

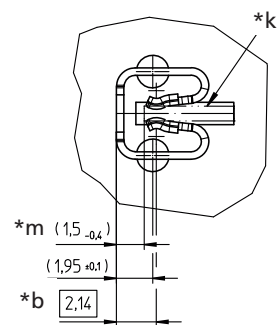
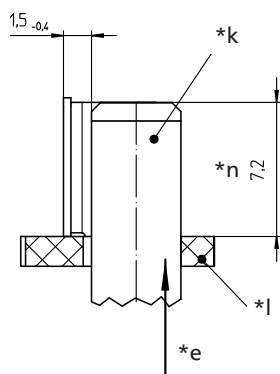
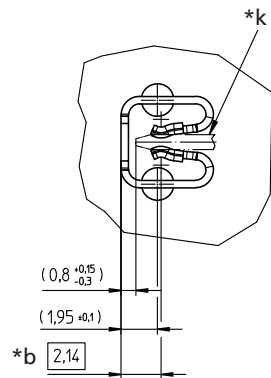
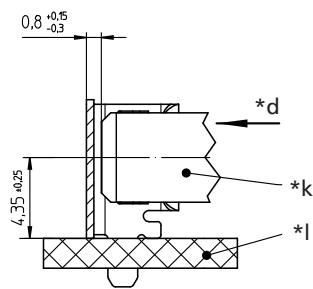
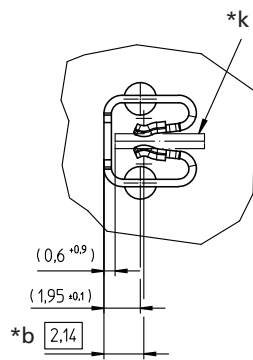
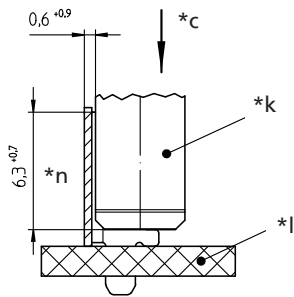
¹ depending on the connection to the printed circuit board, installation situation and heat dissipation

45 4580 01 SP



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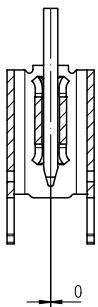
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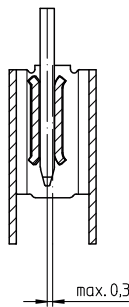
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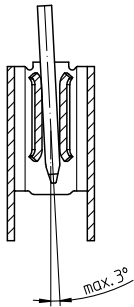
Assembly tolerances for top and bottom entry
- tab dimensions 4.8 mm x 0.5/0.6/0.8 mm x length 8 mm
- larger assembly tolerances possible for lengths > 15 mm



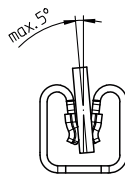
typical mating



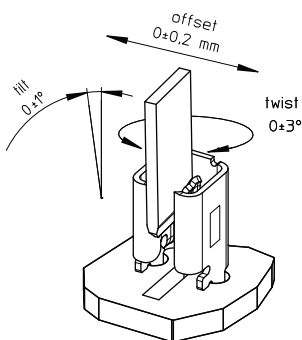
permissible lateral offset



permissible tilt



permissible twist



permissible combined tolerances

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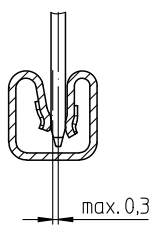
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Assembly tolerances for lateral entry

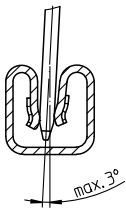
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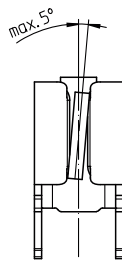
typical mating



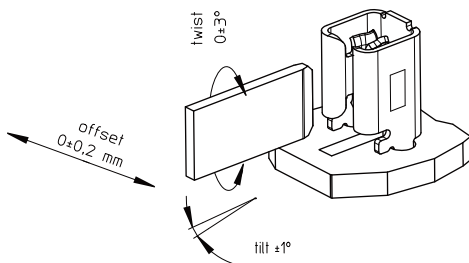
permissible lateral offset



permissible tilt



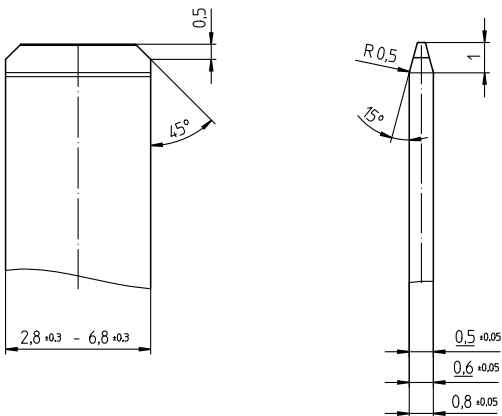
permissible twist



permissible combined tolerances

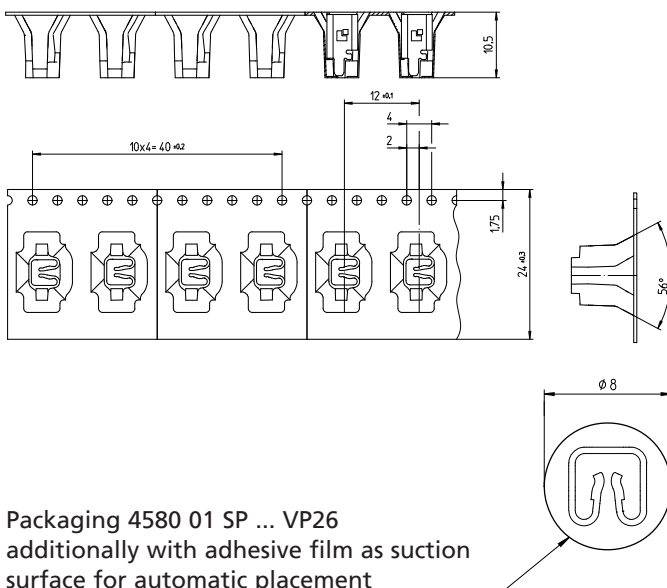
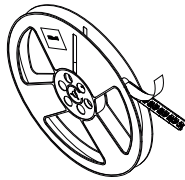
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Geometry of the mating tab contact



Material to be coordinated with Lumberg.

Packaging 4580 01 SP ... VP12
reel: 330 mm/100 mm/24.5 mm
leader: 408 mm, 34 empty cavities
trailer: 168 mm, 14 empty cavities



Packaging 4580 01 SP ... VP26
additionally with adhesive film as suction
surface for automatic placement

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-
- *a THT solder pin
 - *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 top or bottom direction
 - *h bore hole for THT solder pin
 - *i slot in the printed circuit board min. 0.5 mm wider than tab
 - *k contact tab
 - *l printed circuit board
 - *m dimension 1.5 mm depending on the slot in the printed circuit board
 - *n insertion depth

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Designation	Pole Number	PU (Pieces)	MDQ (Pieces)
4580 01 SP T0,5V12VP12	1	4000	
4580 01 SP T0,6V12VP12	1	4000	
4580 01 SP T0,8V12VP12	1	4000	

Packaging:
on reel