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SEK 18 male low profile solder and press-in RoHS compliant				Recommended configuration of plated through holes for press-in termination In addition to the hot-air-level (HAL), other PCB surfaces are getting more important. Due to their different properties – such as mechanical strength and coefficient of friction – we recommend the following configuration of PCB through holes. drilled hole $\varnothing$ finished hole $\varnothing$ plating (e.g. Sn) Cu min. 25 μm <table><tr><td rowspan="3">Tin plated PCB (HAL) acc. to EN 60352-5</td><td>Drilled hole $\varnothing$</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 μm</td></tr><tr><td>Sn</td><td>max. 15 μm</td></tr><tr><td rowspan="3">Chemical tin plated PCB</td><td>plated hole $\varnothing$</td><td>0,94 - 1,09 mm</td></tr><tr><td>Drilled hole $\varnothing$</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 μm</td></tr><tr><td rowspan="4">Gold /Nickel plated PCB</td><td>Sn</td><td>min. 0,8μm</td></tr><tr><td>plated hole $\varnothing$</td><td>1,00 - 1,10 mm</td></tr><tr><td>Drilled hole $\varnothing$</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 μm</td></tr><tr><td rowspan="3">Silver plated PCB</td><td>Ni</td><td>3 - 7 μm</td></tr><tr><td>Au</td><td>0,05 - 0,12 μm</td></tr><tr><td>plated hole $\varnothing$</td><td>1,00 - 1,10 mm</td></tr><tr><td rowspan="3">Copper plated PCB (OSP)</td><td>Drilled hole $\varnothing$</td><td>1,15-0,03 mm</td></tr><tr><td>Cu</td><td>min. 25 μm</td></tr><tr><td>plated hole $\varnothing$</td><td>1,00 - 1,10 mm</td></tr></table>				Tin plated PCB (HAL) acc. to EN 60352-5	Drilled hole $\varnothing$	1,15-0,03 mm	Cu	min. 25 μ m	Sn	max. 15 μ m	Chemical tin plated PCB	plated hole $\varnothing$	0,94 - 1,09 mm	Drilled hole $\varnothing$	1,15-0,03 mm	Cu	min. 25 μ m	Gold /Nickel plated PCB	Sn	min. 0,8 μ m	plated hole $\varnothing$	1,00 - 1,10 mm	Drilled hole $\varnothing$	1,15-0,03 mm	Cu	min. 25 μ m	Silver plated PCB	Ni	3 - 7 μ m	Au	0,05 - 0,12 μ m	plated hole $\varnothing$	1,00 - 1,10 mm	Copper plated PCB (OSP)	Drilled hole $\varnothing$	1,15-0,03 mm	Cu	min. 25 μ m	plated hole $\varnothing$	1,00 - 1,10 mm																																																													
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Please refer to the catalogue for tools, machines and further information about the press-in process. Soldering instructions The connectors should be protected when being soldered in a dip, flow or film soldering baths. Otherwise, they might become contaminated as a result of soldering operations or deformed as a result of overheating. (1) For prototypes and short runs protect the connectors with an industrial adhesive tape, e.g. Tesaband 4331 (www.tesa.de). Cover the underside of the connector moulding and the adjacent parts of the pcb as well as the open sides of the connector. This will prevent heat and gases of the soldering apparatus from damaging the connector. About 140 + 5 mm of the tape should suffice. (2) For large series a jig is recommended. Its protective cover with a fast action mechanical locking device shields the connectors from gas and heat generated by the soldering apparatus. As an additional protection a foil can be used for covering the parts that should not be soldered. Packaging material (only for plastic tray) <table><tr><td>Material</td><td>Polystyrol</td></tr><tr><td>Color</td><td>Yellow</td></tr><tr><td>Standardization</td><td>acc. to DIN EN / IEC 61340-5-1 and ANSI / ESD S541-2003</td></tr></table> - Safe protection for electronic components against electrostatic charges Cross section of solder terminations				Material	Polystyrol	Color	Yellow	Standardization	acc. to DIN EN / IEC 61340-5-1 and ANSI / ESD S541-2003
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Derating diagram acc to IEC 60512-2 (Current carrying capacity) The current carrying capacity is limited by maximum temperature of materials for inserts and contacts including terminals. The current capacity-curve is valid for continuous, not interrupted current-loaded contacts of connectors when simultaneous power on all contacts is given without exceeding the maximum temperature. Control and test procedures according to DIN IEC 60512. 1) Temperature rise 2) Derating 3) Derating curve at I max x 0.8(IEC 60512-2)				All rights reserved Department EC PD – DE HARTING Electronics GmbH D-32339 Espelkamp All Dimensions in mm Original Size DIN A3 Scale 1:1 Free size tol. All Dimensions in mm Original Size DIN A3 Scale 1:1 Free size tol. Created by STORCK Inspected by LEHNERT Standardisation HOFFMANN Date 2016-09-05 State Final Release Title SEK 18 male low profile solder and press-in Doc-Key / ECM-Nr. 100554984/UGD/001/F 500000107692 Type DS Number 09181100001 Rev. F Page 1/1																																																																																																					
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