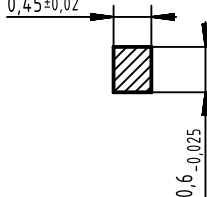
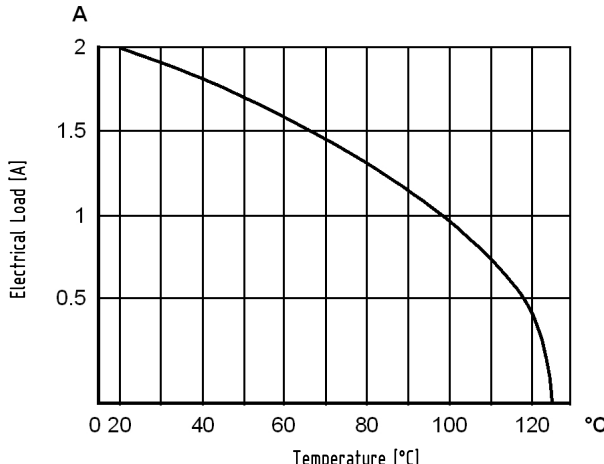


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A	 DIN Signal male connector - SMC  			Soldering instructions SMC (Surface Mount Compatible) connectors are designed to be used in a reflow oven together with other SMD (Surface Mount Device) components. In this process, called as well „Pin in Hole Intrusive Reflow“, the connectors are inserted into plated through holes in a comparable way to conventional component mounting. All other components can be assembled on the pcb surface. The length of the connector contacts should be such that they protrude by no more than 1.5 millimetres after insertion to the pcb. Each contact collects solder on its tip as it penetrates the solder paste in the hole. So if the contact is too long, this solder would no longer be able to reflow back into the plated through hole by capillary action during the soldering process, therefore the quality of the soldered connection would suffer as a result. Quantity of solder paste Before the components are assembled, solder paste must be applied to all the solder pads (for connecting surface-mount components) and the plated through holes. To ensure that the plated through holes are completely filled, significantly more solder paste must be applied than traditional solder pads on the pcb surface. There are numerous calculation methods available which are complicated to apply. The following rule of thumb has proved valuable in practice: VPaste = 2(VH - VP) in which: VPaste = Required volume of solder paste VH = Volume of the plated through hole VP = Volume of the connector termination in the hole Comment: the multiplier “2” compensates for solder paste shrinkage during soldering. For this purpose, it was assumed that 50 % of the paste consists of the actual solder, the other 50 % being soldering aids. Cross section of solder pins A= 0,25mm² - 0,28mm² 				A																																																					
B	General information <table><tr><td>Design</td><td>IEC 60603-2</td><td>types: B, C male</td></tr><tr><td>No. of contacts</td><td>max. 96</td><td></td></tr><tr><td>Contact spacing</td><td>2,54mm</td><td></td></tr><tr><td>Test voltage</td><td>1000V</td><td></td></tr><tr><td>Contact resistance</td><td>max. 15m0hm</td><td></td></tr><tr><td>Insulation resistance</td><td>min. 10⁹Ohm</td><td></td></tr><tr><td>Working current</td><td>2A at 20°C (see derating diagram)</td><td></td></tr><tr><td>Temperature range</td><td>-55°C ... +125°C</td><td></td></tr><tr><td>Termination technology</td><td>SMC with solder pins</td><td></td></tr><tr><td>Clearance & creepage distance</td><td>min. 1,2mm each</td><td></td></tr><tr><td>Insertion and withdrawal force</td><td>64-pole max. 60N</td><td></td></tr><tr><td></td><td>96-pole max. 90N</td><td></td></tr><tr><td>Mating cycles</td><td>PL 1 acc. to IEC 60603-2</td><td>500 mating cycles</td></tr><tr><td></td><td>PL 2 acc. to IEC 60603-2</td><td>400 mating cycles</td></tr><tr><td></td><td>PL 3 acc. to IEC 60603-2</td><td>50 mating cycles</td></tr><tr><td>UL file</td><td>E102079</td><td></td></tr><tr><td>RoHS - compliant</td><td>Yes</td><td></td></tr><tr><td>Leadfree</td><td>Yes</td><td></td></tr><tr><td>Hot plugging</td><td>No</td><td></td></tr></table>			Design	IEC 60603-2	types: B, C male	No. of contacts	max. 96		Contact spacing	2,54mm		Test voltage	1000V		Contact resistance	max. 15m0hm		Insulation resistance	min. 10 ⁹ Ohm		Working current	2A at 20°C (see derating diagram)		Temperature range	-55°C ... +125°C		Termination technology	SMC with solder pins		Clearance & creepage distance	min. 1,2mm each		Insertion and withdrawal force	64-pole max. 60N			96-pole max. 90N		Mating cycles	PL 1 acc. to IEC 60603-2	500 mating cycles		PL 2 acc. to IEC 60603-2	400 mating cycles		PL 3 acc. to IEC 60603-2	50 mating cycles	UL file	E102079		RoHS - compliant	Yes		Leadfree	Yes		Hot plugging	No		B
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F				 All rights reserved Department EC PD - DE HARTING Electronics GmbH D-32339 Espelkamp Created by TADJE Inspected by ELLERMANN Standardisation HOFFMANN Title DIN Signal male connector - SMC Type DS Number 09031230202 Ref. Sub. DS 09 06 123 02 02 / EC01482 / 08.06.2011 Date 2013-12-18 State Final Release Doc-Key / ECM-Nr. 100560790/UGD/001/B 500000069830 Rev. B Page 1/1				F																																																					
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