DIN signal male connector - NFF

RoHS compliant

General information

Design	complementary IEC 60603-2		type: B, 2B, C, 2C, M male
No. of contacts	max. 96		
Contact spacing	2,54mm		
Test voltage	1000V		
Contact resistance	max. 20mOhm		
Insulation resistance	min. 10^{11}Ohm		
Working current	max. 2 A at 20°C (see derating diagram)		
Temperature range	-55°C ... +125°C		
Termination technology	solder pins		
Clearance & creepage distance	min. 1,2 mm		
Insertion and withdrawal force	16pol. max. 15N	20pol. max. 20N	
	30pol. max. 30N	32pol. max. 30N	
	48pol. max. 45N	64pol. max. 60N	96pol. max. 90N
Mating cycles	- PL1 acc. to IEC 60603-2 =>		500 mating cycles
	- PL2 acc. to IEC 60603-2 =>		400 mating cycles
UL file	-		
RoHS - compliant	Yes		
Leadfree	Yes		
Hot plugging	No		

Insulator material

Material	PA (Polyamid, glass fiber reinforcement 25%)
Colour	RAL 7035 (light grey)
UL classification	UL 94-V0
Material group acc. to IEC 60664-1	II (400 ≤ CTI < 600)
NFF classification	I2, F1

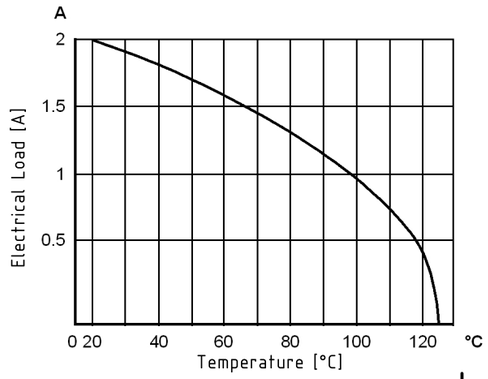
Contact material

Contact material	Copper alloy
Plating termination zone	Sn over Ni
Plating contact zone	Au over PdNi over Ni

Derating diagram acc. to IEC 60512-5 (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, non 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 60512-5



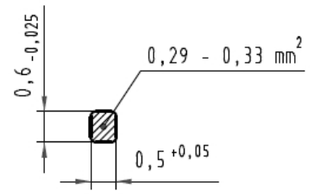
Soldering instructions

The connectors should be protected when being soldered in a dip, flow or film soldering bath. 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.

Cross section of solder pins



All Dimensions in mm
Original Size DIN A3

Scale 1:1	Free size tol.			Ref. Sub. DS 09 03 122 02 01 / EC04252 / 27.04.2011	
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