3M[™] Mini Stack Connector

Easy termination, Easy handling Enables board space savings & optimized networking

勝 特 力 材 料 886-3-5753170 胜特力电子(上海) 86-21-34970699 胜特力电子(深圳) 86-755-83298787 Http://www.100y.com.tw

- As manufacturing equipment becomes increasingly automated, more electronic components, such as sensors, need to be integrated onto the control boards. This is driving a need for higher density connector options.
- The 3M[™] Mini Stack Connector provides a reliable connection with a simple termination process while reducing the required board footprint.

Space-saving: Saves 30% more board space in comparison with 3M™ Mini-Clamp Connectors

2 Time-saving: Reduces wiring time by approx. 60% compared to crimping connectors

* Compared to similar sized crimped connector with 3 pins (based on 3M evaluation)

Set connector into tool

Set wires into tool and crimp

Insert terminated wires into

terminals simultaneously

housing simultaneously

3M[™] Mini Stack Connector 3pins

x1

x1

x1

Total 3 steps

Work Steps

Crimp Connector 3pins	
• Strip wire	x3
 Set terminal in tool 	x3
 Set wire and crimp terminal 	x3
 Insert terminated wire into housing 	х3

Total 12 steps

3 Compact with simple termination

- Contact & housing are integrated, making handling easy
- No need to strip wires
- Connect wires simultaneously



Insert terminals into housing



4 Compact with easy mating/unmating

Stack 4 connectors into a single block



Easily mated even in hard-to-reach or see spaces Block style simplifies mating Ability to e











3M[™] Mini Stack Connector Wiremount Socket 3S50x-Sx30-x00 PN

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- Provides excellent wire connections in a compact form
- No pre-treatment of wire needed with IDC technology
- Terminates 3 or 4 wires in single action
- Integrated terminals and housing make handling easy
- Wide range of wire compatibility (AWG#22-30) with highly reliable double IDC termination
- Handling stacked connectors as a block offers easy mating and unmating



Material & Plating	Item	Material	Remarks
	Housing	PBT resin	UL94V-0
	Contact	Copper alloy	Wiping area: Gold plating over nickel plating IDC: Nickel plating
Wire Accommodation	See product table		

Ratings	Item	Rating		
	Voltage	AC/DC 32V Max.		
	Current	2.0A MAX. (AWG22-26) 1.5A MAX. (AWG27-28) 1.0A MAX. (AWG29-30)		
	Temperature	-20 to 85 degree C		

Product Table

		Wire Accommodation			
Positions	AWG No.	Nominal conductor cross-sectional area mm ² (mil ²)	Wire OD mm (mil)	Body Color	Product Number
2	24-22	0.2 - 0.3 (310 - 465) 0.6 to 1.5		Black	3S503-S330-B00 PN
3	30-25	0.05 - 0.19 (78 – 295)	- 0.19 (78 – 295) (23.6 to 59.1)		3S503-S530-G00 PN
4	24-22	0.2 - 0.3 (310 - 465) 0.6 to 1.5		Black	3S504-S330-B00 PN
4	30-25	0.05 - 0.19 (78 -295)	(23.6 to 59.1)	Gray	3S504-S530-G00 PN







Stacked Condition

Dimensions



3S503-Sx30-x00 PN

4.0

3.0



<u>3S504-Sx30-x00 PN</u>

3M[™] Mini Stack Connector **Boardmount Header** 3S6xx-62Sx-BOO PP

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- Saves 30% more board space in comparison with 3M[™] Mini-Clamp connectors
- Mates with 4 stacked connectors in one action
- Wiremount connector can be unplugged by gripping the center latch
- Fixed tabs prevent lifting and secure fixation of the board during soldering

Material & Plating	Item	Material	Remarks		
	Body	PBT resin	UL94V-0		
	Header pin	Copper alloy	Wiping area: Gold plating over nickel plating Solder tails: Tin plating over nickel plating		
	Fixture pin	Copper alloy	Tin plating over nickel plating		
PCB Accommodation	Thickness: 1.0 to 1.6mm (3	ckness: 1.0 to 1.6mm (39 to 63mil), see recommended hole pattern			
Ratings	Item	Rating			
	Voltage AC/DC 32V Max.				
	Current	2.0A MAX.			
	Temperature	-20 to 85 degree C			





3S612-62S3-BOO PP

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12-0.9±0.05 DIA.

 $2-1.5\pm0.05$ DIA.

-

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(14.9)

6.00±0.05 3.00±0.05 3.50±0.05

3S616-62S4-BOO PP

3M[™] Mini Stack Connector Dust Cover 3SD0x-S01

- For use when there are less than four sockets. Creates a four-socket block to plug into the header.
- Prevents debris from getting inside boardmount headers



Material & Plating	Item	Material	Remarks	
	Body	PBT resin	UL94V-0	
Ratings	Item	Rating		
	Temperature	-20 to 85 degree C		

Dimensions





Application Example



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	Htt	p :/	//wv	vw.	100y. com. tw

3M[™] Mini Stack Connector Hand Tool 3S900-1x

Product Number	Wire OD Accommodation mm (mil)
3\$900-13	0.6 to 1.0 (24 to 39)
3\$900-16	over 1.0 to 1.5 (39 to 59)



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