

Stacking Connectors High-density circuits between boards

The Cinch Advantage

CIN::APSE[®] stacking connectors are used for connecting PCB, flex PCB to PCB or component to PCB without the use of solder. The contacts are compact with a pitch of 0.050". Each pathway on the CIN::APSE[®] connector relies on a spring-like contact that establishes a durable electrical connection using mechanical pressure. The spring-like contact is protected from over compression by the CIN::APSE[®] insulator. Plungers are used on either side of the spring-like contact allowing compression cycles to over 100. The connector mounts onto the PCB and connects electrically to gold plated pads.

CIN::APSE[®] stacking connectors can be found in multiple military, aerospace and satellite applications where a mezzanine style PCB layout is utilized to reduce space and weight. CIN::APSE[®] 1.27mm pitch allows for high-density of circuits between boards. CIN::APSE[®] mechanical contacts are ideal for applications that require frequent disconnections for modifications or testing. The mechanical contacts also reduce soldering cost and rework.

Features

- 25, 51, 83, 166, 249 positions
- 0.125", 0.250" and 0.277" heights
- Gold plated contacts and plungers
- 0.006" working compression range

| Part Number | Positions | Height | | Rows | Fastener | | |
|-------------------|-----------|--------|------|------|-----------------------------|--|--|
| | | in | mm | | | | |
| 3800520001* | 25 | 0.125 | 3.18 | 2 | 2x #2 Thru Holes (Ø 0.090") | | |
| 3800520013* | 51 | 0.125 | 3.18 | 2 | 2x #2 Thru Holes (Ø 0.090") | | |
| 3900520017 | 83 | 0.277 | 7.04 | 5 | 2x #4 Thru Holes (Ø 0.124") | | |
| 3900520008 | 166 | 0.277 | 7.04 | 5 | 3x #4 Thru Holes (Ø 0.124") | | |
| 3800520038 | 249 | 0.277 | 7.04 | 5 | 4x #2-56 Tapped Insert | | |
| 3800520042 | 249 | 0.277 | 7.04 | 5 | 4x #4 Thru Holes (Ø 0.124") | | |
| *Oto also al Dast | | | | | | | |

*Stocked Part





Outline Specification

| Current Rating | 1-3A per positions | | | | |
|-----------------------|--------------------------------------|--|--|--|--|
| Withstanding Voltage | 500 VDC (sea level) | | | | |
| Contact Resistance | <50 milliohms | | | | |
| Housing | UL94V-O rated liquid crystal polymer | | | | |
| Plunger | Gold-plated copper alloy | | | | |
| Contact | Gold-plated molybdenum | | | | |
| Operating Temperature | -65°F (-55°C) to 257°F (125°C) | | | | |
| Durability | >100 mating cycles | | | | |
| Configuration | Plunger, Contact, Plunger | | | | |
| Alignment | With pins | | | | |
| Inductance | <2 nH | | | | |
| Vibration | 20 Gs, 10-2,000 Hz | | | | |

Configurations

25 Position



51 Position

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|----------------------------|-------|---------|---------|-----------|-------------|---------|----------|
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83 Position



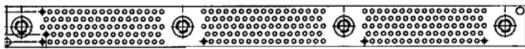
CONNECTIVITY SOLUTIONS

a be**l** group

166 Position



249 Position



Cinch Connectivity Solutions reserves the right to change specifications without notice

Europe, Middle East & Africa +44 (0) 1245 342060 CinchConnectivity@eu.cinch.com

North America +1 507.833.8822 ccsorders@us.cinch.com

Asia Pacific +86 21 5442 7668 ccs.asia.sales@as.cinch.com

belfuse.com/cinch

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