

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 0.040". 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® 1.0mm 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")
3800520002	25	0.250	6.35	2	2x #2 Thru Holes (Ø 0.090")
3800520004	25	0.125	3.18	2	2x #2 Thru Holes (Ø 0.090")
3800520005	25	0.250	6.35	2	2x #2 Thru Holes (Ø 0.090")
3800520013*	51	0.125	3.18	2	2x #2 Thru Holes (Ø 0.090")
3800520014	51	0.250	6.35	2	2x #2 Thru Holes (Ø 0.090")
3800520016	51	0.125	3.18	2	2x #2 Thru Holes (Ø 0.090")
3800520017	51	0.250	6.35	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")

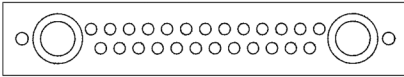
*Stocked Part

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	Contact, plunger, contact
Alignment	With pins
Inductance	<2 nH
Vibration	20 Gs, 10-2,000 Hz

Configurations

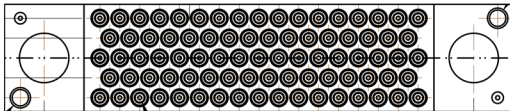
25 Position



51 Position



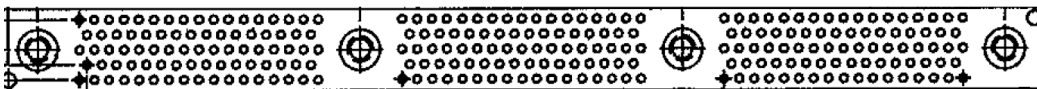
83 Position



166 Position



249 Position



Cinch Connectivity Solutions reserves the right to change specifications without notice



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