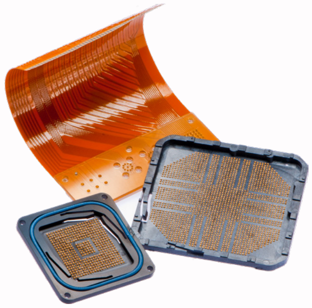
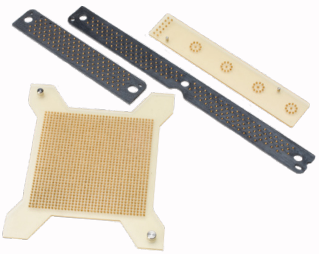
cinch
CONNECTIVITY SOLUTIONS
a bel group

CIN::APSE®

Technology Characteristics Overview





Standard Offering

CIN::APSE solderless, high density, custom interconnects are used for board to board, IC to board, flex to board and component to board applications. CIN::APSE is the most widely implemented crimpless and solderless, high speed, interconnect in the industry. The simple 2-piece, patent protected design enables 50+ Gbps, and wide range of profiles from 0.020 in to 1.0 in. CIN::APSE contacts are available in 0.5 mm and 1.0 mm diameters with a standard pitch of 1.0 mm or greater. CIN::APSE connectors have been designed with data, power and RF signals all in one concise package.

Diameter *Not sold as a loose contact	0.020 in (0.508 mm) & 0.040 in (1.016 mm)
Contact Material	Gold-Plated Molybdenum

Technical Specifications

Applications	IC to PCB (LGA), PCB to PCB, Flex to PCB
Contact Pitch	≥ 0.04 in (≥ 1.00 mm)
Current Capability	3 Amps continuous, max 6.5 Amps 30°C rise
Temperature Range	-75°F (-60°C) to 220°F (105°C)
Compliance Total	0.006 in max flatness
Compression Force / Contact	3 oz (85 g) / Contact
Crosstalk / Bandwidth	-25 dB @ 10 GHz
Insertion Loss / Bandwidth (S21)	0.1 dB @ 10 GHz and 0.6 dB @ 50 GHz
Return Loss / Bandwidth (S11)	-19 dB @ 10 GHz
Self / Mutual Inductance	0.4-0.5 nH / 0.01-0.10 nH
Ground / Mutual Capacitance	0.06 pF / 0.01-0.02 pF
Resistance	<15 mΩ

Markets

- Aerospace
- Communications
- Datacom
- Defense
- Medical

Applications

- EMI Shielding
- Grounding
- IC Sockets
- Interconnects
- Interposers
- Mezzaine Connectors
- RF / Coaxial
- Test Fixtures

Custom Programs

- Chip Packaging
- GHz Connectors
- Satellites
- Milimeter Wave
- Missiles
- Product Test
- UV / US
- Radar Arrays
- Space Probes

belfuse.com/cinch | 1-507-833-8822 | ccsorders@us.cinch.com