

electro mechanical

Cage Jack – PCB mounted single pole sockets

Highly reliable PCB connector with multiple contact points to 60% of the circumference of the mating pin. Used in conjunction with Connector Pins and Shorting Links. Also known as Jacks, Jack Sockets or PCB Sockets.

Mount – Solder, Press-fit, Swage, Crimp & Eyelet

Versions – Straight & Right Angled, Closed & Open ended, Insulated.

Acceptance Diameter – 0.41mm (0.016") to 2.54mm (0.100")

Current Carrying Capacity – up to 32 Amps.

Material

Spring Beryllium Copper

Body Copper or Brass, Deep Drawn or Machined

Plating Options

Gold - Tin - Tin/Gold

Right-angled versions can be supplied with colour code snap on insulator. Swaging tools available on request. Custom Designs available on request



Connector Pins - Also known as Plugs, Pins or PCB Pins

A range of precision machined Connector Pins for through board or used in conjunction with Cage Jack or Shorting Link Socket. Can be used when inserting into various PCB materials such as FR4 and Ceramic.

Mount – Solder, Press-fit, Swaged & Crimp

Versions – Straight & Right Angled. Standard, Slotted, Turreted, Eyelet & Patch Cord form.

Crimp AWG – 16 AWG – 28 AWG

Pin Diameter – 0.41mm (0.016") to 2.54mm (0.100")

Board Thickness

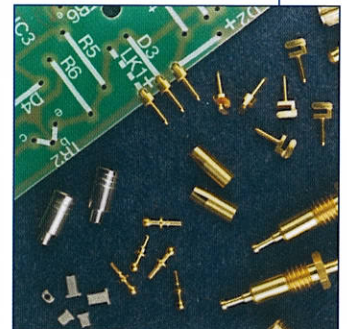
0.79mm (0.031") – 3.96mm (0.156")

Material

Brass or High performance Tellurium Copper

Plating Options – Gold - Tin

Connector Pins also designed in Patch Cord style. Comprehensive range of insertion tools specific to the Terminal mount.



Polygon Pins and Wire Wrap Terminals

Polygon Pins

A range of machined pins available in Brass or for high current applications, Tellurium Copper

Materials

Brass or Tellurium Copper

Plating options

Gold

Wire Wrap Terminals

A range of Wire Wrap Terminals either stamped or Polygon turned.

Termination – 2 & 3 Wrap lengths

Board Thickness

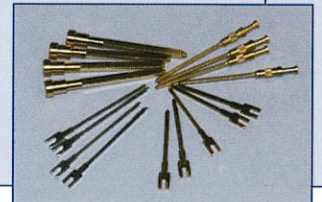
1.59mm (0.062") – 4.76mm (0.187")

Material – Brass

Plating options

Gold

Tin



Shorting Links - Also known as Handbags or Jumpers

Type – Male & Female

Styles – Insulated & Non Insulated

Pitch – 2.54mm (0.100") to 12.7mm (0.500")

Colours

Red, Blue & Black as standard other colours available on request

Material

Link

Insulator

Female Spring

Female Body

Brass

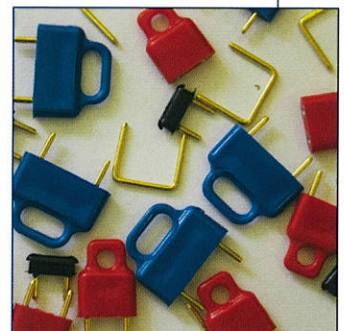
Polypropylene

Beryllium Copper

Copper

Plating Options

Gold - Tin - Tin/Gold



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Solder Terminals

A range of Terminals specific to the desired method of soldering.

Mount – Solder, Press-fit & Swaged

Versions – Slotted, Turreted & Threaded.

Board Thickness

0.79mm (0.031") – 3.18mm (0.125")

Material

Brass & Phosphor Bronze

Plating Options

Silver

Gold

ElectroTin

Electro Solder

Comprehensive range of insertion tools specific to the Terminal mount



Insulated Terminals

A range of Insulated Terminals in the stand off or feed-through style.

Versions – Slotted, Turreted & Threaded

Insulator Material

PTFE (Teflon)

Diallyl Phthalate

Ceramic

Tufnol

Terminal Material

Brass

Plating Options

Silver

Gold

ElectroTin

Electro Solder

Comprehensive range of insertion tools specific to the Terminal type.



Connectaball - PCB test points

A Quick and simple means of termination for PCB test points. Machined for high performance and reliability with eight points of contact on engagement. Unhindered movement of the assembly within a solid angle of 90° about the axis of the test point, beyond which the assembly disengages automatically.

Mount – Surface Mount, Press-fit, Swaged & Edge Mount

Type – Ball & Socket Wire Assembly

Electrical – Working Current – 3 Amps Max.

Contact Resistance – 5mΩ

Mechanical – Engaging force – 60N

Pull off force – 4.9N

Material – Ball & Socket – Brass Socket Insulator – PTFE

Socket Wire – 19*0.2, silver-plated copper, Teflon insulated or 28*0.15, tinned copper, PVC insulated. Supplied in standard length of 457mm (18.00"), other length made to order.

Plating Options – Silver – Gold – Electro Tin

Colours – Red, Blue & Black as standard other colours available on request



Relay Bases

Available as 8 and 11 way, with, and without mounting ears, to suit Leach Relays types M300 and M500. Other versions available on request

Materials

Insulator – High temperature plastic, UL 94V-0, suitable for vapor phase, infrared and wave soldering

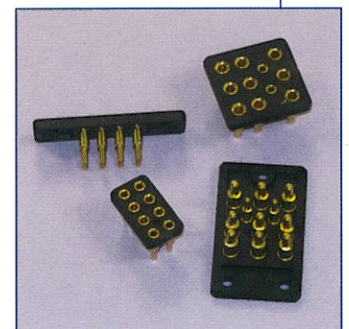
Contacts – Brass, Gold plated

Clips – Beryllium Copper, Gold plated

Operating Temperature Range

-40°C to +125°C

Current – upto 25A



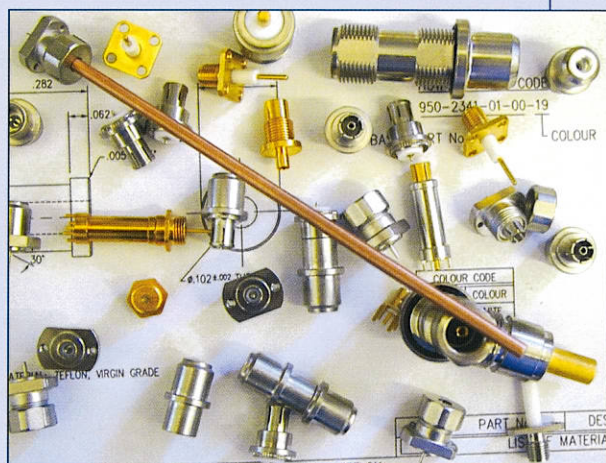
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RF Connectors

Recent major investment in 'state of art' CNC machining centres and contact less measurement systems, has allowed Cambion to compliment its range of high performance connectors and inductive products, with RF Connectors. Specialising in manufacture of custom variants of industry standards.

Cambion can offer a unique development facility of precision turning and prototyping of application specials in styles such N type, 7/16, SMA, SMB, SSMB, MCX, Din 41626 and many more, incorporating blind mates, quick termination with minimal outlay.

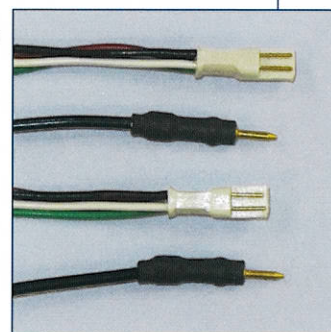
Also available are custom converters and adaptors theoretically between any standard range of RF Connectors. Contact our Technical Sales Desk on + 44 (0)1433 621555 or send enquiry via email to sales@cambion.com



Custom Connectors and Cable Assembly

Cambion are able to assist with Electro-Mechanical component design, either hybrid versions of standard products, or to an application specific requirement, supported with fast turnaround of prototypes via its UK manufacturing facility.

Additionally, Cambion can offer full project management of connector and cable harness developments.



Battery Holders / Component Clips / Stand Offs

Battery Holders

A range of Battery Holders to accept a range of industry standard batteries.

Styles – AA, C, D & PP3

Mount – Screw & Through Board Solder

Material

Body & Clip – Polyester
Spring/Solder Lug – Phosphor Bronze

Plating (Spring/Lug) – Tin
Battery Clip Supplied loose with assembly

Component Clips

Consist of a metal housing and a spring-loaded plunger which, when depressed opens to accept a component lead. Mainly used for testing and burn in components.

Mount – Thread (2-56 & 3-48), Swage, Press-fit, Pluggable

Version – Insulated & Non-Insulated, Capped Plunger.

Material Housing & Plunger – Brass.
Spring – Cres. Steel, Passivated

Insulator – PTFE (Teflon)

Plunger Cap – Nylon

Plating Options – Nickel – Electro Solder

Stand Offs & Spacers

A range of stand-offs and spacer in both round and hex forms.

Lengths 4mm (0.157") to 25.4mm (1.000")

Versions – Through hole or Threaded.

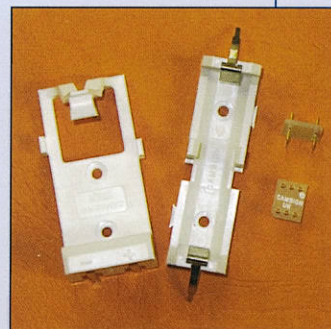
Tapped Imperial 2-56 to 6-32 / Metric M2 to M4

Material Options

Brass – Stainless Steel – Aluminium

Plating Options

Nickel – Cadmium



Inductive products

Filtered Terminals

Capacitance – E12 range from 150pF to 2200pF
Capacitance Tolerance – $\pm 20\%$, $\pm 10\%$ and $\pm 5\%$
Working Voltage – over 500V DC
Working current – upto 20 Amps

Plating – include gold, silver and tin

Mounting – Thread, solder and swaged

Additional elements such as inductors can be included within the package to form Pi filters



Air Coils

Types – with or without ferrite, Iron powder and steel cores

Diameter – 1mm to 40mm

Turns – up to 100

Wire size – 0.1mm to 5mm

Wire type – silver plated, tinned, enamel coated copper and aluminium

Applications include – power supplies, noise suppression, RF filters



Variable Coils

Inductance – 50nH to over 100mH

"Q" – greater than 200

Frequency range – from below 1KHz to over 500MHz

Styles – Open and magnetically shielded versions

Pattern size – 5, 7 and 10mm others to order

Mounting – through hole and surface mount

Applications Include – filters, if transformer, communications systems, telemetry



Chokes

Inductance – 22nH to over 100mH

Current – greater than 4A

DCR – less than 10m Ω

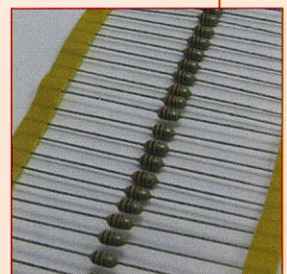
"Q" – greater than 100

Tolerance – 5% and 10% available others to special order

Case type – open, shrink sleeve, epoxy and moulded

Packaging – loose, ammo pack or tape and reel

Applications include – communications equipment, RFID, filter networks



Toroids

Outside Diameter – 1.5mm to 175mm

Core material – strip steel, amorphous, iron powder and ferrite

Wire size – 0.05mm to over 3mm

Mounting – self-leaded, surface mount, open frame, potted

Applications include – dc-dc converters, common mode and differential mode filter, RFmixer, baluns, current sensors, audio systems



Inductive products

Wire Wound Chip

Footprint – 0402, 0603, 0805, 1008 and 1812

Inductance – 1nH to 1mH

Current – up to 1.3A

Tolerance – 2%, 5%, 10% and 20%

Core materials – ceramic and ferrite

Applications Include – communication systems, cellular telephones, filter networks, telemetry



Drum Cores

Inductance – 3.3μH to over 250mH

Current – up to 30A

Tolerance – 5%, 10% and 20%

Packaging – loose or tape and reel

Covering – heat shrink or ferrite sleeved versions available

Mounting – through hole and surface mount

Application include – power supplies, class D amplifiers and speaker crossovers



RFID

Inductance – 250nH to 23.8mH

Tolerance – 2%, 5% and 10% others to order

Core types – air core, ceramic, phenolic, ferrite and iron powder

Packaging – loose or tape and reel

Applications include – various frequency segments including 60KHz, 125KHz, 134KHz, 8.3MHz, 13.56MHz, 432MHz and 915MHz



Transformers

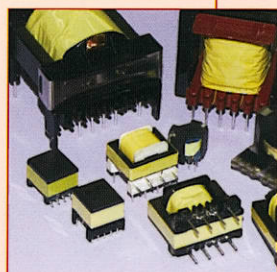
Types – linear and switching

Core material – laminated steel, laminated nickel, iron powder and ferrite

Power rating – from 0.2VA to over 500VA

Styles – through hole and surface mount, open frame, potted, planar and traditional winding methods

Applications include – dc-dc converter, ac-dc or dc-ac power supplies, impedance matching



Custom

All of the products listed can be tailored to customer requirements.

Our in house tooling and moulding facility can provide fast turnaround together with competitive pricing.

Cambion are able to take your project from drawing board through prototype to low cost, high volume production with industry recognised standards.

