



Interconnect Solutions
Cannon, VEAM, BIW

Interconnect Product Portfolio



Engineered for life

Cannon, VEAM, BIW

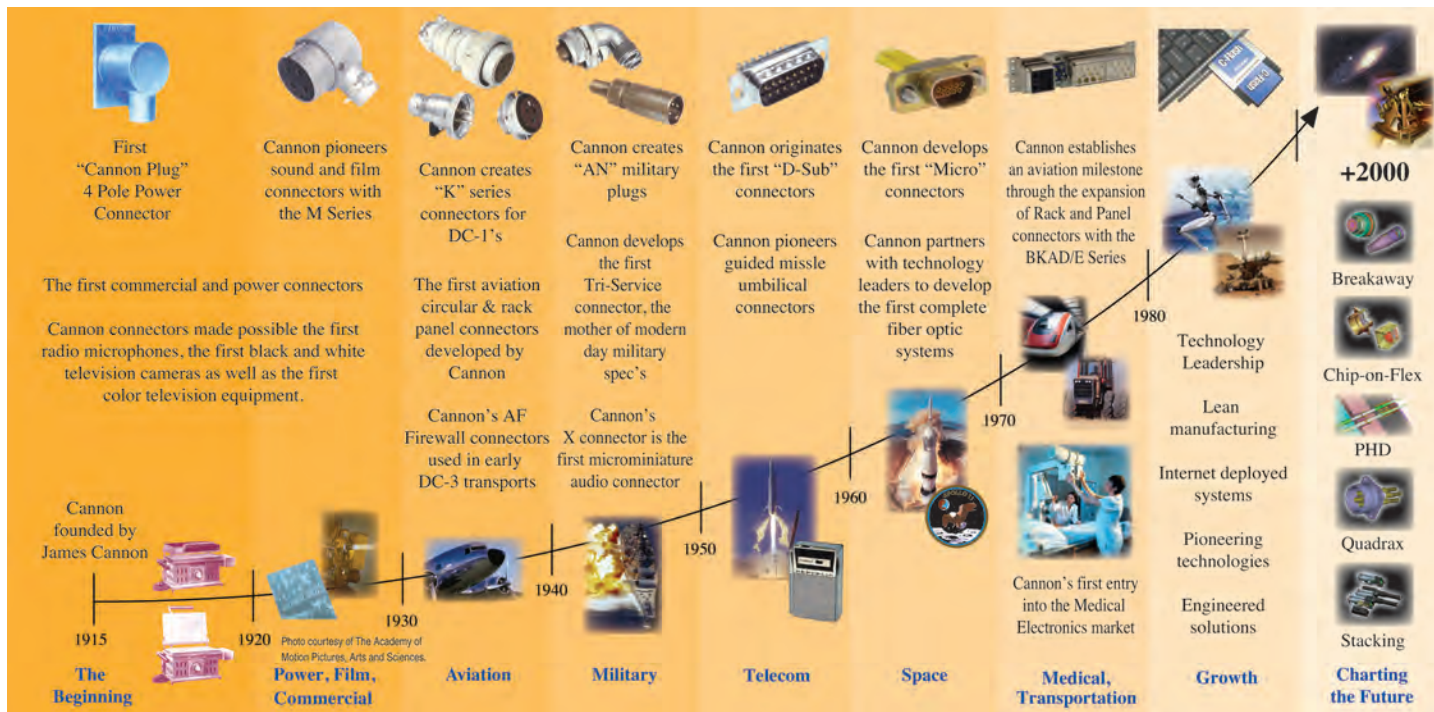
A Historical Achievement of Technology Leadership

Defining and Championing Innovation

Showcasing a portfolio of creativity, ITT's "Engineered For Life" execution embraces products which have become ubiquitous in a broad collection of markets including: Military/Aerospace, Civil Aircraft, Industrial Instrumentation, Medical, Oil & Gas, Energy, Transportation, Telecom/Handset, Computer, Consumer, and Automotive.

ITT's rich interconnect history embraces contributions to both technological breakthroughs and social movements. With one of the industry's broadest product offerings, ITT's interconnect products have supported:

- Every Free World space mission, bringing the universe to our doorstep.
- Motion picture, radio, and television equipment, serving laughter and entertainment to millions.
- Commercial and military communications systems, linking the voices of the world.
- Computerized tools, reshaping the information highway.
- Aircraft, rapid transit, and automobiles, mobilizing our expanding society.
- Oil and natural gas production, powering the world's economies.
- Agricultural equipment, attacking the roots of world hunger.



ITT Interconnect Solutions

ITT Interconnect Solutions is a division of the multi-national ITT Corporation, a \$9 billion dollar global enterprise representing the brands Cannon, VEAM, and BIW. Our connector portfolio remains the most extensive in the industry offering the most reliable and cost effective range of interconnect solutions. These innovations have enabled ITT to provide products and technologies to such markets as:

- Automotive
- Computer/Consumer
- Industrial/Instrumentation
- Military/Aerospace
- Oil Fields
- Telecom/Handset
- Transportation

When you specify a Cannon, VEAM or BIW connector, you can rely on a product designed, developed, and manufactured to the highest quality and reliability standards. This tradition of excellence is based on ITT's corporate culture of operating its businesses under the principles of Six Sigma. At ITT, Six Sigma is not just a quality philosophy but a complete corporate culture that drives the entire business. Our Value Based Management and Value Based Product Development systems are two cornerstones that allow for the development of both leadership and product engineering principles, ensuring the correct industry leading products are developed to the accepted market driven lead times. These principles have allowed ITT to become the market leader in all of our business portfolios.

Six Sigma Manufacturing

ITT operates manufacturing facilities in the United States, Germany, Italy, Mexico, China, Japan and the UK, all of which have particular product area strengths allowing ITT to offer a truly global footprint to our customers. Our facilities are world class and accommodate full vertical integration utilizing the latest manufacturing technologies including: automated and robotic machining centers, Super Market manufacturing cells, Kanban pull systems, and automated electrical, mechanical, and optical test and inspection equipment. The combination of our manufacturing strength and our

advanced manufacturing facilities allows ITT to offer products at market driven prices. Our capabilities, especially in robotics, computerized precision tooling, Kaizen Project Management, Six Sigma tools, and testing, give ITT the most optimized global manufacturing footprint in the interconnect industry.

The Custom Difference

As the industry leader in harsh environment interconnect applications, ITT's world class engineering teams will work directly with our customers to design and develop cost effective solutions for their applications. In many cases we may modify one of our standard designs to ensure a highly reliable solution where timing is critical. Yet, in those cases where a complete custom interconnect solution is required, ITT will work with our customer's Engineers to design an interconnect solution which will be cost effective yet highly reliable. As professional consultants, our Engineering teams will provide a thorough systems and mechanical analysis of any proposed solution. These analyses provide our customers with sophisticated electrical signal and mechanical characterizations to determine the best solution for their application.

RoHS Compliance Information

ITT has implemented a strict parts control plan for all ITT electronics plants worldwide that allows the Cannon, VEAM, and BIW connector product portfolios to meet the requirements of European Union Directive 2002/95/EC better known as the Reduction of Hazardous Substances initiative. As appropriate, specific Cannon, VEAM, and BIW products may be ordered with an R prefix number which insures our customers will receive RoHS compliant parts for their commercial electronics applications and equipment. Since most RoHS hazardous substances center around specific metal plating and lead solder coatings, ITT's products for RoHS compliance are available in the following plating finishes: electroless nickel, stainless steel, Anodize over aluminum and Gold plating. It should be noted that gold plating would be recommended as the replacement for tin-lead solder when ordering board mount connectors.



Audio / Entertainment	10-11
GRH	
CIR_FR	
Mini XL, 40% smaller than XLR	
XLB-PCB, Plastic Shell, PCB Mount, Low Cost	
XLM-PCB, Metal Shell, PCB Mount, EMI Shielding	
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BFR/TBF; MIL-DTL-5015, Pressurized Bulkhead Receptacle	
CA/MS-A&B; MIL-DTL-5015, Low Cost, High Reliability	
CA-Bayonet; VG95234, Environmental, Bayonet Coupling	
CA-COM, Commercial, Nickel Plated Shells	
CA-KE; MIL-DTL-5015 Type, Firewall, Fire Proof and Moisture Proof	
CGE; VG96929, High Current at Low Voltage	
CGKX/KPTA; VG96912/VG95328, Environmental, High Density	
CIR	
FVF/FRA/WFB; MIL-DTL-5015 type	
GS (Glass Sealed); MIL-C-5015 (see <i>Hermetic</i> , page 31)	
KJL/KJ/KJA; MIL-DTL-38999, Series I, II, III	
KJLY/KJY/KJAY; MIL-DTL-38999, Series I, II, III (see <i>Hermetic</i> , page 31)	
KPT/KPSE; MIL-C-26482, Series I; VG95328	
KPTC/KPTC-NG, Metal Shell, High Density	
KPTH/PVAH; MIL-DTL-26482, Series I, II (see <i>Hermetic</i> , page 31)	
M83723/CVA, MIL-DTL-83723, Series II (USAF)	
MIKM (see <i>Microminiature</i> , page 38)	
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MS/CA-E/F/R/ER; MIL-DTL-5015, Environmental, Low Cost, High Reliability	
MS/CA-K; MIL-DTL-5015, Firewall	
MS/CV345*; MIL-DTL-5015, Rear Release	
Neptune (see <i>Trident</i> , page 56)	
Powerlock	
PV/PV-TBF, MIL-C-26482, Series 2, Environmental	
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RPTT	
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SureSeal/Mini Sure-Seal (see <i>Sure-Seal</i> , page 51)	
TKJL/TKJ/TKJA/TKJB (see <i>Filter</i> , page 30)	
TNM – Trident Neptune Metal (see <i>Trident</i> , page 56)	
TPV (see <i>Filter</i> , page 30)	
VEAM PT/PTSE/CPT/Audio	
Trinity™ MKJ Mini Circular	
Nemesis™	

Connector Product Overview

Compact Flash Packaging Kit	21
C-Flash™ Cards and Connectors	
D Subminiature	22-27
D*, Eurostyle, Low Profile, 90° PC Tail	
D*, Solder Cup Termination, Tin Shells, Cable Mount	
D*, Solder Termination, 90° PCB	
– European Footprint 10,2 or 9,4 mm	
D*, Solder Termination, Straight PCB	
– European PC Tails	
D*, Wire Wrap Post Termination, Straight PCB	
D*A, Combo D™	
D*A, Crimp Connectors without Contacts, Cable Mount	
D*BMA, Bulkhead	
D*D, Environmental D; MIL-C-24308	
D*JK/D*JT (see <i>Filter</i> , page 29)	
D*H/D*TBH, (see <i>Hermetic</i> , page 31)	
D*M, Combo D™	
D*M, Solder Termination, 90° PCB	
– Standard Footprint .318 or .283 inch	
D*M, Solder Termination, Straight PCB	
– Standard PC tails	
D*M/D*MA, Space/High Reliability; MIL-DTL-24308	
D*MM/D*MAM, Military/High Reliability; MIL-DTL-24308	
D*NG, Pressfit Termination, Straight PCB	
D*SF	
D*A	
D*W, Discrete Wire IDC	
MDSM (see <i>Microminiature</i> , page 38)	
TD1* (see <i>Filter</i> , page 29)	
TMDM (see <i>Filter</i> , page 30)	
ZD*, Solder Cup Termination, Tin Shells, Cable Mount	
ZD*, Solder Termination, 90° PCB	
– European Footprint 10,2 mm	
ZD*, Solder Termination, Straight PCB	
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FOHC, Fiber Optic Hybrid Contacts	
FOMC, Fiber Optic Multi-Channel Connectors and Termini	
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CFKJA, Subminiature Chip on Flex	
D*JK/D*JT (Commercial D Subminiature)	
TBKA (Rack & Panel); ARINC Series 600 Standard	
TD1* (D Subminiature); MIL-C-24308	
TDPX; (Rack & Panel); ARINC Series 404 Standard; MIL-C-81650	
TKJL/TKJ/TKJA/TKJB (Miniature Circular); MIL-C-38999, Series I, II, III, IV	
TMDM (Microminiature D Subminiature); MIL-PRF-83513	
TPV (Miniature Circular); MIL-C-26482, Series 2 and MIL-C-83723, Series 1	

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Hermetic	31-32
<ul style="list-style-type: none"> BFH/TBFH (Standard Circular); MIL-DTL-5015 D*H/D*TBH (D Subminiature); MIL-DTL-24308 GS (Standard Circular); MIL-C-5015 KJLY/KJY/KJAY (Miniature Circular); MIL-DTL-38999, Series I, II, III KPTH/PVAH (Miniature Circular); MIL-C-26482, Series I, II MDMH (Microminiature D Subminiature); MIL-PRF-83513 	
Industrial Motors	33
<ul style="list-style-type: none"> CmX Servo/Linear 	
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<ul style="list-style-type: none"> • Micro Line: 1,27(.050) Contact Spacing <ul style="list-style-type: none"> – MDM, Micro D Metal; MIL-PRF-83513 – MDM C/P, Coaxial/Power; MIL-PRF-83513 – MDMH; MIL-PRF-83513 (see <i>Hermetic</i>, page 32) – MDM-PCB, Printed Circuit Board; MIL-PRF-83513 – MD, Micro D Plastic; MIL-C-83513 – MDB C/P, Coaxial/Power; MIL-C-83513 – MDB-PCB; Micro D-Printed Circuit Board, MIL-C-83513 – MT (MTV/MTB) Series, (Micro Strip) – MEB, Edgeboard • Centi-Line: 1,90(.075) Contact Spacing <ul style="list-style-type: none"> – 2D, Double Density D – 2DD, Environmental Double Density D – CDL, Centi D Loc – CTA Series (Centi Strip) • Nano Line: 0,64(.025) Contact Spacing <ul style="list-style-type: none"> – NDM, Metal Shell – NJS, Nano Center Jackscrew, Rectangular – NT (NTP/NTDP) Series (Nano Strip) <p>MJS, Micro Center Jackscrew Series; MIL-C-83513 MIKM, Micro K Screw Coupling; MIL-C-83513 MIKQ, Micro K Push/Pull Coupling; MIL-C-83513 MDSM, Micro D Subminiature</p>	
Mobile	40-41
<ul style="list-style-type: none"> • LF <ul style="list-style-type: none"> – Universal Contact • RF <ul style="list-style-type: none"> – Fakra – LPC CP1 – LPC CP1 Accessories – LPC MID – LPC SP1 – Mini RF 	

Connector Product Overview

PC Card, PCMCIA I/O Card Kit	42
StarCard Snappy™	
StarCard Ultra™	
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Printed Circuit Board	43
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Tempus™ CBC20HS; Series 1000/2000 (2mm)	
Tempus™ CBC20HS; Series 4000 (2mm)	
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DPA/DPAMA	
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DPGM/DPJM/DPJMB	
DPK; MIL-C-83733 (USAF)	
DPX; ARINC Series 404 Standard	
DPXNA/DPXNE; MIL-C-81659	
SGA, Single Gang ARINC	
TBKAD (Rack & Panel); ARINC Series 600 Standard (see <i>Filter</i> , page 29)	
TDPX (Rack & Panel); ARINC Series 404 Standard (see <i>Filter</i> , page 30)	
RF Coaxial Connectors	46-49
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1.6/5.6	
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Coaxial Terminators	
Fakra (see <i>Mobile</i> , page 40)	
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LPC CP1 Accessories (see <i>Mobile</i> , page 41)	
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Transportation	52-52
Cannon Aquatica™ APD/DIN 72585	
APE	
APV Vector™	
CIR 290	
CIR 295	
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Multiway (Rack & Panel)	
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Snap Together – Slimline	
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DL4 (Metal)	
DLD (Drawer)	
DLM (Metal)	
DL Pressfit Adapter	
DLP-272	
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Connector Product Overview

Audio / Entertainment: GRH



VEAM GRH

GRH is a quarter turn coupling 5 pin cylindrical power connector for 100 amps continuous service. This is an extremely rugged connector with a compact size in comparison to competitive offerings. Set screw contact termination affords ease of wire installation.

Literature Reference: [Audio XL](#)

Applications:

- Power Distribution Boxes
- Portable Power Generation Systems

Product Features:

- Finger protected contacts guarantee operator safety
- Rubber covered coupling nut for superior grip and durability
- Machined aluminum shells with black hard anodize finish
- High shock and vibration resistance

Audio / Entertainment: CIR_FR



VEAM CIR_FR

Used for HMI lighting applications, these rugged connectors with hard black anodized finish are available with extended coupling nuts for better gripping. Uses metal or composite backshells. Various types of strain relief options are available.

Literature Reference: [Audio XL](#)

Applications:

- HMI Lights
- Studio Controls

Product Features:

- Quick-Disconnect, Positive Lock
- UL Recognized

Audio / Entertainment:Mini-XL



Cannon Mini-XL

The Mini-XL audio connector is 40% smaller than XLR connectors, 3 to 6 position plugs and receptacles feature precision machined contacts and accommodates both cable and panel mount applications. This quick one touch connect/disconnect circular connector is designed to withstand extreme field use. RoHS Compliant.

Literature Reference: [Audio XL](#)

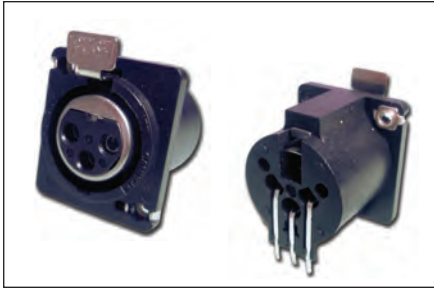
Applications:

- Broadcast/Entertainment Equipment
- Medical Devices

Product Features:

- Gold plated contacts standard
- Rear cap available in plastic or metal
- High density solution

Audio / Entertainment: XLB-PCB



Literature Reference: [Audio XL](#)

Cannon XLB-PCB

XLB male and female PCB flange mount receptacles are a plastic low cost alternative to our metal XLM-PCB connectors. They are ideal for applications where EMI protection and precise mechanical stability are not essential. The XLB-PCB connectors are interchangeable and intermateable with our XLR series. RoHS compliant.

Applications:

- **Broadcast/Entertainment Equipment**
- **Medical and Industrial control devices**

Product Features:

- **Lightweight design.**
- **Separate ground contact**

Audio / Entertainment: XLM-PCB



Literature Reference: [Audio XL](#)

Cannon XLM-PCB

XLM male and female PCB metal flange mount receptacles offer durability, reliability, space savings, and greatly improved EMI shielding over our plastic XLB-PCB connectors. Ease of installation is enhanced since the grounding terminal can be used to temporarily fasten the connector to the circuit board during assembly. The XLM-PCB connectors are interchangeable and intermateable with our XLR series. RoHS Compliant.

Applications:

- **Broadcasting/Entertainment Equipment**
- **Medical and Industrial control Devices**

Product Features:

- **Separate ground contact.**
- **Space-saving (smaller shell).**

Audio / Entertainment: XLR



Literature Reference: [Audio XL](#)

Cannon XLR

First introduced in 1958 ITT's broad range of XLR connectors are extensively used in a wide variety of audio OEM applications. Available in configurations of 2 and 7 positions, our plugs and receptacles offer precision, machined contacts, shock-absorbing rubber insulators, and lightweight aluminum shells. RoHS Compliant.

Applications:

- **Audio Visual Equipment**
- **Broadcasting Equipment**

Product Features

- **Rugged design to withstand extreme field use.**
- **Quick disconnect latch lock.**

Audio / Entertainment: VEAM VSC



Literature Reference: [Audio XL](#)

VEAM VSC

VSC is a threaded coupling 19 pin cylindrical series of connectors for lighting applications. Uses the VEAM superior quality and design concept to provide a very rugged version of the Socapex™, SL-419 connector family. A 7 pin version VSC is now available.

Applications:

- **Break-out & Break-in Cables**
- **Dimmers**
- **Junction Boxes**

Product Features

- **Meets IP67 in a mated condition**
- **UL Recognized**
- **Machined aluminum shells with black hard anodize finish**

Connector Product Overview

BIW Connector Systems: Electric Vehicles: Apollo's Power Connectors, 400/200 Series



BIW Apollo

Apollo EV power connectors, series 200 and 450, are designed for fast charging of battery powered electric vehicles. Connectors are intended to be used with microprocessor controlled off-board charging systems, which supply charging current to vehicle battery packs up to 450 A. Connectors are suitable for outdoor use and are field proven to withstand severe handling.

Applications:

- **Electric Vehicle Fast Charging**
- **High Current Connection**

Product Features:

- **PowerGlide contacts, low insertion forces.**
- **Molded design.**
- **Optional LED lights.**

BIW Connector Systems: Industrial & Military: High Voltage Cable Assembly



BIW High Voltage

The High Voltage Cable Assembly provides corona-free performance at 10,000 V dc, continuous working voltage, in high ambient temperature conditions.

Applications:

- **Industrial/Electronic**
- **Military/Aerospace**

Product Features:

- **Gold plated contacts.**
- **Silicone insulation.**
- **Tapered contact inserts.**
- **4-Conductor design.**

BIW Connector Systems: Electrical Power Connectors for Oil and Gas Wells



Literature Reference: [Electrical Feedthru Systems for Oil and Gas](#)

BIW Electrical Power Connectors

BIW Electrical Power Connectors have a world-wide reputation for reliability and quality in the oil and gas industry. BIW products are used in the recovery of oil and gas on six continents. From instrumentation connectors that monitor oil and gas production to power connectors that safely provide the energy to operate high powered systems related to oil production, BIW offers a wide product range to meet virtually any requirement.

Applications:

- **Oil and Gas Field Production**

Product Features:

- **Approved for Hazardous Zones**
- **Withstand pressures to 10,000 psi**
- **Service up to 5 KV, 200A**

BIW Connector Systems: Underwater: WetSeal



Literature Reference: [WetSeal](#)

BIW WetSeal

WetSeal underwater connectors feature heavy duty metal shells and are available with 3 to 84 contacts. Elastomeric inserts provide redundant levels of sealing against fluid intrusion, and most connectors do not require O-rings.

Applications:

- **ROV Military & Commercial**

Product Features:

- **Pressure rated to 10,000 psi.**
- **Low mating forces.**

Cable Assemblies: Cabling Capabilities



Cabling Capabilities - Cannon & VEAM

What's unique about ITT's cable assembly capabilities is that we have the flexibility to meet demanding schedules and design requirements. From concept to prototyping, engineering to manufacturing.

Applications:

- Avionics/Military
- Communications
- Industrial

Product Features:

- Customized solutions.
- Harness design and/or design consultation.

[Literature Reference: Cable Assemblies](#)

Connector Product Overview

Circular: BFR/TBF; MIL-DTL-5015



Literature Reference: ICS Military/Aerospace Sourcebook

Cannon BFR/TBF

BFR/TBFR (bulkhead fitting or thru-bulkhead fitting with rubber insert) pressurized bulkhead receptacles are compatible with standard MS type plugs (3106, 3107, 3108) with corresponding size and contact arrangements.

Applications:

- Aerospace
- Military

Product Features:

- Threaded coupling.
- TBF allow coupling from both ends.

Circular: CA/MS-A&B; MIL-DTL-5015



Literature Reference: MS A&B

Cannon CA/MS-A&B

The CA/MS-A&B design meets the performance requirements of MIL-DTL-5015. Available in 50 popular sizes and configurations in Class A (CA/MS-A, solid endbell) and Class B (CA/MS-B, split endbell) versions.

Applications:

- Industrial Controls
- Test Equipment

Product Features:

- Threaded Coupling
- Machined contacts
- RoHS Option w/black zinc plating

Circular: CA-Bayonet; VG95234



Literature Reference: CA Bayonet

Cannon CA-Bayonet

VG/CA-Bayonet signal and power connectors provide superior performance in extreme environmental conditions. They offer exceptional sealing against the ingress of fluids and will withstand the effects of high vibration.

Applications:

- Heavy Vehicle
- Industrial
- Transportation

Product Features:

- Bayonet coupling.
- Audible sound and color-code indicate positive mating.

Circular: CA-COM



Literature Reference: CA-COM

Cannon CA-COM

CA-COM commercial signal and power connectors are designed to resist aggressive fluids like fuel, oil, etc. Compatible with MIL-DTL-5015 and VG95234 connectors with corresponding size, contact arrangements, and coupling method.

Applications:

- Commercial
- Industrial

Product Features

- Threaded and bayonet coupling.
- Nickel plated shells.

Circular: CA-KE; MIL-DTL-5015 type



Literature Reference: [ICS Military/Aerospace Sourcebook](#)

Cannon CA-KE

Environment-resistant firewall connectors combine moisture resistance with fireproof characteristics. Although fully compatible with standard MIL-DTL-5015 type connectors, to maintain their moisture seal and fire resistance, CA-KE connectors must mate with other CA-KE connectors with corresponding size and contact arrangements.

Applications:

- Industrial
- Military

Product Features:

- Threaded coupling.
- Fireproof and moisture resistant.

Circular: CGE; VG96929



Literature Reference: [CGE](#)

Cannon CGE

CGE connectors are designed to transmit very high current at low voltage. They meet the mating dimensions, mechanical features and rear panel installation requirements of VG96929.

Applications:

- Industrial
- Military

Product Features:

- Bayonet coupling.
- Audible sound and color-code indicate positive mating.

Circular: CGKX/KPTA; VG96912/VG95328



Cannon CGKX/KPTA

Miniature CGKX/KPTA circular connectors offer high contact density in a rugged metal shell. They feature environmental sealing with fast and easy mating/unmating with bayonet coupling.

Applications:

- Industrial Automation
- Black Box

Product Features:

- Bayonet coupling.
- Lightweight.

Circular: CIR



Literature Reference: [VEAM CIR](#)

VEAM CIR

The VEAM CIR Series is the most versatile electrical, optical and pneumatic multi-pin connector available today. Designed originally for the hostile environment of Transit applications, CIR has earned acceptance in Military, Commercial, Nuclear and Entertainment markets requiring nearly non-destructible connector systems.

Applications:

- Mass Transit
- Commercial
- Military/Defense
- Entertainment
- Nuclear

Product Features

- Quick Quarter Turn Coupling
- Environmental Sealing
- High shock and Vibration resistance
- Over 250 insert arrangements available

Connector Product Overview

Circular: FVF/FRA/WFB; MIL-DTL-5015 type



Cannon FVF/FRA/WFB

FVF lightweight firewall connectors are designed according to MIL-DTL-5015, Class K. They utilize fluid resistant elastomers to provide maximum protection against degrading fuels, oils, coolants, and cleaners. FRA connectors are an aluminum shell version of the FRF/WFB connectors are an aluminum shell version qualified to Boeing BACC63CD & CE.

Applications:

- Commercial Aircraft
- Military Aircraft

Product Features:

- Threaded coupling.
- Front release contacts.

Literature Reference: ICS Military/Aerospace Sourcebook

Circular: KJL/KJ/KJA; MIL-DTL-38999 Series I, II, III



Cannon KJL/KJ/KJA

High performance, high contact density miniature circular connectors are designed according to MIL-DTL-38999.

Applications:

- Military
- Satellite

Product Features:

- Bayonet and threaded coupling.
- Rear release snap-in contacts.

Literature Reference: Cannon Mil-DTL-38999

Circular: KPT/KPSE; MIL-C-26482, Series I; VG95328



Cannon KPT/KPSE

Miniature circular series with general purpose solder contacts and high performance crimp contacts. They feature fast and easy mating/ unmating with a three point bayonet coupling.

Applications:

- Industrial
- Military

Product Features:

- Bayonet coupling.
- Closed-entry socket contacts.
- RoHS Option w/black zinc plating

Literature Reference: ICS Military/Aerospace Sourcebook

Circular: KPTC/KPTC-NG



Cannon KPTC/KPTC-NG

Miniature KPTC/KPTC-NG (New Generation) connectors offer high contact density in a rugged metal shell. They feature environmental sealing with a fast and easy mating/unmating with bayonet coupling.

Applications:

- Black Box
- Industrial Automotive
- Motion Control

Product Features:

- Bayonet coupling.
- Lightweight.

Circular: M83723/CVA; MIL-DTL-83723



Cannon M83723/CVA

M83723/CVA series is high reliability version of the MIL-DTL-5015 type connectors. They utilize removable rear release crimp contacts. They are compatible with MIL-DTL-5015 connectors with corresponding size and contact arrangements.

Applications:

- Military
- Space

Product Features:

- Threaded coupling.
- Rear release crimp contacts.

Circular: MS/CA-E/F/R/ER; MIL-DTL-5015



Cannon MS/CA-E/F/R/ER

MS/CA-E/F/R series are designed for extreme environmental sealing and high altitude conditions. MS/CA-ER are lightweight potting connectors that offer exceptional sealing against salt, water, fuels, etc., and will withstand the effects of high vibration.

Applications:

- Commercial
- Industrial

Product Features:

- Threaded coupling.
- Low cost, high reliability.
- RoHS Option w/black zinc plating.

[Literature Reference: ICS Military/Aerospace Sourcebook](#)

Circular: MS/CA-K; MIL-DTL-5015



Cannon MS/CA-K

MS/CA-K Firewall connectors qualified to the fireproof test of MIL-DTL-5015. These connectors are not environmentally sealed.

Applications:

- Industrial
- Military

Product Features:

- Threaded coupling.
- Crimp or thermocouple (solder) contacts.

[Literature Reference: ICS Military/Aerospace Sourcebook](#)

Circular: MS/CV345*; MIL-DTL-5015 (Navy), Rear Release



Cannon MS/CV345*

Standard circular high environmental (MS/CV345*) connectors according to MIL-DTL-5015 (Navy). They utilize fluid resistant elastomers to provide maximum protection against degrading fuels, oils, coolants, and cleaners.

Applications:

- Industrial
- Military

Product Features:

- Threaded coupling.
- Intermateable with threaded MIL-C-83723.

[Literature Reference: ICS Military/Aerospace Sourcebook](#)



Connector Product Overview

Circular: Powerlock



Literature Reference: [VEAM Powerlock](#)

VEAM Powerlock

The VEAM Powerlock Series is designed for applications up to 660 amps terminating to cables up to 300mm². The contact mating areas are finger touch protected and these connectors are color coded with keyway orientation and locking mechanisms for a safe and reliable connection system.

Applications:

- Three Phase Motors
- Mobile Generators
- Lighting Distribution Panels
- Theme Park Rides

Product Features:

- Finger touch Protected contacts
- Meets IP67 in a mated condition
- UL Recognized

Circular; VEAM PT/PTSE/CPT/Audio



Literature Reference: [VEAM PT](#)

VEAM PT/PTSE/CPT/Audio

Miniature circular connectors based on M26482 Series 1 with additional features to meet UK Fighting Vehicle requirements including many special backshells and accessories.

Applications:

- Military Vehicles
- Communications Industrial

Product Features:

- Retained coupling nuts on plugs
- Heavy (arctic) ribbed coupling nuts available
- Alternate keyway polarization and insert orientations to prevent cross-plugging
- Available with grounding springs for EMC shielding
- Positive coupling 3 bayonet construction with audible mate
- Solder or crimp terminations
- Wide range of cable accessories

Circular: PV/PV-TBF; MIL-C-26482, Series 2



Literature Reference: [ICS Military/Aerospace Sourcebook](#)

Cannon PV/PV-TBF

Miniature environmental circular series. Designed according to MIL-C-26482, Series 2. They feature fast and easy mating/unmating with a three point bayonet coupling.

Applications:

- Aerospace
- Space Shuttle

Product Features:

- Bayonet coupling.
- Closed-entry socket contacts.

Circular; PVW/PVX



CANNON PVW/PVX

The Cannon PVX and PVW range of environment resistant connectors based on M26482 series 2, but with inserts designed to operate between -65° C and +200°C.

Applications:

- **Military Aircraft**
- **Commercial Aircraft**
- **Fighting Vehicles**

Product Features:

- **Intermateable with m26481 Series 1 and 2, m83723, Pattern 602 and HE301 ranges**
- **Broad range of connector styles and insert layouts including Panavia and Airbus specifications**
- **Two atmosphere sealed pressure bung feed-through solutions available**
- **Hermetic and Filtered styles available**
- **Extensive range of special contacts and accessories**
- **Finishes include Cadmium, Nickel, and Black anodized**

Circular; RPTT



VEAM RPTT

Circular connectors based on D38999 Series 3 insert arrangements in shells for 500hr salt spray environment with axial float features and panel lock mechanism for blind-mate panel to panel applications. Variants also include direct harness feature to avoid additional backshell requirements.

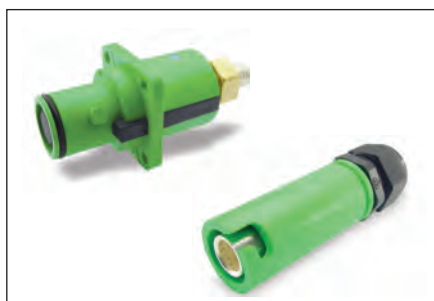
Applications:

- **Maritime aircraft**
- **Naval Radar**
- **Coastal Defense systems**

Product Features:

- **Shell sizes from 10 to 24 with standard and mixed contact layouts available**
- **Compliant with D38999 performance specifications**
- **Double the density on panels over conventional D28999 mated pairs**
- **Unique T83 plating gives 500hr salt spray resistance where Cadmium is not allowed**

Circular: Snaplock



VEAM Snaplock

The VEAM Snaplock connector series is a miniature single-pole power cable hook up system offering a 250amp continuous current rating capability while maintaining minimal physical dimensions.

Applications:

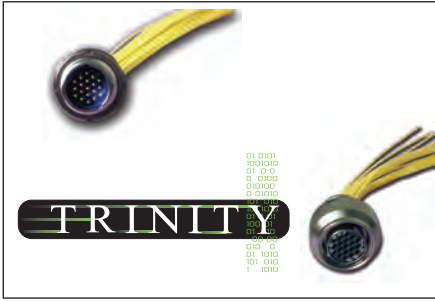
- **High Power Lighting**
- **Battery Powered Vehicles**
- **Hybrid Buses**
- **Mass Transit Systems**

Product Features:

- **Finger Touch Protected pin contacts**
- **Meets IP67 in a mated condition**
- **Low contact resistance**

Connector Product Overview

Circular: Trinity™ MKJ Mini Circular



Cannon Trinity™ MKJ Mini Circular

The Trinity family of micro circular connectors is a smaller version of the Mil-DTL-38999 Series III Connector. This miniature connector series has several different shell sizes offering up to 85 contact positions on 0.076 contact spacing. Contact options include standard #23 AWG pin and socket contacts as well as pogo spring probe/pad contact system. The family of products offers several different coupling mechanisms including threaded coupling and push/pull coupling versions. The connectors are designed to withstand the harsh environments found in Defense Electronics and Industrial applications.

Applications:

- Tactical Communications
- Avionics
- Defense Electronics
- Medical Electronics

Product Features:

- .076 contact spacing
- Pogo Spring Probe contact System
- Touch Pad Receptacle Inserts

Circular: Nemesis™



Cannon Nemesis™

The Nemesis series connector has been designed to meet the requirements of Future Soldier Technology and is miniature, robust, sealed and salt spray resistant.

Applications:

- Tactical Radios
- Computing Devices

Product Features:

- Robust Stainless Steel Construction
- Resistant to Salt spray for up to 500 hours

Compact Flash Packaging Kit: C-Flash™ Cards and Connectors



Literature Reference: PC Card and Memory Card

Cannon C-Flash Cards and Connectors

Compact Flash product family utilizes ultrasonically welded covers and 50 pin I/O connectors. This packaging process produces the most robust and rigid products in the industry and allows OEM's to streamline their manufacturing process and deliver cost effective solutions in the minimum production time. Meets all CFA and complies with PCMCIA ATA electronic Standards.

Applications:

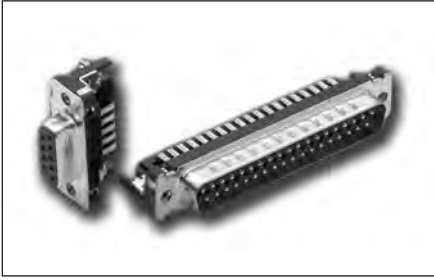
- Personal Computers and Digital Cameras
- Portable Electronic Devices

Product Features:

- Small, lightweight and robust
- Available in both Type I and Type II packages
- Connectors available with multiple offsets

Connector Product Overview

D Subminiature: D*, Eurostyle, CECC 75 301 802 (DIN 41652) 90° PCB



Cannon D*, Eurostyle

The Eurostyle D Subminiature (D*) low profile 90° PC tail connector is designed according to the CECC 75 301 802 (DIN 41652) European specification. The special low profile configuration provides additional space for the end user. D* connectors are compatible with all standard D subminiature connectors according to CECC 75 301 802 (DIN 41652).

Applications:

- Communications
- Industrial

Product Features:

- Available in Performance Class 1, 2 and 3, according to CECC 75 301 802 (DIN 41652).
- Clinch nut or jackpost with M3 or #4-40 UNC thread.

D Subminiature: D*, Solder Cup Termination, Tin Shells, Cable Mount



Cannon D*, Solder Cup, Cable Mount

The D*, solder cup termination connectors with tin shells are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations and field repair without termination tooling.

Applications:

- Communication Systems
- Transportation

Product Features:

- High performance commercial class connectors.
- Three contact performance classes.

Literature Reference: [D Subminiature](#)

D Subminiature: D*, Solder Termination, 90° PCB- European Footprint 10,2[♦] or 9,4mm^{♦♦}



Cannon D*, 90° PCB

The D*, 90° solder termination (machined contact) connectors are available for high performance uses according to CECC 75 301 802 (DIN 41652). Available with European footprint 1AON contacts, plastic and metal brackets, #4-40 or M3 threads and stamped pushfits/boardlocks.

[♦]Connector footprint measured from the front shell.

^{♦♦}Connector footprint measured from the rear shell.

Applications:

- Information Systems
- Medical

Product Features:

- High performance commercial class connectors.
- Three contact performance classes.

Literature Reference: [D Subminiature](#)

D Subminiature: D*: Solder Termination, Straight PCB- European PC Tails



Cannon D*, Straight PCB

The D*, straight solder termination (machined contact) — European PC tail connectors are available for high performance uses according to CECC 75 301 802 (DIN 41652). Available with European length OL2 and OL4 contacts.

Applications:

- Medical
- Test Equipment

Product Features

- High performance commercial class connectors.
- Three contact finish performance classes.

Literature Reference: [D Subminiature](#)

D Subminiature: D*, Wire Wrap Post Termination, Straight PCB



Literature Reference: [D Subminiature](#)

Cannon D*, Straight Wire Wrap Post

The D*, straight wire wrap post termination connectors are available for high performance uses according to CECC 75 301 802 (DIN 41652). Contacts available in two popular lengths.

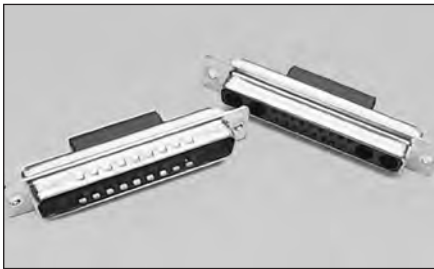
Applications:

- Communication Systems
- Medical

Product Features:

- High performance commercial class connectors.
- Wrap post for 3 wraps.

D Subminiature: D*A, Combo D™



Literature Reference: [ZD](#)

Cannon D*A, Combo D

Combo D, D*A connector series offers the advantages of an industry standard shield I/O interconnect, with the flexibility of a customized special, designed for any application. A combination of signal, high power, coaxial, high voltage, and fiberoptic contacts can be used.

Applications:

- Video Coaxial Transmission (75 ohm)
- RF and Telecom Transmission (50 ohm)
- Power Interconnects

Product Features:

- Crimp and poke.
- Low Cost
- Stainless or carbon shells available

D Subminiature: D*A, Crimp Connectors without Contacts, Cable Mount



Literature Reference: [ZD](#)

Cannon D*A, Cable Mount

The D*A, crimp connectors without contacts are designed for reliable, fast cabling. Available in the industry standard D*A housing, the connectors provide a low-cost, quick cabling alternative compared to soldering.

Applications:

- Information Systems
- Transportation

Product Features:

- Crimp contacts available in reels of 5,000 and 400.
- Application tooling:
 - Hand or automatic
 - Stripper crimper

D Subminiature: D*BMA, Bulkhead/Connector Saver



Literature Reference: [D Subminiature Accessories](#)

Cannon D*BMA, Bulkhead/Connector Saver

The D*BMA feed-thru bulkhead connector is used when it is desirable to connect and disconnect a cable on both sides of a bulkhead or panel. This connector can also be used as a connector saver in test equipment applications where more than normal mating/unmating would soon degrade a permanently mounted connector.

Applications:

- Test Equipment

Product Features:

- Little Caesar rear insertion, rear release contact retention system.
- Durable design.

Connector Product Overview

D Subminiature: D*D, Environmental D



Cannon D*D, Environmental D

The D*D environmental series is a rectangular connector in the popular D Subminiature shell configuration which meets all applicable performance requirements of MIL-C-24308. D*D is designed to meet demand for sealed subminiature plugs with superior vibration and moisture resistance characteristics.

Please Note: The D*D series is not interchangeable with other D Subminiature connectors. Standard, high density, and Combo-D versions are available.

Applications:

- Aircraft
- Missile

Product Features:

- Little Caesar rear insertion, rear release contact retention system.
- MIL-C-24308 compatibility.

D Subminiature: D*M, Combo D™



Literature Reference: Combo D

Cannon D*M, Combo D

Combo D, D*M connector series offers the advantages of an industry standard shield I/O interconnect, with the flexibility of a customized special, designed for any application. A combination of signal, high power, coaxial, high voltage, and fiber-optic contacts are available.

Applications:

- Power Interconnects (Up to 40 A)
- RF and Telecom Transmission (50 Ω)

Product Features:

- Standard and European footprints.
- Pre-installed 75 Ω/50 Ω coaxial or high power contacts (one part number) or High power, High Voltage, Fiber Optic inserts.
- Stainless or carbon steel shells available

D Subminiature: D*M Solder Termination 90° PCB, Standard Footprint .318[♦] or .283 inch^{♦♦}



Literature Reference: D Subminiature

Cannon D*M, 90° PCB

The D*M, 90° solder termination (machined contact) PCB connectors, equivalent to MIL-DTL-24308 qualified versions (except for finishes), for use with printed circuit boards in demanding applications. High density layouts are available in D*MA versions.

[♦]Connector footprint measured from the front shell

^{♦♦}Connector footprint measured from the rear shell

Applications:

- Communication Systems
- Test Equipment

Product Features:

- UL file number E8572.
- Metal bracket with threaded insert standard.
- Optional screw locks and boardlocks.
- Stainless or carbon steel shells available

D Subminiature: D*M, Solder Termination, Straight PCB, Standard PC tails



Literature Reference: D Subminiature

Cannon D*M, Straight PCB

The D*M, straight solder termination (machined contact) – standard PC tail connectors, equivalent to MIL-DTL-24308 qualified versions (except for finishes) for printed circuit boards and backplanes in demanding applications. High density layouts are available in D*MA versions..

Applications:

- Aerospace
- Information Systems

Product Features:

- UL file number E8572.
- Optional vertical standoffs, screw locks and boardlocks available.
- Stainless or carbon steel shells available

D Subminiature: D*M/D*MA, Space/High Reliability; MIL-DTL-24308



Literature Reference: [D Subminiature](#)

Cannon D*M/D*MA, Space/High Reliability

Space/high reliability D*M and D*MA high performance D Subminiature connectors meet stringent tests for outgassing and residual magnetism.

D*M and D*MA connectors meet the performance and dimensional requirements of the ESA/SCC 3401 and MIL-DTL-24308 specifications.

Applications:

- Medical
- Space- Low/High Orbit Satellites

Product Features:

- Non-Magnetic
- No outgassing
- Brass or aluminum shells available

D Subminiature: D*MM/D*MAM, Military/High Reliability;MIL-DTL-24308



Literature Reference: [D Subminiature](#)

Cannon D*MM/D*MAM, Military/High Reliability

The D Subminiature D*MM and D*MAM connectors with fixed contacts in solder cup, straight and 90° PC contact terminations are qualified to MIL-DTL-24308. These high-reliability D Subminiature connectors are the finest quality connectors available at the most competitive prices in the market.

Applications:

- Aerospace
- Transportation

Product Features:

- Suitable for a variety of cable and printed circuit board options.
- Solder Cup version accommodates wire size #20 AWG maximum.
- Stainless or carbon steel shells available

D Subminiature: D*NG, Pressfit, Straight PCB



Literature Reference: [D Subminiature](#)

Cannon D*NG, Pressfit, Straight PCB

The D*NG, straight pressfit termination is based upon the specification CECC 75 301 802. These connectors provide a low-cost alternative to traditional through hole solder contacts. Utilizing stamped "Eye of the Needle" compliant contact tails per IEC-352-5, the parts are quickly and easily mounted onto PCBs without soldering, crimping, or specialized tooling.

Applications:

- Information Systems
- Test Equipment

Product Features:

- Quick and easy press-in installation without specialized tooling.
- "Spoon" socket contact provides improved interface

D Subminiature: D*SF



Cannon D*SF

The D*SF connectors allow reliable, fast, and economical termination of ribbon cable without stripping and without splicing. They are intermateable with all D Subminiature connectors and offer an extremely low profile.

Applications:

- Communications
- Daisy-chain

Product Features:

- Low profile.
- No splitting of ribbon cable.

Connector Product Overview

D Subminiature: D*A



Literature Reference: ZD

Cannon D*A

The D*A series, Cannon's low cost crimp-type D Subminiature connector, offers both machined and stamped contacts for crimp applications. Available in UL 94V-0 material, D*A series features a snap-in, rear-release contact.

Applications:

- Commercial Cabling
- Telecom/Industrial

Product Features:

- Corrects misaligned contacts.
- Mates with existing D Subminiature connectors.

D Subminiature: D*W, Discrete Wire IDC



Literature Reference: D Subminiature

Cannon D*W, Discrete Wire IDC

The D*W connector provides insulation displacement connection technology for either solid or stranded wires. With D*W, speed of cabling is increased significantly over solder cup or crimp solutions. Contacts are easily removable and replaceable. Several specialized accessories (including shield cans, ferrules, and plastic boots) are available to provide a complete product solution.

Applications:

- Industrial
- Telecom

Product Features:

- Quick harnessing capability with simple hand or semi-automatic tooling.
- Accepts #30 AWG to #20 AWG

D Subminiature: ZD*, Solder Cup Termination, Tin Shells, Cable Mount



Literature Reference: ZD

Cannon ZD*, Solder Cup, Cable Mount

The ZD*, solder cup termination (stamped and formed contact) connectors with tin shells are used for cable or panel mount wiring applications. Solder cup connectors provide maximum flexibility and performance for applications requiring discrete solder terminations.

Applications:

- Communications Systems
- Test Equipment

Product Features:

- Economical.
- Stamped solder cup contacts, 5 A current capacity.

D Subminiature: ZD*, 90° PCB-European Footprint 10,2 mm[♠], ZED*, 90° PCB-US Footprint, .318 inch



Literature Reference: ZD

Cannon ZD*, 90° PCB

The ZD*, 90° solder termination (stamped and formed contact) connectors are available for applications where price is the primary driver. They are available with integrated plastic brackets with European footprints.

* Connector footprint measured from the front shell.

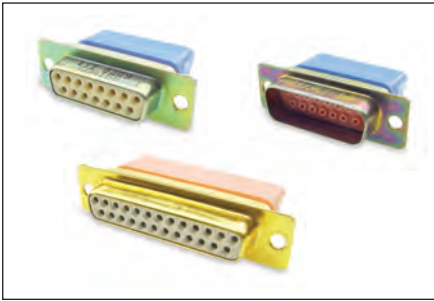
Applications:

- Medical
- Transportation

Product Features:

- Economical.
- Stamped PCB contacts, 5 A current capacity.

D Subminiature: GD*, Grommet D



Cannon GD*, Grommet D Subminiature

Cannon GD* connectors are ideal for applications requiring environmental (moisture) protection with high reliability. Sealing is accomplished by bonding components inside the shell and using a resilient interfacial seal and a grommet.

Applications:

- Aerospace
- Military
- Telecommunications
- Avionics
- Space-Satellites

Product Features

- Mil-DTL-24308 Compatibility
- No outgassing
- Environmental Protection
- Versatility
- High Reliability
- IP 67 Rated
- Crimp and PCB terminations

Connector Product Overview

Fiber Optics: FOHC (Fiber Optic Hybrid Contacts) Termini



Literature Reference: Fiber Optics

Cannon FOHC

ITT Fiber Optic Termini are a standard in the industry. We offer the most complete line of fiber optic termini engineered to fit today's MIL-Spec Circular, Rack & Panel, Edgcard, LRM and D-Sub Connectors.

Applications:

- Harsh Environment
- Shipboard
- Military Electronics

Product Features:

- Conforms to MIL-T-29504 fiber optic termini.
- Fits any size 16 cavity with no modification to connector
- Both pin and socket termini end faces are easily cleaned

Fiber Optics: FOMC (Fiber Optic Multi-Channel) Connectors



Literature Reference: Fiber Optics

Cannon FOMC

ITT Cannon's FOMC series fiber optic connectors are designed to meet the needs of military and commercial customers who require a rugged environmental multi-fiber filed connector.

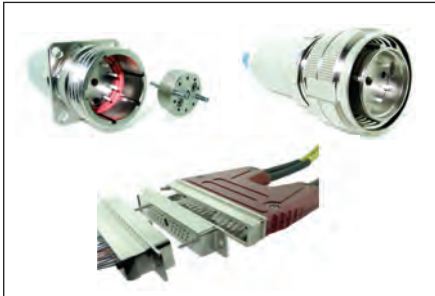
Applications:

- Ground Tactical Communications
- Field Broadcast Network
- Mobile Communications Systems

Product Features:

- Environmentally Sealed
- Removable insert for easy access to termini
- Fiber Flex Chamber provides space for fiber service loop

Fiber Optics: PHD (Photonics High Density) Connectors



Literature Reference: Fiber Optics

Cannon PHD

ITT Cannon's PHD Connector System provides the industry's highest and most stable performance for multi-channel interconnects. The PHD design delivers reduced insertion loss, less channel-to-channel variance and easy integration into High Density Interconnect Hardware.

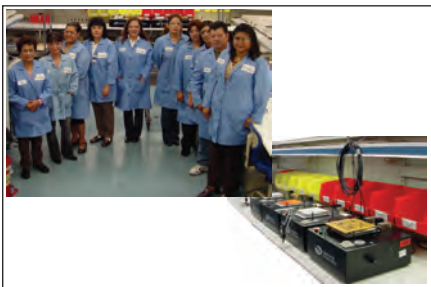
Applications:

- Military Electronics
- Medical
- Optical Networking

Product Features:

- Removable insert allows direct end-face access for terminus cleaning/inspection
- High Density, 50 channels per sq. inch
- Common Termini Solution deployable across all fiber sizes and types (SM & MM)

Fiber Optics: Harness Solutions



Literature Reference: Fiber Optics

Cannon Fiber Optic Harness Solutions

ITT Cannon has a world class Fiber Optic facility with proven reputation of delivering high quality, high performance fiber optic cable assemblies for the Telecommunication, Automotive, Commercial Aircraft, Data Communication, Industrial, Medical and Military Electronic Industries. ITT's fiber optic production facility is staffed with both project and manufacturing engineers along with highly skilled technicians/operators which work to strict military and commercial standards. Our in-house capabilities allow us to design, manufacture and test, Standard and highly custom multi-channel Cable/Harness assemblies.

Filter: CFKJA (Subminiature Chip on Flex)



Literature Reference: [Cannon Filter](#)

Cannon CFKJA: Chip on Flex

These filter connectors utilize new state of the art Chip-on-Flex technology that offers significant improvement in Thermal shock and vibration performance. These are available in all standard filter configurations.

Applications:

- Avionics
- Communications

Product Features:

- Chip-on-Flex Filtering
- Rugged construction
- Meet 1000 cycles of thermal shock

Filter: D*JK/D*JT (Commercial D Subminiature)



Literature Reference: [D Subminiature](#)

Cannon D*JK/D*JT

D*JK and D*JT filter connectors utilize D Subminiature standard components and accessories which deliver 100% compatibility with equivalent products according to CECC 75 301 802 (DIN 41652) and offer a cost-effective production. They also provide excellent protection against EMI/RFI.

Applications:

- EMI/RFI Sensitive Electronics
- Telecommunication Transmission

Product Features:

- HF-tightness and mechanical stability by closed backshell.

Filter: TBKA, ARINC Series 600 Standard (Rack & Panel)



Literature Reference: [Cannon Filter](#)

Cannon TBKA, ARINC Series 600 Standard

These connectors provide solutions to high mating forces of pluggable modules in a rack by approximately two-thirds. Filter adaptations include either single module (gang) or complete connector filtering. The standard version features non-removable contacts with PC tail termination. Other versions include crimp piggyback rear release contacts and/or removable front sockets.

Applications:

- TCAS Commercial Avionics
- Wind Shear

Product Features:

- Low insertion force contacts.
- Up to 800 (size 22) contacts in one connector.

Filter: TD1* (D Subminiature)



Literature Reference: [Cannon Filter](#)

Cannon TD1*

These filter connectors have been developed to meet the industry's demands for improved control of EMI/RFI. They combine the functions of a standard electrical connector and feed-thru filters into one compact package. They are designed for applications where space and weight are the prime considerations.

Applications:

- Avionics
- Fire Control Systems

Product Features:

- Intermateable with all standard D Subminiature connectors.
- Intermateable with MIL-C-24308 connectors and meets applicable portions of this specification.

Connector Product Overview

Filter: TDPX, ARINC Series 404 Standard (Rack & Panel)



Literature Reference: [Canon Filter](#)

Cannon TDPX, ARINC Series 404 Standard

These filter connectors are used primarily on commercial and military aircraft for radio and instrumentation equipment. They are available in single through four gang versions with standard ARINC shells and polarizing posts. They are intermateable with the standard DPX connectors.

Applications:

- Commercial/Military Avionics
- Military Communications

Product Features:

- Small packaging.
- Large selection of contact arrangements.

Filter: TKJL/TKJ/TKJA/TKJB (Subminiature Circular)



Literature Reference: [Canon Filter](#)

Cannon TKJL/TKJ/TKJA/TKJB

These subminiature circular filter connectors are designed to combine the functions of a standard electrical connector with a feed-thru filter into one compact package. They are designed to meet the applicable portions of MIL-C-38999, Series I, II, III, IV. These connectors feature arrangements that will accommodate up to 128 contacts.

Applications:

- Avionics
- Communication

Product Features:

- Series I – TKJL
- Series II – TKJ
- Series III – TKJA
- Series IV – TKJB

Filter: TMDM (Microminiature D Subminiature)



Literature Reference: [Canon Filter](#)

Cannon TMDM

These microminiature filter connectors offer higher contact density than traditional rectangular connectors, making them ideally suited for applications where space is limited and EMI/RFI filtering is required. They are designed to meet applicable portions of MIL-PRF-83513.

Applications:

- Jamming Devices
- Telemetry Systems

Product Features:

- Transverse monolith capacitive filter for EMI/RFI shielding.
- Rugged aluminum one-piece shell.

Filter: TPV (Miniature Circular)



Literature Reference: [Canon Filter](#)

Cannon TPV

These miniature circular filter connectors are designed to combine the functions of a standard electrical connector and a feed-thru into one compact package. They are designed to meet applicable portions of MIL-C-26482, Series 2 and MIL-C-83723, Series 1.

Applications:

- Avionics Systems
- Fire Control Units

Product Features:

- Small packaging.
- Total EMI protection.

Hermetic: BFH/TBFH; MIL-C-5015 (Standard Circular)



Literature Reference: [Hermetic](#)

Cannon BFH/TBFH

The BFH is a hermetically sealed version of the BFR (Bulkhead Fitting Receptacle). The TBFH is a hermetically sealed version of the TBF (Thru-Bulkhead Fitting Receptacle). It is flange mounted and mates with 3106, 3107 and 3108 plugs.

Applications:

- Commercial Aircraft
- Industrial
- Military

Product Features:

- Meets the requirements of MIL-C-5015.

Hermetic: D*H/D*TBH; MIL-DTL-24309 (D Subminiature)



Literature Reference: [D Subminiature](#)

Cannon D*H/D*TBH

The hermetically sealed D*H and D*TBH connectors are designed to meet environmental conditions of extreme pressure differential. These connectors are part of the D Subminiature series and are qualified to MIL-DTL-24308. The hermetic seal prevents leakage and subsequent accumulation of corrosive moisture behind the connector.

Applications:

- Commercial Aircraft
- Industrial
- Military

Product Features:

- Qualified to MIL-DTL-24308.

Hermetic: GS; MIL-C-5015 (Standard Circular)



Literature Reference: [Hermetic](#)

Cannon GS

Cannon hermetic sealed GS (Glass Sealed) connectors are designed for applications where a vacuum, inert gas, or a constant or controlled pressure is required to eliminate adverse effects created by atmospheric changes.

Applications:

- Commercial
- Industrial
- Military

Product Features:

- Meets the requirements of MIL-C-5015.

Hermetic: KJLY/KJY/KJAY; MIL-DTL-38999, Series I, II, III (Miniature Circular)



Literature Reference: [Hermetic](#)

KJLY/KJY/KJAY

Cannon's KJLY, KJY and KJAY connectors are hermetically sealed and designed to meet the critical performance and design requirements of MIL-DTL-38999. Engineered for high density circuitry capabilities, these connectors are designed to operate at temperatures ranging from -65°C to 200°C (-85°F to 392°F).

Applications:

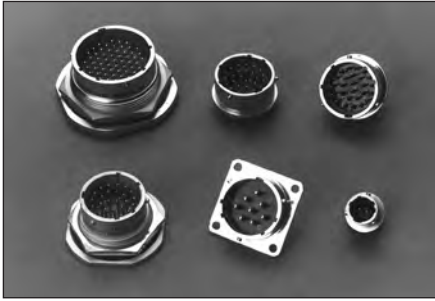
- Industrial
- Military

Product Features:

- Qualified to MIL-DTL-38999.

Connector Product Overview

Hermetic: KPTH/PVAH; MIL-C-26482, Series I,II (Miniature Circular)



Literature Reference: Hermetic

Cannon KPTH/PVAH

Cannon's hermetically sealed KPTH and PVAH (MIL-C-26482, Series I and II) connectors are designed for those applications and environments that require delicate mechanisms to be protected from variations in atmospheric pressure.

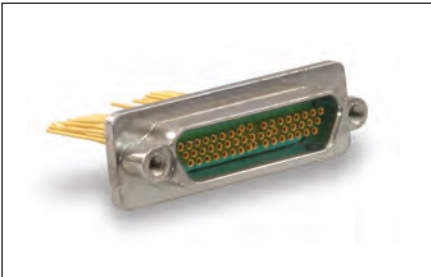
Applications:

- Industrial
- Military
- Transportation

Product Features:

- Series I is qualified to MIL-C-26482.

Hermetic: MDMH; MIL-PRF-93513 (Microminiature D Subminiature)



Literature Reference: Hermetic

Cannon MDMH

MDMH microminiature hermetic connectors feature compression glass sealed contacts into a steel shell with a high grade plastic "front end" insulator. An interfacial seal provides environmental protection when mated. MDMH receptacles are soldered to a chassis or container providing a completely leak-proof unit.

Applications:

- Commercial Aircraft
- Industrial
- Military

Product Features:

- Meets the requirements of MIL-PRF-83513.

Industrial Motors: CmX-Servo/Linear



Literature Reference: [Cannon Servo Motor](#)

Cannon CmX

CmX connector series feature a simplified design that replaces two sets of conventional circular connectors in servo/linear motor applications. CmX connectors incorporate both signal and power cables into a single housing resulting in 50% less weight and piece parts, lower profile, single footprint, and 50% reduction in cost over typical circular connectors. Available in IP65 and IP67 sealing. RoHS Compliant.

Applications:

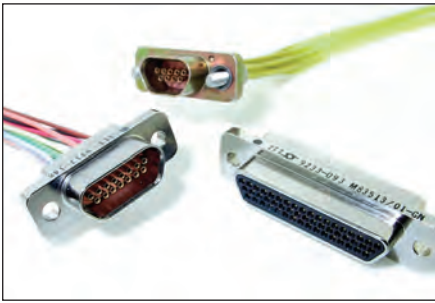
- **Factory automation, material handling**
- **Industrial motion control, Robotics**
- **Packaging, conveyor systems**

Product Features:

- **Meets DIN EN61984 safety compliance**
- **Power Range to 40 Amps, Signal Range to 3 Amps**
- **Separate sealed entries for power and feedback cables**

Connector Product Overview

Microminiature: Micro Line-MDM (Micro D Metal); MIL-DTL-83513



Literature Reference: [Microminiature](#)

Cannon MDM

The Micro D Metal Shell (MDM) connectors meet or exceed the applicable requirements of MIL-DTL-83513. MDM connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

- Military Electronics
- Navigation Systems
- Oil Exploration

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MIL-DTL-83513 Micro D Connectors



Literature Reference: [Microminiature](#)

Cannon M83513

ITT is qualified to the MIL-DTL-83513 specification. ITT M83513 connectors meet or exceed all of the performance requirements of MIL-DTL-83513. ITT's m83513 connectors utilize the unique twist pin contact system. This system features seven points of electrical contact. It assures excellent wipe and superior shock and vibration performance.

Applications:

- Military Electronics
- Navigation Systems
- Oil Exploration
- Space Systems

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MDM (Micro D-Printed Circuit Board); MIL-DTL-83513



Literature Reference: [Microminiature](#)

Cannon MDM-PCB

The Micro D Metal Shell Printed Circuit Board (MDM-PCB) connectors meet or exceed the applicable requirements of MIL-DTL-83513. MDM-PCB connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

- Military Electronics
- Robotics
- Satellites

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MDM C/P (Micro D Metal Coaxial/Power)



Literature Reference: [Microminiature](#)

Cannon MDM C/P

The Micro D Metal Shell Coaxial/Power (MDM C/P) connectors meet or exceed the applicable requirements of MIL-DTL-83513. Coaxial and Power contacts can be interchanged as desired and offer the versatility of combining with signal lines in the same connector.

Applications:

- Commercial Avionics
- Defense Electronics

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MD (Micro D Plastic); Mil-DTL-85313



Literature Reference: [Microminiature](#)

Cannon MD

The Micro D (MD) microminiature rectangular connectors meet or exceed the applicable requirements of MIL-DTL-83513. MD connectors are designed for use in applications requiring highly reliable, extremely small, lightweight connectors. Connectors are available in two insulator materials, allowing wide versatility in most applications required by industry.

Applications:

- High Speed Data
- Test Equipment

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MDB C/P



Literature Reference: [Microminiature](#)

Cannon MDB C/P

The Micro D (MD) microminiature rectangular connectors meet or exceed the applicable requirements of MIL-DTL-83513. MD connectors are designed for use in applications requiring highly reliable, extremely small, lightweight connectors. Connectors are available with your choice of two insulator materials, allowing wide versatility in most applications required by industry.

Applications:

- Avionics Equipment
- Computer Equipment

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MDB-PCB (Micro D Plastic-Printed Circuit Board)



Literature Reference: [Microminiature](#)

Cannon MDB-PCB

The Micro D (MDB-PCB) microminiature rectangular connectors meet or exceed the applicable requirements of MIL-DTL-83513. They are designed for use in applications requiring highly reliable, extremely small, lightweight connectors. Connectors are available in two insulator materials, allowing wide versatility in most applications required by industry.

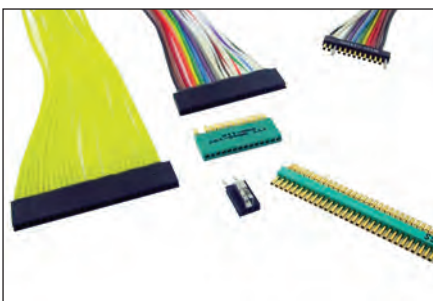
Applications:

- Commercial Instruments
- High Speed Data

Product Features

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line-MT (MTV/MTB) (Micro Strip)



Literature Reference: [Microminiature](#)

Cannon MT (MTV/MTB)

The Micro Strip (MT) microminiature connectors provide an extremely dense and reliable interconnection solution in a minimum profile package. These connectors meet or exceed the applicable requirements of MIL-DTL-83513. MT connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

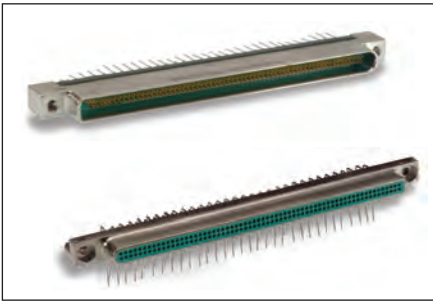
- Satellites
- Instrumentation

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.

Connector Product Overview

Microminiature: Micro Line-MEB (Micro Edgeboard)



Literature Reference: [Microminiature](#)

Cannon MEB

The Micro Edgeboard (MEB) connector series provides a combination of high density and high reliability. MEB connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

- Industrial Systems
- Military Electronics

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Centi Line- 2D (Double Density D)



Literature Reference: [Microminiature](#)

Cannon 2D

The Double Density D (2D) is a rectangular connector in the popular D Subminiature shell configuration. It offers (approximately) double the contact density in the same insert area.

Applications:

- Communications
- Instrumentation and Controls

Product Features:

- Contacts on 1.91 (.075) min. center spacing.
- Reliable, field-proven Centipin/Centisocket contacts.

Microminiature: Centi Line- 2DD (Environmental Double Density D)



Literature Reference: [Microminiature](#)

Cannon 2DD

The Environmental Double Density D (2DD) is an environmental rectangular connector in the popular D Subminiature configuration. It offers double the contact density in the same insert area and features superior vibration and moisture resistance characteristics.

Applications:

- Avionics
- Instrumentation

Product Features:

- Contacts on 1.91 (.075) min. center spacing.
- Reliable, field-proven Centipin/Centisocket contacts.

Microminiature: Centi Line- CDL (Centi D Lock)



Literature Reference: [Microminiature](#)

Cannon CDL

The Centi D Lock (CDL) series is an all plastic monoblock high density rectangular connector. The CDL is a general purpose connector with a peripheral O-ring and wire sealing gasket. The CDL connector can accommodate 139 contacts.

Applications:

- Aircraft and Avionics
- Instrumentation and Controls

Product Features:

- Contacts on 1.91 (.075) min. center spacing.
- Reliable, field-proven Centipin/Centisocket contacts.

Microminiature: Centi Line- CTA (Centi Strip)



Cannon CTA

The Centi-Loc (CTA) series are low-cost nylon strip connectors designed for military and commercial applications. The Centi-Loc strip connector may be ordered as a kit or ordered in bulk and assembled as desired.

Applications:

- Communications
- Medical Equipment

Product Features:

- Reliable, field-proven Centipin/Centisocket contacts.

[Literature Reference: Microminiature](#)

Microminiature: Nano Line-NDM



Cannon NDM

The Nano single row (NDM) series is a metal shell connector that features the highly reliable Twist Pin Contact system. Twist Pin design allows continuity in very dense areas and under severe shock and vibration environments.

Applications:

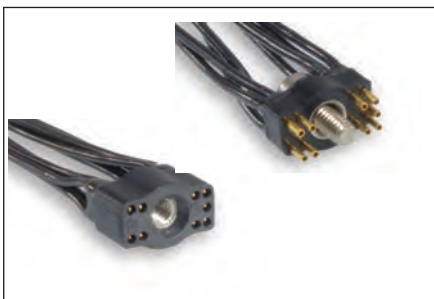
- Geological Exploration
- Medical Electronics
- Panel-to-Board
- Defense Electronics

Product Features:

- Contacts on 0.64 (.025) min. center spacing.
- Twist Pin Contact System
- Complete Cable Assemblies

[Literature Reference: Microminiature](#)

Microminiature: Nano Line- NJS (Nano Center Jackscrew Rectangular)



Cannon NJS

The Nano Jackscrew (NJS) series is a rectangular configuration with a center jackscrew. This connector features the highly reliable Twist Pin Contact system. Twist Pin design allows continuity in very dense areas and under severe shock and vibration environments.

Applications:

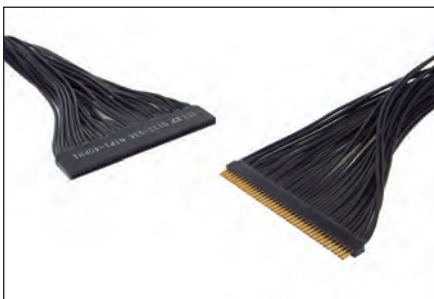
- Geophysical
- Defense Electronics

Product Features:

- Contacts on 0,64 (.025) min. center spacing.
- Rectangular configuration with center jackscrew.
- Complete Cable Assemblies

[Literature Reference: Microminiature](#)

Microminiature: Nano Line- NT (NTP/NTDP) (Nano Strip)



Cannon NT (NTP/NTDP)

The single NTP or dual NTDP Nano Strip connectors feature the highly reliable Twist Pin Contact system. Twist Pin design allows continuity in very dense areas and under severe shock and vibration environments.

Applications:

- Medical
- Space Systems

Product Features:

- Max. 20 contacts on 1.27 (.050) min. center spacing.
- Max. 40 contacts on .64 (.025) min. center spacing.

[Literature Reference: Microminiature](#)

Connector Product Overview

Microminiature: Micro Line- MJS (Micro Center Jackscrew)



Literature Reference: [Microminiature](#)

Cannon MJS

The Micro Center Jackscrew (MJS) series meets or exceeds the applicable requirements of MIL-DTL-93513. MJS connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

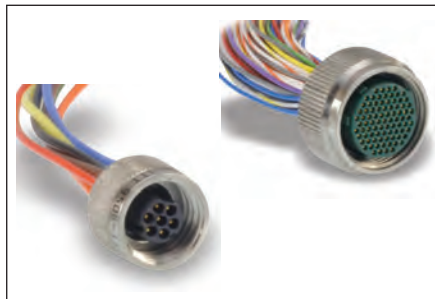
Applications:

- Board-to-Board
- Board-to-Cable

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line - MIKM (Micro K Screw Coupling Series)



Literature Reference: [Microminiature](#)

Cannon MIKM

The Micro K Screw Coupling (MIKM) series offers a steel shell for improved ruggedness and RFI resistance yet they are lightweight. They meet or exceed the applicable requirements of MIL-DTL-83513. MIKM connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

- High Reliability Cameras
- Instrumentation

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line - MIKQ (Micro K Push/Pull Coupling Series)



Literature Reference: [Microminiature](#)

Cannon MIKQ

The Micro K Push/Pull coupling (MIKQ) series offers a metal shell and a quick disconnect feature. They meet or exceed the applicable requirements of MIL-DTL-83513. MIKQ connectors utilize the unique Micropin/Microsocket contact design system. This system features seven points of electrical contact. It assures high normal force, excellent wipe and superior shock and vibration performance.

Applications:

- Computers
- Head Sets

Product Features:

- Micropin/Microsocket contacts, unique twist pin and solid tubular socket.
- Contacts on 1.27 (.050) min. center spacing.

Microminiature: Micro Line - MDSM



Literature Reference: [MDSM](#)

Cannon MDSM

MDSM's rugged construction and unique contact design provide durability of 500 mating cycles. All of this comes in a sleek package that includes a snap together shield can and a slide over boot producing a cable assembly with an overmolded look and a low assembled cost.

Applications:

- Bar Code Scanners
- Hand Held Devices

Product Features:

- UL file number E8572.
- Choice of two different latching options (thumbscrew or push-pull).

Microminiature: NDD



Literature Reference: [Microminiature](#)

Cannon NDD

The new NDD High Density Dual Row Nano Connector family is a metal shell connector that meets or exceeds all performance requirements of MIL-DTL-32139. This next generation rectangular connector features the highly reliable twist pin contact system. Contact spacing is on 0.0225" centers. Connector is designed to withstand high shock and vibration environments.

Applications:

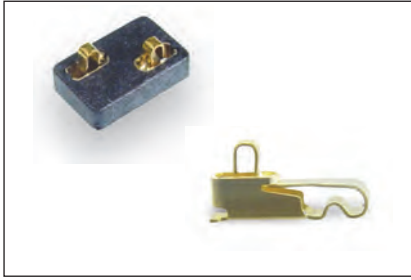
- Defense Electronics
- Geophysical Exploration
- Medical Electronics

Product Features:

- Twist Pin Contacts
- Contacts on 0.64 (0.025) min. center spacing
- Rectangular configuration

Connector Product Overview

Mobile: LF: Universal Contact



Literature Reference: Universal Contact Series

Cannon Universal Contact

The Universal Contact provides a standard interface solution across many platforms, therefore reducing qualification testing. In addition, these contacts eliminate the need for individual spring contacts on modular components. Universal Contacts are very small and can be soldered directly onto the PCB with a minimum pitch of 1,35 mm between contacts. Working heights range from .9mm to 3.7mm.

Applications:

- **Speakers**
- **Microphones**
- **Key Fob**
- **Smoke Detectors**
- **White Goods**
- **Grounding**
- **Vibrator**
- **Antenna Pickup**

Product Features:

- **Contacts can be soldered directly onto PCB.**
- **Contacts are pre-loaded and feature anti-lifting protection.**

Mobile: RF: Fakra



Literature Reference: 50 Ohm RF

Cannon Fakra

The 50 ohm Fakra connector features a solid one piece metal design. It offers a low mating/unmating force with high electrical performance, at 4 GHz, while contact resistance values are maintained from connector to connector.

Applications:

- **Global Positioning Satellite**
- **Vehicular Internet Access**
- **Satellite Radio**
- **Blue Tooth**

Product Features:

- **Supports 0 to 4 GHz transferring speed.**
- **Available in a variety of key codes**

Mobile: RF: LPC CP1



Cannon LPC SP1

The LPC SP1 is the waterproof version of the LPC CP1 RF switchable connector. It features a special seal, allowing it to be IP67 compliant (1 meter of water). These connectors are ideal for small handsets. They offer high performance in a very compact design with a unique cold pin to minimize the RF emissions in unmated conditions.

Applications:

- **Mobile Phones**
- **PDA**

Product Features:

- **Cold pin to minimize RF emissions in unmated conditions.**
- **Low profile of 5,6 mm.**
- **Up to 6 GHz**

Mobile: RF: LPC CP1 Accessories



Cannon LPC CP1 Accessories

To compliment the LPC CP1/CP2 PCB connectors, Cannon offers a wide range of accessories to cover different needs for testing. These accessories are also ideal for the automotive industry.

Our accessories can be easily customized for specific projects.

Applications:

- Car kits
- On-line production testing
- Testing

Product Features:

- 100% tested assemblies
- Customized lengths and mating connectors

Mobile: LF: Mini RF



Cannon Mini RF

The Mini RF switching connector operates up to 6 GHz, is small in size and provides over 5000 mating cycles. Designed for pick and place, it is compliant with WEEE and RoHS directives.

Applications:

- Mobile Handset
- GPS Systems
- PDA, PPC, and Gaming
- White Goods

Product Features:

- Small Size
- Low Profile
- Latching Mechanism for hands free testing
- Allows for angular and offset misalignment
- 5k mating cycle

[Literature Reference: 50 Ohm RF](#)

Connector Product Overview

PC Card: PCMCIA I/O Card Kit, StarCard Snappy



Literature Reference: PC Card and Memory Card

Cannon StarCard Snappy Cover Sets and Connectors

The Snappy product family utilizes frameless stainless shell snap-on covers. Available in both Type I and Type II packages. These packages offer a wide variety of standard PCMCIA 68 pin I/O connectors with multiple offsets. We are capable of customizing extensions and end caps to customer specifications. RoHS Compliant.

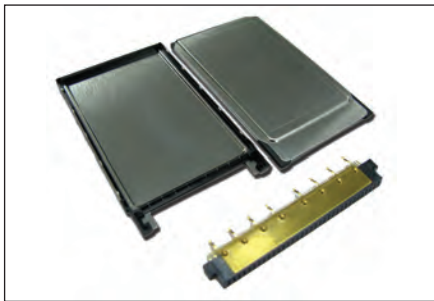
Applications:

- LAN/Modems, Set-top Boxes
- Wireless Devices and Personal Computers

Product Features:

- Meets all current PCMCIA Standards
- Simple press tool required for assembly

PC Card: PCMCIA I/O Card Kit, StarCard Ultra



Literature Reference: PC Card and Memory Card

Cannon StarCard Ultra Sets and Connectors

The Ultra product family utilizes ultrasonically welded covers. Available in both Type I and Type II packages. These packages offer a wide variety of standard PCMCIA 68 pin I/O connectors with multiple offsets. We are capable of customizing extensions and end caps to customer specifications. RoHS Compliant.

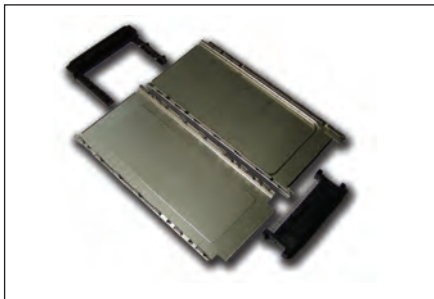
Applications:

- LAN/Modems, Set-top Boxes
- Wireless Devices and Personal Computers

Product Features:

- Meets all current PCMCIA Standards
- Significantly improves assembly cycle times

PC Card: PCMCIA I/O Card Kit, Expresscard



Cannon Expresscard Cover Sets and Connectors

The Expresscard product family is available in both ultrasonic weld and stainless steel snap-on covers for 34mm and 54mm modules. Our 26 pin I/O connectors are available with multiple offsets. Capabilities include customizing extensions and end caps. Passed Expresscard Compliance Program by PCMCIA. RoHS Compliant.

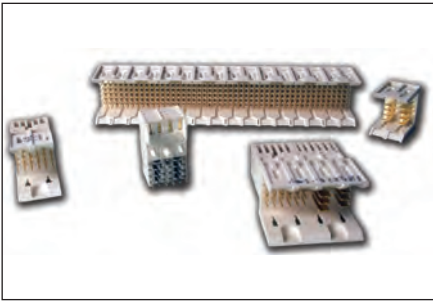
Applications:

- Notebook/Desktop Computers
- Storage media and portable devices

Product Features:

- Universal slot design
- Connector designed to meet 10,000 mating cycles

Printed Circuit Board: Tempus™ CBC20 (2mm)



Literature Reference: Tempus CBC20

Cannon Tempus CBC20 (640 Mbits)

Tempus CBC-20 is a 2mm modular two part plug and receptacle system. It is a reverse system with the male pin contacts mounted on the backplane and the female socket contacts mounted on the daughtercard. Available in 4 and 5 row configurations. It is used in DC, low frequency analog and digital high speed applications. Most designs RoHS Compliant, all others with Telecom exemption until 2010.

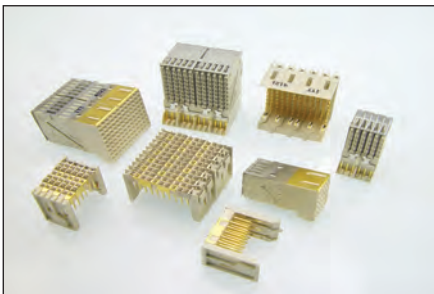
Applications:

- Data Communication
- Telecommunication

Product Features:

- Optimum 2 mm connector pitch.
- Durability: 1000 mating cycles min.

Printed Circuit Board: Tempus™ CBC20HS, Series 1000/2000 (2mm)



Literature Reference: Tempus HS

Cannon Tempus CBC20HS (2.5 Gb/s)

The Tempus 1000/2000 Series is a 2mm high-speed stripline-shielded backplane connector system. The 1000 Series features a unique stripline structure in both the header and receptacle. The 2000 Series adds column-wise stripline shielding to the header. Available in 5 and 8 row configurations. They are similar in profile, footprint, and mating interface to the Cannon Tempus CBC20 connectors. Most designs RoHS compliant, all other with Telecom exemption until 2010.

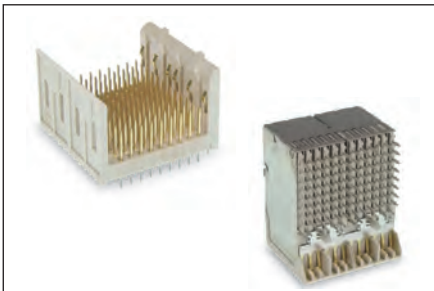
Applications:

- Data Communications
- Telecommunications

Product Features:

- Backwards compatible with standard Tempus 2mm connectors
- Shielded to reduce crosstalk

Printed Circuit Board: Tempus™ CBC20HS, Series 4000 (2mm)



Literature Reference: Tempus HS

Cannon Tempus CBC20HS (5 Gb/s+)

Tempus 4000 Series is based on the 2mm high-speed 1000/2000 series. The outside envelope and mating interfaces are the same between series, so they align evenly and stack side-by-side on pitch. Available in 5 and 8 row configurations. Connectors offer additional shielding, wide grounds, shorter signal tuning forks, and smaller plated through holes. Most designs RoHS compliant, all others with Telecom exemption until 2010.

Applications:

- Data Communications
- Telecommunications

Product Features:

- Intermateable with Tempus HS 1000/2000 series
- 0,5 mm PTH for improved routing and less foot print losses
- Pressfit on both sides

Connector Product Overview

Rack and Panel: BKA, ARINC Series 600 Standard



Literature Reference: [Rack and Panel](#)

Cannon BKA

BKAD/BKAE connectors are available with rear release/rear removable, low insertion force contacts. They are interchangeable with the contacts used in the DPX series and permit retrofit of existing equipment.

BKAF connectors are totally intermateable and intermountable with ARINC Series 600 Standard connectors now in the field. They use front release/front removable, low insertion force contacts.

Applications:

- Avionics Equipment
- Commercial Aircraft

Product Features:

- Up to 800, size 22 contacts in one connector.
- Low insertion force contacts.

Rack and Panel: DPA/DPAMA (Miniature)



Literature Reference: [Rack and Panel](#)

Cannon DPA/DPAMA

DPA series connectors are rugged, miniature rack and panel plugs utilizing maximum insert space in a one-piece shell.

Applications:

- Avionics Equipment
- Commercial Aircraft

Product Features:

- DPAMA connectors feature Little Caesar rear release contact retention assembly.

Rack and Panel: DPD/DPDMA



Literature Reference: [Rack and Panel](#)

Cannon DPD/DPDMA

DPD rack and panel connectors are distinguished from other connector lines by their rectangular shape which provides maximum space utilization on rack or chassis mounted equipment. They are available in non-environmental single and two-gang configurations.

Applications:

- Computer Panels
- GFE Test Equipment

Product Features:

- DPDMA/DPD2MA connectors feature Little Caesar rear release contact retention assembly. Preferred for new design.

Rack and Panel: DPGM/DPJM/DPJMB



Literature Reference: [Rack and Panel](#)

Cannon DPGM/DPJM/DPJMB

DPGM, DPJM, and DPJMB connectors are designed for applications where space and weight are prime considerations. Their rectangular shape provides maximum space utilization and permits easy removal of equipment for inspection and/or repair.

Applications:

- Avionics Equipment
- Commercial Aircraft

Product Features:

- DPJMB features Little Caesar rear release contact retention assembly. Preferred for new design.

Rack and Panel: DPK; MIL-C-83733 (USAF)



Literature Reference: [Rack and Panel](#)

Cannon DPK

DPK series are high performance environment-resistant, rectangular connectors qualified to MIL-C-83733 (USAF). They feature crimp snap-in contacts in the dependable Little Caesar rear release contact retention assembly. This field-proven assembly permits contacts to be inserted and extracted at the rear of the connector.

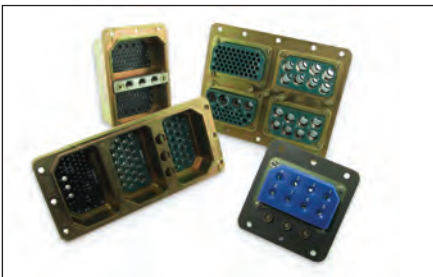
Applications:

- Commercial Aircraft
- Military Aircraft

Product Features:

- Qualified to MIL-C-83733 (USAF).
- Little Caesar rear release contact retention assembly.

Rack and Panel: DPX, ARINC Series 404 Standard



Literature Reference: [Rack and Panel](#)

Cannon DPX, ARINC Series 404 Standard

The DPX series are one-piece shell miniature rack and panel connectors. They are available in single through four gang versions with ARINC Series 404 Standard shells. Their construction offers high strength and maximum utilization of insert area.

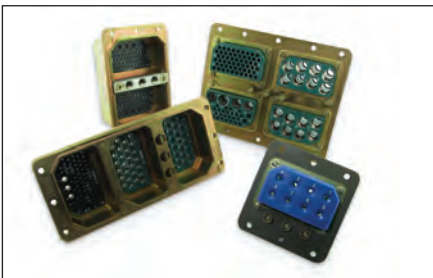
Applications:

- Avionics Equipment
- Commercial Aircraft

Product Features:

- Accommodates up to 424 contacts.

Rack and Panel: DPXNA/DPXNE; MIL-C-81659



Literature Reference: [Rack and Panel](#)

Cannon DPXNA/DPXNE

DPXNA (non-environmental, Type IV) and DPXNE (environmental, Types II and III) rack and panel connectors are designed to meet or exceed the requirements of MIL-C-81659, Revision B. They are available in single through four gang configurations, with a total of 12 contact arrangements accommodating contact sizes 12, 16, 20 and 22, and combination standard and coaxial contacts.

Applications:

- Commercial Aircraft
- Military Aircraft

Product Features:

- Little Caesar rear release contact retention assembly.
- Qualified to MIL-C-81659.

Rack and Panel: SGA- Single Gang ARINC



Literature Reference: [Rack and Panel](#)

Cannon SGA

SGA connectors utilize all the signal cavity inserts and contacts featured in the ARINC Series 600 Standard connector. It was designed to be used where there are space constraints in which an ARINC Series 600 Standard connector cannot be used. Cannon's SGA connector fills the need for a 150 maximum contact connector with a smaller shell design than shell size 2 of ARINC Series 600 Standard, and has more contacts available than single gang DPX with 106, size 22, contacts.

Applications:

- Avionics Equipment
- Commercial Aircraft

Product Features:

- Both environmental and non-environmental versions.
- Low insertion force contacts.

Connector Product Overview

RF: 1.0/2.3



Literature Reference: 75 Ohm RF

Cannon 1.0/2.3

1.0/2.3 connectors are widely used in 75 ohm telecommunications and broadcast systems where due to their smaller size, significant space saving can be achieved. Ideally suited to RF and high speed digital equipment, the connectors are designed to meet the requirements of CECC 22230 and DIN 47247. RoHS Compliant.

Applications:

- Telecom Equipment
- Broadcast Equipment

Product Features:

- Push-Pull coupling mechanism.
- High density solution

RF: 1.6/5.6



Literature Reference: 75 Ohm RF

Cannon 1.6/5.6

The range of 1.6/5.6 connectors are suitable for use in 75 ohm communication systems. These connectors have become the recognized standard in telecommunication systems in many parts of the world. These connectors are designed to meet the requirements of DIN 47295, CECC 22240 and IEC 169-13. RoHS Compliant.

Applications:

- Switching Equipment
- Telecom Systems
- Transmission Equipment
- Voice over Internet Protocol

RF: Between Series Adapters (Adaptors)



Literature Reference: 50 Ohm RF

Cannon Between Series Adapters

Between Series Adapters are widely used for high efficiency transitions between various types of RF coaxial connectors. They are used for connecting test equipment to systems employing a different type connector, or they are used as a component in electronic equipment where it is desirable to have one type of connector for external connections and another type for internal connections.

All Between Series Adapters are designed for lowest VSWR characteristics up to the frequency limits of the connector types involved. All popular types of miniature, subminiature and microminiature designs are available. RoHS Compliant.

Applications:

- Industrial Systems
- Military Equipment
- Telecom Systems
- Test & Instrumentation Equipment

RF: BNC



Literature Reference: 75 Ohm RF

Cannon BNC

The 75 ohm 90° BNC RF connectors are designed to meet and exceed the most rigorous demands in today's central offices. The 90° BNC connectors feature full crimp designs and can be easily terminated in the field with our recommended tools. RoHS Compliant.

Applications:

- Central Office Switching
- Telecommunications

Product Features:

- Fits 734 and 735 type DS3 coaxial cables.
- Available in single or bulk package.

RF: Coaxial Terminators



Literature Reference: 50 Ohm RF

Cannon Coaxial Terminators

Coaxial Terminators provide a low cost means of cable junction to a printed circuit where engagement and disengagement are not required. This method of terminating cable on PCBs eliminates the inconsistency associated with hard wiring. RoHS Compliant.

Applications:

- Consumer Products
- Industrial Equipment

Product Features:

- Easy to assemble.
- Low cost.

RF: MMCX



Cannon MMCX

Base stations and wireless architectures require the highest level of RF performance. The MMCX connector series is rated at 6 GHz and is about 50 percent of the size of the MCX and SMB series. The MMCX connector is designed with a 50 ohm impedance and a reliable snap-on coupling method producing low "RF leakage". It is designed for use in applications where space requirements are small and weight limitations are demanded. RoHS Compliant.

Applications:

- Automotive
- GPS

Product Features:

- High reliability and long service life.
- Low RF leakage value.

RF: QT-BNC



Literature Reference: 75 Ohm RF

Cannon QT-BNC

This termination technique provides the QT-BNC with a high pressure, gas tight center conductor joint of exceptional mechanical integrity, without crimping the center contact. The QT-BNC is a 75 ohm pre-assembled connector with an integral center contact and rear crimp ferrule. This connector may be terminated onto cable in under 20 seconds, significantly reducing installation costs. RoHS Compliant.

Applications:

- Telecommunications
- Broadcast Systems

Product Features:

- Plastic rear cap is color coded for easy identification of cable type.
- Meets Telcordia/SMPTE 292M standards.

RF: Sealflex 2



Literature Reference: 50 Ohm RF

Cannon Sealflex 2

Sealflex 2 microwave cable assemblies are designed for applications requiring consistent microwave performance through to 18 GHz and may be used with minimal degradation to 26 GHz, with SMA connectors.

All connector designs, except BNC, exhibit "mode free" characteristics to 18 GHz, thereby allowing low VSWR to be specified without "spikes" being present in the upper frequency spectrum. RoHS Compliant.

Applications:

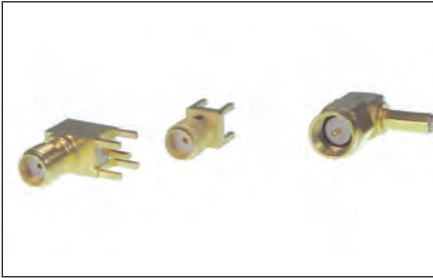
- Avionics Systems
- Commercial Communications Equipment

Product Features:

- 100% tested for VSWR and insertion loss and test plots are supplied with each item.

Connector Product Overview

RF: SMA- Commercial



Literature Reference: 50 Ohm RF

Cannon SMA – Commercial

ITT offers a range of Commercial SMA, brass bodied connectors. These offer a more economic product for a slightly reduced performance. They are supplied with either gold or nickel plating. Also, available with passivated stainless steel coupling nuts. RoHS Compliant.

Applications:

- Base Station - Networks
- Test & Instrumentation Equipment

Product Features:

- SMA plugs are environmentally sealed using a gasket.
- Intermateable with all SMA connectors currently available.

RF: SMA- High Temperature



Cannon SMA – High Temperature

These SMA connectors are specially designed to operate in temperatures up to 250° C without impacting performance and feature the MIL-PRF-29012 SMA interface. Designed specifically for harsh environment applications requiring 50 Ohm RF interconnects. We also offer semi-rigid cable assemblies utilizing these connectors. RoHS Compliant.

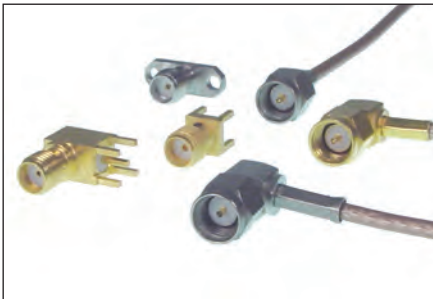
Applications:

- Military
- Industrial

Product Features:

- Pressfit contact
- Semi-rigid cable assembly sets can be phase matched

RF: SMA- Precision



Literature Reference: 50 Ohm RF

Cannon SMA – Precision

Precision SMA connectors feature the MIL-C-39012 Series SMA interface and envelope configuration. They can be mated with all connectors meeting the MIL-SPEC dimensions. Designed for use with a variety of subminiature coaxial cables, superior results are obtained from DC to 18 GHz when used with semi-rigid cables and from DC to 12.4 GHz with flexible cable. RoHS Compliant.

Applications:

- Military Equipment
- Radar – Ground and Airborne

Product Features:

- SMA plugs are environmentally sealed using a gasket.
- Intermateable with all SMA connectors currently available.

RF: SMB/SMC



Literature Reference: 50 Ohm RF

Cannon SMB/SMC

SMB/SMC connectors are compatible with all SMB/SMC connectors conforming with MIL-C-39012, BS9210, UTE C93 561, UTE C93 562, CECC 22130 and CECC 22140.

SMB connectors feature snap-on coupling, allowing rapid mating/unmating. SMC connectors feature screw-on coupling, permitting a low VSWR under vibration conditions and a matched impedance of 50 ohms. RoHS Compliant.

Applications:

- Body Scanners – Medical
- Hard Disk Drives
- Radar – Airport Search
- Telecom Systems
- Test & Instrumentation Equipment

RF: SMZ (Type 43)



Literature Reference: 75 Ohm RF

Cannon SMZ (Type 43)

The SMZ connector is a telecommunication standard in the UK and in many areas of the world. A series of 75 ohm connectors which feature positive latching and Cannon's unique QT™ (Quick Termination) assembly method. RoHS Compliant.

Applications:

- **Switching Equipment**
- **Telecom Network**
- **Transmission Equipment**
- **Voice over Internet Protocol**

Product Features:

- **Center contact termination using crimp or QT termination method to reduce installed costs.**
- **Interface to BS9210 F0022.**

RF: SSIS



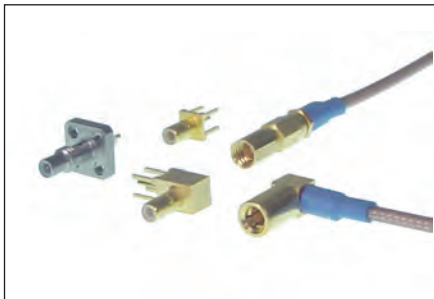
Cannon SSIS

Subminiature Intermediate Slide-On Series (SSIS) connectors are miniature versions of the SIS range. The jack-to-jack adapter has been designed to bias the mating forces. This feature ensures that the components will be retained in the desired module. One end of the adapter has a higher engagement/separation force than the other. Consequently at separation the high force end of the adapter will remain in one module while the low force end slides free. RoHS Compliant.

Applications:

- **Avionics Equipment**
- **Filters**
- **Radar**
- **Telecom – Base Station Equipment**

RF: SSMB/SSMC



Literature Reference: 50 Ohm RF

Cannon SSMB/SSMC

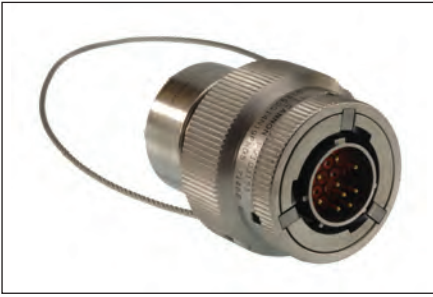
SSMB 50 ohm connectors feature snap-on coupling, allowing rapid mating/unmating in applications where limited space prohibits the use of torque wrenches or when components/modules must be quickly changed to reduce downtime. SSMC 50 ohm connectors feature screw-on coupling, to provide positive mechanical engagement, where space permits the use of torque wrenches. RoHS Compliant.

Applications:

- **Avionics Equipment**
- **Military Radio – Manpack**
- **Missiles**
- **Portable Equipment**
- **Weapon Control Systems**

Connector Product Overview

Space and Specials: GM- Quick Disconnects



Literature Reference: [Space and Specials](#)

Cannon GM

This family of special connectors feature customized umbilical and lanyard release that automatically disconnect at the time of system launch. They are designed to meet the highest quality and performance standards. Ideal for intersage separation, weapon stores, and pylon applications, these connectors can incorporate both pneumatic and electrical lines in the same assembly.

Applications:

- **Space Launch Vehicles**
- **Missile and Torpedos**

Product Features:

- **Rugged High Performance**
- **Custom and application specific designs**

Space and Specials: H- Hydrospace and Hull Penetrators



Literature Reference: [Space and Specials](#)

Cannon H Series

These custom designed ship and sub-safe bulkhead connectors provide the critical interface required to penetrate and carry signals through the hull or bulkhead of military ships and submarine vessels. Connectors are designed with a special compression glass interface that provides a highly reliable hermetic seal and will operate at extreme temperature and pressure up to 20,000 PSI.

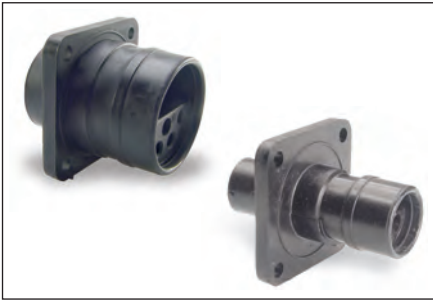
Applications:

- **Military Ships**
- **Submarine Ships**

Product Features:

- **High Pressure resistant to 20,000 PSI**
- **Compression Glass Sealed**
- **Sub-Safe Qualified**

Sure-Seal/ Mini Sure-Seal



Literature Reference: [Sure-Seal](#)

Cannon Sure-Seal/Mini Sure-Seal

A series of low cost, environmental circular connectors representing simplicity at its best. All that is needed is a rubber connector body and contacts to achieve a rugged IP67 solution. Sure-Seal connectors were designed to meet the increased requirements for safety and reliability in the automotive field brought about by Department of Transportation regulations. These sealed connectors satisfy all of the parameters defined by automotive/industrial standards including vibration, shock, temperature cycling, salt water spray and immersion, petroleum derivatives, industrial gas, and most important low millivolt drop and low contact resistance.

Applications:

- **Off-road Vehicles**
- **Industrial machinery**
- **Generally for humid and dirty environment**

Product Features:

- **Layout 2-10 way equipped with pin and socket**
- **Inexpensive, IP67 seal solution**
- **Available in 2 main sizes, Standard and Mini Version**
- **Flange and inline connectors**

Connector Product Overview

Transportation: Cannon Aquatica™ APD/DIN 72585



Literature Reference: APD DIN 72585

Cannon Aquatica™ APD/DIN 72585

This series of in-line and bulkhead sensor connectors are resistant to engine, transmission and brake fluid – specifically designed for the harsh environment on a vehicle. It also boasts very low contact resistance, so you can benefit from maximum signal integrity. Configurations from 1 way to 51 way (contact count).

Applications:

- **ABS Brake control**
- **Valve control (water, oil, air pressure)**

Product Features:

- **Bayonet coupling.**
- **Environmentally sealed to IP69K.**

Transportation: APE



Cannon APE

APE 2 and 3-way connectors are designed to protect against the harshest environmental conditions. It stands up to contaminants, vibration and shock. Low contact resistance provides a maximum signal integrity. Also available as free assembly version for socket receptacle.

Applications:

- **ABS/EBS Brake Systems for Truck and Trailers**

Product Features:

- **Environmentally sealed to IP69K.**
- **Individual wire seals**

Transportation: APV Vector



Literature Reference: SLC/SLE/CLC APV

Cannon APV Vector

This series of connectors offers a low cost, lightweight environmental sealing solution with a maximum of space savings. Positive polarization is assured by the trapezoidal shape of the connectors and additional coding positions. Reliable mating and locking is indicated both visually and audibly.

Applications:

- **Transportation**

Product Features:

- **In-line design.**
- **Positive mating.**
- **Secondary terminal locking.**
- **Signal and Power with single housing.**

Transportation: CIR290



Literature Reference: VEAM CIR

VEAM CIR290

The VEAM CIR290 connector series is used principally in the harsh environment of Railroad Mass Transit Systems. Has fast and precise quarter turn coupling of the plug and receptacle connectors

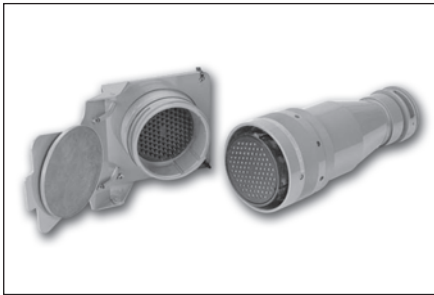
Applications:

- **Mass Transit Systems**

Product Features:

- **Watertight seal**
- **High current versions (up to 1200 amps)**

Transportation: CIR295



Literature Reference: [VEAM CIR](#)

VEAM CIR295

The VEAM CIR295 connector series is used principally in the harsh environment of Railroad Mass Transit Systems. Has fast and precise quarter turn coupling of the plug and receptacle connectors. These connectors have rigid insulators and contacts with retention clips.

Applications:

- Mass Transit Systems

Product Features:

- Watertight seal
- Ease of contact insertion and extraction

Transportation: CLC/ Y-Splice



Literature Reference: [SLC/SLE/CLC/APV](#)

Cannon CLC/Y-Splice

Cannon's Clip Lock Circular (CLC) environmental miniature connector and Y-Splice series are designed to support electronic networks, sensors and actuators direct, in-line and feed-thru interconnect applications. CLC is one rugged connector system that can really take the heat, shock and vibration found in the harshest vehicle environments. CLC's Pass-Thru and Y-Splice connectors both offer field-proven elastomeric seals.

Applications:

- CAN Bus Systems (J1939)
- Engine Block – Fuel Injection
- Transmission – Automotive

Product Features:

- In-line design.
- Bulkhead feed-thru.

Transportation: DSR



VEAM DSR

The VEAM DSR connectors have a double start, ratcheted coupling system with a durable hard anodize finish. A contrasting brightly colored stripe on the receptacle connector provides visual indication when the connectors are fully mated.

Applications:

- Mass Transit Systems

Product Features:

- Coupling system prevents unmating in high shock and vibration conditions
- Connector shells have 5 keys for positive and stable alignment

Transportation: SLC/SLC-T



Literature Reference: [SLC/SLE/CLC/APV](#)

Cannon SLC/SLC-T

For high performance circular connector requirements look to the environmentally sealed Snap-(Clip) Lock Circular (SLC/SLC-T) series from Cannon. The connector design ensures a tightly sealed connection that can withstand heat, shock and vibration, preserving the integrity of the solid state package.

Applications:

- Black Box
- Printed Circuit Board
- Transmission – Automotive

Product Features:

- Superior environmental sealing.
- Low installed cost.
- 5, 8, 10 and 15 contact cavities.

Connector Product Overview

Transportation: SLE



Literature Reference: SLC/SLE/CLC/APV

Cannon SLE

For high performance rectangular connector requirements look to the Snap Lock Environmental (SLE) series from Cannon. The connector design ensures a tightly sealed connection that can withstand heat, shock and vibration, preserving the integrity of the solid state package, while protecting against contaminants – even when unmated.

Applications:

- **Black Box**
- **Control Module**
- **Printed Circuit Board**

Product Features:

- **Superior environmental sealing.**
- **Low installed cost.**

Transportation: VBN



Literature Reference: VEAM VBN

VEAM VBN

The VEAM VBN connector series is completely intermateable with VG95234/CIR reverse bayonet connectors and conforms to the Mass Transit specification NF F 61-030.

Applications:

- **Mass Transit Systems**
- **Industrial/Commercial**

Product Features:

- **Vibration resistant**
- **Flame retardant UL 94V-0 Thermoplastic Inserts.**
- **Ease of contact insertion and extraction**

Trident™: Multiway- Rack & Panel



Literature Reference: [Trident](#)

Cannon Trident Multiway (TM)

The Multiway range is an extremely reliable and robust series of rack & panel connectors. The design is based on the requirements of Mil-C-28748 and will accept any of the Trident signal or coax contacts. It is available in 6 arrangements ranging from 14 to 75 ways, together with a wide range of accessories and mounting hardware.

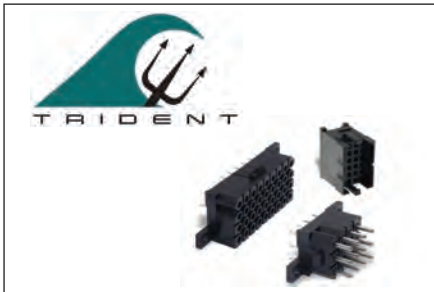
Applications:

- Rail equipment
- Test equipment

Product Features:

- Fully tested to MIL-STD-202 and now IEC 512.

Trident™: Snap Together- Rectangular



Literature Reference: [Trident](#)

Cannon Trident Snap Together – Rectangular (TST)

These are low installed cost connectors rated for up to 13 A and 250 V ac rms. They are typically used for circuit board and internal wiring applications. Snap Together connectors facilitate easy assembly and removal of equipment such as motors, fans, and transformers.

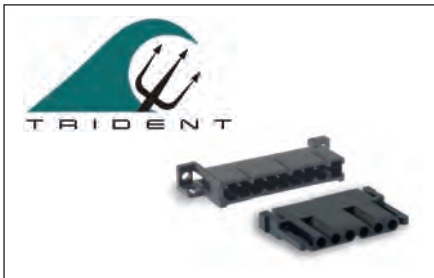
Applications:

- Circuit Board connections
- Internal connections

Product Features:

- Easy, cost effective installation
- Recognized under the component program of UL Inc.

Trident™: Snap Together- Slimline



Literature Reference: [Trident](#)

Cannon Trident Snap Together – Slimline (TST)

The Slimline Range offers a low profile connector system that is well suited for circuit board applications. The precision machined contacts are ideal for power and sensitive signals.

Applications:

- Communication equipment
- Test equipment

Product Features:

- Five single row contact arrangements available.
- 10 A per circuit.
- Recognized under the component program of UL Inc.

Trident™: Ringlock- Circular



Literature Reference: [Trident](#)

Cannon Trident Ringlock (TR)

Ringlock is a range of robust circular connectors for industrial applications. It uses a metal bayonet coupling system for quick and reliable connections and thermoplastic bodies for low installed cost. The connectors are available in several sizes ranging from 4 to 48 circuits for signals up to 13 A or coax. With the addition of a sealed cable clamp, the connectors can be water sealed to meet IP65.

Applications:

- Industrial electronics
- Manufacturing equipment

Product Features:

- Recognized under the component program of UL Inc.
- Rugged metal coupling.

Connector Product Overview

Trident™: Neptune™- Circular



Literature Reference: [Trident](#)

Cannon Trident Neptune (TN)

Neptune is a range of circular connectors specifically designed for harsh environment applications. They are water sealed to IP67 and do not require blanking plugs for unused cavities. Contact arrangements include combinations of signal (13 A) and power (30 A) contacts. The mating uses a highly reliable bayonet coupling system with either high strength metal or corrosion resistant plastic coupling rings.

Applications:

- Off Road Vehicles
- Outdoor electronics

Product Features:

- Mixes signal and 30 A power contacts in one housing.
- Full interface and cable sealing up to IP67.

Trident™: TNM (Trident Neptune Metal) Circular



Literature Reference: [Trident](#)

Cannon Trident Neptune Metal TNM

TNM is a series of metal shell connectors that, when used with the shielded end bell, provides RF shielding from cable-to-equipment or cable-to-cable. Connectors and end bells are moisture sealed to IP67. They are ideal for applications that require the additional strength of metal shells.

Applications:

- Communication equipment
- Industrial electronics

Product Features:

- Can be sealed to IP67.
- Easy-to-assemble.
- Recognized under the component program of UL Inc.

Trident™: Contacts



Literature Reference: [Trident](#)

Cannon Trident Contacts

The Trident series of contacts are based on a standard cavity design. This enables the stamped, machined, PCB, solder, and coax contacts to fit into any of the connectors in the Trident connector system. In addition, the mating interface is standardized so that the various signal contacts (ranging from 14-26 AWG) will all mate together. The retention system of the contacts enables quick and cost effective assembly without special insertion tools.

Applications:

- Trident rectangular connectors
- Trident circular connectors

Product Features:

- Formed/Stamped Contacts
- Solder Contacts
- Power Contacts
- Coaxial Contacts
- Discriminating/Keying Pins

ZIF: DL (Plastic)



Literature Reference: DL/DLM/DLD

Cannon DL1/2/3/5

The DL Series of Zero Insertion Force (ZIF) connectors feature: a minimum rated life of 10,000 complete mating/unmating cycles with no performance loss; can be mated/unmated in less than two seconds even with as many as 2496 contacts; and they cost less (often as much as 25% less) per mated line than singular high-density rack & panel connectors.

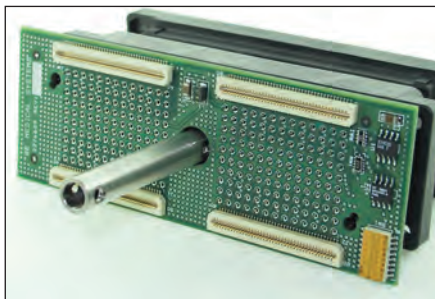
Applications:

- Entertainment
- Medical – Ultrasound

Product Features:

- Plastic Body.
- 60, 96, 156, or 260 contact cavities.

ZIF: DL Pressfit PCB Adapter



Literature Reference: DL/DLM/DLD

Cannon DL5 Pressfit

The DL Pressfit is a unique modification of the standard Zero Insertion Force (ZIF) – DL5 product offering. An eye-of-needle design allows the receptacle side product to be press fit onto an application circuit board assembly.

Applications:

- Medical Ultrasound
- Test & Measurement Equipment

Product Features:

- Alignment plate sub-assembly assures proper positioning and structural support during insertion of the DL contacts..

ZIF: DL4



Literature Reference: DL/DLM/DLD

Cannon DL4

The DL4 series of Zero Insertion Force (ZIF) connectors feature; a minimum rated life of 20,000 complete mating/unmating cycles with no performance loss; can be mated/unmated in less than two seconds even with as many as 2496 contacts; and they cost less (often as much as 25% less) per mated line than singular high-density rack and panel connectors.

Applications:

- Medical
- Entertainment

Product Features:

- Panel Mount.
- Metal Frame.
- 624, 1248, or 2496 contact cavities.

ZIF: DLD (Drawer)



Literature Reference: DL/DLM/DLD

Cannon DLD1/2

ITT has combined Zero Insertion Force (ZIF) technology with remote electrical engagement. The DLD Drawer allows the movement of a drawer or panel to effortlessly mate/unmate the connector halves. As an example: electrical sub-systems can be easily removed for service, interchangeability, or portability.

The contacts in the DLD Drawer product series do not touch each other while the connector halves are mating. This unique ZIF technology, introduced in the Cannon DL series in the early 1970's, has time-tested proven reliability and durability.

Applications:

- Telecommunication
- Test Instrumentation
- Transportation

Product Features:

- Drawer Style.
- Plastic Body.
- 96 or 156 contact cavities.

Connector Product Overview

ZIF: DLM (Metal)



Literature Reference: DL/DLM/DLD

Cannon DLM1/2/3/5/6

ITT has expanded the DL-ZIF series offering with the addition of the DLM (metal shell) versions. The DLM uses a rugged nickel plated aluminum housing. A shield-locking mechanism feature ensures uniform mating pressure around the perimeter of the mated connector to create an EMI/RFI shield. Facilitates compliance of equipment to CE EMC directives.

Applications:

- **Commercial/Industrial Manufacturing**
- **Test Instrumentation**

Product Features:

- **Metal body.**
- **EMI/RFI shielding.**
- **60, 96, 156, 260, or 360 contact cavities.**

ZIF: DLP-272



Literature Reference: DLP ZIF

Cannon DLP-272

The DLP is a Zero Insertion Force (ZIF) wire-to-board connector. Developed for use in multi-conductor cable interface applications. DLP offers higher performance in the most compact design.

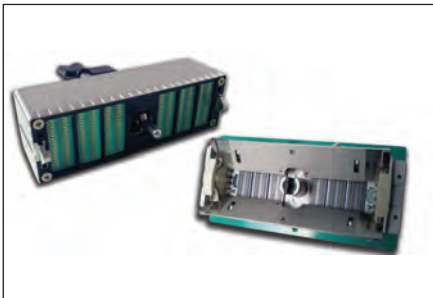
Applications:

- **Mobile Medical Equipment**
- **Semiconductor Production**

Product Features:

- **A lower profile plug connector with high-density contact layout.**
- **EMI/RFI protection with metal shell and grounding spring.**

ZIF: DLP-408



Literature Reference: DLP ZIF

Cannon DLP-408

The DLP is a Zero Insertion Force (ZIF) wire-to-board connector. Developed for use in multi-conductor cable interface applications. DLP offers higher performance in the most compact design. Integral shutters cover the contact area for maximum protection.

Applications:

- **Mobile Medical Equipment**
- **Semiconductor Production**

Product Features:

- **A lower profile plug connector with high-density contact layout.**
- **EMI/RFI protection with metal shell and grounding spring.**
- **Integral shutters cover the contact area for maximum protection**

Interconnect Solutions Prefix Guide

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Product Safety and Warranty

1. MATERIAL CONTENT AND PHYSICAL FORM

Electrical connectors do not usually contain hazardous materials. They contain conducting and non-conducting materials and can be divided into two groups.

a) Printed circuit types and low cost audio types which employ all plastic insulators and casings.

b) Rugged, Fire Barrier and High Reliability types with metal casings and either natural rubber, synthetic rubber, plastic or glass insulating materials. Contact materials vary with type of connector and also application and are usually manufactured from either: Copper, copper alloys, nickel, alumel, chromel or steel. In special applications, other alloys may be specified.

2. FIRE CHARACTERISTICS AND ELECTRIC SHOCK HAZARD

There is no fire hazard when the connector is correctly wired and used within the specified parameters. Incorrect wiring or assembly of the connector or careless use of metal tools or conductive fluids, or transit damage to any of the component parts may cause electric shock or burns. Live circuits must not be broken by separating mated connectors as this may cause arcing, ionization and burning.

Heat dissipation is greater at maximum resistance in a circuit. Hot spots may occur when resistance is raised locally by damage, e.g. cracked or deformed contacts, broken strands of wire. Local overheating may also result from the use of the incorrect application tools or from poor quality soldering or slack screw terminals. Overheating may occur if the ratings in the product Data Sheet/Catalog are exceeded and can cause breakdown of insulation and hence electric shock. If heating is allowed to continue it intensifies by further increasing the local resistance through loss of temper of spring contacts, formation of oxide film on contacts and wires and leakage currents through carbonization of insulation and tracking paths. Fire can then result in the presence of combustible materials and this may release noxious fumes. Overheating may not be visually apparent. Burns may result from touching overheated components.

3. HANDLING

Care must be taken to avoid damage to any component parts of electrical connectors during installation and use. Although there are normally no sharp edges, care must be taken when handling certain components to avoid injury to fingers. Electrical connectors may be damaged in transit to the customers, and damage may result in creation of hazards. Products should therefore be examined prior to installation/use and rejected if found to be damaged.

4. DISPOSAL

Incineration of certain materials may release noxious or even toxic fumes.

5. APPLICATION

Connectors with exposed contacts should not be selected for use on the current supply side of an electrical circuit, because an electric shock could result from touching exposed contacts on an unmated connector. Voltages in excess of 30 V ac or 42.5 V dc are potentially hazardous and care should be taken to ensure that such voltages cannot be transmitted in any way to exposed metal parts of the connector body. The connector and wiring should be checked, before making live, to have no damage to metal parts or insulators, no solder blobs, loose strands, conducting lubricants, swarf, or any other undesired conducting particles. Circuit resistance and continuity check should be made to make certain that there are no high resistance joints or spurious conducting paths. Always use the correct application tools as specified in the Data Sheet/Catalog. Do not permit untrained personnel to wire, assemble or tamper with connectors. For operation voltage please see appropriate national regulations.

IMPORTANT GENERAL INFORMATION

(i) Air and creepage paths/Operating voltage. The admissible operating voltages depend on the individual applications and the valid national and other applicable safety regulations.

For this reason the air and creepage path data are only reference values. Observe reduction of air and creepage paths due to PC board and/or harnessing.

(ii) Temperature

All information given are temperature limits. The operation temperature depends on the individual application.

(iii) Other important information

Cannon continuously endeavors to improve their products. Therefore, Cannon products may deviate from the description, technical data and shape as shown in this catalog and data sheets.

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Circular/Filter/Hermetic/Fiber Optic Connectors

As a world leader in circular, filter, and hermetic connectors, ITT can leverage its design and manufacturing expertise to fit virtually any application. Our expertise includes fast positive mating for a wide range of military applications, as well as numerous sizes and contact configurations for various harsh environments. Our wide variety of fiber optic products include hybrid contacts, multi-channel, rack and panel, and hi-rel assemblies, including MIL and ARINC standard solutions. ITT can meet numerous specs, including NATO and MIL standards.

www.ittcannon.com/circulars • www.ittcannon.com/filter • www.ittcannon.com/hermetics • www.ittcannon.com/fiberoptics



D-Subminiature Connectors

Cannon invented D-sub connectors in 1952. Our family of D-Subs now includes combinations of signal, power and RF, as well as severe service sealed connectors. Cannon D-Subs are available with an extensive line of backshells and accessories and are one of the most economical shielded connector solutions available. ITT D-Sub connectors are qualified to the MIL-DTL-24308 specification.

www.ittcannon.com/dsubs



Microminiature Connectors

Developed first by Cannon in the 1960's, Interconnect Solutions microminiature connectors offer high performance and reliability with exceptional versatility. Available in rectangular, circular, and strip configurations for countless applications, many of our connectors meet or exceed applicable requirements of the MIL-DTL-83513 specification.

www.ittcannon.com/micro



Rack and Panel Connectors

Initially pioneered by Cannon during the 1930s, Interconnect Solutions is the world leader in rack and panel connectors, offering unmatched variety of shell configurations and insert arrangements, materials, plating, and contact options. Many of our standard and custom designs meet the stringent requirements of ARINC 600, ARINC 404 (MIL-C-81659), and MIL-DTL-83733 standards.

www.ittcannon.com/rackandpanel



RF Connectors

ITT Interconnect Solutions has been providing interconnect products to the Microwave and RF industry since 1963 (formerly The Sealectro Corporation). The RF 50 & 75 Ohm product lines cover UHF band through Ku band requirements. These connectors and cable assemblies are available with a thread type, snap type, bayonet type or slide on coupling method. The frequencies range from DC to 18+ GHz.

www.ittcannon.com/RF50 • www.ittcannon.com/RF75



Transportation

The ITT ICS interconnect range includes sealed circular and rectangular connectors in metal or plastic shells. These configurations include board to cable or cable to cable/ bulkhead applications. Both signal and power contacts can be combined in various layouts. All product lines within the Transportation segment offer very low contact resistance providing maximum signal integrity.

www.ittcannon.com/transportation



ITT Interconnect Solutions is an international manufacturer and supplier of connectors including circular, rectangular, fiber optic, RF, power and high voltage, audio, PMCIA, Compact Flash Card, enclosures, cable assemblies, and application specific custom solutions. The Interconnect Solutions portfolio includes the brands Cannon, VEAM, and BIW. As a worldwide leader in connector technology for nearly a century, ITT offers one of the broadest product offerings, six sigma manufacturing capability, Value Based Product Development with exceptional engineering capability, and an extensive sales, distribution, and customer support network.



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