# cannon

ENGINEERED FOR LIFE

### Versatile. Highly Reliable. MIL-DTL-24308 Qualified.

Military Grade D-Subminiature Connectors for Aerospace & Defense Applications

Cannon's MIL-DTL-24308 Qualified D-Subminiature offers a ruggedized interconnect solution that transfers data, power, and signal in a small, weight-saving design. Available in standard and select high density configurations, these robust connectors feature a versatile interface for mission-critical platforms and programs.

Cannon's MIL-DTL-24308 Connectors are highly engineered to operate in temperatures from -55°C to +125°C and are available in MIL-Spec shell sizes 1-5, with removable crimp contacts and non-removable solder contacts. This contact offering can be configured for in-line termination using solder cup and crimp contacts, or for straight and 90-degree printed circuit board (PCB) mounted applications. Cannon also offers a range of tooling, accessories and SAE-AS85049/48/50 qualified backshells for the MIL-DTL-24308 Connector Series.

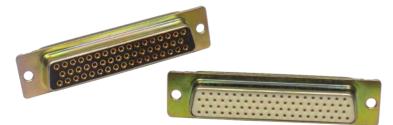
Ideally suited for a wide range of demanding, harsh environment Aerospace & Defense applications, Cannon's MIL-DTL-24308 Connectors are the ultimate choice for long-range subsonic cruise missiles, technology driven UAVs, advanced shipboard communications, and next generation commercial aircraft systems.

#### The ITT Cannon Difference

- Global capabilities & local support
- State-of-the-art manufacturing facilities
- Proven engineering & application expertise
- A committed business partner

### **Key Features**

- Solder & crimp cable versions
- Straight & right angle PCB mount versions
- Fixed or float mount options
- Standard & High Density Configurations
- DWV Rating: 1,000 VAC at sea level
- Current Rating: 5.0 & 7.5 Amps
- Mating Cycles: 500



### Markets & Applications



MILITARY AVIATION



MISSILES & ORDNANCE





SHIPBOARD SYSTEMS

COMMERCIAL AEROSPACE

MIL-DTL-24308 Selection Guide



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How to Order | Part Number Configurator for Slash Sheets 1-4, 23 & 24, Finishes F & Z

		M24308/1	—	2	F
<b>Specification</b>	Sheet Number				
M24308/1	Class G Polarized Shell, Receptacle, Socket Contacts, Solder Type				
M24308/2	Class G Polarized Shell, Receptacle, Socket Contacts, Crimp Type				
M24308/3	Class G Polarized Shell, Pin Contacts, General Purpose, Solder Type				
M24308/4	Class G Polarized Shell, Pin Contacts, General Purpose, Crimp Type				
M24308/23	Class G Nonenvironmental, Polarized Shell, Socket Contacts Printed Wiring				
	Board Termination Types (Standard Density Only)				
M24308/24	Class G Nonenvironmental, Polarized Shell, Pin Contacts Printed Wiring				
	Board Termination Types (Standard Density Only)				
Data Sheet N	lumber				
Please refer to t	he MIL-DTL-24308 detailed specification sheet for applicable dash numbers				
Finish					

F-Cadmium 7-7inc

Test Requirements **Test Description** Test Method Mating/Unmating Force Shell Size Max Unmating (lbs.) Max Mating (lbs.) EIA-364-13 Layout 9 6 10 10 2 15 17 3 25 17 28 4 37 24 39 5 50 30 49 Contact Retention • Contacts shall be retained in their inserts by a 9-pound (minimum) force EIA-364-29 • The axial displacement of contacts shall not exceed .012 inch while under load > 5,000 Megohms (min.) Normal conditions Insulation Resistance EIA-364-21 > 1 Megohm (min.) post Humidity Contact Resistance EIA-364-06 Normal Conditions: • 55 mV max at 7.5 A. (Wired, 20 AWG) • 45 mV max at 3.0 A. (Wired, 24 AWG) • 45 mV max at 3.0 A. (PWB) After Salt Spray: • 65 mV max at 7.5 A. (Wired, 20 AWG) • 55 mV max at 3.0 A. (Wired, 24 AWG) • 55 mV max at 3.0 A. (PWB) Vibration • No damage and no loosening of parts due to vibration EIA-364-28, Test Condition IV • No interruption of electrical continuity longer than 1 microsecond Shock • No damage and no loosening of parts EIA-364-27, Test Condition E • No interruption of electrical continuity longer than 1 microsecond Durability • No electrical or mechanical defects after 500 cycles of mating and unmating EIA-364-09  $200 \pm 100$  cycles/hour Salt Spray (Corrosion) • No exposure of base metal due to corrosion which will affect performance EIA-364-26, Test Condition B • Product will meet further tests as specified Fluid Immersion • Meets mating and unmating forces post immersion in MIL-PRF-83282 EIA-364-10 Hydraulic Fluid and MIL-PRF-23699 Lubricating Fluid

#### Why ITT

ITT is a focused, multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions ITT Cannon is a leading global manufacturer of connector products serving international customers in the aerospace and defense, industrial and medical end markets. We design and engineer a variety of interconnect solutions that make it possible to transfer data, signal and power in an increasingly connected world.

#### Connect with your ITT Cannon representative today or visit us at www.ittcannon.com

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