cannon

ITT

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.

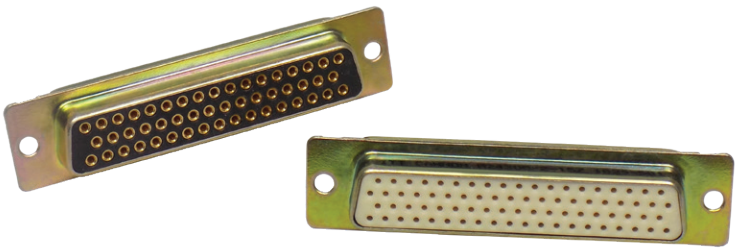
Ideally suited for a wide range of demanding, harsh environment Aerospace & Defense applications, Cannon's MIL-DTL-24308 connectors are the ultimate choice for long-range subsonic cruise missiles, technology driven UAVs, advanced shipboard communications, and next generation commercial aircraft systems.

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

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

M24308/1 — 2 F

Specification 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 Number

Please refer to the MIL-DTL-24308 detailed specification sheet for applicable dash numbers

Finish

F-Cadmium
Z-Zinc
P-Stainless steel, passivated

Test Description	Test Requirements				Test Method
Mating/Unmating Force	Shell Size	Layout	Max Unmating (lbs.)	Max Mating (lbs.)	EIA-364-13
	1	9	6	10	
	2	15	10	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 • The axial displacement of contacts shall not exceed .012 inch while under load				EIA-364-29
Insulation Resistance	> 5,000 Megohms (min.) Normal conditions > 1 Megohm (min.) post Humidity				EIA-364-21
Contact Resistance	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)				EIA-364-06
Vibration	• No damage and no loosening of parts due to vibration • No interruption of electrical continuity longer than 1 microsecond				EIA-364-28, Test Condition IV
Shock	• No damage and no loosening of parts • No interruption of electrical continuity longer than 1 microsecond				EIA-364-27, Test Condition E
Durability	• No electrical or mechanical defects after 500 cycles of mating and unmating				EIA-364-09 200 ± 100 cycles/hour
Salt Spray (Corrosion)	• No exposure of base metal due to corrosion which will affect performance • Product will meet further tests as specified				EIA-364-26, Test Condition B
Fluid Immersion	• Meets mating and unmating forces post immersion in MIL-PRF-83282 Hydraulic Fluid and MIL-PRF-23699 Lubricating Fluid				EIA-364-10

Why ITT

ITT is a focused multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions. ITT's Cannon brand is a leading global manufacturer of connector products serving international customers in aerospace, defense, medical, industrial and transportation end markets. ITT's Connector business, which also includes the Veam and BIW Connector Systems brand, manufactures and supplies a variety of connectors and interconnects that make it possible to transfer data, signal and power in an increasingly connected world.

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