



MIL-DTL-83513 Series Microminiature Connectors

Offering Proven Reliability & Performance, When it Matters Most

Cannon MIL-DTL-83513 Series Microminiature interconnects and cable assemblies are ideally suited for applications requiring extremely small, lightweight and ruggedized solutions with higher density contact configurations. They are available in eight shell sizes that accommodate from 9 to 100 contacts. These robust, space-saving connectors meet ongoing industry demand for environmental, high performance and moisture-sealed Micros that perform reliably in the harshest environments.

- Multiple shell options in aluminum
- Wired pigtail, solder cup, right angle, condensed right angle and straight PC tail options
- High performance Cannon Twist Pin Contacts
- Turnkey & custom cabling solutions

The CANNON Difference:

- Highly engineered
- Exceptional versatility & performance
- Proven reliability
- A commitment to delivering the highest quality interconnect solutions for standard and custom design requirements

Key Features:

- Designed to MIL-DTL-83513 specifications
- .050" center-to-center contact spacing
- 500 mating cycles
- Push-pull hardware option requires no torque, reducing misalignments and rocking



Markets & Applications



MISSILES & ORDNANCE



AEROSPACE LAUNCH VEHICLES



OIL & GAS EXPLORATION



INDUSTRIAL AUTOMATION

Micro-D Metal Shell -.050" Contact Spacing | MIL-DTL-83513



How to Order | Part Number Configurator Slash Sheets 1-5, 10-27

Max. Voltage	Max. Current	Operating Temp	Durability		
600 VAC rms Sea Level	3.0 Amps	-55 to +125 Degrees C	500 Mating Cycles		
M83513	01	H100	**	C	P
Series Prefix	Slash Sheet	Insert Arrangement	Wire Type	Shell Finish	Hardware

Series	Wired/Solder	PCB	
Slash Sheet	01 - Plug, connector, solderpot (metal shell)	10 - Connector, plug, condensed board right angle (CBR), sizes 9-37	
	02 - Receptacle, connector, solderpot (metal shell)	11 - Connector, plug, CBR, size 51	
	03 - Plug, connector, crimp type (metal shell)	12 - Connector, plug, CBR, size 100	
	04 - Receptacle, connector, crimp type (metal shell)	13 - Connector, receptacle, CBR, sizes 9-37	
	05 - Hardware only ⁵	14 - Connector, receptacle, CBR, size 51	
		15 - Connector, receptacle, CBR, size 100	
		16 - Connector, plug, board right angle (BR), sizes 9-37	
		17 - Connector, plug, BR, size 51	
		18 - Connector, plug, BR, size 100	
		19 - Connector, receptacle, BR, sizes 9-37	
		20 - Connector, receptacle, BR Size 51	
		21 - Connector, receptacle, BR Size 100	
		22 - Connector, plug, board straight (BS), Sizes 9-37	
		23 - Connector, plug, BS, Size 51	
		24 - Connector, plug, BS, Size 100	
		25 - Connector, receptacle, BS, Size 9-37	
		26 - Connector, receptacle, BS, Size 51	
		27 - Connector, receptacle, BS Size 100	
	Insert Arrangement	A - 9 Contact	A - 9 Contact (metal shell)
		B - 15 Contact	B - 15 Contact (metal shell)
		C - 21 Contact	C - 21 Contact (metal shell)
		D - 25 Contact	D - 25 Contact (metal shell)
		E - 31 Contact	E - 31 Contact (metal shell)
		F - 37 Contact	F - 37 Contact (metal shell)
		G - 51 Contact	G - 51 Contact (metal shell)
		H - 100 Contact ³	H - 100 Contact (metal shell)
	Wire Type	No Number - For solderpot	No Number - For solderpot
01 - 18" long, #26 AWG per SAE-AS22759/11-26-9 (all white)		01 - .109" long, #24 AWG solid cooper wire per A-A-59551-343, Type "S", solder dipped ⁶	
02 - 36" long, #26 AWG per SAE-AS22759/11-26-9 (all white)		02 - .140" long, #24 AWG solid copper wire per A-A-59551-343, Type "S", solder dipped ^{1,6}	
03 - 18" long, #26 AWG per SAE-AS22759/11-26 color coded per MIL-STD-681, system 1, 10 colors repeating ⁴		03 - .172" long, #24 AWG solid copper wire per A-A-59551-343, Type "S", solder dipped ⁶	
04 - 26" long, #26 AWG per SAE-AS22759/11-26 color coded per MIL-STD-681, system 1, 10 colors repeating ⁴			
05 - .5" long, #25 AWG, type S per A-A-59551-343, Gold Plated			
06 - 1.0" long, #25 AWG, type S per A-A-59551-343, Gold Plated			
07 - .5" long, #25 AWG, type S per A-A-59551-343, Tin Plated			
08 - 1.0" long, #25 AWG, type S per A-A-59551-343, Tin Plated			
09 - 18" long, #26 AWG per SAE-AS22759/33-26-9 (all white) ²			
10 - 36" long, #26 AWG per SAE-AS22759/33-26-9 (all white) ²			
11 - 18" long, #26 AWG per SAE-AS22759/33-26 color coded per MIL-STD-681, system 1, 10 colors repeating ^{2,4}			
12 - 36" long, #26 long #AWG per ASAE-AS22759/33-26 color coded per MIL-STD 681, system 1, 10 colors repeating ^{2,4}			
13 - 72" long, #26 AWG per SAE-AS22759/11-26-9 (all white)			
14 - 72" long, #26 AWG per SAE-AS22759/11-26 color coded per MIL-STD-681, system 1, 10 colors repeating ⁴			
15 - 72" long, #26 AWG per SAE-AS22759/33-26-9 (all white) ²			
16 - 72" long, #26 AWG per SAE-AS22759/33-26 color coded per MIL-STD-681, system 1, 10 colors repeating ^{2,4}			
Shell Finish	C - Cadmium	C - Cadmium	
	N - Electroless nickel	N - Electroless nickel ²	
Hardware		N - No jackpost	
		P - Jackpost (permanently attached)	
		T - Threaded insert	

1 - Tolerance on wire lengths: 18", 36" and 72" long - +1.00"/-0.00. 2 - For space applications, connector shell finish must be "A174" and wire must be per SAE-AS22759/33-26. 3 - Size 100 not available in /06 through /09. 4 - Color coding in accordance with MIL-STD-681, system 1. 5 - For mounting hardware to Military Specifications (sizes 9 to 100). 6 - Tolerance on termination ± .015



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 www.ittcannon.com

CHINA—Shenzhen City +86.755.2726.7888	GERMANY—Weinstadt +49.7151.699.0	INDIA—Bangalore +91 22 67843000	JAPAN—Kanagawa +81.462.57.2010	SINGAPORE +65 66974205	USA—Irvine, CA +1.800.854.3028
FRANCE +33.1.60.04.93.93	HONG KONG +852.2732.2720	ITALY—Lainate +39.02938721	MEXICO—Nogales +52.631.311005	UK—Basingstoke +44.1256.347400	