



MIL-DTL-83513 Series Microminiature Connectors

Proven Reliability & Performance, When it Matters Most

Cannon's MIL-DTL-83513 Series of microminiature interconnects Microminiature interconnects and cable assemblies are ideally suited for applications requiring exceedingly 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.

The CANNON Difference:

- Global capabilities and local support
- Proven application expertise
- Over a century of interconnect leadership
- A committed innovator and business partner

- 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

Key Features:

- Designed to MIL-DTL-83513 specifications
- 0.050" 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'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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ITT Cannon Micro-D MIL-DTL-83513 Sell Sheet | 052022

