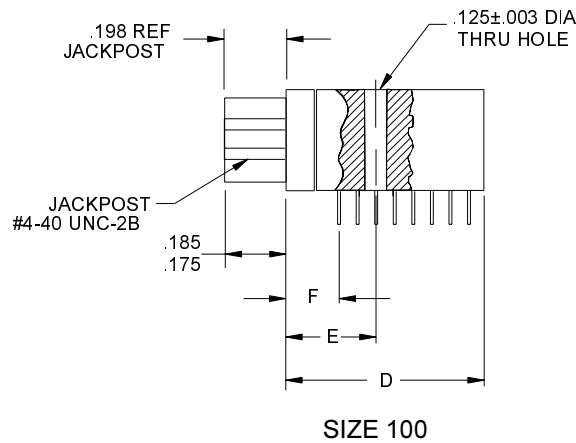
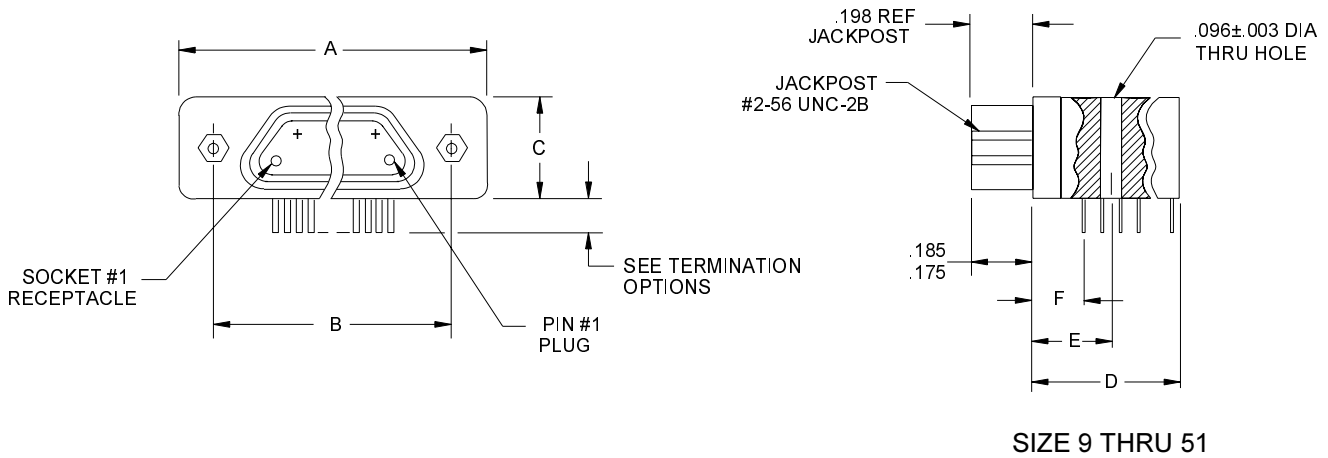


## 1.1 MICRO CONNECTORS / M83513 MICRO D

NO. OF POSITIONS	A MAX	B	C MAX	D MAX	E	F
9	.787	.565	.325	.425	.25	.23
15	.937	.715	.325	.425	.25	.13
21	1.087	.865	.325	.425	.25	.13
25	1.187	.965	.325	.425	.25	.13
31	1.337	1.115	.325	.525	.25	.13
37	1.487	1.265	.325	.525	.25	.13
51	1.435	1.215	.360	.660	.30	.15
100	2.175	1.800	.420	1.010	.40	.20



CRISTEK INTERCONNECTS, INC.  
 www.cristek.com  
 1301 S. Lewis St.  
 Anaheim, CA 92805  
 Phone: (714) 618-2000  
 FAX: (714) 535-4897

TITLE  
**MILITARY MICRO D METAL SHELL  
 RIGHT ANGLE P.C.B. MOUNT**

FILENAME  
**ADS-CIM10-15-1**

DWG. NO.  
**M83513/10-15**

CODE IDENT NO. <b>67720</b>	SHT <b>1</b> OF <b>4</b>	REV <b>D</b>
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TOLERANCE: .XXX ±.005 .XX ±.01 ANGLE ±1°

**CIM ## - # ## # #**

CRISTEK'S P/N EQUIVALENT TO M83513 MIL SPEC.

SLASH NUMBER (M83513/##)

- 10 = PLUG SIZE 9-37
- 11 = PLUG SIZE 51
- 12 = PLUG SIZE 100
- 13 = RECEPTACLE SIZE 9-37
- 14 = RECEPTACLE SIZE 51
- 15 = RECEPTACLE SIZE 100

NUMBER OF CONTACTS

- A = 9      D = 25      G = 51
- B = 15     E = 31      H = 100
- C = 21     F = 37

TERMINATIONS

- 01 = .109 ±.015
  - 02 = .140 ±.015
  - 03 = .172 ±.015
- } ALL 24 AWG HOT TIN DIPPED

SHELL FINISH

- C = CADMIUM
- N = NICKEL

SHELL HARDWARE

- N = NO HARDWARE
- P = JACKPOST PER M83513/05-07 SIZES 9 THRU 51
- JACKPOST PER M83513/05-17 FOR SIZE 100

**1. MATERIALS:**

SHELL - ALUMINUM PER QQ-A-200/8, QQ-A-250/11, OR QQ-A-591  
 INSULATOR - DIALLYL PHTHALATE PER MIL-M-14G, TYPE SDG-F  
 BACKSHELL - POLYPHENYLENE SULFIDE PER MIL-M-24519  
 TYPE GST-40F  
 PIN CONTACT - BERYLLIUM COPPER  
 SOCKET CONTACT - COPPER ALLOY  
 INTERFACIAL SEAL - FLUOROSILICONE BLEND

**2. FINISH:**

SHELL - CADMIUM PER QQ-P-416, TYPE II, CLASS 3 OVER  
 ELECTROLESS NICKEL PER AMS 2404 OR  
 ELECTROLESS NICKEL PER AMS 2404  
 CONTACT - GOLD PER MIL-G-45204, TYPE II, GRADE C,  
 CLASS I OVER NICKEL PER QQ-N-290.

**3. SPECIFICATIONS:**

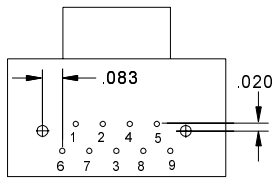
CURRENT RATING ----- 3 AMPS MAX  
 TEMPERATURE RATING ----- -55° C TO +125° C  
 INSULATION RESISTANCE ----- 5000 MEGOHMS MIN  
 DWV AT SEA LEVEL ----- 600 VAC  
 DWV AT 70,000 FT ALTITUDE --- 150 VAC  
 CONTACT RESISTANCE ----- 8 MILLIOHMS AT 2.5 AMPS  
 LOW LEVEL CONTACT ----- 10 MILLIOHMS MAX  
 RESISTANCE  
 CONTACT RETENTION ----- 5 lb MINIMUM AXIAL LOAD  
 ENGAGEMENT FORCE ----- 6 oz MAX  
 SEPARATION FORCE ----- 0.5 oz MIN

**4. ADDITIONAL INFORMATION:**

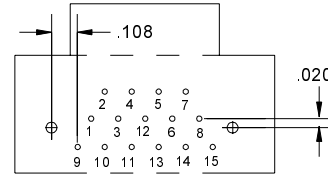
FOR CROSS-REFERENCING CRISTEK PART NUMBERS TO M83513, SEE CROSS REFERENCE INFORMATION IN THE FRONT OF THIS SECTION. FOR MOUNTING HARDWARE OPTIONS, SEE THE HARDWARE PAGES AT THE END OF THIS SECTION. ALL INTERFACE DIMENSIONS IN ACCORDANCE WITH M83513.

CRISTEK INTERCONNECTS, INC. www.cristek.com 1301 S. Lewis St. Anaheim, CA 92805 Phone: (714) 618-2000 FAX: (714) 535-4897	TITLE <b>MILITARY MICRO D METAL SHELL                  RIGHT ANGLE P.C.B. MOUNT</b>	DWG. NO. <b>M83513/10-15</b>	
	FILENAME <b>ADS-CIM10-15-2</b>	CODE IDENT NO. <b>67720</b>	SHT <b>2</b> OF <b>4</b>
		TOLERANCE: .XXX ±.005 .XX ±.01 ANGLE ±1°	

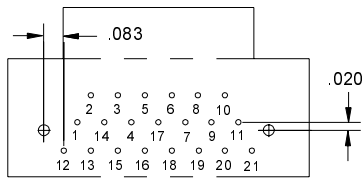
## 1.1 MICRO CONNECTORS / M83513 MICRO D



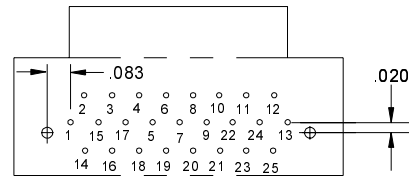
9 CONTACTS



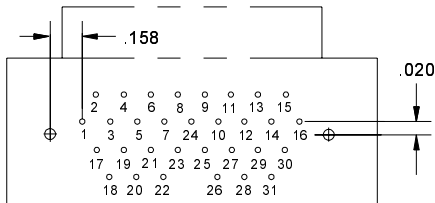
15 CONTACTS



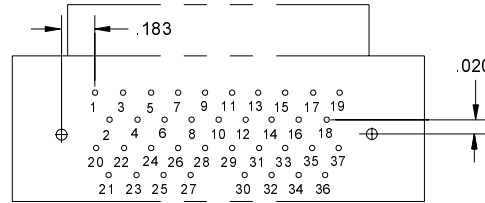
21 CONTACTS



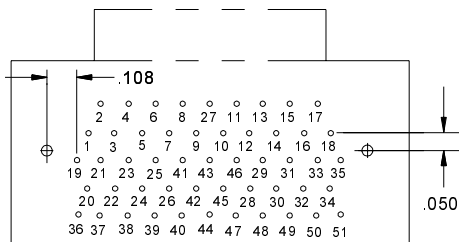
25 CONTACTS



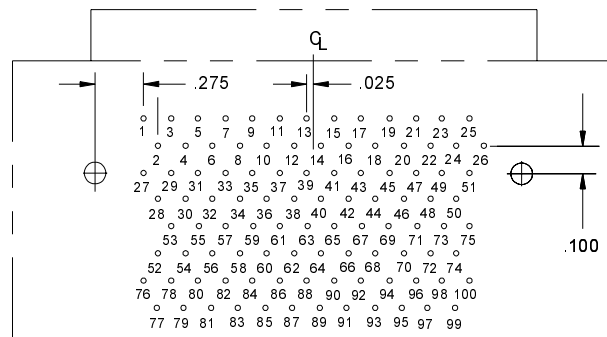
31 CONTACTS



37 CONTACTS



51 CONTACTS

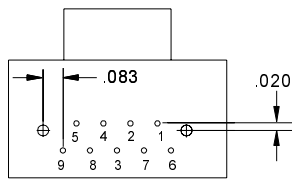


100 CONTACTS

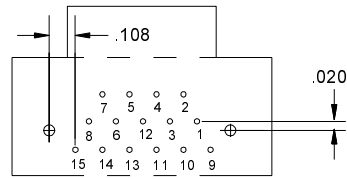
### PLUG PCB LAYOUTS (OR BOTTOM VIEW OF RECEPTACLE - EXCEPT 100)

.100 X .100 GRID PATTERN OFFSET .050

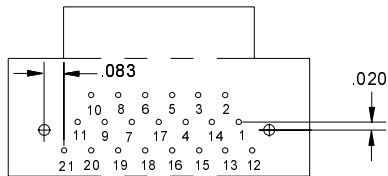
CRISTEK INTERCONNECTS, INC. www.cristek.com 1301 S. Lewis St. Anaheim, CA 92805 Phone: (714) 618-2000 FAX: (714) 535-4897	TITLE <b>MILITARY MICRO D METAL SHELL                  RIGHT ANGLE P.C.B. MOUNT</b>		DWG. NO. <b>M83513/10-15</b>	
	FILENAME <b>ADS-CIM10-15-3</b>		CODE IDENT NO. <b>67720</b>	SHT <b>3</b> OF <b>4</b>
			REV <b>D</b>	
TOLERANCE: .XXX ±.005 .XX ±.01 ANGLE ±1°				



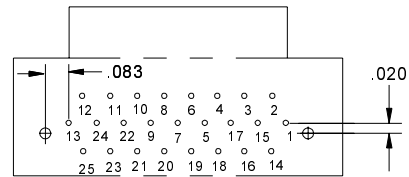
9 CONTACTS



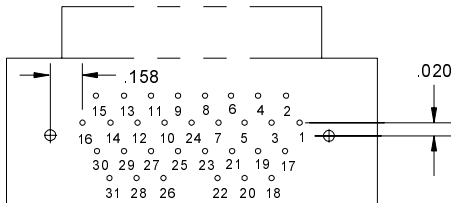
15 CONTACTS



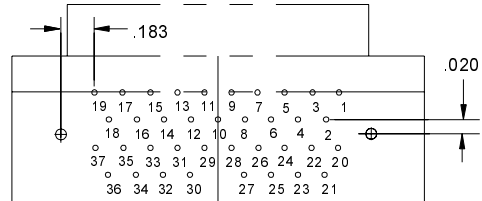
21 CONTACTS



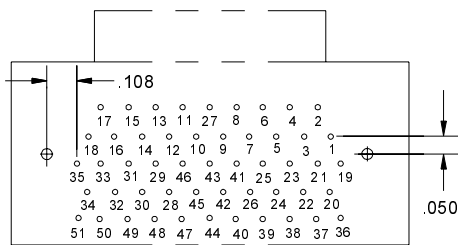
25 CONTACTS



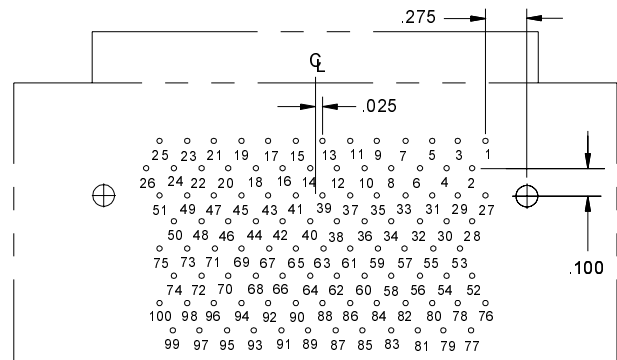
31 CONTACTS



37 CONTACTS



51 CONTACTS



100 CONTACTS

### RECEPTACLE PCB LAYOUTS (OR BOTTOM VIEW OF PLUG - EXCEPT 100)

.100 X .100 GRID PATTERN OFFSET .050

CRISTEK INTERCONNECTS, INC. www.cristek.com 1301 S. Lewis St. Anaheim, CA 92805 Phone: (714) 618-2000 FAX: (714) 535-4897	TITLE <b>MILITARY MICRO D METAL SHELL                  RIGHT ANGLE P.C.B. MOUNT</b>	DWG. NO. <b>M83513/10-15</b>		
	FILENAME <b>ADS-CIM10-15-4</b>	CODE IDENT NO. <b>67720</b>	SHT <b>4</b> OF <b>4</b>	REV <b>D</b>
	TOLERANCE: .XXX ±.005 .XX ±.01 ANGLE ±1°			