

TOLERANCE: .XXX ± .005  
.XX ± .01  
ANGLE ± 1°

TITLE  
**MILITARY MICRO-D METAL SHELL  
STRAIGHT BOARD MOUNT**

SHT 1 OF 4

DWG. NO.  
**M83513/22-27**

REV  
**G**



# MILITARY MICRO-D METAL SHELL STRAIGHT BOARD MOUNT

NO. OF CONTACTS	A MAX	B ±.007	C BSC	D MAX	E MAX
9	1.390	1.150	.565	.885	.308
15	1.390	1.150	.715	.945	.308
21	1.690	1.450	.865	1.185	.308
25	1.740	1.500	.965	1.275	.308
31	2.040	1.800	1.115	1.575	.308
37	2.340	2.100	1.265	1.875	.308
51	2.270	2.000	1.215	1.775	.351
100	3.250	2.800	1.800	2.585	.460

CIM XX - X XX X X

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

SLASH NUMBER (M83513/##)  
22 = PLUG SIZE 9-37  
23 = PLUG SIZE 51  
24 = PLUG SIZE 100  
25 = RECEPTACLE SIZE 9-37  
26 = RECEPTACLE SIZE 51  
27 = 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 (.020 DIA)  
HOT SOLDER 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

MATERIALS AND FINISHES ARE IAW MIL-DTL-83513  
FOR DETAILS SEE MIL SPEC OR WWW.CRISTEK.COM

1. MATERIALS:  
SHELL - ALUMINUM ALLOY  
INSULATOR & BACKSHELL - GLASS FILLED THERMOPLASTIC  
CONTACT - COPPER ALLOY  
INTERFACIAL SEAL (RECEPT) - FLUOROSILICONE BLEND

2. FINISH:  
SHELL - ELECTROLESS NICKEL OR CADMIUM OVER  
ELECTROLESS NICKEL  
CONTACT - GOLD OVER NICKEL

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 ----- 24 AWG = 25 MILLIOHMS MAX  
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  
DESIGN AND PERFORMANCE IN GENERAL  
ACCORDANCE WITH M83513.

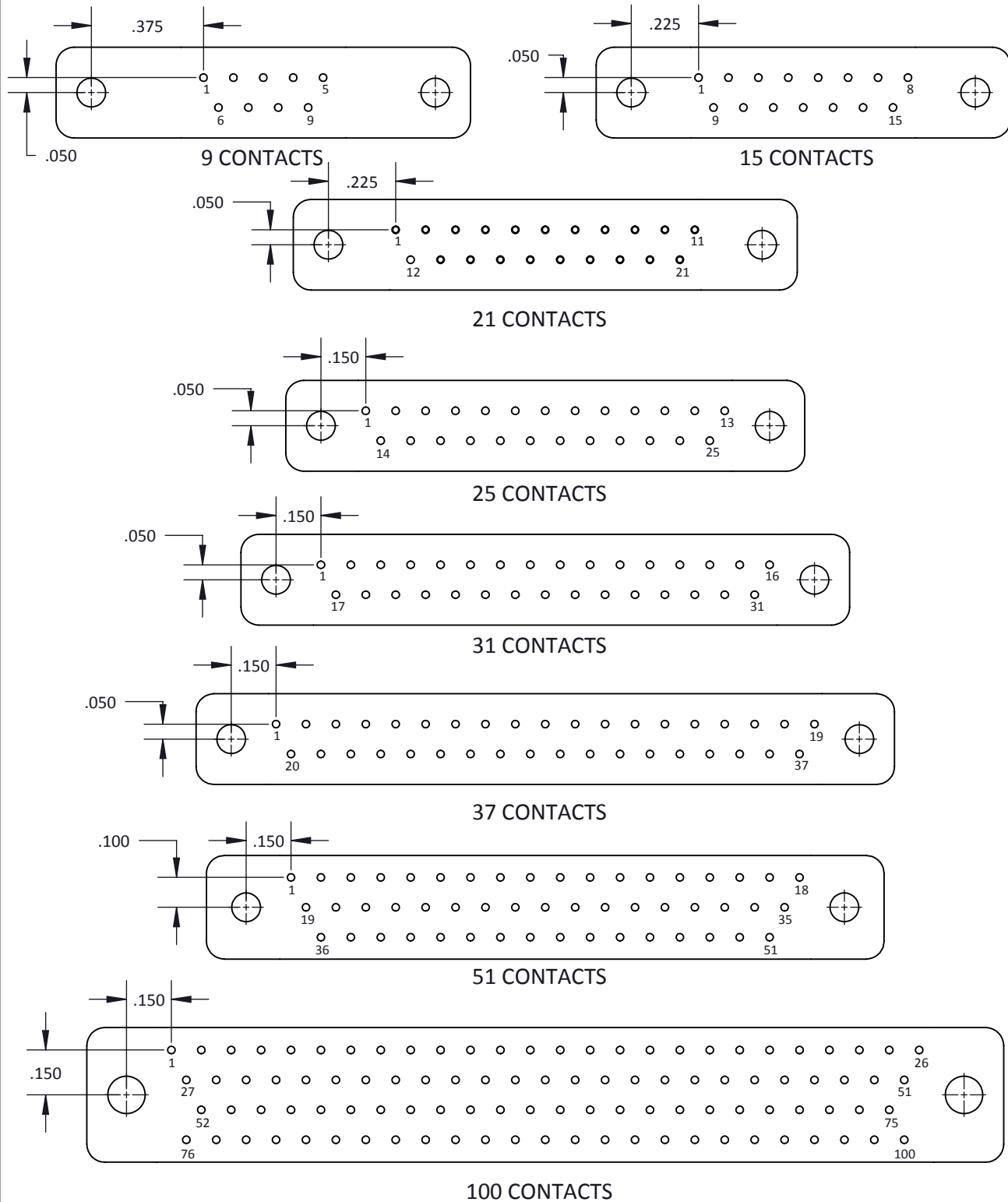
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**PLUG PCB LAYOUTS**  
.100 X .100 GRID PATTERN OFFSET .050

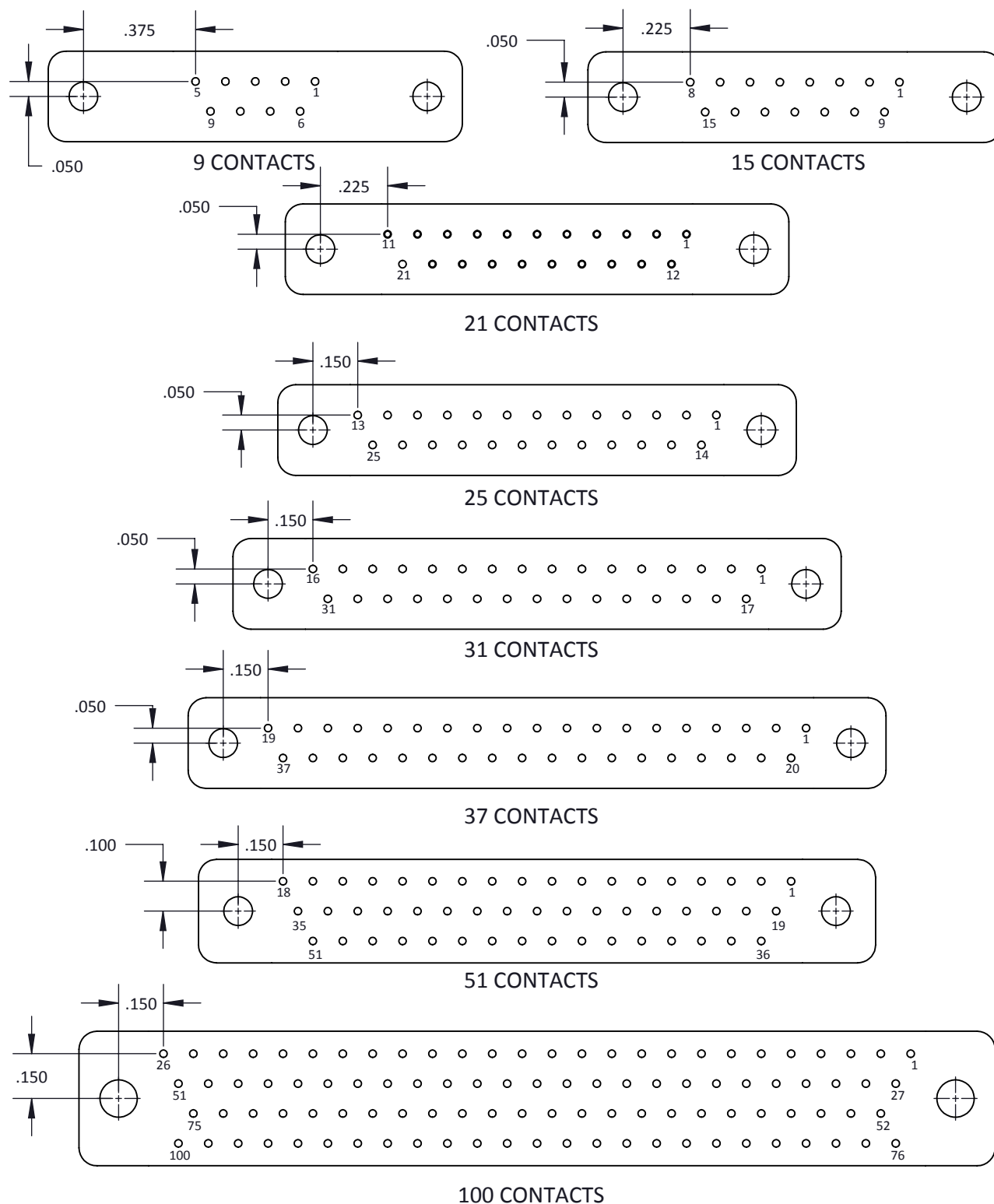
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.XX ±.01  
ANGLE ±1°

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**RECEPTACLE PCB LAYOUTS**  
.100 X .100 GRID PATTERN OFFSET .050

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