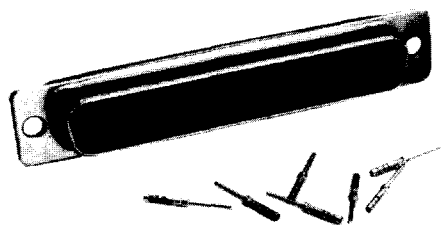


## MIL-C-24308 Cross Reference (Continued)

Military Part Number	Cannon Part Number	Military Part Number	Cannon Part Number	Military Part Number	Cannon Part Number
M24308/8-15	DDMAM78PNM	M24308/23-8	DAMM15SZ	M24308/24-8	DAMM15PZ
M24308/8-259	DEMAM9PNM-FO	M24308/23-9	DBMM25SZ	M24308/24-9	DBMM25PZ
M24308/8-260	DAMAM15PNM-FO	M24308/23-10	DCMM37SZ	M24308/24-10	DCMM37PZ
M24308/8-261	DBMAM25PNM-FO	M24308/23-11	DDMM50SZ	M24308/24-11	DDMM50PZ
M24308/8-262	DCMAM37PNM-FO	M24308/23-13	DENM99SH	M24308/24-13	DENM99PH
M24308/8-263	DDMAM50PNM-FO	M24308/23-14	DAMM15SH	M24308/24-14	DAMM15PH
M24308/8-269	DDMAM78PNM-FO	M24308/23-15	DBMM25SH	M24308/24-15	DBMM25PH
M24308/8-302	DEMAMF9PNM	M24308/23-16	DCMM37SH	M24308/24-16	DCMM37SH
M24308/8-303	DAMAMF15PNM	M24308/23-17	DDMM50SH	M24308/24-17	DDMM50PH
M24308/8-304	DBMAMF25PNM	M24308/23-19	DENM99SX	M24308/24-19	DENM99PX
M24308/8-305	DCMAMF37PNM	M24308/23-20	DAMM15SX	M24308/24-20	DAMM15PX
M24308/8-306	DDMAMF50PNM	M24308/23-21	DBMM25SX	M24308/24-21	DBMM25PX
M24308/8-311	DDMAMF78PNM	M24308/23-22	DCMM37SX	M24308/24-22	DCMM37PX
M24308/8-313	DEMAMF9PNM	M24308/23-23	DDMM50SX	M24308/24-23	DDMM50PX
M24308/8-314	DAMAMF15PNM	M24308/23-25	DENM99SD	M24308/24-25	DENM99PD
M24308/8-315	DBMAMF25PNM	M24308/23-26	DAMM15SD	M24308/24-26	DAMM15PD
M24308/8-316	DCMAMF37PNM	M24308/23-27	DBMM25SD	M24308/24-27	DBMM25PD
M24308/8-317	DDMAMF50PNM	M24308/23-28	DCMM37SD	M24308/24-28	DCMM37PD
M24308/8-324	DEMAMF9PNM-FO	M24308/23-29	DDMM50SD	M24308/24-29	DDMM50PD
M24308/8-325	DAMAMF15PNM-FO	M24308/23-31	DENM99SL	M24308/24-31	DENM99PL
M24308/8-326	DBMAMF25PNM-FO	M24308/23-32	DAMM15SL	M24308/24-32	DAMM15PL
M24308/8-327	DCMAMF37PNM-FO	M24308/23-33	DBMM25SL	M24308/24-33	DBMM25PL
M24308/8-328	DDMAMF50PNM-FO	M24308/23-34	DCMM37SL	M24308/24-34	DCMM37PL
M24308/8-333	DEMAMF78PNM-FO	M24308/23-35	DDMM50SL	M24308/24-35	DDMM50PL
M24308/9-1	DEH9P002	M24308/23-37	DENM99SA	M24308/24-37	DENM99PA
M24308/9-2	DAH15P002	M24308/23-38	DAMM15SA	M24308/24-38	DAMM15PA
M24308/9-3	DBH25P002	M24308/23-39	DBMM25SA	M24308/24-39	DBMM25PA
M24308/9-4	DCH37P002	M24308/23-40	DCMM37SA	M24308/24-40	DCMM37PA
M24308/9-5	DDH50P002	M24308/23-41	DDMM50SA	M24308/24-41	DDMM50PA
M24308/9-6	DEH9P001	M24308/23-43	DENM99SG	M24308/24-43	DENM99PG
M24308/9-7	DAH15P001	M24308/23-44	DAMM15SG	M24308/24-44	DAMM15PG
M24308/9-8	DBH25P001	M24308/23-45	DBMM25SG	M24308/24-45	DBMM25PG
M24308/9-9	DCH37P001	M24308/23-46	DCMM37SG	M24308/24-46	DCMM37PG
M24308/9-10	DDH50P001	M24308/23-47	DDMM50SG	M24308/24-47	DDMM50PG
M24308/9-11	DEH9P202	M24308/23-49	DENM99SS	M24308/24-49	DENM99PS
M24308/9-12	DAH15P202	M24308/23-50	DAMM15SS	M24308/24-50	DAMM15PS
M24308/9-13	DBH25P202	M24308/23-51	DBMM25SS	M24308/24-51	DBMM25PS
M24308/9-14	DCH37P202	M24308/23-52	DCMM37SS	M24308/24-52	DCMM37PS
M24308/9-15	DDH50P202	M24308/23-53	DDMM50SS	M24308/24-53	DDMM50PS
M24308/9-16	DEH9P201	M24308/23-55	DENM99SW	M24308/24-55	DENM99PW
M24308/9-17	DAH15P201	M24308/23-56	DAMM15SW	M24308/24-56	DAMM15PW
M24308/9-18	DBH25P201	M24308/23-57	DBMM25SW	M24308/24-57	DBMM25PW
M24308/9-19	DCH37P201	M24308/23-58	DCMM37SW	M24308/24-58	DCMM37PW
M24308/9-20	DDH50P201	M24308/23-59	DDMM50SW	M24308/24-59	DDMM50PW
M24308/23-1	DENM99SM	M24308/24-1	DENM99PM	M24308/26-1	D20418-2
M24308/23-2	DAMM15SM	M24308/24-2	DAMM15PM	M24308/26-2	D20418-39
M24308/23-3	DBMM25SM	M24308/24-3	DBMM25PM		
M24308/23-4	DCMM37SM	M24308/24-4	DCMM37PM		
M24308/23-5	DDMM50SM	M24308/24-5	DDMM50PM		
M24308/23-7	DENM99SZ	M24308/24-7	DENM99PZ		

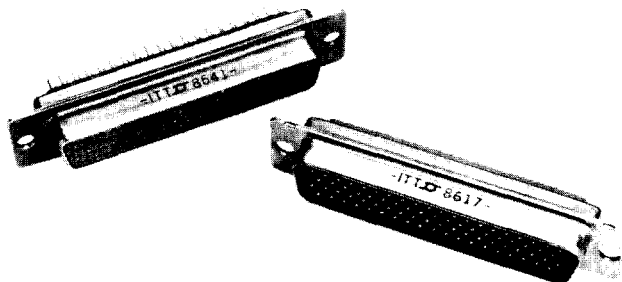
D Subminiature Connectors

## Crimp



(See page 342)

## Printed Circuit



(See page 343)

## Performance and Material Specifications

### MATERIALS AND FINISHES

	Standard		Military	
	Material	Finish	Material	Finish
Shell	Steel per ASTM A-620	Yellow chromate over cadmium QQ-P-416 Type II Class 2	Steel per ASTM A-620	Yellow chromate over cadmium QQ-P-416 Type II Class 2
Insulator	Diallyl phthalate glass-filled per MIL-M-14, type SDG-F, color green	—	Diallyl phthalate glass-filled per MIL-M-14, type SDG-F, color green	—
Contact	Copper alloy	Gold over nickel	Copper alloy Crimp socket has stainless steel hood	Gold 50 microinches minimum thickness per MIL-G-45204 Type II Grade C Class 1 over copper per MIL-C-14550 Hood: Passivated
Float Mount Hardware	Stainless steel	Passivate per QQ-P-35	Stainless steel	Passivate per QQ-P-35

### PERFORMANCE SPECIFICATIONS

Wire Accommodation (AWG)	Crimp - #22-#28 AWG
Current Rating	#22: 5 Amp
Temperature Rating	-65°C to +150°C
Contact Resistance After Salt Spray, Millivolt Max.	55 @ 5 Amp test current

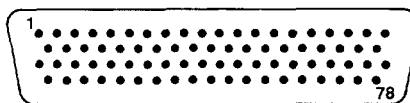
### DIELECTRIC WITHSTANDING VOLTAGE

Test	90° and Straight (Solder/Crimp)		
	Altitude (feet/m)		
	Sea Level	70,000/21,336	100,000
	1000	325	175

All voltage figures are rms AC 60 rms cps, measured at approximately +25°C, 50% rh. For additional performance specifications refer to MIL-C-24308 Test Extracts on page 385.

## Contact Arrangements

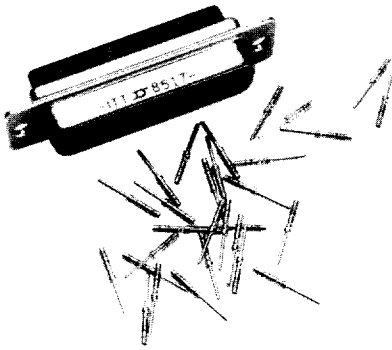
### Face View Pin Insert



Shell Size  
Contact Arrangement  
Contact Size

D  
78  
#22

## How to Order — Crimp Connectors



### Receptacles (Includes Socket Contacts) With .120" Through-Mounting Holes

Number of Contacts (Shell Size)	Standard Version	Military Version
78 (D)	DDMA78S	DDMAM78S

### Plugs (Includes Pin Contacts)\* With .120" Through Mounting Holes

Number of Contacts (Shell Size)	Standard Version	Military Version
78 (D)	DDMA78P	DDMAM78P

Note: 1) To receive the connector without contacts, add "FO" to end of part number.

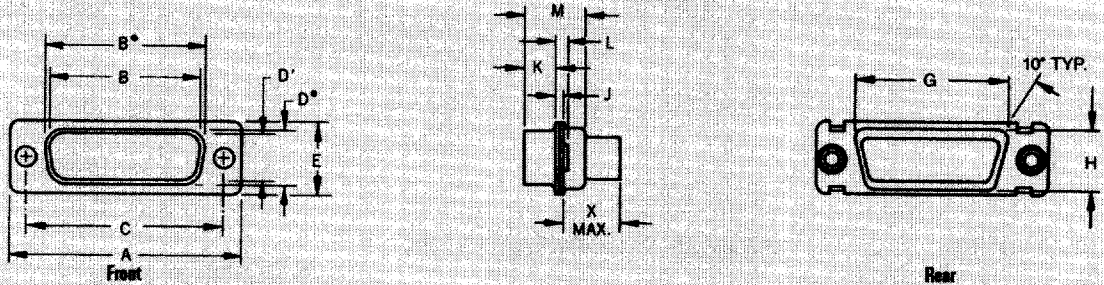
Example: DBMA25SF0, DBMAM25SF0.

2) For loose contacts and tooling see page 5.

### Mounting Options Available:

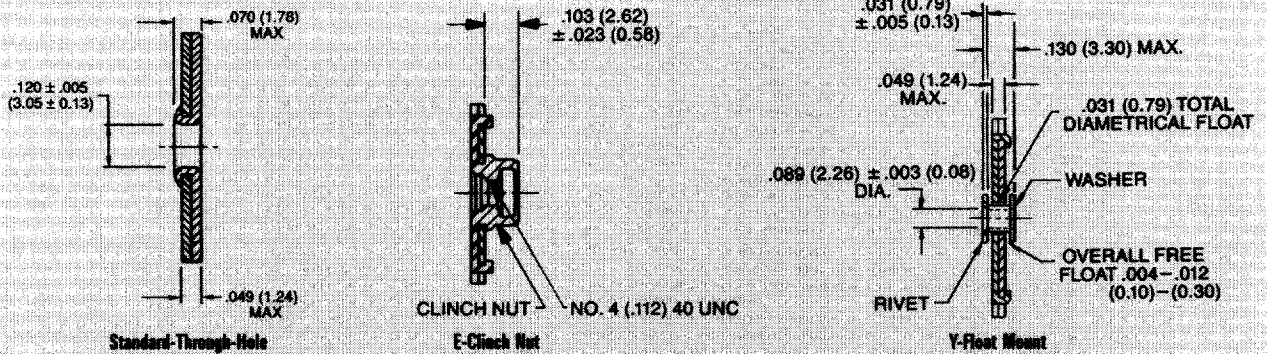
- 4-40 Clinch Nut — Add "E" to Part Number After "M" or "A"
  - 4-40 Float Mount — Add "Y" to Part Number After "M" or "A"
- (Can be used in front or rear panel mount applications)

## Dimensions — Crimp Connectors



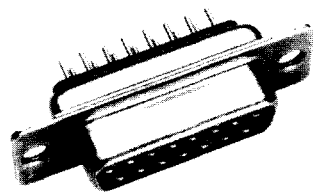
Part Number by Shell Size	A	B <sub>o</sub>	B'	C	D <sub>o</sub>	D'	E	G	H	J	K	L	M	X Max
DDM78P	±.015 (0.38)	±.010 (0.25)	±.005 (0.13)	±.005 (0.13)	±.005 (0.13)	±.010 (0.25)	±.015 (0.38)	±.010 (0.25)	±.010 (0.25)	±.010 (0.25)	±.006 (0.25)	±.013 (0.33)	±.010 (0.25)	.345 (8.76)
DDM78S	2.635 (66.92)	2.064 (52.43)	—	2.406 (61.11)	.423 (10.41)	—	.605 (15.37)	2.178 (55.32)	.534 (13.56)	.030 (0.76)	.243 (6.17)	.045 (1.14)	.429 (10.90)	.345 (8.76)

## Mounting Option Dimensions

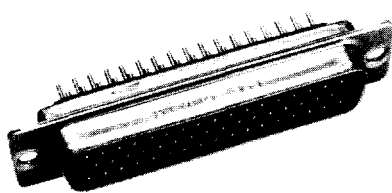


It is recommended that only one assembly, either pin or socket, be float mounted.

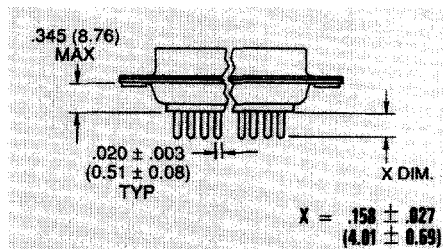
## High Rel Printed Circuit Mount Connectors – Straight PC Tail



Receptacle



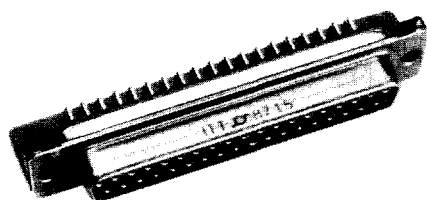
Plug



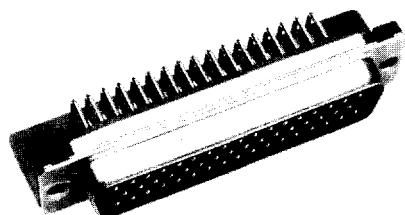
With .120 (3.15) Through-Mounting Holes

Number Contacts (Shell Size)		Receptacle	<i>NM</i> Non-Magnetic Receptacle	Plug	<i>NM</i> Non-Magnetic Plug
78 (D)	Standard	DDMA50913-499	—	DDMA50913-500	—
78 (D)	Military	DDMA50913-439	DDMA50913-445	DDMA50913-440	DDMA50913-446

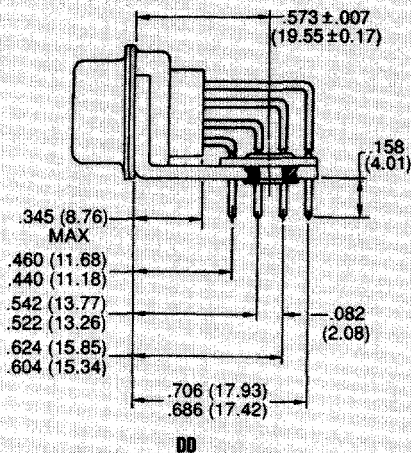
## High Rel 90° PCB Connectors



Receptacle



Plug



Connectors with brackets cannot be ordered with float mounts or clinch nuts.

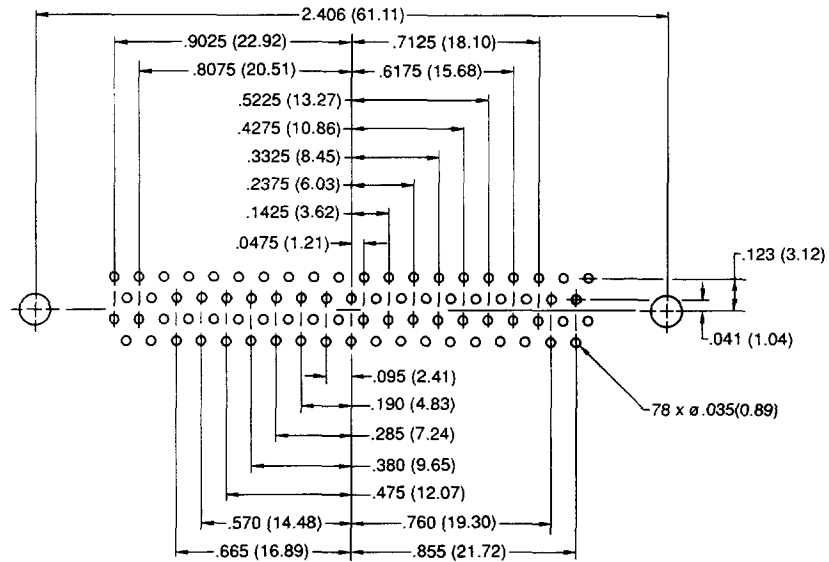
Number Contacts (Shell Size)		Receptacle	<i>NM</i> Non-Magnetic Receptacle	Plug	<i>NM</i> Non-Magnetic Plug
78 (D)	Standard	DDMA50913-467	—	DDMA50913-468	—
78 (D)	Military	DDMA50913-437	DDMA50913-473	DDMA50913-438	DDMA50913-474

## High Rel Crimp Contacts

Contact Size	Wire Size Accommodation	M39029	M24308*	Canon Part Number	
				Pin	Socket
22D Pin	22, 24, 26, 28	/58-360	/13-1	030-2042-000	—
22D Socket	22, 24, 26, 28	/57-354	/12-1	—	031-1147-000

\* Superseded by M39029

## Straight and 90° Board Hole Patterns



DD-78

## Tooling

### Hand Tools

Contact Size	AWG	Plastic Insertion/Extraction	Crimp Tool	Locator
22D	22, 24, 26, 28	274-7048-000 CIET-22D	995-0001-584 M22520/2-01	995-0001-739 M22520/2-06