

D-subminiature Metal Shell Solder Cup, Right-Angle, and Vertical PCB Series 1 - High Reliability



FEATURES

- Available in vertical and right-angle dip solder PCB connectors and solder cup version for wire termination.
- Commercial version of M24308 military connectors with tin-plated or zinc-plated shell and 30µin. gold plating.
- Monoblock green diallyl phthalate insulator for improved electrical performance.
- Machined contacts for precision performance.
- Offered in 9, 15, 25, 37, and 50 (except right-angle version) position plugs and sockets.
- Offered with .120 mounting holes, 4-40 clinch nuts (except right-angle version), or dual float bushings (except right-angle version).
- Approvals:
 - UL Recognized - Files E170218 (UL1977) and E130965 (UL1863).
 - CSA Approved - File LR31996.
- See pages 4-5 thru 4-10 for standard dimensions, contact arrangements, and panel mounting specifications.

MATERIALS

Insulator Material: Glass-filled diallyl phthalate (green)
UL 94V-0 rated

Connector Shell: Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug)

Contact Material: Plug - Brass (machined), Socket - Phosphor bronze (machined)

Contact Plating: 30µin. gold over nickel

4-40 Clinch Nut: Steel with cadmium plating and yellow chromate finish

Dual Float Bushing: Stainless steel, passivated

ENVIRONMENTAL

Operating Temperature: -65°C to + 125°C

Shock: 50G peak per MIL-STD-202, Method 213, Condition G

Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D

Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103

ELECTRICAL

Withstanding Voltage: Minimum 1250V RMS @ sea level

Current Rating: 5 Amps

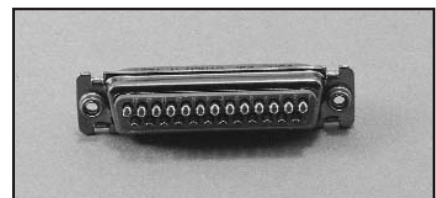
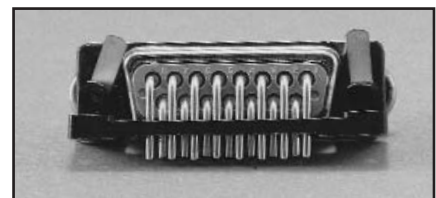
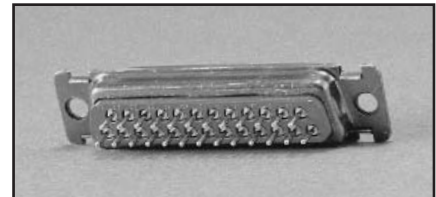
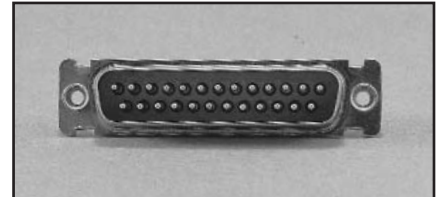
Contact Resistance: 2.7 milliohms maximum

Insulation Resistance: 5000 megohms maximum (initial);
1000 megohms (minimum) after environmental testing

MECHANICAL

Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz.

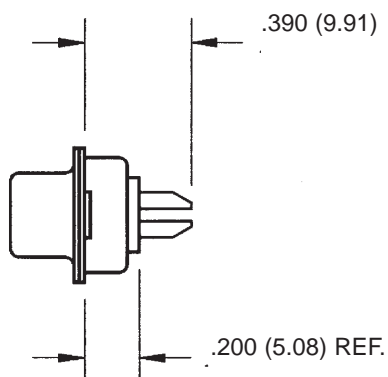
Durability: 500 mating cycles



D-subminiature Metal Shell Solder Cup Series 1 - High Reliability



- Will accommodate up to 20 AWG wire.



Ordering Information

Solder Cup Plugs

Positions	Zinc-Plated Shell with Yellow Chromate Finish			Tin-Plated Shell with Grounding Indents		
	Mounting Hole	4-40 Clinch Nut	Dual Float Bushings	Mounting Hole	4-40 Clinch Nut	Dual Float Bushings
9	DEM-9P	DEME-9P	DEMY-9P	DEM-9PTI	DEME-9PTI	DEMY-9PTI
15	DAM-15P	DAME-15P	DAMY-15P	DAM-15PTI	DAME-15PTI	DAMY-15PTI
25	DBM-25P	DBME-25P	DBMY-25P	DBM-25PTI	DBME-25PTI	DBMY-25PTI
37	DCM-37P	DCME-37P	DCMY-37P	DCM-37PTI	DCME-37PTI	DCMY-37PTI
50	DDM-50P	DDME-50P	DDMY-50P	DDM-50PTI	DDME-50PTI	DDMY-50PTI

Solder Cup Sockets

Positions	Zinc-Plated Shell with Yellow Chromate Finish			Tin-Plated Shell		
	Mounting Hole	4-40 Clinch Nut	Dual Float Bushings	Mounting Hole	4-40 Clinch Nut	Dual Float Bushings
9	DEM-9S	DEME-9S	DEMY-9S	DEM-9ST	DEME-9ST	DEMY-9ST
15	DAM-15S	DAME-15S	DAMY-15S	DAM-15ST	DAME-15ST	DAMY-15ST
25	DBM-25S	DBME-25S	DBMY-25S	DBM-25ST	DBME-25ST	DBMY-25ST
37	DCM-37S	DCME-37S	DCMY-37S	DCM-37ST	DCME-37ST	DCMY-37ST
50	DDM-50S	DDME-50S	DDMY-50S	DDM-50ST	DDME-50ST	DDMY-50ST

D-subminiature Metal Shell Crimp and Poke Series 3 - High Reliability



FEATURES

- **High-reliability in a commercial grade connector.**
- **Monoblock diallyl phthalate insulator for improved electrical performance.**
- **Offered in 9, 15, 25, 37, and 50 position plugs and sockets.**
- **Offered with .120 mounting holes, 4-40 clinch nuts, or dual float bushings.**
- **Commercial version of M24308 Military connectors with tin-plated or zinc-plated shell and 30µin. gold contact plating.**
- **Screw Machine Crimp and Poke contacts available as follows:**
 - **Note that all contacts are packed loose.**
 - **Plating options: 30µin. gold.**
 - **Can be included with the connector or purchased separately (FO part numbers).**
- **See pages 4-5 thru 4-10 for standard dimensions, contact arrangements, and panel mounting specifications.**

MATERIALS

Insulator Material: Glass fiber-filled diallyl phthalate (green), UL 94V-0

Connector Shell: Steel with zinc plating and yellow chromate finish

Contact Material: Plug - Brass (machined), Socket - Phosphor bronze (machined)

Contact Plating: 30µin. gold over nickel

4-40 Clinch Nut: Steel with cadmium plating and yellow chromate finish

Dual Float Bushing: Stainless steel, passivated



ENVIRONMENTAL

Operating Temperature: -65°C to + 125°C

Shock: 50G peak per MIL-STD-202, Method 213, Condition G

Vibration: 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D

Moisture Resistance: 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, Method 103



ELECTRICAL

Withstanding Voltage: Minimum 1250V RMS @ sea level

Current Rating: 5 Amps

Contact Resistance: 2.7 milliohms maximum

Insulation Resistance: 5000 megohms maximum (initial); 1000 megohms (minimum) after environmental testing



MECHANICAL

Individual Contact Insertion and Separation Force (minimum/maximum): 0.7 oz./12 oz.

Durability: 500 mating cycles

D-subminiature Metal Shell Crimp and Poke Series 3 - High Reliability



Termination Tooling

- Contact Insertion/Extraction Tool: #CIET-20-HD (Military #M81969/39-01). See page 4-103.
- Crimp Contact Hand Tool: Military #M22520/2-01. See page 4-103. Contact Positioner (below) required.
- Positioner for machine contacts for Hand Tool #M22520/2-01 (locates contact in the correct position): #M22520/2-08. See page 4-103.

Ordering Information

Crimp and Poke - Plugs

Zinc-Plated Shell with Yellow Chromate Finish

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts
9	DEMA-9P	DEMA-9P-FO	DEMAE-9P	DEMAE-9P-FO	DEMAY-9P	DEMAY-9P-FO
15	DAMA-15P	DAMA-15P-FO	DAMAE-15P	DAMAE-15P-FO	DAMAY-15P	DAMAY-15P-FO
25	DBMA-25P	DBMA-25P-FO	DBMAE-25P	DBMAE-25P-FO	DBMAY-25P	DBMAY-25P-FO
37	DCMA-37P	DCMA-37P-FO	DCMAE-37P	DCMAE-37P-FO	DCMAY-37P	DCMAY-37P-FO
50	DDMA-50P	DDMA-50P-FO	DDMAE-50P	DDMAE-50P-FO	DDMAY-50P	DDMAY-50P-FO

Tin-Plated Shells with Grounding Indents

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts
9	DEMA-9PTI	DEMA-9PTI-FO	DEMAE-9PTI	DEMAE-9PTI-FO	DEMAY-9PTI	DEMAY-9PTI-FO
15	DAMA-15PTI	DAMA-15PTI-FO	DAMAE-15PTI	DAMAE-15PTI-FO	DAMAY-15PTI	DAMAY-15PTI-FO
25	DBMA-25PTI	DBMA-25PTI-FO	DBMAE-25PTI	DBMAE-25PTI-FO	DBMAY-25PTI	DBMAY-25PTI-FO
37	DCMA-37PTI	DCMA-37PTI-FO	DCMAE-37PTI	DCMAE-37PTI-FO	DCMAY-37PTI	DCMAY-37PTI-FO
50	DDMA-50PTI	DDMA-50PTI-FO	DDMAE-50PTI	DDMAE-50PTI-FO	DDMAY-50PTI	DDMAY-50PTI-FO

D-subminiature Metal Shell Crimp and Poke Series 3 - High Reliability



Ordering Information

Crimp and Poke - Sockets

Zinc-Plated Shell with Yellow Chromate Finish

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts
9	DEMA-9S	DEMA-9S-FO	DEMAE-9S	DEMAE-9S-FO	DEMAY-9S	DEMAY-9S-FO
15	DAMA-15S	DAMA-15S-FO	DAMAE-15S	DAMAE-15S-FO	DAMAY-15S	DAMAY-15S-FO
25	DBMA-25S	DBMA-25S-FO	DBMAE-25S	DBMAE-25S-FO	DBMAY-25S	DBMAY-25S-FO
37	DCMA-37S	DCMA-37S-FO	DCMAE-37S	DCMAE-37S-FO	DCMAY-37S	DCMAY-37S-FO
50	DDMA-50S	DDMA-50S-FO	DDMAE-50S	DDMAE-50S-FO	DDMAY-50S	DDMAY-50S-FO

Tin-Plated Shell

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts	30µin. Gold Contacts	Without Contacts
9	DEMA-9ST	DEMA-9ST-FO	DEMAE-9ST	DEMAE-9ST-FO	DEMAY-9ST	DEMAY-9ST-FO
15	DAMA-15ST	DAMA-15ST-FO	DAMAE-15ST	DAMAE-15ST-FO	DAMAY-15ST	DAMAY-15ST-FO
25	DBMA-25ST	DBMA-25ST-FO	DBMAE-25ST	DBMAE-25ST-FO	DBMAY-25ST	DBMAY-25ST-FO
37	DCMA-37ST	DCMA-37ST-FO	DCMAE-37ST	DCMAE-37ST-FO	DCMAY-37ST	DCMAY-37ST-FO
50	DDMA-50ST	DDMA-50ST-FO	DDMAE-50ST	DDMAE-50ST-FO	DDMAY-50ST	DDMAY-50ST-FO

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Crimp and Poke Machined Contacts

- Will accommodate 20, 22, and 24 AWG wire.



Ordering Information

Contacts

Description

Pin	M39029/64-369
Socket	M39029/63-368