

# D-subminiature Metal Shell Crimp and Poke, Right-Angle and Vertical PCB D\*U Series



## FEATURES

- Offered in 9, 15, 25, 37, and 50 position plugs and sockets (except right-angle PCB connectors- 9, 15, and 25 positions).
- Available with gold flash or 30µin. gold plating.
- Offered with .120 mounting holes, optional 4-40 clinch nuts, or dual float bushings (except right-angle PCB connectors-mounting holes only).
- 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 nylon (black), UL 94 V-O rated  
**Connector Shell:** Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug)  
**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 1000V 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 D\*U Series



- Machined contacts supplied loose with connector or can be ordered separately. Use with 20-24 AWG wire.
- Stamped Contacts (order separately) for use when ordering connector with contacts not included (-FO option). Use with 20-28 AWG wire.
  - Available in 10K reel.
  - Order reels of stamped contacts separately.

## Materials

- Contact Material: Plug - Brass (stamped) or copper alloy (machined). Socket - Phosphor bronze (stamped) or copper alloy (machined).
- Contact Plating:
  - Stamped Plugs and Sockets: Gold flash or 30µin. gold and gold flash on the remainder. All over nickel.
  - Machined Plugs and Sockets: Gold flash or 30µin. gold. All over nickel.

## Termination Tooling

- Semi-Automatic Stripper Crimper for Stamped Contacts on 10K PC reels: #ESC-20-3. See page 4-102.
- Contact Insertion/Extraction: #CIET-20-HDB. See page 4-101.
- Loose Contact Crimp Tool:

Machined Contact - #M22520/2-01. See page 4-103.  
For Positioner as required see page 4-103.

Stamped Contacts #BT-20-HC see page 4-101.  
No positioner required.

**D-subminiature Metal Shell  
Crimp and Poke  
D\*U Series**



**Ordering Information**

**D\*U Crimp and Poke Plugs**

**Zinc-Plated Shell with Yellow Chromate Finish**

Position	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Contacts Included	Without Contacts	Contacts Included	Without Contacts	Contacts Included	Without Contacts
9	DEU-9P	DEU-9P-FO	DEUE-9-P	DEUE-9P-FO	DEUY-9P	DEUY-9P-FO
15	DAU-15P	DAU-15P-FO	DAUE-15-P	DAUE-15-P-FO	DAUY-15P	DAUY-15P-FO
25	DBU-25P	DBU-25P-FO	DBUE-25-P	DBUE-25P-FO	DBUY-25P	DBUY-25P-FO
37	DCU-37P	DCU-37P-FO	DCUE-37-P	DCUE-37P-FO	DCUY-37P	DCUY-37P-FO
50	DDU-50P	DDU-50P-FO	DDUE-50-P	DDUE-50P-FO	DDUY-50P	DDUY-50P-FO

**Tin-Plated Shell with Grounding Indents**

Position	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Contacts Included	Without Contacts	Contacts Included	Without Contacts	Contacts Included	Without Contacts
9	DEU-9PTI	DEU-9PTI-FO	DEUE-9PTI	DEUE-9PTI-FO	DEUY-9PTI	DEUY-9PTI-FO
15	DAU-15PTI	DAU-15PTI-FO	DAUE-15PTI	DAUE-15PTI-FO	DAUY-15PTI	DAUY-15PTI-FO
25	DBU-25PTI	DBU-25PTI-FO	DBUE-25PTI	DBUE-25PTI-FO	DBUY-25PTI	DBUY-25PTI-FO
37	DCU-37PTI	DCU-37PTI-FO	DCUE-37PTI	DCUE-37PTI-FO	DCUY-37PTI	DCUY-37PTI-FO
50	DDU-50PTI	DDU-50PTI-FO	DDUE-50PTI	DDUE-50PTI-FO	DDUY-50PTI	DDUY-50PTI-FO

**D\*U Crimp and Poke Sockets**

**Zinc-Plated Shell with Yellow Chromate Finish**

Position	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Contacts Included	Without Contacts	Contacts Included	Without Contacts	Contacts Included	Without Contacts
9	DEU-9S	DEU-9S-FO	DEUE-9S	DEUE-9S-FO	DEUY-9S	DEUY-9S-FO
15	DAU-15S	DAU-15S-FO	DAUE-15S	DAUE-15S-FO	DAUY-15S	DAUY-15S-FO
25	DBU-25S	DBU-25S-FO	DBUE-25S	DBUE-25S-FO	DBUY-25S	DBUY-25S-FO
37	DCU-37S	DCU-37S-FO	DCUE-37S	DCUE-37S-FO	DCUY-37S	DCUY-37S-FO
50	DDU-50S	DDU-50S-FO	DDUE-50S	DDUE-50S-FO	DDUY-50S	DDUY-50S-FO

**Tin-Plated Shell**

Position	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Contacts Included	Without Contacts	Contacts Included	Without Contacts	Contacts Included	Without Contacts
9	DEU-9ST	DEU-9ST-FO	DEUE-9ST	DEUE-9ST-FO	DEUY-9ST	DEUY-9ST-FO
15	DAU-15ST	DAU-15ST-FO	DAUE-15ST	DAUE-15ST-FO	DAUY-15ST	DAUY-15ST-FO
25	DBU-25ST	DBU-25ST-FO	DBUE-25ST	DBUE-25ST-FO	DBUY-25ST	DBUY-25ST-FO
37	DCU-37ST	DCU-37ST-FO	DCUE-37ST	DCUE-37ST-FO	DCUY-37ST	DCUY-37ST-FO
50	DDU-50ST	DDU-50ST-FO	DDUE-50ST	DDUE-50ST-FO	DDUY-50ST	DDUY-50ST-FO

# D-subminiature Metal Shell Solder Cup, Vertical PCB Mount, and Wire Wrap Basic D Series



## FEATURES

- Offered in Wire Wrap and Solder Cup styles for wire termination and vertical style for PCB mount.
- Offered with .120 mounting holes, 4-40 clinch nuts, and dual float bushings.
- Offered in 9, 15, 25, 37, and 50 position plugs and sockets.
- Available with gold flash or 30µin. gold plating.
- 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 polyester (white), UL 94V-O rated  
**Connector Shell:** Steel with zinc plating and yellow chromate finish or tin plating (grounding indents on plug)  
**4-40 Clinch Nut:** Steel with cadmium plating and yellow chromate finish  
**Dual Float Bushing:** Stainless steel, passivated

## ENVIRONMENTAL

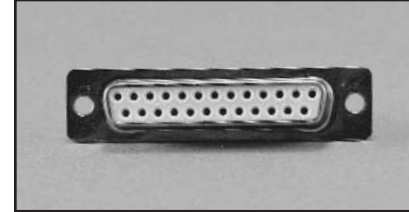
**Operating Temperature:** -65°C to + 125°C  
**Shock:** 50G peak per MIL-STD-202, Method 213, Condition G  
**Vibration:** 12 cycles in three perpendicular directions @ 10-2000Hz, per MIL-STD-202, Method 204, Condition D  
**Moisture Resistance:** 90-95% relative humidity @ 40°C for 96 hours per MIL-STD-202, 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

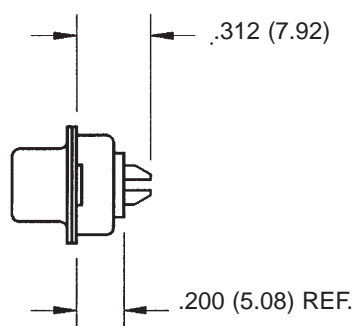
### Basic D Series



- Available with stamped or machined contacts.
- Will accommodate up to 20 AWG wire.

#### Materials

- Contact Material: Copper Alloy
- Contact Plating:
  - Stamped contacts with gold flash or 30µin. gold in mating area, gold flash or tin/lead on remainder. All over nickel.
  - Screw machine contacts with gold flash or 30µin. gold. All over nickel.



#### Ordering Information

#### Solder Cup Plugs

#### Zinc-Plated Shell with Yellow Chromate Finish

#### Stamped Contact with Gold Flash in Solder Cup

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DE-9P	DE-9P-30	DEE-9P	DEE-9P-30	DEY-9P	DEY-9P-30
15	DA-15P	DA-15P-30	DAE-15P	DAE-15P-30	DAY-15P	DAY-15P-30
25	DB-25P	DB-25P-30	DBE-25P	DBE-25P-30	DBY-25P	DBY-25P-30
37	DC-37P	DC-37P-30	DCE-37P	DCE-37P-30	DCY-37P	DCY-37P-30
50	DD-50P	DD-50P-30	DDE-50P	DDE-50P-30	DDY-50P	DDY-50P-30

#### Stamped Contact with Tin/Lead in Solder Cup

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DE-9P-II	DE-9P-II-30	DEE-9P-II	DEE-9P-II-30	DEY-9P-II	DEY-9P-II-30
15	DA-15P-II	DA-15P-II-30	DAE-15P-II	DAE-15P-II-30	DAY-15P-II	DAY-15P-II-30
25	DB-25P-II	DB-25P-II-30	DBE-25P-II	DBE-25P-II-30	DBY-25P-II	DBY-25P-II-30
37	DC-37P-II	DC-37P-II-30	DCE-37P-II	DCE-37P-II-30	DCY-37P-II	DCY-37P-II-30
50	DD-50P-II	DD-50P-II-30	DDE-50P-II	DDE-50P-II-30	DDY-50P-II	DDY-50P-II-30

#### Screw Machine Contact

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DE-9P-SM	DE-9P-SM-30	DEE-9P-SM	DEE-9P-SM-30	DEY-9P-SM	DEY-9P-SM-30
15	DA-15P-SM	DA-15P-SM-30	DAE-15P-SM	DAE-15P-SM-30	DAY-15P-SM	DAY-15P-SM-30
25	DB-25P-SM	DB-25P-SM-30	DBE-25P-SM	DBE-25P-SM-30	DBY-25P-SM	DBY-25P-SM-30
37	DC-37P-SM	DC-37P-SM-30	DCE-37P-SM	DCE-37P-SM-30	DCY-37P-SM	DCY-37P-SM-30
50	DD-50P-SM	DD-50P-SM-30	DDE-50P-SM	DDE-50P-SM-30	DDY-50P-SM	DDY-50P-SM-30



# 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

4