

# 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



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- 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 Crimp and Poke Contacts D\*U Series



## Machined Contacts • 20-24 AWG Wire



### Dimensions

Description	Wire AWG	A		B		C Max.	
		in	mm	in	mm	in	mm
Pin	#20, 22, 24	.066	1.67	.045	1.14	.537	13.64
Socket	#20, 22, 24	.066	1.67	.045	1.14	.523	13.28

### Ordering Information

#### D\*U Series Loose-Piece Machined Contacts

	Gold Flash	30µin. Gold
Pin	030-1952-000	030-1952-030
Socket	030-1953-000	030-1953-030

## Stamped Contacts • 20-28 AWG Wire



### Ordering Information

#### D\*U Series Stamped Contacts on 10K Reels

	Gold Flash	30µin. Gold
Pin	BCL-1964-20P	D110238-034
Socket	BCL-1963-20S	D110238-035



# D-subminiature Metal Shell Right-Angle Dip Solder PCB D\*U Series



- .445" footprint.
- .024" contact diameter.

## Materials

- Contact Material: Socket - Copper alloy (machined), Plug - Brass (machined).
- Contact Plating: Gold flash or 30µin. gold. All over nickel.
- Mounting bracket: Black nylon. Can be removed if necessary.



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## Ordering Information

### D\*U Right-Angle Plugs

Positions	Zinc-Plated Shell with Yellow Chromate Finish		Tin-Plated Shell with Grounding Indents	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9PAD	DEU-9PAD-30	DEU-9PADTI	DEU-9PADTI-30
15	DAU-15PAD	DAU-15PAD-30	DAU-15PADTI	DAU-15PADTI-30
25	DBU-25PAD	DBU-25PAD-30	DBU-25PADTI	DBU-25PADTI-30

### D\*U Right-Angle Sockets

Positions	Zinc-Plated Shell with Yellow Chromate Finish		Tin-Plated Shell	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9SAD	DEU-9SAD-30	DEU-9SADT	DEU-9SADT-30
15	DAU-15SAD	DAU-15SAD-30	DAU-15SADT	DAU-15SADT-30
25	DBU-25SAD	DBU-25SAD-30	DBU-25SADT	DBU-25SADT-30

# D-subminiature Metal Shell Vertical Dip Solder PCB D\*U Series



- .024" contact diameter.
- Longer rear insulator provides integral standoff from PCB.

## Materials

- Contact Material: Plug - Brass (machined), Socket - Copper alloy (machined).
- Contact Plating: Gold flash or 30µin. gold. All over nickel.



## Ordering Information

### Vertical Plugs

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

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9PBF	DEU-9PBF-30	DEUE-9PBF	DEUE-9PBF-30	DEUY-9PBF	DEUY-9PBF-30
15	DAU-15PBF	DAU-15PBF-30	DAUE-15PBF	DAUE-15PBF-30	DAUY-15PBF	DAUY-15PBF-30
25	DBU-25PBF	DBU-25PBF-30	DBUE-25PBF	DBUE-25PBF-30	DBUY-25PBF	DBUY-25PBF-30
37	DCU-37PBF	DCU-37PBF-30	DCUE-37PBF	DCUE-37PBF-30	DCUY-37PBF	DCUY-37PBF-30
50	DDU-50PBF	DDU-50PBF-30	DDUE-50PBF	DDUE-50PBF-30	DDUY-50PBF	DDUY-50PBF-30

#### Tin-Plated Shell with Grounding Indents

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9PBFTI	DEU-9PBFTI-30	DEUE-9PBFTI	DEUE-9PBFTI-30	DEUY-9PBFTI	DEUY-9PBFTI-30
15	DAU-15PBFTI	DAU-15PBFTI-30	DAUE-15PBFTI	DAUE-15PBFTI-30	DAUY-15PBFTI	DAUY-15PBFTI-30
25	DBU-25PBFTI	DBU-25PBFTI-30	DBUE-25PBFTI	DBUE-25PBFTI-30	DBUY-25PBFTI	DBUY-25PBFTI-30
37	DCU-37PBFTI	DCU-37PBFTI-30	DCUE-37PBFTI	DCUE-37PBFTI-30	DCUY-37PBFTI	DCUY-37PBFTI-30
50	DDU-50PBFTI	DDU-50PBFTI-30	DDUE-50PBFTI	DDUE-50PBFTI-30	DDUY-50PBFTI	DDUY-50PBFTI-30



**D-subminiature Metal Shell  
Vertical Dip Solder PCB  
D\*U Series**



Ordering Information (Cont'd)

Vertical Sockets

Zinc-Plated Shell with Yellow Chromate Finish

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9SBF	DEU-9SBF-30	DEUE-9SBF	DEUE-9SBF-30	DEUY-9SBF	DEUY-9SBF-30
15	DAU-15SBF	DAU-15SBF-30	DAUE-15SBF	DAUE-15SBF-30	DAUY-15SBF	DAUY-15SBF-30
25	DBU-25SBF	DBU-25SBF-30	DBUE-25SBF	DBUE-25SBF-30	DBUY-25SBF	DBUY-25SBF-30
37	DCU-37SBF	DCU-37SBF-30	DCUE-37SBF	DCUE-37SBF-30	DCUY-37SBF	DCUY-37SBF-30
50	DDU-50SBF	DDU-50SBF-30	DDUE-50SBF	DDUE-50SBF-30	DDUY-50SBF	DDUY-50SBF-30

Tin-Plated Shell

Positions	Mounting Holes		4-40 Clinch Nuts		Dual Float Bushings	
	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold	Gold Flash	30µin. Gold
9	DEU-9SBFT	DEU-9SBFT-30	DEUE-9SBFT	DEUE-9SBFT-30	DEUY-9SBFT	DEUY-9SBFT-30
15	DAU-15SBFT	DAU-15SBFT-30	DAUE-15SBFT	DAUE-15SBFT-30	DAUY-15SBFT	DAUY-15SBFT-30
25	DBU-25SBFT	DBU-25SBFT-30	DBUE-25SBFT	DBUE-25SBFT-30	DBUY-25SBFT	DBUY-25SBFT-30
37	DCU-37SBFT	DCU-37SBFT-30	DCUE-37SBFT	DCUE-37SBFT-30	DCUY-37SBFT	DCUY-37SBFT-30
50	DDU-50SBFT	DDU-50SBFT-30	DDUE-50SBFT	DDUE-50SBFT-30	DDUY-50SBFT	DDUY-50SBFT-30

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