

## Industry Standard, Stamped Contacts Size 20 Performance and Material Specifications

### MATERIALS AND FINISHES

	Material	Finish
Shell	Steel	Tin or Yellow chromate over cadmium or zinc
Insulator	UL 94V-0 rated Thermoplastic, Glass-filled, color black	
Contacts:		
Machined	Copper alloy	Gold over nickel
Stamped and Formed Crimp Type	Copper alloy	Gold over nickel
Float Mount Hardware	Stainless Steel	Passivated

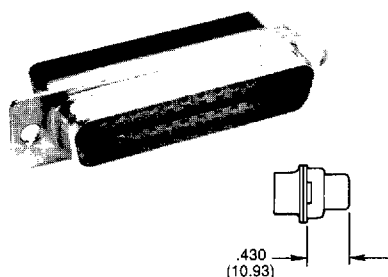
U.L. File No. E8572      CSA File No. 85691-2

### PERFORMANCE SPECIFICATIONS

Wire Size – See contact ordering information.
Current Rating – #20 contact, 5 Amps / #22 contact, 2 amps
Voltage Rating – 1000 VAC sea level
Temperature Rating – -55°C to +105°C
Contact Resistance – 15 mΩ

### Dimensions/Part Numbers

Crimp Snap-In Contacts Supplied Separately



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Mounting Method Detail – Page 6

### Connectors With Tin Shells (Commercial Standard)

Number of Positions (Shell Size)	Part Numbers	
	Pin Connector With Grounding Indents	Socket Connector
9(E)	DEA9P-K87-FO	DEA9S-A197-FO
15(A)	DAA15P-K87-FO	DAA15S-A197-FO
25(B)	DBA25P-K87-FO	DBA25S-A197-FO
37(C)	DCA37P-K87-FO	DCA37S-A197-FO
50(D)	DDA50P-K87-FO	DDA50S-A197-FO

Clinch Nut and Float Mounting Options Available:

Add: E = 4-40 Clinch Nut

Y = Float Mounting

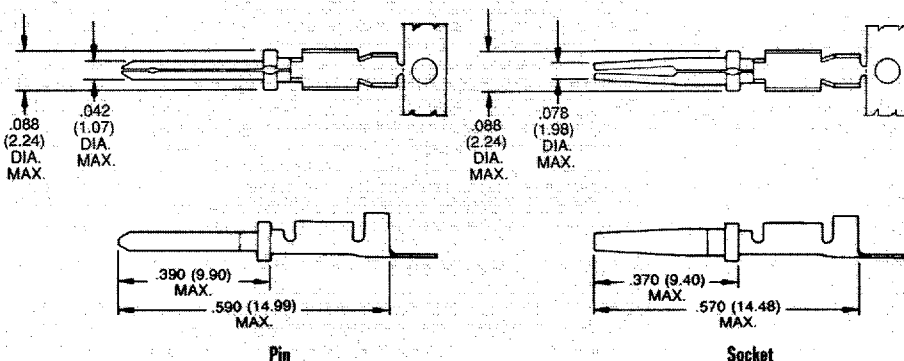
Example: DBAE25P-K87-FO

### Connectors With Yellow Chromate

Number of Positions (Shell Size)	Part Numbers	
	Pin Connector	Socket Connector
9 (E)	DEA9P-FO	DEA9S-FO
15 (A)	DAA15P-FO	DAA15S-FO
25 (B)	DBA25P-FO	DBA25S-FO
37 (C)	DCA37P-FO	DCA37S-FO
50 (D)	DDA50P-FO	DDA50S-FO

### Economy, Standard Contacts Size 20

Stamped contacts with insulation support are supplied on reels of 10,000 for use with semi-automatic strip and crimp machines, or loose for use with hand crimp tooling. Two sizes are available to accommodate wire ranges 20-28 AWG.



Semi-Automatic Tooling – Inside Back Cover

### Loose Contacts (Order Multiples of 100)

	Part Number			
	Pin Contact		Socket Contact	
	24-28 AWG	20-24 AWG	24-28 AWG	20-24 AWG
Gold over Nickel	—	—	—	—
30μ Gold over Nickel	030-2487-015	030-2487-014	030-2488-015	030-2488-014

### Reeled Contacts — 10,000 Pieces per Reel

	Part Number			
	Pin Contact		Socket Contact	
	24-28 AWG	20-24 AWG	24-28 AWG	20-24 AWG
Gold over Nickel	D110238-476	D110238-475	D110238-478	D110238-477
30μ Gold over Nickel	D110238-472	D110238-471	D110238-474	D110238-473

Highlighted part numbers indicate standard product; usually available with shorter lead times.

### Tooling

Hand Tool		Extraction Tool		
Description	Part Number	Wire Size	Description	Part Number
CCT-D*A-1	995-2000-000	20-24	CIET-D*A-20-24	980-0008-135
		24-28	CIET-D*A-24-28	980-0008-136

## Performance and Material Specifications

### MATERIALS AND FINISHES

	Material	Finish
Shell	Steel	Tin or yellow chromate over zinc or cadmium
Insulator	Thermoplastic-UL 94V-0	
Contacts	Pin: Brass Socket: Phosphor Bronze	Gold Over nickel

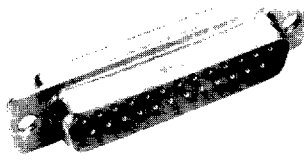
### MECHANICAL FEATURES

Coupling — Friction and lock accessories  
Polarization — Keystone-shaped shells

### PERFORMANCE SPECIFICATIONS

Temperature Rating — -55°C to +105°C  
Dielectric Withstanding Voltage — 1000 VAC sea level  
Wire/Contact Size — #20 AWG  
Current Rating — #20 contact 5 Amps

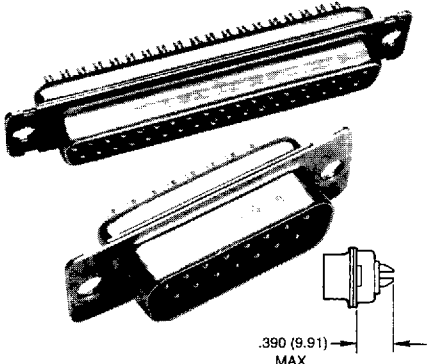
## Dimensions/Part Numbers—Stamped Contacts



Number of Contacts (Shell Size)	Yellow Chromate Part Number	Tin Part Number
9(E)	DE9P	DE9PK87
	DE9S	DE9SA197
15(A)	DA15P	DA15PK87
	DA15S	DA15SA197
25(B)	DB25P	DB25PK87
	DB25S	DB25SA197
37(C)	DC37P	DC37PK87
	DC37S	DC37SA197
50(D)	DD50P	DD50PK87
	DD50S	DD50SA197

## Dimensions/Part Numbers – Machined Contacts (Non-Removable)

With .120" Through-Mounting Holes



Layout	Tin/ Gold Over Nickel	Yellow Chromate/ Gold Over Nickel	Tin/ 30µ in. Gold
DE-9S	DEM9SA197	DEM9S	DEM9SK126
DE-9P	DEM9PK87	DEM9P	DEM9PK127
DA-15S	DAM15SA197	DAM15S	DAM15SK126
DA-15P	DAM15PK87	DAM15P	DAM15PK127
DB-25S	DBM25SA197	DBM25S	DBM25SK126
DB-25P	DBM25PK87	DBM25P	DBM25PK127
DC-37S	DCM37SA197	DCM37S	DCM37SK126
DC-37P	DCM37PK87	DCM37P	DCM37PK127
DD-50S	DDM50SA197	DDM50S	DDM50SK126
DD-50P	DDM50PK87	DDM50P	DDM50PK127

Mounting Options Available:

4-40 Clinch Nut – Add "E" to Part Number After "M".

Float Mount – Add "Y" to Part Number After "M".

(Can be used in front or rear panel mount applications)

Example: DBME25SA197 DEMY9PK87

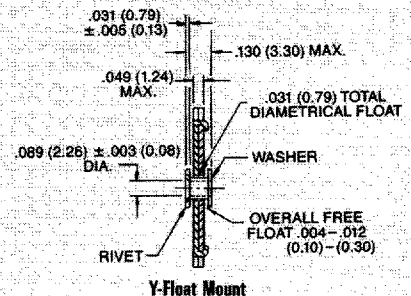
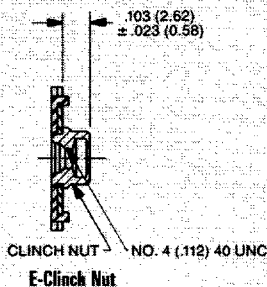
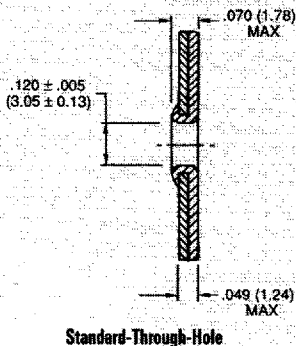
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Highlighted part numbers indicate standard product; usually available with shorter lead times.

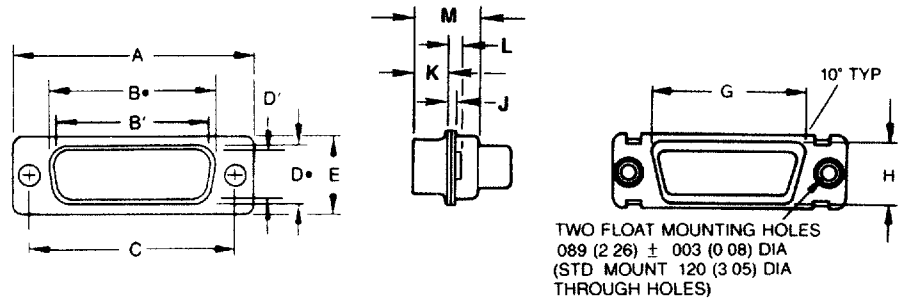
## Mounting Option Dimensions – Solder Cup Connectors



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

# D Subminiature

## Standard D Shell Dimensions



Shell Size	A ±.015 (0.38)	B* ±.010 (0.25)	B' ±.010 (0.25)	C ±.008 (0.2)	D* ±.010 (0.25)	D' ±.010 (0.25)	E ±.016 (0.4)	G Max.	H Max.	J ±.010 (0.25)	K ±.010 (0.25)	L Max.	M Max.
DE-9P	1.213 (30.81)	—	.667 (16.94)	.984 (24.99)	—	.329 (8.36)	.494 (12.55)	.765 (19.41)	.430 (10.92)	.032 (0.81)	.236 (5.99)	.075 (1.90)	.438 (11.12)
DE-9S	1.213 (30.81)	.642 (16.31)	—	.984 (24.99)	.310 (7.87)	—	.494 (12.55)	.765 (19.41)	.430 (10.92)	.032 (0.81)	.242 (6.15)	.075 (1.90)	.438 (11.12)
DA-15P	1.539 (39.14)	—	.995 (25.27)	1.311 (33.32)	—	.329 (8.36)	.494 (12.55)	1.088 (27.64)	.430 (10.92)	.032 (0.81)	.236 (5.99)	.075 (1.90)	.438 (11.12)
DA-15S	1.539 (39.14)	.970 (24.64)	—	1.311 (33.32)	.310 (7.87)	—	.494 (12.55)	1.088 (27.64)	.430 (10.92)	.032 (0.81)	.242 (6.15)	.075 (1.90)	.438 (11.12)
DB-25P	2.087 (53.03)	—	1.535 (38.99)	1.850 (47.04)	—	.329 (8.36)	.494 (12.55)	1.630 (41.40)	.430 (10.92)	.036 (0.91)	.232 (5.99)	.075 (1.90)	.438 (11.12)
DB-25S	2.087 (53.03)	1.510 (38.35)	—	1.850 (47.04)	.310 (7.87)	—	.494 (12.55)	1.630 (41.40)	.430 (10.92)	.032 (0.81)	.242 (6.15)	.075 (1.90)	.438 (11.12)
DC-37P	2.728 (69.31)	—	2.183 (55.45)	2.500 (63.50)	—	.329 (8.36)	.494 (12.55)	2.278 (57.86)	.430 (10.92)	.036 (0.91)	.232 (5.99)	.075 (1.90)	.438 (11.12)
DC-37S	2.728 (69.31)	2.158 (54.81)	—	2.500 (63.50)	.310 (7.87)	—	.494 (12.55)	2.278 (57.86)	.430 (10.92)	.032 (0.81)	.242 (6.15)	.075 (1.90)	.438 (11.12)
DD-50P	2.634 (66.92)	—	2.080 (52.83)	2.406 (61.11)	—	.436 (11.07)	.605 (15.37)	2.183 (55.45)	.542 (13.77)	.036 (0.91)	.232 (5.99)	.075 (1.90)	.438 (11.12)
DD-50S	2.634 (66.92)	2.063 (52.40)	—	2.406 (61.11)	.422 (10.72)	—	.605 (15.37)	2.183 (55.45)	.542 (13.77)	.032 (0.81)	.242 (6.15)	.075 (1.90)	.438 (11.12)

NOTE: Dimensions B\*, D\*, G and H are measured as outside dimensions at the bottom of the draw. B\* and D\* are the O.D. dims. for socket side, B' and D' are the inside dims. for pin side.