

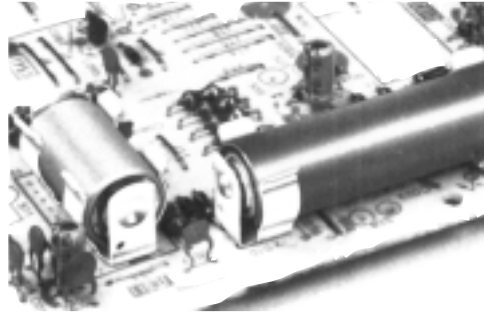


Designers' Choice

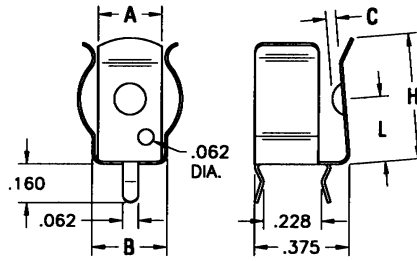
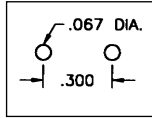
BATTERY CLIPS & CONTACTS

SNAP-IN PC BATTERY CLIPS FOR "A" • "AA" • "AAA" • "AAAA" • "N" SIZES

- Available for "A" • "AA" • "AAA" • "AAAA" • "N" size batteries
- Mounts securely to the PC board with advanced "Snap-In" design for thru hole mounting
- "Snap-In" clip holds firmly for wave soldering
- Reliable spring tension assures low contact resistance
- Low profile, economical design
- Retains battery securely to withstand shock and vibration



Mounting Detail



MATERIAL: Spring Steel, Nickel Plate



No Ears

CAT. NO.	BATTERY SIZE	BATTERY DIA.	A	B	C	H	L	MAT'L THICK
52	"A" • "AA"	No Ears	.250	—	.040	.500	.260	.010
92	"A" • "AA"	.531-.665	.312	.375	.060	.593	.359	.012
2915	"A" • "AA"	.531-.665	.312	.375	.060	.593	.359	.015
82	"AAA" • "N"	.375-.460	.250	.300	.040	.500	.260	.010
51	"AAAA"	.300-.350	See drawing below					.010

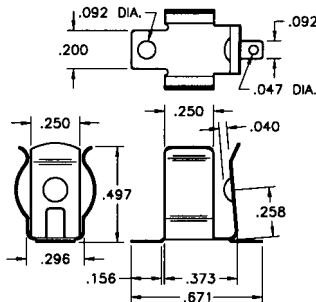
New

SURFACE MOUNT BATTERY CLIP

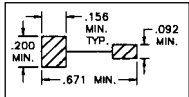
For "AAA" • "N"



- Low profile for densely packed PCBs
- "Flow-Hole" SMT solder tail design for increased joint strength
- Retains cell securely, withstands shock and vibration
- All conductive polystyrene carrier tape meets ANSI/EIA -481 standard



Pad Layout



MATERIAL: .010 Spring Steel, Tin Plate
Tape & Reel Specs: 32mm wide; 16mm pitch; 13 inch reel, (300 pieces per reel)

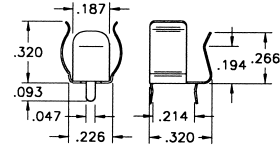
CAT. NO. 55 (Bulk)

CAT. NO. 55TR (Tape and Reel)

"AAAA"

MATERIAL: .010 Spring Steel, Nickel Plate

CAT. NO. 51



Mounting Detail



ECONOMY CLIPS FOR "AA" • "C" • "D" SIZES

Designed for mounting in self-contained, non-metallic battery compartments. Reliable spring tension assures low contact resistance. Recessed contact holds battery in place. All clips have anti-rotation tab.

MATERIAL: .016 Spring Steel, Nickel Plate

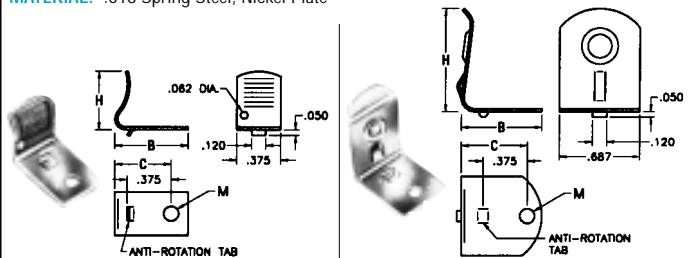
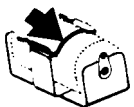


FIG. 1

FIG. 2

CAT. NO.	FIG. NO.	B	C	H	M MTHG. HOLE	CELL SIZE
206	1	.625	.480	.500	.128	AA
207	2	.687	.547	.875	.128	C
208	2	.750	.562	1.260	.128	D

BATTERY RETAINER CLIPS



- Prevents battery from loosening in battery holder
- Retainer clip slips on the ears of the battery holder clip
- Manufactured from Spring Steel, Nickel plate

CAT. NO. 61

Retainer for "AA" or cells with diameters of .532" to .562". Used with Keystone Battery Clips Cat. No. 91, 92, 92-015, 95, 99 and 100.

CAT. NO. 62

Retainer for "C" cells or similar size batteries to 1.032" diameter. Used with Keystone Battery Clips Cat. No. 86, 87, 93 and 222.

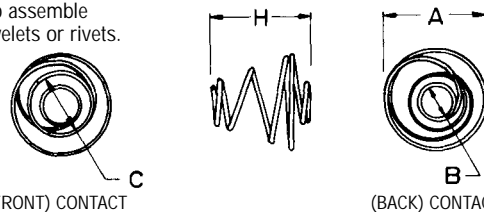
CAT. NO. 63

Retainer for "D" cells or similar size batteries to 1.343" diameter. Used with Keystone Battery Clips Cat. No. 88, 89 and 94.

BATTERY SPRING CONTACTS

For "A" • "AA" • "C" • "D" Sizes

Easy to assemble with eyelets or rivets.



CAT. NO.	H	A	B	C	MATERIAL
211 ("A" • "AA")	.290	.335	.100	.140	.025 Dia. Spring Steel, Nickel Plate
211-D ("C" • "D")	.850	.650	.162	.300	.040 Dia. Spring Steel, Nickel Plate

BATTERY & COMPONENT CLIPS

Designers' Choice



STEEL SPACE SAVER BATTERY CLIPS

FOR "AA" • "C" • "D" SIZES

IDEAL FOR • CARBON ZINC • NiCd • NiMH • LITHIUM • ALKALINE BATTERIES



Available with insulated or non-insulated contact.
Positive contact grips battery securely.

SPECIFICATIONS

Clips: Spring Steel, Nickel Plate
Contact Eyelets: Brass, Nickel Plate
Insulating Washers: Moisture Proof, Resin Impregnated Fibre
Terminal Lugs: Brass, Tin Plate

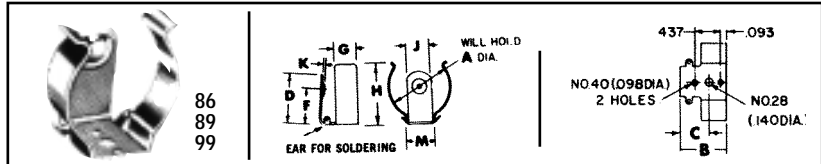


FIG. NO. 1 NON-INSULATED CONTACT

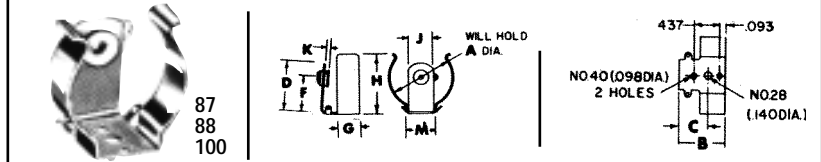


FIG. NO. 2 INSULATED CONTACT

CAT. NO.	FIG. NO.	CONTACT	A DIA. MIN. - MAX.	FOR CELLS	± .015		± .010		± .015		± .015		± .005		± .020		STEEL THICKNESS
					B	C	D	F	G	H	J	K	M				
86	1	NON-INSULATED	.875 to 1.125	C	.703	.391	.812	.593	.375	.937	.500	.050	.605	.020			
87	2	INSULATED	.875 to 1.125	C	.703	.391	.812	.593	.375	.937	.500	.070	.605	.020			
88	2	INSULATED	1.187 to 1.350	D	.775	.463	1.075	.750	.437	1.187	.500	.070	.609	.020			
89	1	NON-INSULATED	1.187 to 1.350	D	.775	.463	1.075	.750	.437	1.187	.500	.050	.609	.020			
99	1	NON-INSULATED	.531 to .650	AA	.703	.391	.609	.375	.375	.609	.312	.050	.353	.015			
100	2	INSULATED	.531 to .650	AA	.703	.391	.609	.375	.375	.609	.312	.070	.353	.015			

ALUMINUM & STEEL COMPONENT CLIPS

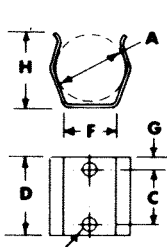
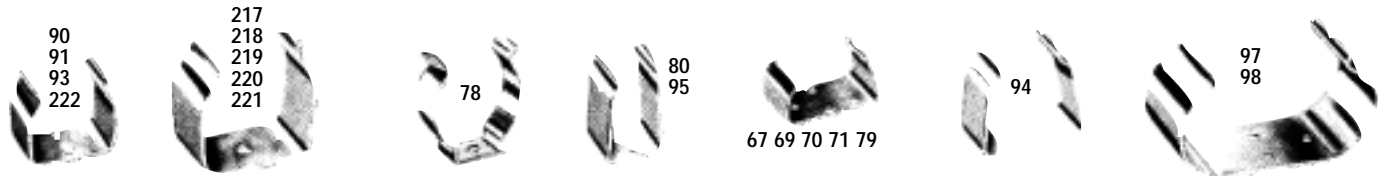


FIG. 1

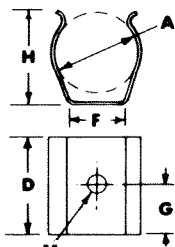


FIG. 2

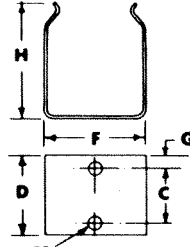


FIG. 3

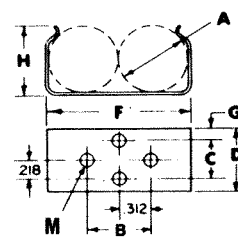


FIG. 4

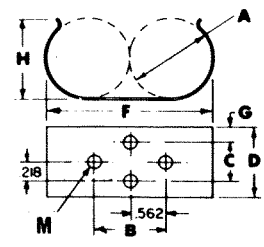


FIG. 5

Precision made spring clips are available in a wide range of sizes. These clips will hold round, square and rectangular batteries or components with similar dimensions. Clips are manufactured from Aluminum or Spring Steel.

MATERIAL

Steel Clips: Spring Steel, Nickel Plate
Aluminum Clips: 2024-T3

*These clips will hold batteries or components of similar dimensions.

CAT. NO.	FIG. NO.	A MIN MAX DIA. OR SIZE	*FOR CELLS	± .005		± .005		± .010		± .015	± .003 M MTG HOLES.	MATERIAL
				B	C	D	F	G	H			
67	3	.375 x .125	CRYSTAL	—	.187	.375	.410	.093	.210	.562	2#51(.067)	.016 Steel
69	4	.562 (2)	(2) AA	.625	.437	.625	1.125	.093	.562	.740	4#40(.098)	.015 Steel
70	4	.656 (2)	(2) RM12	.625	.437	.625	1.343	.093	.740	.921	4#40(.098)	.025 Alum.
71	3	.593 x 1.031	"9" VOLT	—	.437	.625	1.031	.093	.687	.921	2#40(.098)	.015 Steel
78	2	1.187 to 1.350	D	—	—	.500	.562	.250	1.218	.921	1#29(.136)	.020 Steel
79	4	.650 x 1.280	TR146X	.625	.437	.625	1.050	.093	.765	.921	4#40(.098)	.015 Steel
80	3	.650 x 1.280	"9" VOLT	—	.437	.625	.675	.093	1.187	.921	2#40(.098)	.015 Steel
90	1	.375 to .468	AAA	—	.437	.625	.312	.093	.453	.921	2#40(.098)	.020 Alum.
91	1	.531 to .656	AA	—	.437	.625	.406	.093	.562	.921	2#40(.098)	.020 Alum.
93	1	.875 to 1.125	C	—	.437	.625	.937	.093	.921	.921	2#40(.098)	.020 Alum.
94	3	1.187 to 1.375	D	—	.437	.625	1.250	.093	1.218	.921	2#40(.098)	.032 Alum.
95	3	.625 x 1.000	"9" VOLT	—	.437	.625	.656	.093	1.125	.921	2#40(.098)	.020 Alum.
97	5	1.031 (2)	(2) C	—	.437	.625	2.062	.093	1.125	.921	2#40(.098)	.020 Alum.
98	5	1.312 (2)	(2) D	1.125	.437	1.000	2.656	.281	1.437	.921	4#40(.098)	.032 Alum.
217	2	1.375 to 1.500	NiCd	—	—	.812	1.218	.406	1.430	.921	1#22(.157)	.025 Steel
218	2	1.437 to 1.687	NiCd	—	—	.812	1.375	.406	1.531	.921	1#22(.157)	.025 Steel
219	2	2.000 to 2.500	NiCd	—	—	.812	1.687	.406	2.156	.921	1#22(.157)	.025 Steel
220	2	.187 to .203	5mm	—	—	.315	.158	.157	.280	.921	1#42(.093)	.010 Steel
221	2	.859 to .890	.875	—	—	.468	.828	.234	.906	.921	1#22(.157)	.020 Steel
222	1	.875 to 1.125	C	—	.437	.625	.937	.093	.921	.921	2#40(.098)	.020 Steel