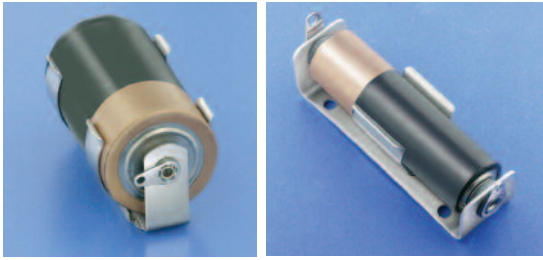


RUGGED BATTERY HOLDERS



An established design that has gained wide acceptance for commercial and military applications. Batteries are held under constant spring tension assuring low contact resistance. Retainer clips are available to lock batteries in place and prevent shifting or loosening. Refer to page 22. Recommended for use where shock or severe vibration is encountered. Special fabrication for more than four batteries or variations from standard stock parts can be assembled to meet your requirements.

SPECIFICATIONS:

Base: Stainless Steel, Phenolic, Aluminum
Contacts: Brass, Nickel Plate
Solder Lugs: Brass, Tin Plate

STEEL



FIG. 1 STEEL

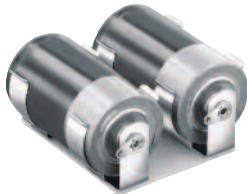


FIG. 2 STEEL, PHENOLIC BASE

ALUMINUM



FIG. 1 ALUMINUM



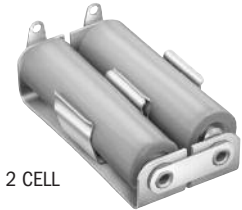
FIG. 2 ALUMINUM

CONNECTED IN SERIES

Features pre-connected jumper strap insulated from the Aluminum base. Batteries held in series circuit without need of additional wiring.

SPECIFICATIONS:

Base: Aluminum
Contacts: Brass, Nickel Plate
Solder Lugs: Brass, Tin Plated Jumper, Brass, Nickel Plate



2 CELL



3 CELL

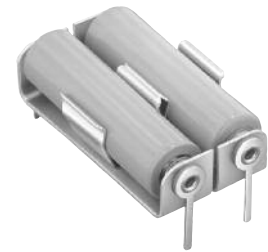
CAT. NO.	HOLDS NO. OF CELLS
"AA" CELL	
146	1
147	2
148	3
"C" CELL	
149	1
150	2
151	3
"D" CELL	
152	1
153	2
158	3

WITH PC LUGS

For printed circuitry we have standardized our most popular holders with PC Lugs. Choice of single or multiple holders "AA" assembled with PC solder lugs.

SPECIFICATIONS:

Base: Steel, Phenolic or Aluminum
Contacts: Brass, Nickel Plate
Solder Lugs: Brass, Tin Plate Jumper, Brass, Nickel Plate



ALUMINUM



STEEL

ALUMINUM HOLDERS	HOLDS NO. OF CELLS	STEEL HOLDERS
CAT. NO.		CAT. NO.
"AA" CELL		
2222	1	2228
2223	2	2229
"C" CELL		
2224	1	2230
2225	2	2231
"D" CELL		
2226	1	2232
2227	2	2233
"1/2AA" CELL		
—	1	2103
"2/3A" CELL		
131	1	—
DL223A - 6 Volt		
224	1	—

*Dual cell, Steel holders will have Phenolic base

STEEL HOLDERS		HOLDS NO. OF CELLS	FIG. NO.	ALUMINUM HOLDERS	
ONE CONTACT INSULATED	ALL CONTACTS INSULATED			ALL CONTACTS INSULATED	
CAT. NO.	CAT. NO.			CAT. NO.	
"AAA" CELL					
—	—	1	1	137	
—	—	2	1	138	
—	—	3	1	169	
—	—	4	1	170	
"AA" CELL					
1139	2139	1	1	139	
1189	2189	2	1	140	
—	2140*	2	2	189	
1191	2191	3	1	171	
—	2171*	3	2	—	
1194	2194	4	1	182	
—	2182*	4	2	192	
—	—	6	2	193	
"C" CELL					
1173	2173	1	1	173	
1185	2185	2	1	174	
—	2174*	2	2	185	
1195	2195	3	1	187	
—	2187*	3	2	—	
1198	2198	4	1	—	
—	2188*	4	2	196	
—	—	6	2	197	
"D" CELL					
1175	2175	1	1	175	
1186	2186	2	1	176	
—	2176*	2	2	186	
1199	2199	3	1	190	
—	2190*	3	2	—	
1162	2162	4	1	—	
—	2192*	4	2	200	
—	—	6	2	201	
"1/2 AA" LITHIUM CELL					
—	1103	1	1	—	
LITHIUM "2/3 A" OR "CR123" BATTERY					
—	—	1	1	132	

THM LOW PROFILE LITHIUM-ION & ALKALINE CELL HOLDERS

"1/3N" · "AAA" · "1/2AA" · "CR2" · "AA" · "2/3A"

FEATURES

- Snap-In PC contact holds firmly in position for wave soldering
- Tin Nickel contacts for excellent solderability and durability
- Polarity clearly marked for orientation
- Snap-on retainer cover (optional) retains battery securely to withstand shock and vibration. Helps protect against shorting

APPLICATIONS

- Computer memory, power backup systems
- Telecommunications
- Residential, industrial and commercial security systems
- PLC and industrial controls

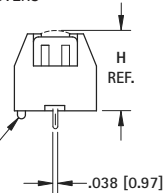
RETAINER COVERS



THM LOW PROFILE



108C
1028C
1029LC
RETAINER COVERS



SPECIFICATIONS

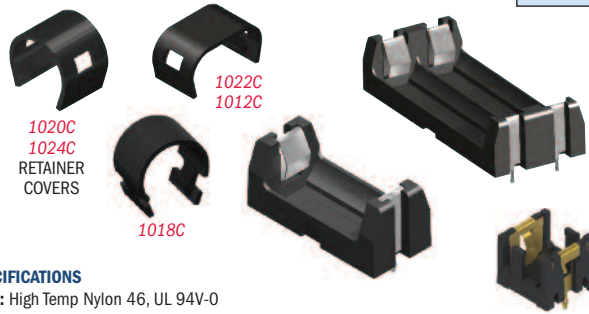
Base/Retainer Cover: PBT, UL 94V-0

Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

Operating Temp Range: -60°F to +293°F (-51°C to +145°C)

HOLDER	COVER								CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
CAT. NO.	CAT. NO.	L	W	H (Ref. Dim)	A	B	F	G			
108	108C	1.160 (29.5)	.640 (16.3)	.633 (16.1)	1.030 (26.2)	1.360 (34.5)	.610 (15.5)	.279 (7.1)	"1/2 AA" "CR2"	50 pieces per tray	Energizer 544, CR2, Duracell PX28L, CR2, Kodak K28A & KS28, CR2, Panasonic CR14250, CR2, Saft LCP3, Maxell 4LR44, CR2, Sanyo CR14250SE, CR2
1028	1024C 1028C	2.160 (54.9)	.640 (16.3)	.633 (16.1)	2.040 (51.8)	2.360 (59.9)	1.610 (40.9)	.279 (7.1)	"AA"	50 pieces per tray	Energizer, Duracell, Panasonic, Sanyo, Varta, Rayovac, Tadiran
1029	1029C 1029LC	1.500 (38.1)	.720 (18.3)	.712 (18.1)	1.375 (34.9)	1.700 (43.2)	.950 (24.1)	.320 (8.1)	"2/3 A"	50 pieces per tray	Duracell DL2/3A, Kodak K123L, Panasonic CR123A, Saft 450SC & VR0450, Sanyo CR17335SE

THM ULTRA LOW PROFILE



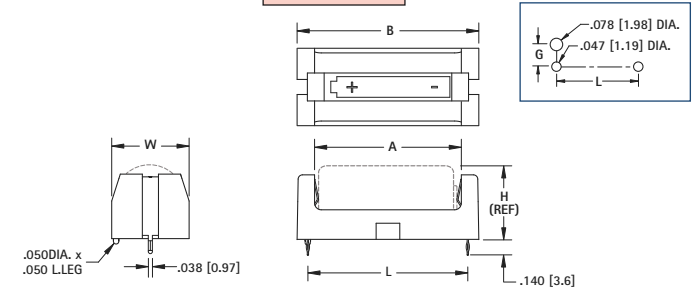
SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0

Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

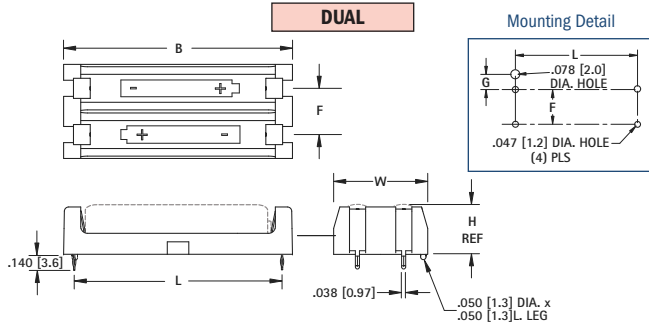
Operating Temp Range: -60°F to +293°F (-51°C to +145°C)

SINGLE



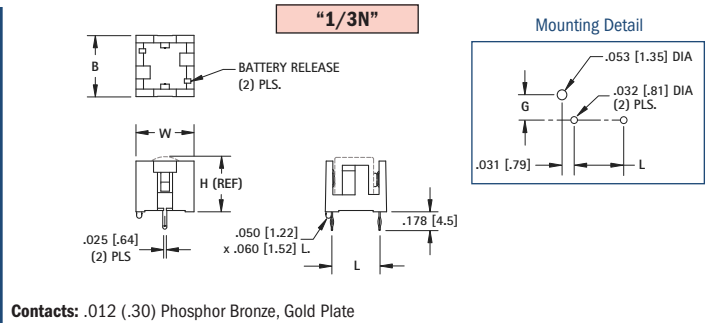
DWG. 1

DUAL



DWG. 2

"1/3N"



Contacts: .012 (.30) Phosphor Bronze, Gold Plate

DWG. 3

HOLDER	COVER	DWG NO.	L	W	H (Ref. Dim)	B	F	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
1021	1020C	1	1.933 (49.1)	.500 (12.7)	.445 (11.3)	2.140 (54.4)	-	.209 (5.3)	"AAA"	50 pieces per tray	All Major Manufacturers
1023	1022C	2	1.933 (49.1)	.875 (22.2)	.445 (11.3)	2.140 (54.4)	.430 (10.9)	.182 (4.6)	"AAA"	25 pieces per tray	
1015	1024C	1	2.161 (54.9)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	-	.265 (6.7)	"AA"	50 pieces per tray	All Major Manufacturers
1013*	1012C	2	2.161 (54.9)	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	25 pieces per tray	
1017	1024C	1	1.156 (29.4)	.612 (15.5)	.603 (15.3)	1.360 (34.5)	-	.265 (6.7)	"1/2 AA"	50 pieces per tray	Energizer 544, Duracell PX28L, Kodak K28A & KS28, Saft LCP3, Maxell 4LR44, Sanyo CR14250SE
1019*	1018C	1	1.487 (37.8)	.720 (18.3)	.682 (17.3)	1.690 (42.9)	-	.319 (8.1)	"2/3 A"	50 pieces per tray	Duracell DL2/3A, Kodak K123L, Saft 450SC & VR0450, Sanyo CR17335SE
1099*	-	2	1.487 (37.8)	1.440 (36.6)	.682 (17.3)	1.690 (42.9)	.720 (18.3)	.319 (8.1)	"2/3 A"	25 pieces per tray	Sanyo CR17335SE
503	-	3	.450 (11.4)	.540 (13.7)	.506 (12.9)	.570 (14.5)	-	.240 (6.1)	"1/3 N"	300 pieces per tray	Duracell DL1/3N, Sanyo K58L, Energizer CR1/3N

*Base Material: PBT UL 94V-0

THM BATTERY HOLDERS

SMT LOW PROFILE LITHIUM-ION & ALKALINE CELL HOLDERS

"1/3N" · "AAA" · "1/2AA" · "AA" · "2/3A"

FEATURES

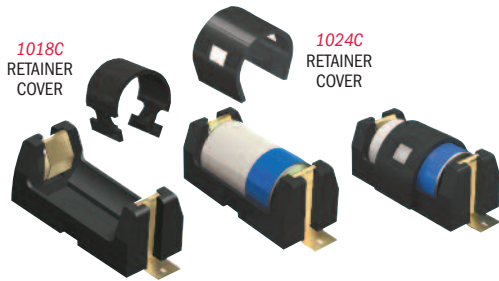
- Low profile surface mount holders for Cylindrical Lithium and Alkaline batteries
- UL 94V-0 Heat resistant Nylon Housings well suited for reflow soldering
- Designed for vacuum pick and place assembly
- Gold-plated Phosphor Bronze contacts assure low contact resistance and are readily solderable

- Ideal for both lead free solder and traditional solder process
- Battery installation and removal does not require tools
- Securely holds battery in place
- Polarity clearly marked for orientation
- Operating temp range: -60°F to +293°F (-51°C to +145°C)

APPLICATIONS

- Computer memory, power backup systems
- Telecommunications
- Residential, industrial and commercial security systems
- PLC and industrial controls

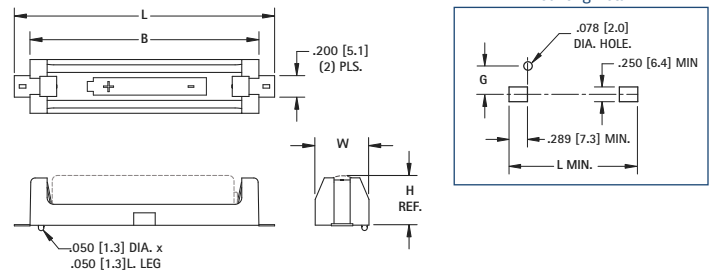
SMT ULTRA LOW PROFILE



SPECIFICATIONS

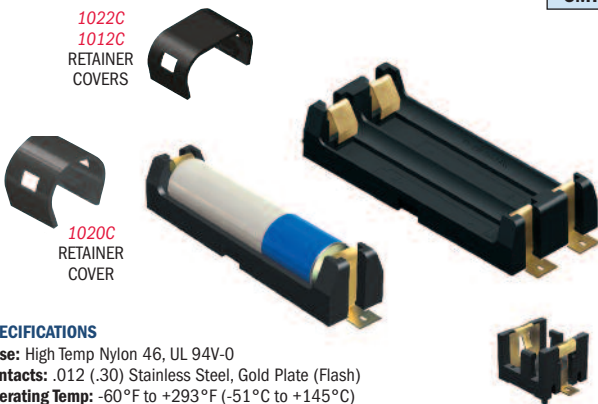
Base: High Temp Nylon 46, UL 94V-0

Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)



CAT. NO.	COVER	L	W	H (REF)	B	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
1016	1024C	1.723 (43.8)	.612 (15.5)	.603 (15.3)	1.360 (34.5)	.265 (6.7)	"1/2AA"	50 pieces per tray	Energizer 544, Duracell PX28L, Kodak K28A & KS28, Panasonic CR14250, Saft LCP3, Maxell
1024	1024C	2.711 (68.9)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	.265 (6.7)	"AA"	50 pieces per tray	Energizer, Duracell, Panasonic, Sanyo, Varta, Rayovac, Tadiran,
1018	1018C	2.062 (52.3)	.720 (18.3)	.682 (17.3)	1.690 (42.9)	.319 (8.1)	"2/3A"	50 pieces per tray	Duracell DL2/3A, Kodak K123L, Saft 450SC & VR0450, Sanyo CR17335SE

SMT ULTRA LOW PROFILE



SPECIFICATIONS

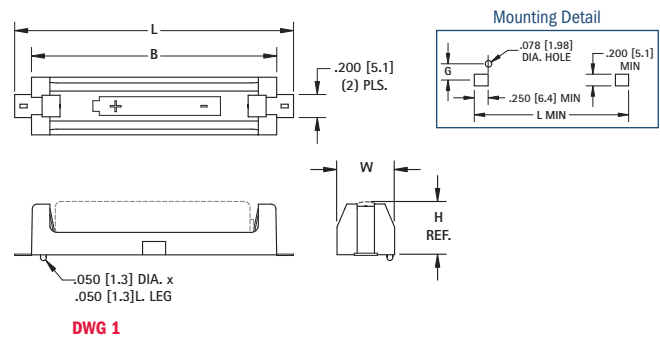
Base: High Temp Nylon 46, UL 94V-0

Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

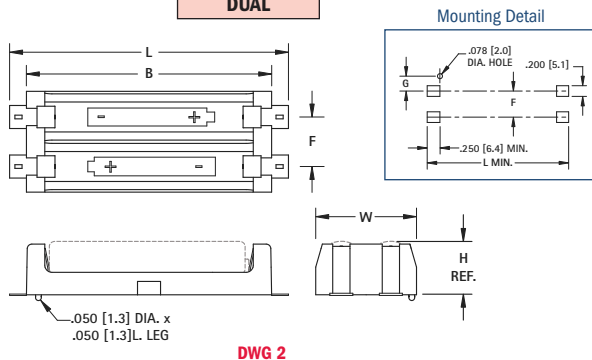
Operating Temp: -60°F to +293°F (-51°C to +145°C)

Packaging Spec's: Supplied in trays

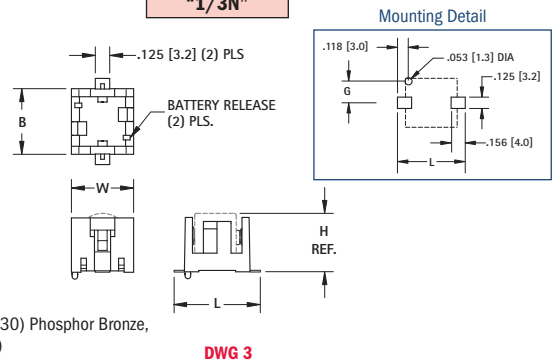
SINGLE



DUAL



"1/3N"



Contacts: .012 (.30) Phosphor Bronze, Gold Plate (Flash)

CAT. NO.	COVER	DWG NO.	L	W	H (REF)	B	F	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
1020	1020C	1	2.421 (61.5)	.500 (12.7)	.445 (11.3)	2.140 (54.4)	-	.209 (5.3)	"AAA"	50 pieces per tray	All Major Manufacturers
1022	1022C	2	2.421 (61.5)	.875 (22.2)	.445 (11.3)	2.140 (54.4)	.430 (10.9)	.182 (4.6)	"AAA"	25 pieces per tray	
1024	1024C	1	2.711 (68.9)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	-	.265 (6.7)	"AA"	50 pieces per tray	All Major Manufacturers
1012	1012C	2	2.711 (68.9)	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	25 pieces per tray	
1018	1018C	1	2.062 (52.3)	.720 (18.3)	.682 (17.3)	1.690 (42.9)	-	.319 (8.1)	"2/3A"	50 pieces per tray	Duracell DL2/3A, Kodak K123L, Saft 450SC & VR0450 Sanyo CR17335SE
1100	-	2	2.062 (52.3)	1.440 (36.6)	.682 (17.3)	1.690 (42.9)	.720 (18.3)	.319 (8.1)	"2/3A"	25 pieces per tray	
498	-	3	.748 (19.0)	.540 (13.7)	.506 (12.9)	.570 (14.5)	-	.240 (6.1)	"1/3N"	300 pieces per tray	Duracell DL1/3N, Sanyo K58L, Energizer CR1/3N

SMT & THM POLARIZED LITHIUM-ION & ALKALINE CELL HOLDERS

SMT & THM COIL SPRING BATTERY HOLDERS

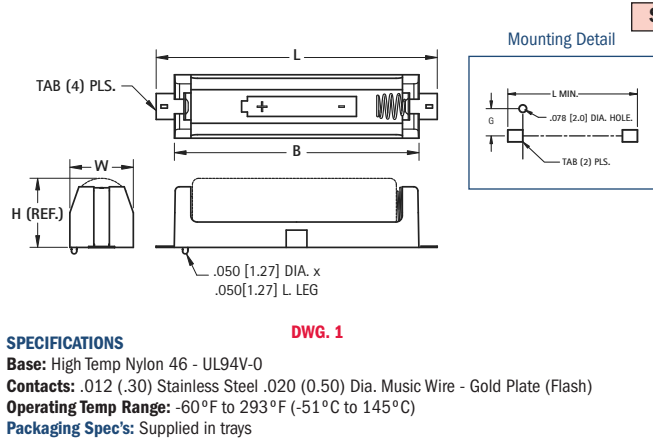


FEATURES

- UL 94V-0 Heat resistant nylon housing well suited for reflow and wave soldering operations
- Coil Spring will rebound after severe shock load
- Polarized holder offers circuit protection against improper battery installation
- Ideal for both lead free and traditional solder processes
- Operating temp range: -60°F to 293°F (-51°C to 145°C)

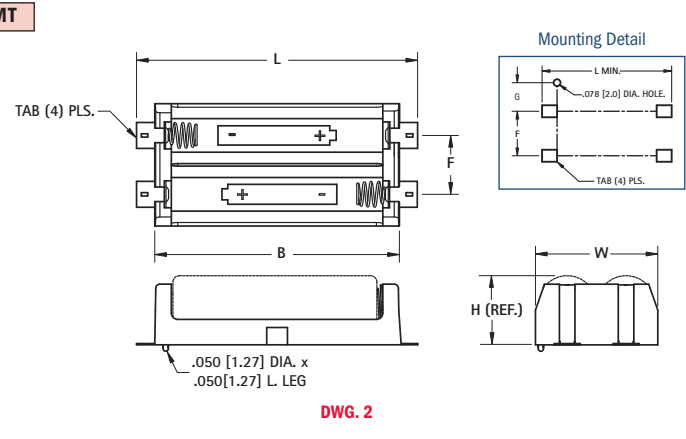
APPLICATIONS:

- Computer memory, power backup systems
- Telecommunications
- Residential, Industrial and commercial security systems
- PLC and industrial controls

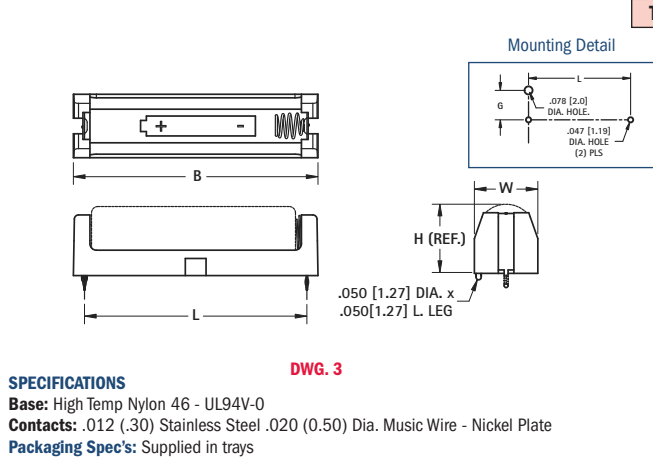


SPECIFICATIONS

Base: High Temp Nylon 46 - UL94V-0
Contacts: .012 (.30) Stainless Steel .020 (0.50) Dia. Music Wire - Gold Plate (Flash)
Operating Temp Range: -60°F to 293°F (-51°C to 145°C)
Packaging Spec's: Supplied in trays

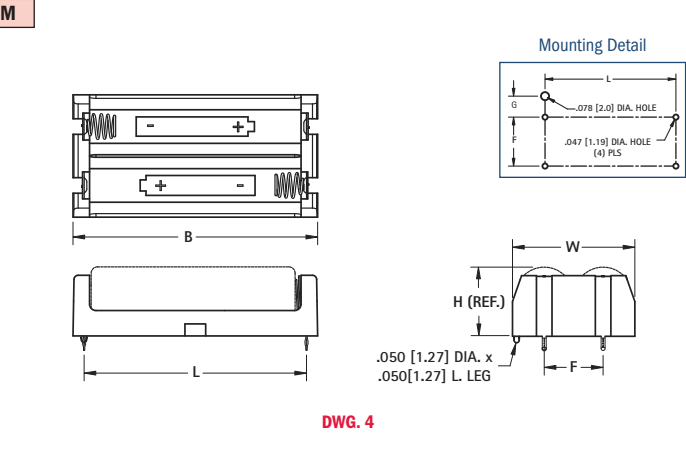


HOLDER	COVER									CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
CAT. NO.	COVER	DWG NO.	L	W	H (Ref. Dim)	B	F	G				
1076	1020C	1	2.421 (61.5)	.500 (12.7)	.445 (11.3)	2.140 (54.4)	-	.209 (5.3)	"AAA"	50 pieces per tray	All Major Manufacturers	
1078	1022C	2	2.421 (61.5)	.875 (22.2)	.445 (11.3)	2.140 (54.4)	.430 (10.9)	.182 (4.6)	"AAA"	25 pieces per tray	All Major Manufacturers	
1088	1024C	1	2.711 (68.9)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	-	.265 (6.7)	"AA"	50 pieces per tray	All Major Manufacturers	
1090	1012C	2	2.711 (68.9)	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	25 pieces per tray	All Major Manufacturers	
1126	1024C	1	1.723 (43.8)	.612 (15.5)	.603 (15.3)	1.360 (34.5)	-	.265 (6.7)	"1/2 AA"	50 pieces per tray	Energizer 544, Duracell PX28L, Kodak K28A & KS28, Saft LCP3, Maxell 4LR44, Sanyo CR14250SE	
1128	1018C	1	2.062 (52.3)	.720 (18.3)	.682 (17.3)	1.690 (42.9)	-	.319 (8.1)	"CR123A"	50 pieces per tray	Duracell DL2/3A, Kodak K123LA, Panasonic CR123A, Saft 450SC & VR0450, Sanyo CR17335SE	
1014	-	2	2.062 (52.3)	1.440 (36.6)	.682 (17.3)	1.690 (42.9)	.720 (18.3)	.319 (8.1)	"CR123A"	25 pieces per tray	Sanyo CR17335SE	



SPECIFICATIONS

Base: High Temp Nylon 46 - UL94V-0
Contacts: .012 (.30) Stainless Steel .020 (0.50) Dia. Music Wire - Nickel Plate
Packaging Spec's: Supplied in trays



HOLDER	COVER									CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
CAT. NO.	COVER	DWG NO.	L	W	H (Ref. Dim)	B	F	G				
1075	1020C	3	1.933 (49.1)	.500 (12.7)	.445 (11.3)	2.140 (54.4)	-	.209 (5.3)	"AAA"	50 pieces per tray	All Major Manufacturers	
1077	1022C	4	1.933 (49.1)	.875 (22.2)	.445 (11.3)	2.140 (54.4)	.430 (10.9)	.182 (4.6)	"AAA"	25 pieces per tray	All Major Manufacturers	
1087	1024C	3	2.145 (54.5)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	-	.265 (6.7)	"AA"	50 pieces per tray	All Major Manufacturers	
1089*	1012C	4	2.145 (54.5)	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	25 pieces per tray	All Major Manufacturers	
1127	1024C	3	1.156 (29.4)	.612 (15.5)	.603 (15.3)	1.360 (34.5)	-	.265 (6.7)	"1/2 AA"	50 pieces per tray	Energizer 544, Duracell PX28L, Kodak K28A & KS28, Saft LCP3, Maxell 4LR44, Sanyo CR14250SE	
1129*	1018C	3	1.487 (37.8)	.720 (18.3)	.682 (17.3)	1.690 (42.9)	-	.319 (8.1)	CR123A	50 pieces per tray	Duracell DL123A, Kodak K123LA, Panasonic CR123A, Varta CR1213A, Sanyo CR123A	
1055*	-	4	1.487 (37.8)	1.440 (36.6)	.682 (17.3)	1.690 (42.9)	.720 (18.3)	.319 (8.1)	CR123A	25 pieces per tray	Varta CR1213A, Sanyo CR123A	

*Base Material: PBT UL 94V-0

THM & SMT POLARIZED "CR2" • "CR123A" CELL HOLDERS

FEATURES

- Battery installation and removal does not require tools
- UL 94V-0 Heat resistant Nylon Housings well suited for reflow or wave soldering
- Securely holds battery in place
- Polarized holder offers circuit protection against improper battery installation

APPLICATIONS

- Computer memory, power backup systems
- Telecommunications/Security Systems
- PLC and industrial controls

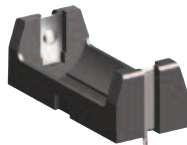
SPECIFICATIONS

Base: High Temp Nylon 46, UL Rated 94V-0
 Operating temp range: -60°F to 293°F (-51°C to 145°C)

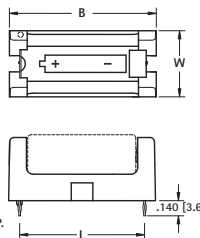
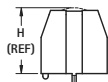
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash) - SMT
 Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate - THM

THM

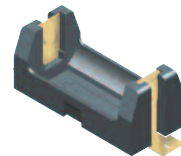
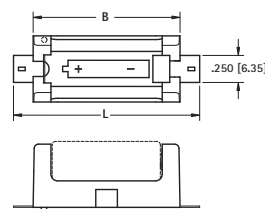
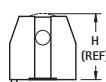
SMT



Thru-Hole Mount (THM)

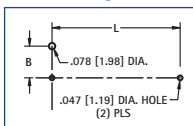


1018C
RETAINER
COVER
FITS ALL
HOLDERS



Surface Mount (SMT)

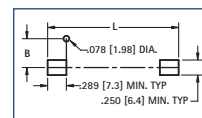
Mounting Detail



CAT. NO.	MOUNTING STYLE	L	W	H (Ref)	B	G	CELL SIZE	PACKAGING SPEC'S
1010	SMT	1.723 (43.8)	.612 (15.5)	.661 (16.8)	1.360 (34.5)	.265 (6.7)	CR2	50 pieces per tray
1011	THM	1.156 (29.4)	.720 (18.3)	.712 (18.1)	1.690 (42.9)	.319 (8.1)	CR2	
1050	SMT	2.062 (52.4)	.720 (18.3)	.712 (18.1)	1.690 (42.9)	.319 (8.1)	CR123A	
1051*	THM	1.487 (37.8)	.720 (18.3)	.712 (18.1)	1.690 (42.9)	.319 (8.1)	CR123A	

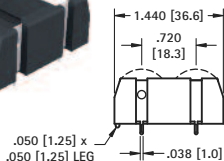
*Base material: PBT UL 94V-0

Mounting Detail

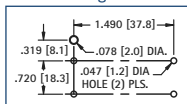


THM DUAL CR123A

SMT DUAL CR123A

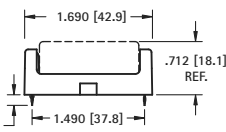


Mounting Detail

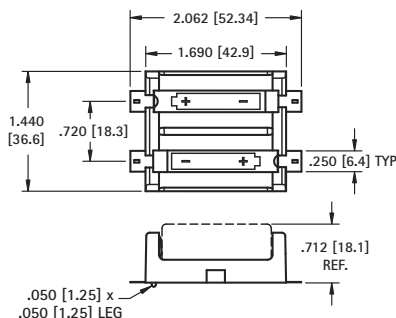


CAT. NO. 1079*

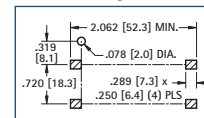
*Base material: PBT UL 94V-0



Packaging Spec's: 25 pieces per tray



Mounting Detail



CAT. NO. 1080

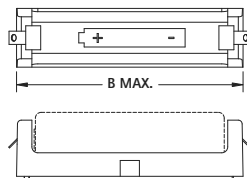
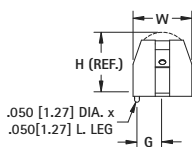
IN-LINE LITHIUM-ION & ALKALINE HOLDERS

SINGLE

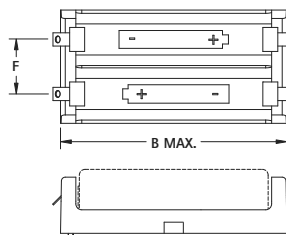
SPECIFICATIONS

Contacts: .012 (.30) Phosphor Bronze, Tin-Nickel Plate

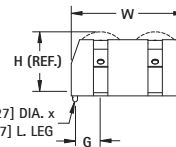
DUAL



DWG. 1



DWG. 2

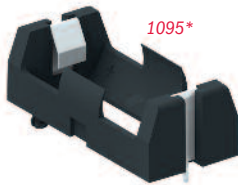


HOLDER	COVER	CAT. NO.	COVER	DWG NO.	W	H	B	F	G	CELL SIZE	BATTERY CROSS REFERENCE
1115	1024C	1	.612 (15.5)	.603 (15.3)	2.359 (59.9)		.265 (6.7)	"AA"	Energizer, Duracell, Panasonic, Sanyo, Varta, Rayovac, Tadiran		
1114*	1012C	2	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	Energizer, Duracell, Panasonic, Sanyo, Varta, Rayovac, Tadiran		
1117	1024C	1	.612 (15.5)	.603 (15.3)	1.360 (34.5)		.265 (6.7)	"1/2 AA"	Energizer 544, Duracell PX28L, Kodak K28A & KS28, Saft LCP3, Maxell 4LR44, Sanyo CR14250SE		
1119*	1018C	1	.720 (18.3)	.682 (17.3)	1.690 (42.9)		.319 (8.1)	"2/3 A"	Duracell DL2/3A, Kodak K123L, Saft 450SC & VR0450		
1120*	—	2	1.440 (36.6)	.682 (17.3)	1.690 (42.9)	.720 (18.3)	.319 (8.1)	"2/3 A"	Sanyo CR17335SE		

*Base material: PBT UL 94V-0

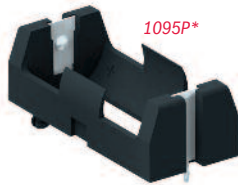
"18350" LITHIUM-ION BATTERY HOLDERS

Leaf Springs



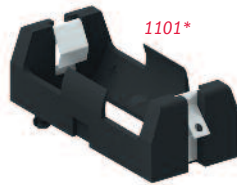
1095*

Leaf Spring Polarized



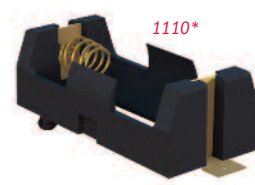
1095P*

Leaf Spring Solder Lugs



1101*

Coil Spring Polarized



1110*

FEATURES

- Low profile surface mount holder for Cylindrical Lithium and alkaline batteries
- UL 94V-0 heat resistant nylon housing well suited for reflow soldering
- Battery installation and removal does not require tools
- Securely holds battery in place

- Accommodates cells with or without built-in PCB protection circuits
- Polarity clearly marked for orientation
- Polarized holders available for protection against improper battery installation

*Dual Cell Not Shown

SPECIFICATIONS

Operating Temp Range:
-60°F to +293°F (-51°C to +145°C)
Base: High Temp Nylon 46, UL 94V-0
Contacts: Stainless Steel/Music Wire
SMT - Gold Plate (Flash)
THM - Tin-Nickel Plate

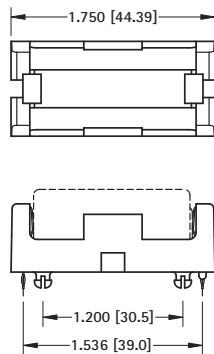
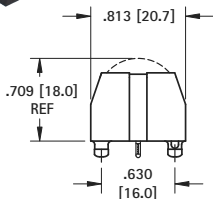


PC Battery Clip Available See Page 13.

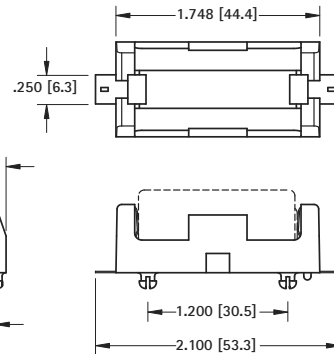
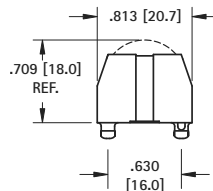
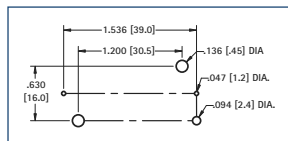
THRU HOLE MOUNT

SURFACE MOUNT

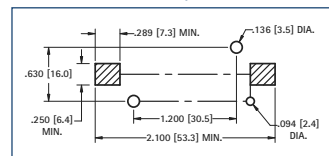
SINGLE CELL



Mounting Detail



Pad Layout



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

CAT. NO. 1095 Leaf Springs

CAT. NO. 1095P Leaf Spring Polarized

CAT. NO. 1111 Coil Spring Polarized

CAT. NO. 1101 Solder Lugs

Packaging Spec's: 50 pieces per tray

SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

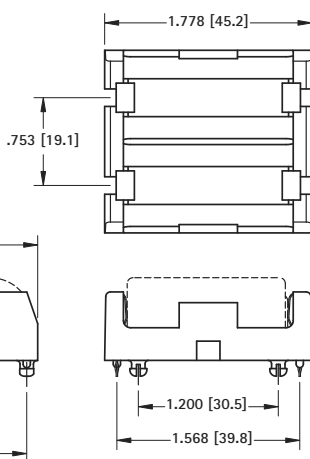
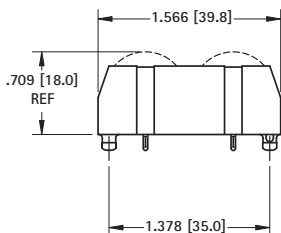
CAT. NO. 1096 Leaf Springs

CAT. NO. 1096P Leaf Spring Polarized

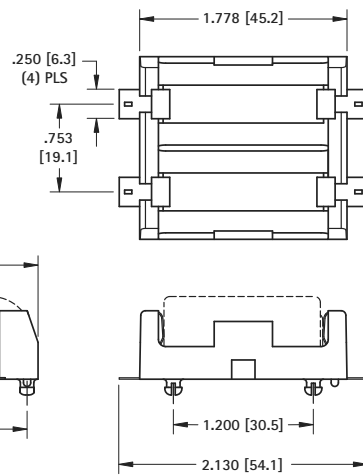
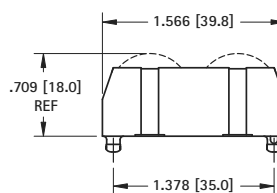
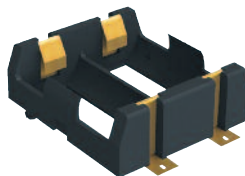
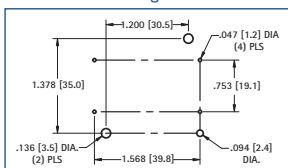
CAT. NO. 1110 Coil Spring Polarized

Packaging Spec's: 50 pieces per tray

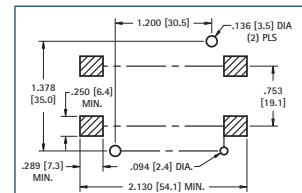
DUAL CELL



Mounting Detail



Pad Layout



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

CAT. NO. 1097 Leaf Springs

CAT. NO. 1097P Leaf Spring Polarized

CAT. NO. 1137 Coil Spring Polarized

CAT. NO. 1102 Solder Lugs

Packaging Spec's: 25 pieces per tray

SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

CAT. NO. 1098 Leaf Springs

CAT. NO. 1098P Leaf Spring Polarized

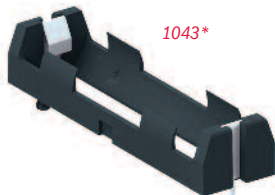
CAT. NO. 1136 Coil Spring Polarized

Packaging Spec's: 25 pieces per tray

"18350" LITHIUM-ION BATTERY HOLDERS

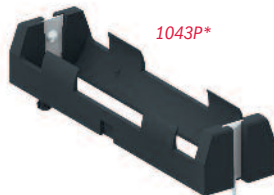
"18650" LITHIUM-ION BATTERY HOLDERS

Leaf Springs



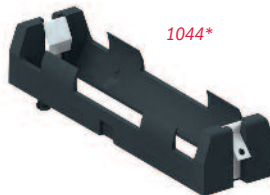
1043*

Leaf Spring Polarized



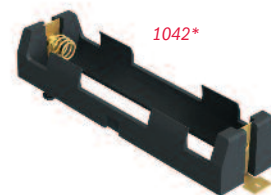
1043P*

Leaf Spring Solder Lugs



1044*

Coil Spring Polarized



1042*

FEATURES

- Low profile surface mount holder for Cylindrical Lithium and alkaline batteries
- UL 94V-0 heat resistant nylon housing well suited for reflow soldering
- Battery installation and removal does not require tools
- Securely holds battery in place

- Accommodates cells with or without built-in PCB protection circuits
- Polarity clearly marked for orientation
- Polarized holders available for protection against improper battery installation

*Dual Cell Not Shown

SPECIFICATIONS

Operating Temp Range:
-60°F to +293°F (-51°C to +145°C)
Base: High Temp Nylon 46, UL 94V-0
Contacts: Stainless Steel/Music Wire
SMT - Gold Plate (Flash)
THM - Tin-Nickel Plate

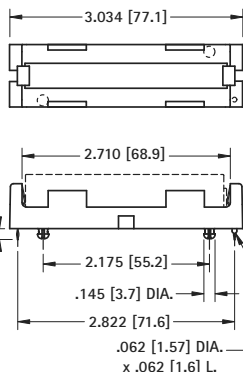
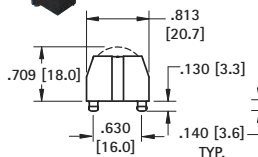


PC Battery Clip Available See Page 13.

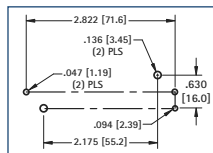
THRU HOLE MOUNT

SURFACE MOUNT

SINGLE CELL



Mounting Detail



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

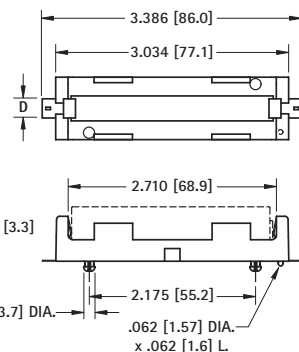
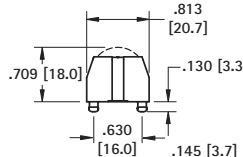
CAT. NO. 1043 Leaf Springs

CAT. NO. 1043P Leaf Spring Polarized

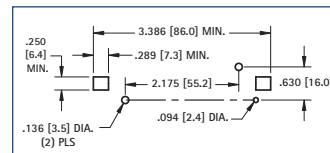
CAT. NO. 1131 Coil Spring Polarized

CAT. NO. 1044 Solder Lugs

Packaging Spec's: 50 pieces per tray



Pad Layout



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

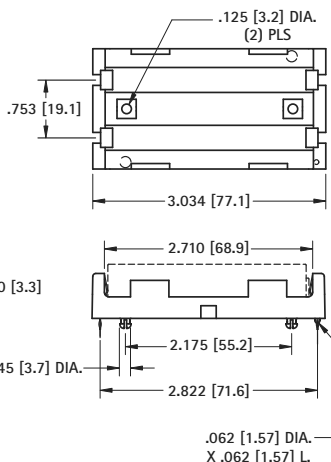
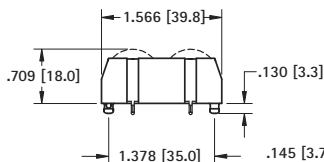
CAT. NO. 1042 Leaf Springs

CAT. NO. 1042P Leaf Spring Polarized

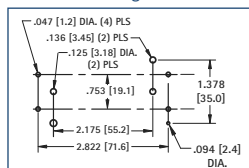
CAT. NO. 1130 Coil Spring Polarized

Packaging Spec's: 50 pieces per tray

DUAL CELL



Mounting Detail



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate

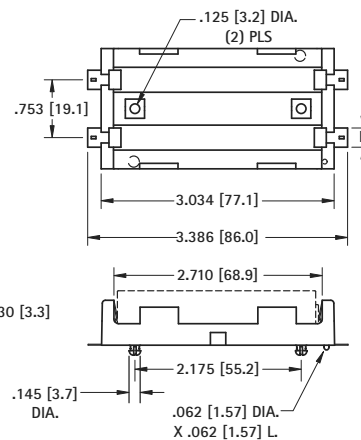
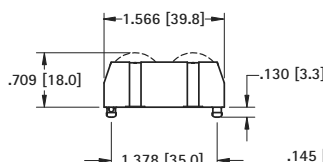
CAT. NO. 1049 Dual Springs

CAT. NO. 1049P Leaf Spring Polarized

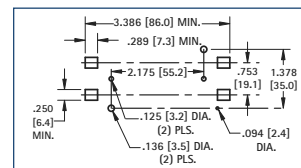
CAT. NO. 1135 Coil Spring Polarized

CAT. NO. 1047 Solder Lugs

Packaging Spec's: 25 pieces per tray



Pad Layout



SPECIFICATIONS

Base: High Temp Nylon 46, UL 94V-0
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

CAT. NO. 1048 Dual Springs

CAT. NO. 1048P Leaf Spring Polarized

CAT. NO. 1134 Coil Spring Polarized

Packaging Spec's: 25 pieces per tray

POLARIZED 20700 & 21700 CELL HOLDERS

FEATURES

- Battery installation and removal does not require tools
- UL 94V-0 Heat resistant Nylon Housings well suited for reflow or wave soldering
- Securely holds battery in place
- Polarized holder offers circuit protection against improper battery installation

APPLICATIONS

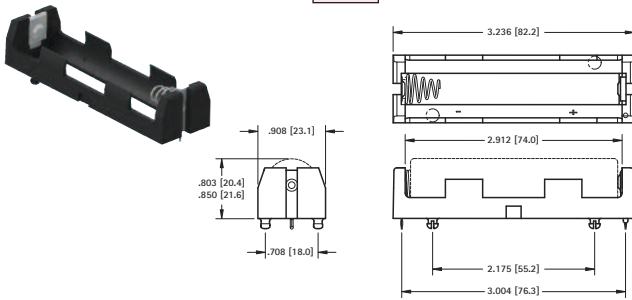
- Computer memory, power backup systems
- Telecommunications/Security Systems
- PLC and industrial controls

SPECIFICATIONS

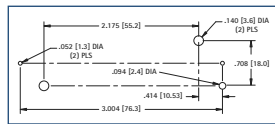
Base: High Temp Nylon 46, UL Rated 94V-0
Operating temp range: -60°F to 293°F (-51°C to 145°C)

Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash) - SMT
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate - THM

THM

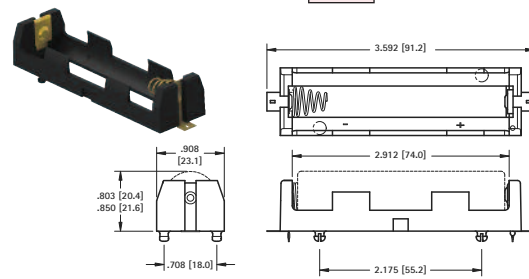


Mounting Detail

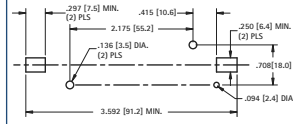


CAT. NO. 1121 Polarized

SMT

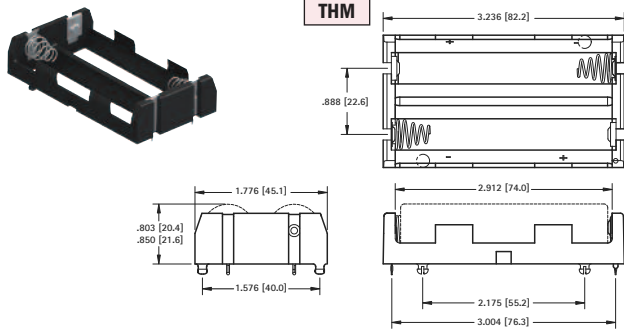


Mounting Detail

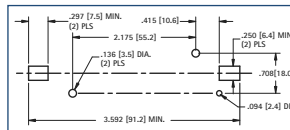


CAT. NO.1122 Polarized

THM

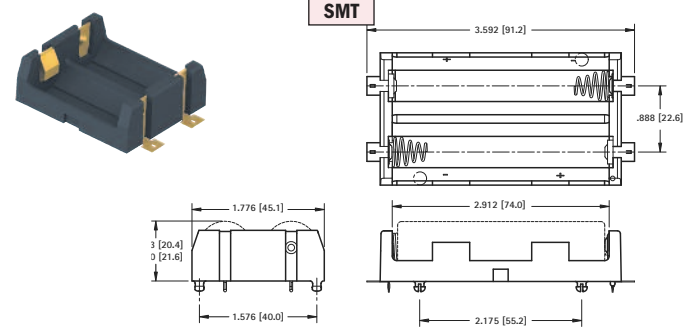


Mounting Detail

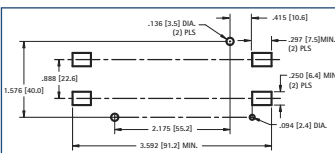


CAT. NO. 1123 Polarized

SMT



Mounting Detail

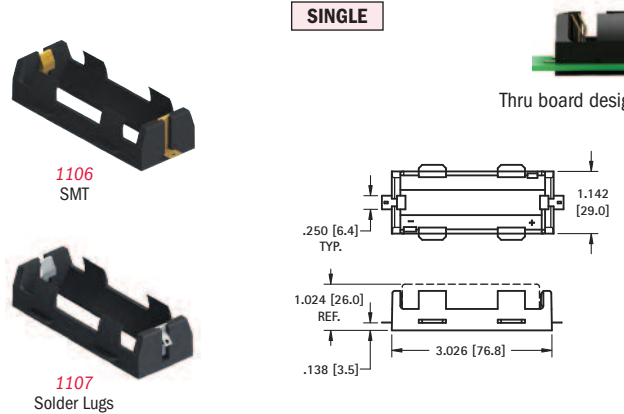


CAT. NO.1124 Polarized

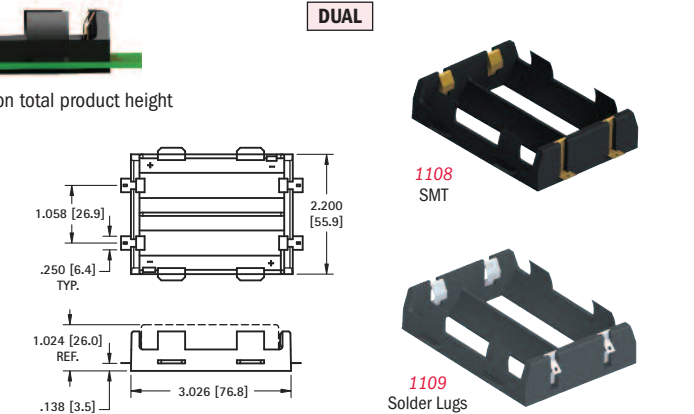
SMT & IN-LINE "26650" LITHIUM-ION HOLDERS

SINGLE

DUAL



DWG. 1 SMT version shown



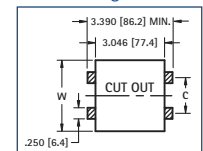
DWG. 2 SMT version shown

SPECIFICATIONS

SMT Base: High Temperature Nylon 4/6, UL Rated 94V-0
SMT Contacts: .012 (03) Stainless Steel, Gold Plate (Flash)
Inline Base: PBT, UL Rated 94V-0
Inline Solder Lugs: .012 (.3) Stainless Steel, Nickel Plate

CAT. NO.	MTG.	FIG. NO.	HOLDS NO. OF CELLS	SMT MOUNTING PAD LAYOUT	
				W	C
1107	Solder Lugs	1	1	-	-
1109		2	2	-	-
1106	SMT	1	1	1.142 (29.0)	On Center
1108		2	2	2.200 (55.9)	1.058 (26.9)

Mounting Detail



LITHIUM-ION BATTERY HOLDERS

IP65 WATER & DUST RESISTANT DENSI-PAK® BATTERY HOLDERS

- Water and dust resistant to IP65 standards
- Sealed on/off switch included
- Ideal for outdoor use such as holiday lighting or automotive emergency markers or harsh manufacturing environments
- Batteries securely held in place to assure a positive connection and low contact resistance
- Coil springs accommodate variations in battery lengths
- Withstands shock and vibration

SUPPLIED WITH ON/OFF SWITCH

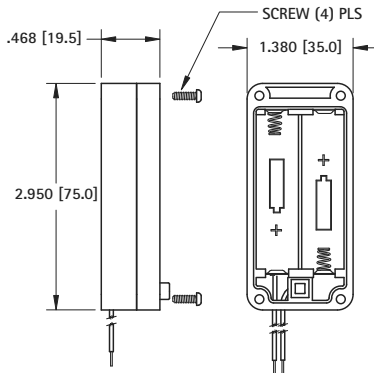


SPECIFICATIONS

Holder: ABS Plastic
Springs: Spring Steel, Nickel Plate
Wires: 6.0 (152) long, #26 AWG Stripped and pretinned ends, UL/CSA 1007
Temperature Range: 50°F to 194°F (10°C to 90°C)

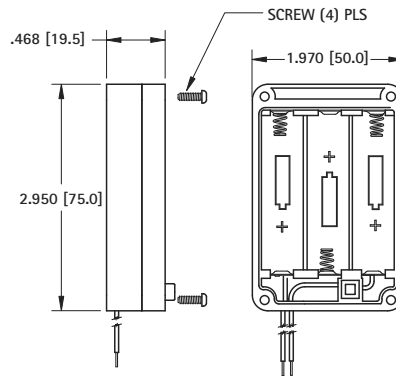
“AA”

Two (2) Cells - In Series



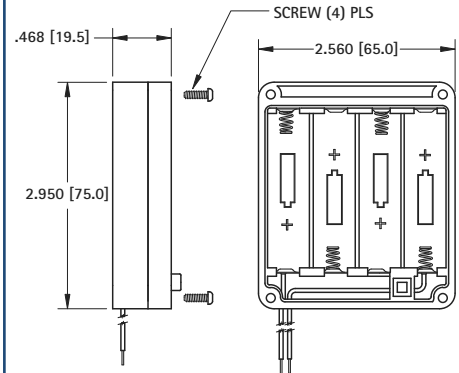
CAT. NO. 2438 Wire Leads with On/Off Switch

Three (3) Cells - In Series



CAT. NO. 2439 Wire Leads with On/Off Switch

Four (4) Cells - In Series

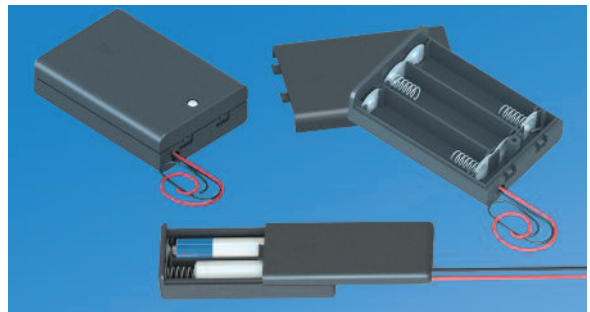


CAT. NO. 2440 Wire Leads with On/Off Switch

DENSI-PAK® BATTERY HOLDERS

- Supports high density packaging
- Batteries securely held in place to assure a positive connection and maintain a low contact resistance
- Contact springs self-adjust to variations in battery length
- Snap-on cover protects and secures batteries
- Withstands shock and vibration

ON/OFF SWITCH OPTIONAL



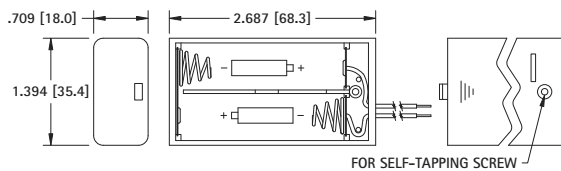
See page 33 for Mating PC Jacks

SPECIFICATIONS

Holder: ABS
Springs: Spring Steel, Nickel Plate
Wires (Red & Black): 6.0 (152) long, #26 AWG, Stripped and pretinned ends, UL/CSA1007
3 Pin Locking PC Connector:
Housing: Nylon 6/6
Contacts: Phosphor Bronze, Tin Plate

“AA”

Two (2) Cells - In Series

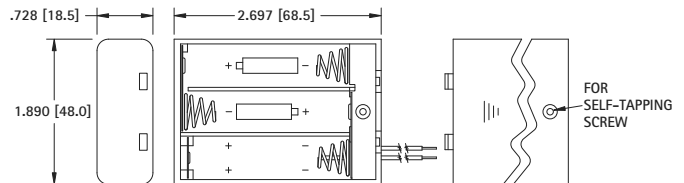


CAT. NO. 2490 Wire Leads Only

CAT. NO. 2490CN Wire Leads w/PC Connector

CAT. NO. 2490SW Wire Leads with On/Off Switch

Three (3) Cells - In Series



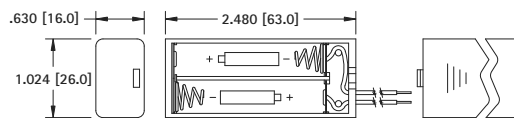
CAT. NO. 2487 Wire Leads Only

CAT. NO. 2487CN Wire Leads w/PC Connector

CAT. NO. 2487SW Wire Leads with On/Off Switch

“AAA”

Two (2) Cells - In Series

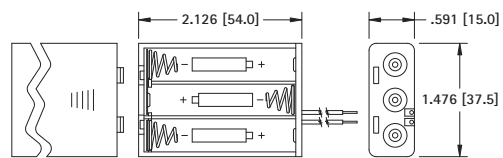


CAT. NO. 2489 Wire Leads Only

CAT. NO. 2489CN Wire Leads w/PC Connector

CAT. NO. 2489SW Wire Leads with On/Off Switch

Three (3) Cells - In Series



CAT. NO. 2484 Wire Leads Only

CAT. NO. 2484CN Wire Leads w/PC Connector

CAT. NO. 2484SW Wire Leads with On/Off Switch

ECONOMICAL PLASTIC BATTERY HOLDERS



PC Mount

PC pins eliminate wiring. Solders directly to PC for compact applications.



PC Mount with Ribbon (RB)

Ribbon wraps under batteries during battery installation. For easy battery removal, pulling up on ribbon will dislodge batteries from holder.



6" Wire Leads

Allows battery holder to be placed remotely from PC freeing up valuable board space.



6" Wire Leads with 3 Pin Locking PC Connector (CN)

PC connector eliminates hand soldering of wire leads to PC. Battery holder can be quickly added or removed from PC.

- Coil spring contacts will adjust to different battery lengths
- Batteries securely held in place to assure a positive connection and low contact resistance
- Withstands shock and vibration
- Holders for multiple cell are wired in series
- Custom designs welcome, Ex: Parallel wiring, custom wiring, combing any of the available options

SPECIFICATIONS

Base: Polypropylene

Spring: Spring Steel, Nickel Plate

PC Pins: Brass, Nickel Plate

Wire Leads: 6.0 (152), #26 AWG Stripped and Tinned, UL/CSA 1007

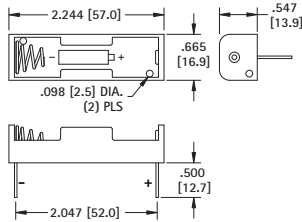
Ribbon: Woven Nylon, Red

PC Connector: Nylon 6/6, Phosphor Bronze, Tin Plate

PLASTIC BATTERY HOLDERS

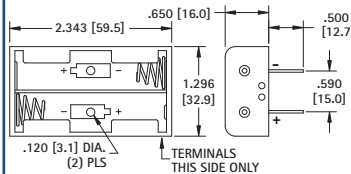
"AA"

One (1) Cell



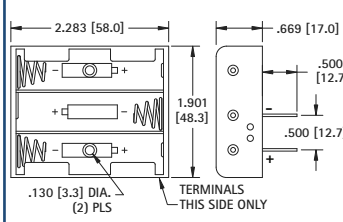
CAT. NO. 2460	PC Mount
CAT. NO. 2460RB	PC Mount w/Ribbon
CAT. NO. 2461	Wire Leads Only
CAT. NO. 2461CN	Leads w/PC Connector

Two (2) Cells - In Series



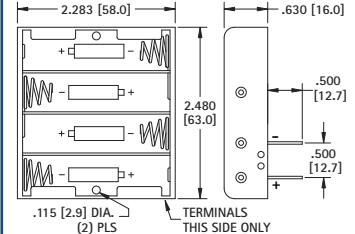
CAT. NO. 2462	PC Mount
CAT. NO. 2462RB	PC Mount w/Ribbon
CAT. NO. 2463	Wire Leads Only
CAT. NO. 2463CN	Leads w/PC Connector

Three (3) Cells - In Series



CAT. NO. 2464	PC Mount
CAT. NO. 2464RB	PC Mount w/Ribbon
CAT. NO. 2465	Wire Leads Only
CAT. NO. 2465CN	Leads w/PC Connector

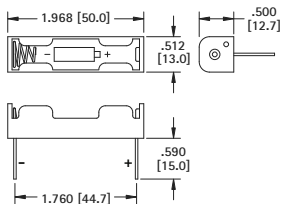
Four (4) Cells - In Series



CAT. NO. 2477	PC Mount
CAT. NO. 2477RB	PC Mount w/Ribbon
CAT. NO. 2478	Wire Leads Only
CAT. NO. 2478CN	Leads w/PC Connector

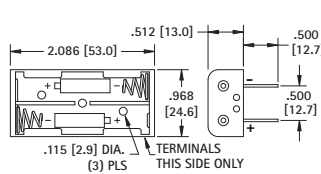
"AAA"

One (1) Cell



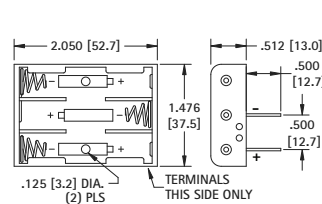
CAT. NO. 2466	PC Mount
CAT. NO. 2466RB	PC Mount w/Ribbon
CAT. NO. 2467	Wire Leads Only
CAT. NO. 2467CN	Leads w/PC Connector

Two (2) Cells - In Series



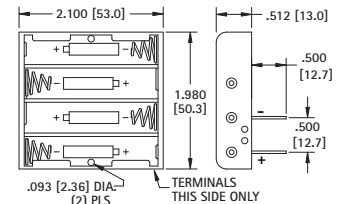
CAT. NO. 2468	PC Mount
CAT. NO. 2468RB	PC Mount w/Ribbon
CAT. NO. 2469	Wire Leads Only
CAT. NO. 2469CN	Leads w/PC Connector

Three (3) "AAA" Cells - In Series



CAT. NO. 2479	PC Mount
CAT. NO. 2479RB	PC Mount w/Ribbon
CAT. NO. 2480	Wire Leads Only
CAT. NO. 2480CN	Leads w/PC Connector

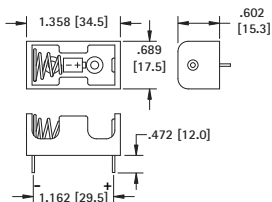
Four (4) Cells - In Series



CAT. NO. 2481	PC Mount
CAT. NO. 2481RB	PC Mount w/Ribbon
CAT. NO. 2482	Wire Leads Only
CAT. NO. 2482CN	Leads w/PC Connector

ECONOMICAL PLASTIC BATTERY HOLDERS (CONT'D)

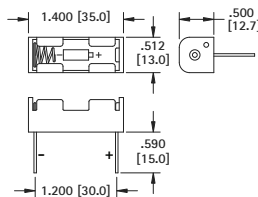
"1/2 AA" Cell -or- "CR2" Cell



CAT. NO. 2485	PC Mount
CAT. NO. 2485RB	PC Mount w/ribbon
CAT. NO. 2486	6" Wire Leads - 6.0 (152)
CAT. NO. 2486CN	Wire Leads w/PC Connector

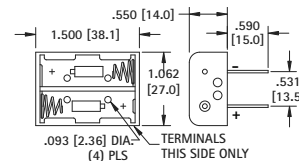
"1/2AA" - "CR2" - "N" - "12V"

"N" Cell - 1.5V or "12V" Cell



CAT. NO. 2470	PC Mount
CAT. NO. 2470RB	PC Mount w/ribbon
CAT. NO. 2471	6" Wire Leads - 6.0 (152)
CAT. NO. 2471CN	Wire Leads w/PC Connector

Two (2) "N" or Two (2) "12V" Cells - In Series



CAT. NO. 2472	PC Mount
CAT. NO. 2472RB	PC Mount w/ribbon
CAT. NO. 2473	6" Wire Leads - 6.0 (152)
CAT. NO. 2473CN	Wire Leads w/PC Connector

PLASTIC BATTERY HOLDERS WITH SNAP-ON CONNECTORS

- Same quality features as our wired & PC mount battery holders
- Features separable "Snap-On/Snap-Off" battery connector (9 Volt type) to assure reliable connections
- Easily disconnect battery holder from your device - no tools required
- Batteries securely held in place to maintain a positive contact and a low contact resistance

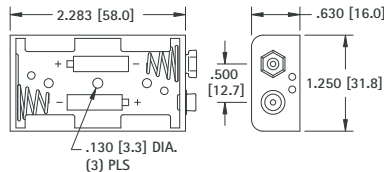
- Battery contact springs self adjust to variations in battery length
- Mates with Keystone 9 Volt battery straps and connectors (Refer to pages 36)

SPECIFICATIONS

Holder: Polypropylene
Male/Female Contacts: Brass, Nickel Plate
Springs: Spring Steel, Nickel Plate

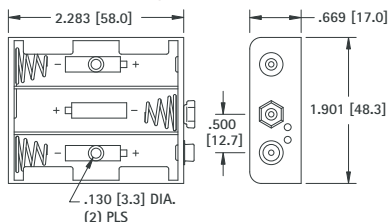
"AA"

Two Cells - in Series



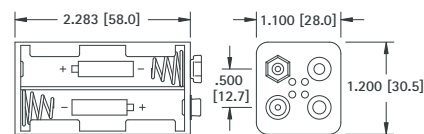
CAT. NO. 2474

Three (3) Cells - in Series



CAT. NO. 2475

Four (4) Cells - in Series



CAT. NO. 2476

PC BATTERY HOLDER CONNECTOR JACKS

- Available in SMT and THM versions
- Vertical and horizontal entry options
- SMT version supplied on tape and reel for vacuum pick and place assembly
- Used to connect any battery holder with PC connector (CN suffix)
- Wiring harness locks onto jack for assured connectivity

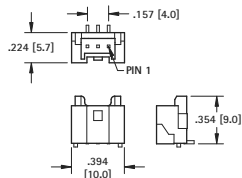
SPECIFICATIONS

Body: Nylon 6/6, UL94V-0
Pins: Brass, Tin Plate
Current Rating: 3 Amps, 100V max
Temperature Range: -13°F (-25°C) to 185°F (85°C)

SMT

SUPPLIED ON TAPE AND REEL

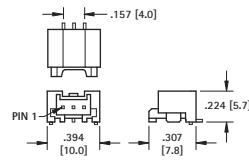
VERTICAL



CAT. NO. 974

Tape and Reel Spec's: 13 inch reel (500 pieces per reel)

HORIZONTAL

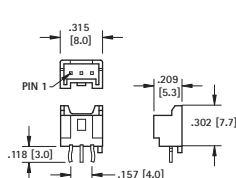


CAT. NO. 976

Tape and Reel Spec's: 13 inch reel (1000 pieces per reel)

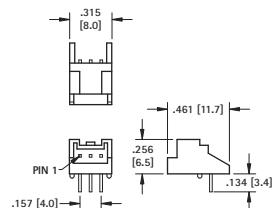
THM

VERTICAL



CAT. NO. 975

HORIZONTAL



CAT. NO. 977