

# THM LOW PROFILE LITHIUM & 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 Plated 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. Tamper-proof.

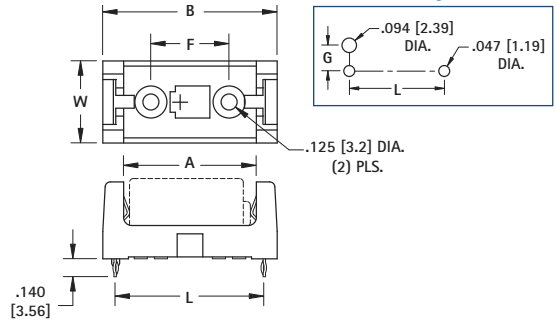
## APPLICATIONS

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

## THM LOW PROFILE



## Mounting Detail



## SPECIFICATIONS

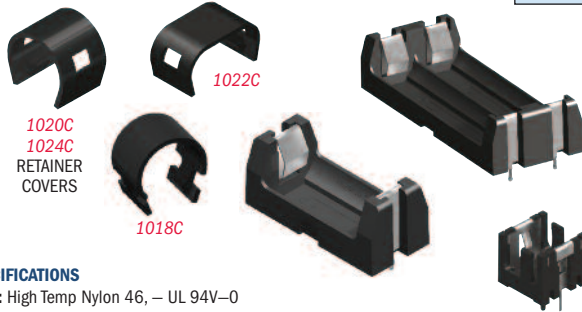
Base/Retainer Cover: PBT, UL 94V-0

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

Operating Temp Range: -60°F to +290°F (-50°C to +145°C)

HOLDER	COVER										
CAT. NO.	CAT. NO.	L	W	H (Ref. Dim)	A	B	F	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
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

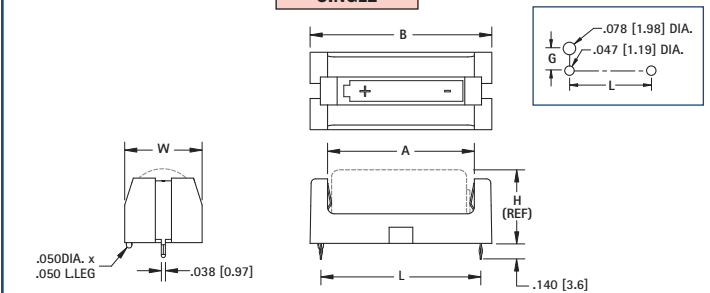
Base: High Temp Nylon 46, - UL 94V-0

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

Operating Temp Range: -60°F to +290°F (-50°C to +145°C)

## SINGLE

## Mounting Detail

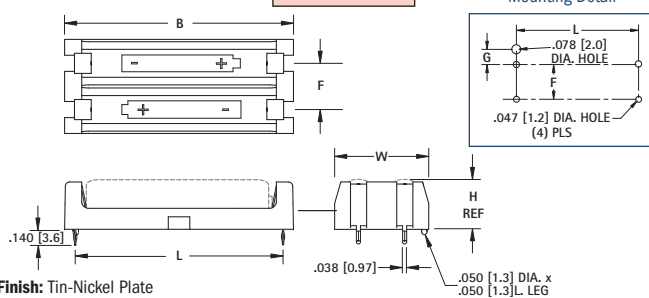


Finish: Tin-Nickel Plate

DWG. 1

## DUAL

## Mounting Detail

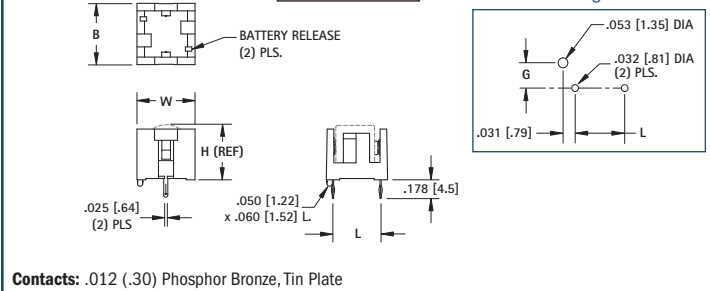


Finish: Tin-Nickel Plate

DWG. 2

## "1/3N"

## Mounting Detail



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

DWG. 3

HOLDER		COVER	DWG. 2								DWG. 3			
CAT. NO.	CAT. NO.	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	2.145 (54.5)	.612 (15.5)	.603 (15.3)	2.359 (59.9)	—	.265 (6.7)	"AA"	50 pieces per tray	All Major Manufacturers			
1013	1012C	2	2.145 (54.5)	1.180 (30.0)	.603 (15.3)	2.359 (59.9)	.568 (14.4)	.265 (6.7)	"AA"	25 pieces per tray				
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				
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	Duracell DL2/3A, Kodak K123L, Saft 450SC & VR0450, 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		

\*Cat. No. 503 Gold Plate Flash

# SMT LOW PROFILE LITHIUM & ALKALINE CELL HOLDERS

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

## FEATURES

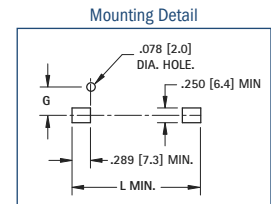
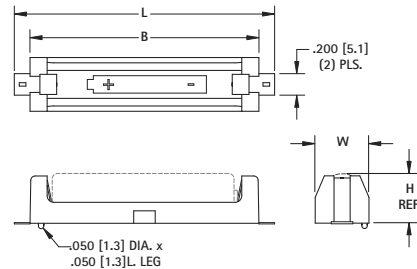
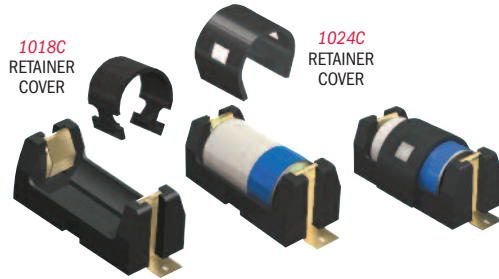
- Low profile surface mount holders for Cylindrical Lithium and Alkaline batteries
- UL 94V-0 Heat resistant Nylon Housings well suited for reflow soldering
- Designed for vacuum pick and place assembly
- Gold-plated Phosphor Bronze contacts assure low contact resistance and are readily solderable

- 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 +290°F (-50°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



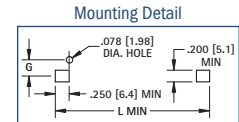
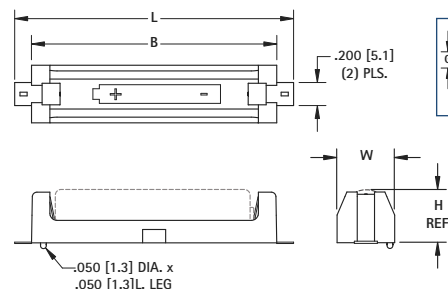
## SPECIFICATIONS

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

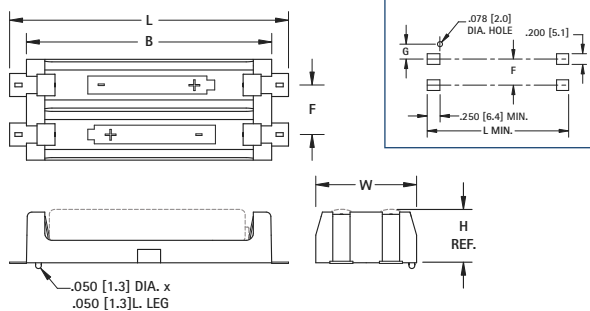
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

Operating Temp: -60°F to +290°F (-50°C to +145°C)

Packaging Spec's: Supplied in trays

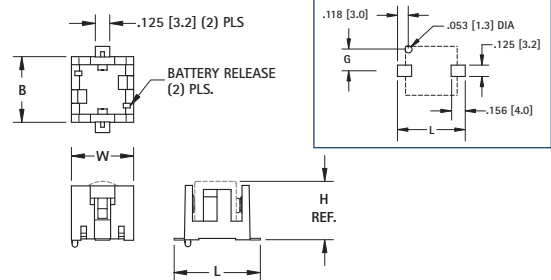
DWG 1

## DUAL



DWG 2

## "1/3N"



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

DWG 3

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 &amp; THM POLARIZED LITHIUM &amp; ALKALINE CELL HOLDERS

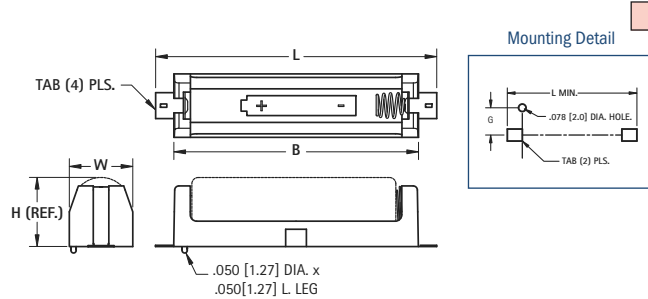


## FEATURES

- 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 290°F (-50°C to 145°C)

## APPLICATIONS:

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



DWG. 1

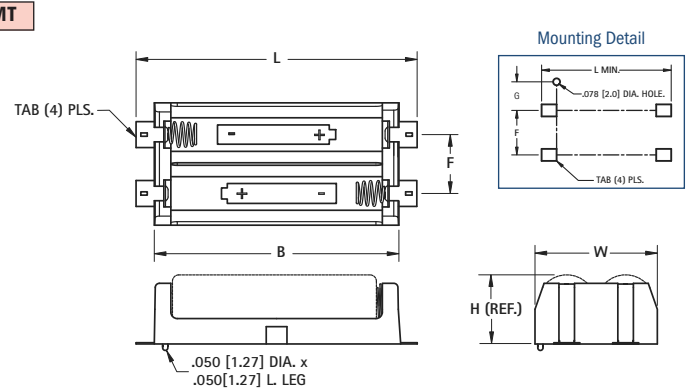
## SPECIFICATIONS

**Base:** High Temp Nylon 46 - UL94V-0

**Contacts:** .012 (.30) Stainless Steel/.020 (0.50) Dia. Music Wire - Gold Plated (Flash)

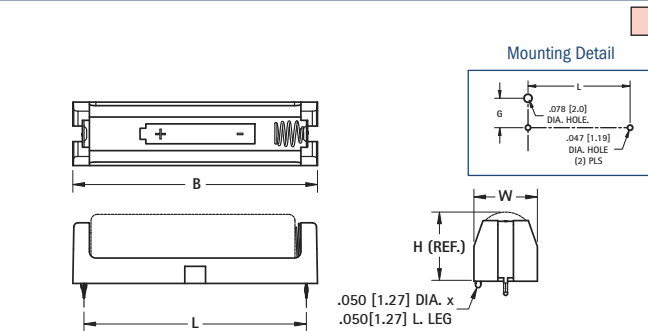
**Operating Temp Range:** -60°F to 290°F (-50°C to 145°C)

**Packaging Spec's:** Supplied in trays



DWG. 2

HOLDER	COVER										
CAT. NO.	COVER	DWG NO.	L	W	H (Ref. Dim)	B	F	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
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	
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	
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 K123L, Panasonic CR123A, Saft 450SC & VR0450,
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



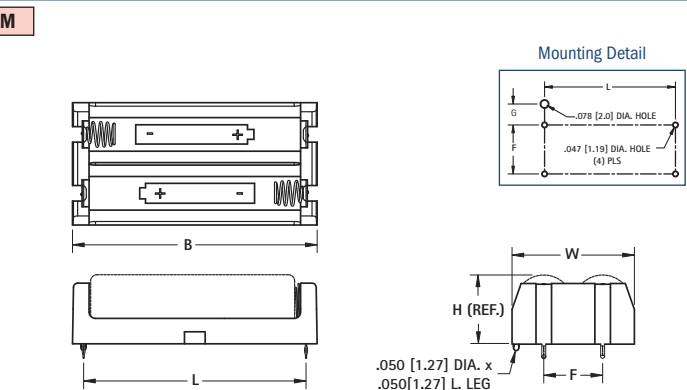
DWG. 3

## SPECIFICATIONS

**Base:** High Temp Nylon 46 - UL94V-0

**Contacts:** .012 (.30) Stainless Steel/.020 (0.50) Dia. Music Wire - Nickel Plated

**Packaging Spec's:** Supplied in trays



DWG. 4

HOLDER	COVER										
CAT. NO.	COVER	DWG NO.	L	W	H (Ref. Dim)	B	F	G	CELL SIZE	PACKAGING SPECS	BATTERY CROSS REFERENCE
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	
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	
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 CR123LA
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 trav	

# SMT & THM 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.

## SPECIFICATIONS

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

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

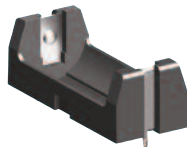
## APPLICATIONS

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

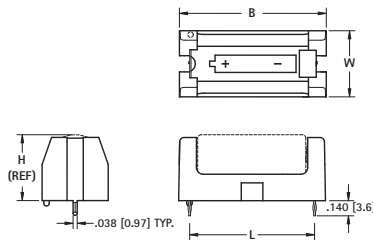
Contacts: .012 (.30) Stainless Steel, Tin-Nickel Plate - THM

Operating temp range: -60°F to 290°F (-50°C to 145°C)

## THM

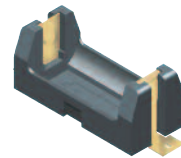


Thru-Hole Mount (THM)

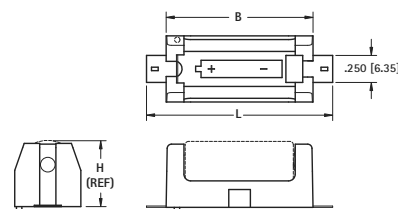


1018C  
RETAINER  
COVER  
FITS ALL  
HOLDERS

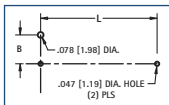
## SMT



Surface Mount (SMT)

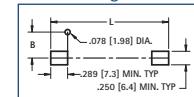


Mounting Detail



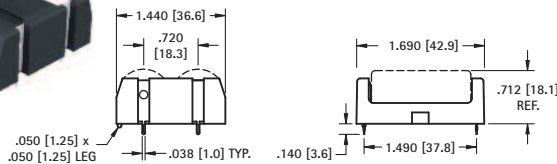
CAT. NO.	MOUNTING STYLE	L	W	H (Ref)	B	G	CELL SIZE	PACKAGING SPEC'S
1010	SMT	1.723 (43.8)	.612 (15.5)	.661 (16.8)	1.360 (34.5)	.265 (6.7)	CR2	50 pieces per tray
1011	THM	1.156 (29.4)						
1050	SMT	2.062 (52.4)						
1051	THM	1.487 (37.8)	.720 (18.3)	.712 (18.1)	1.690 (42.9)	.319 (8.1)	CR123A	

Mounting Detail

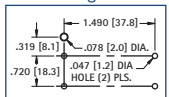


# SMT & THM DUAL POLARIZED CR123A CELL HOLDER

## THM

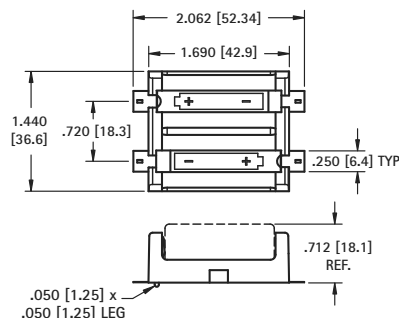


Mounting Detail

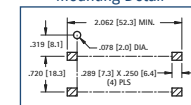


CAT. NO. 1079

## SMT



Mounting Detail

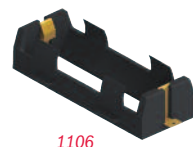


CAT. NO. 1080

Packaging Spec's: 25 pieces per tray

# SMT & INLINE "26650" LITHIUM-ION HOLDERS

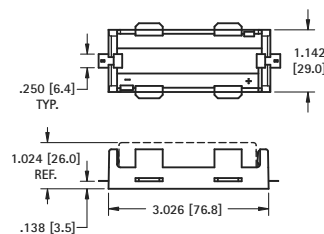
## SINGLE



1106  
SMT

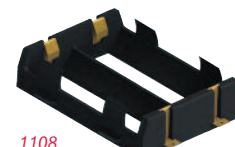


1107  
Solder Lugs



DWG. 1 SMT version shown

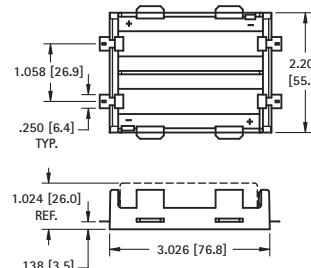
## DUAL



1108  
SMT

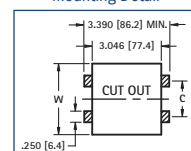


1109  
Solder Lugs



DWG. 2 SMT version shown

Mounting Detail



## 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

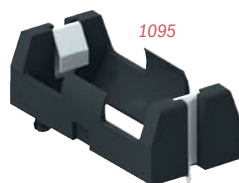
Inline Solder Lugs: .012 (.3) Stainless Steel, Nickel Plate

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)



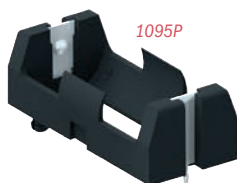
## "18350" LITHIUM-ION BATTERY HOLDERS

### THM Leaf Springs



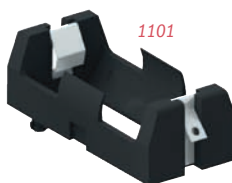
1095  
1097 (Dual Cell)  
Not Shown

### THM Polarized



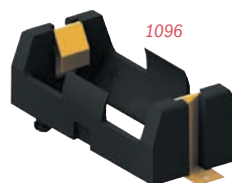
1095P  
1097P (Dual Cell)  
Not Shown

### Solder Lugs\*



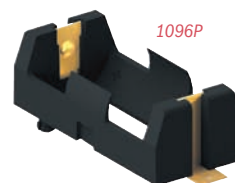
1101  
1102 (Dual Cell)  
Not Shown

### SMT Leaf Springs



1096  
1098 (Dual Cell)  
Not Shown

### SMT Polarized



1096P  
1098P (Dual Cell)  
Not Shown

### 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

### Operating Temp Range:

-60°F to +290°F (-50°C to +145°C)

### APPLICATIONS

- Computer memory, power backup systems
- Digital readers
- Laptop and touch pad computers
- PLC and industrial controls
- Electronic cigarette/vapor industry

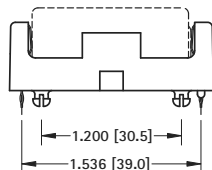
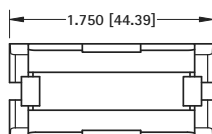
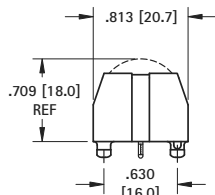


PC Battery Clip  
Available  
See Page 11.

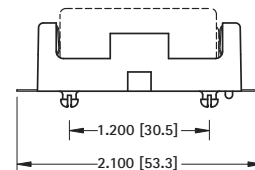
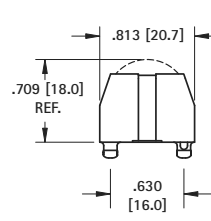
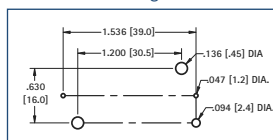
### THRU HOLE MOUNT

### SURFACE MOUNT

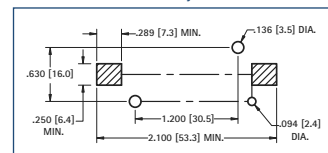
### SINGLE CELL



### 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 Polarized Holder

CAT. NO. 1101 Solder Lugs \*see image above

Packaging Spec's: 50 pieces per tray

### SPECIFICATIONS

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

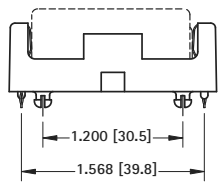
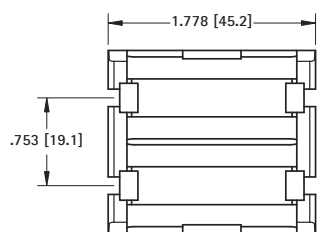
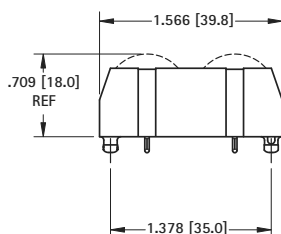
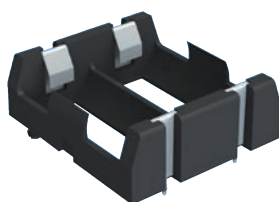
Contacts: .012 (.30) Stainless Steel, Gold Plate (Flash)

CAT. NO. 1096 Leaf Springs

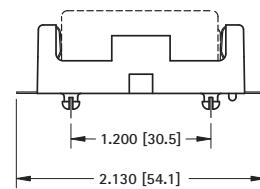
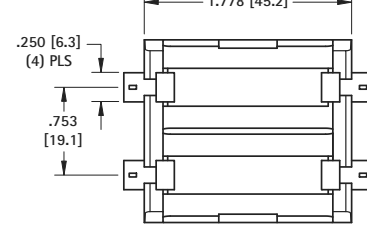
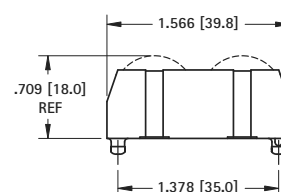
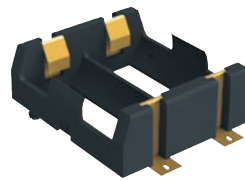
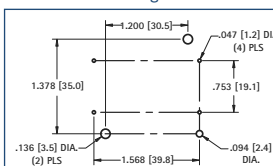
CAT. NO. 1096P Polarized Holder

Packaging Spec's: 50 pieces per tray

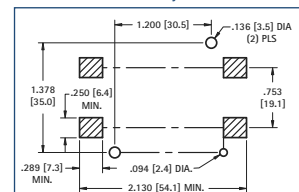
### DUAL CELL



### 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 Polarized Holder

CAT. NO. 1102 Solder Lugs \*see image above

Packaging Spec's: 25 pieces per tray

### SPECIFICATIONS

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

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

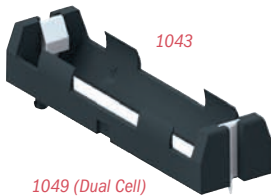
CAT. NO. 1098 Leaf Springs

CAT. NO. 1098P Polarized Holder

Packaging Spec's: 25 pieces per tray

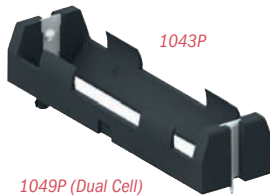
# "18650" LITHIUM-ION BATTERY HOLDERS

THM Leaf Springs



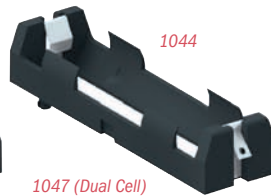
1049 (Dual Cell)  
Not Shown

THM Polarized



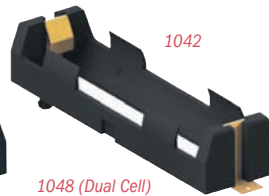
1049P (Dual Cell)  
Not Shown

Solder Lugs\*



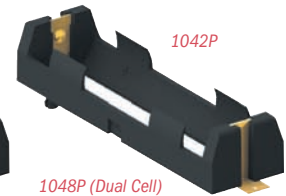
1047 (Dual Cell)  
Not Shown

SMT Leaf Springs



1048 (Dual Cell)  
Not Shown

SMT Polarized



1048P (Dual Cell)  
Not Shown

## 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

**Operating Temp Range:**  
-60°F to +290°F (-50°C to +145°C)

## APPLICATIONS

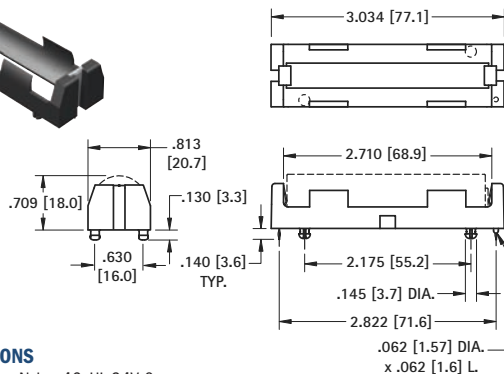
- Computer memory, power backup systems
- Digital readers
- Laptop and touch pad computers
- PLC and industrial controls
- Electronic cigarette/vapor industry



PC Battery Clip  
Available  
See Page 11.

## THRU HOLE MOUNT

### SINGLE CELL



## SPECIFICATIONS

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

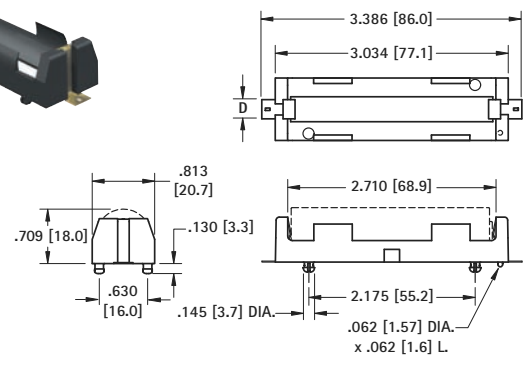
**CAT. NO. 1043** Leaf Springs

**CAT. NO. 1043P** Polarized Holder

**CAT. NO. 1044** Solder Lugs \*see image above

**Packaging Spec's:** 50 pieces per tray

## SURFACE MOUNT



## SPECIFICATIONS

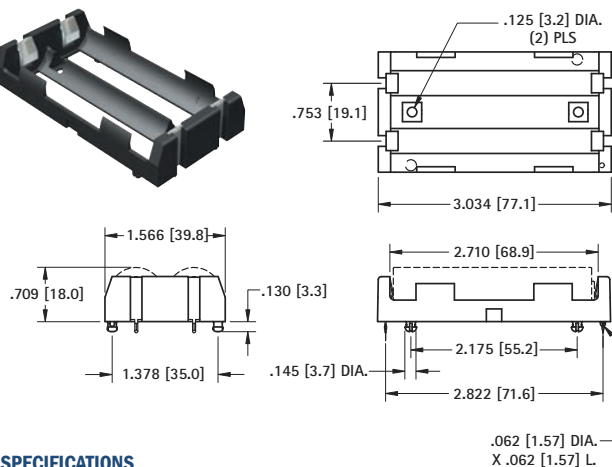
**Base:** High Temp Nylon 46, UL 94V-0  
**Contacts:** .012 (.30) Stainless Steel, Gold Plate (Flash)

**CAT. NO. 1042** Leaf Springs

**CAT. NO. 1042P** Polarized Holder

**Packaging Spec's:** 50 pieces per tray

### DUAL CELL



## SPECIFICATIONS

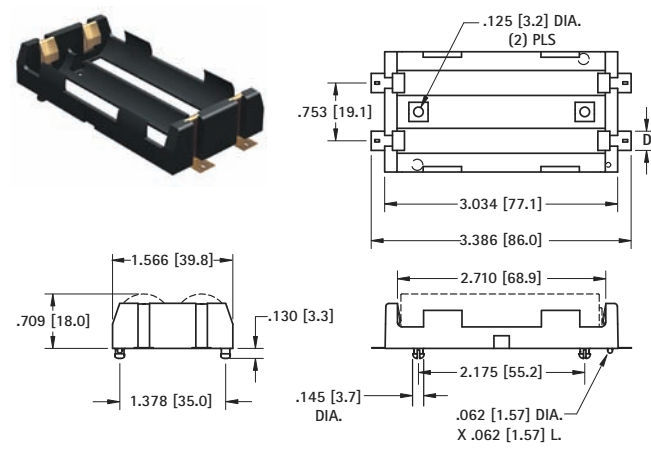
**Base:** High Temp Nylon 46, UL 94V-0  
**Contacts:** .012 (.30) Stainless Steel, Tin-Nickel Plate

**CAT. NO. 1049** Dual Springs

**CAT. NO. 1049P** Polarized Holder

**CAT. NO. 1047** Solder Lugs \*see image above

**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. 1048** Dual Springs

**CAT. NO. 1048P** Polarized Holder

**Packaging Spec's:** 25 pieces per tray