

THRU-HOLE (THM) & SURFACE MOUNT (SMT) COIN CELL HOLDERS

20mm COIN CELL HOLDERS

DESIGN ADVANTAGES...

- Reliable spring tension assures low contact resistance
- Retains battery securely to withstand shock and vibration
- All conductive polystyrene carrier tape meets ANSI/EIA - 481 standard

- Base material UL Rated 94V-0. Impervious to most industrial solvents
- Operating temperature range: -60°F to +293°F (-50°C to +145°C)

IDEALLY SUITED FOR...

- Computer memory, power transfer and back-up systems
- Video and telecommunications power back-up
- Microprocessors and Microcomputer memory hold (desktop and laptop applications)

- Industrial and commercial security and alarm systems
- Communications power sources
- PC/104 applications

20mm CELLS



- Polarity clearly marked (+)
- Compatible with vacuum and mechanical pick & place assembly systems
- Low profile for high density packaging
- Rugged construction, light weight
- SMT solder tail with "Flow-Hole" design for increased joint strength
- Viewable solder tails assures reliable joint inspection
- Safe for all soldering & reflow operations

MATERIAL:

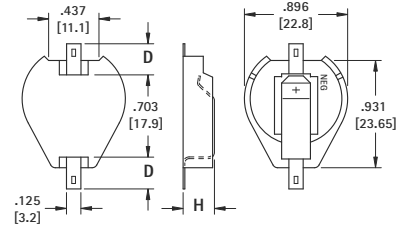
Contacts: .015 (.38) Steel

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

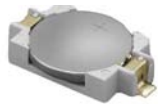
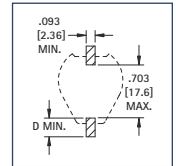
Tin-Nickel Plate		Gold Plate (Flash)		D PAD SIZE	H HEIGHT	CELLS	BATTERY REFERENCE
CAT. NO. BULK	ON TAPE & REEL	CAT. NO. BULK	ON TAPE & REEL				
1061	1061TR	1081	1081TR	.156 (4.0)	.290 (7.4)	(1) Cell (any 20mm) (2) 2012, (2) 2016	CR2012, CL2016, BR2020, DL2032 CR2032
1063	1063TR	1093	1093TR	.278 (7.1)		(2) 2020, (2) 2025, (2) 2032	
1062	1062TR	1082	1082TR	.156 (4.0)	.391 (9.9)	(3) 2012, (3) 2016	
1064	1064TR	1094	1094TR	.278 (7.1)			

Tape & Reel Spec's: 44mm wide; 32mm pitch; 13 inch reel (200 pieces per reel)

AVAILABLE ON TAPE AND REEL



Pad Layout

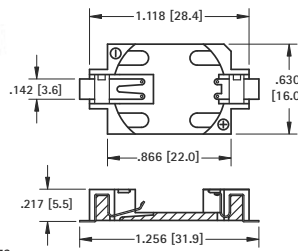


Surface Mount

AVAILABLE ON TAPE AND REEL

2025 / 2032 CELL

- Polarized Holders
- Low Profile for high density packaged PCB's
- Vertical entry



- Compatible with vacuum and mechanical pick & place assembly systems

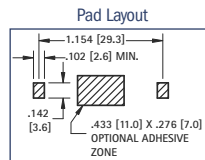
MATERIAL:

Contacts: .006 (.15) Phosphor Bronze, Gold Plate (Flash)

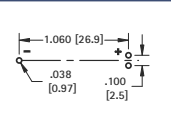
Base: Glass Filled LCP, UL Rated 94V-0

CAT. NO. BULK	ON TAPE & REEL	BATTERY REFERENCE
1060	1060TR	CR2025, DL2032

Tape & Reel Spec's: 44mm wide; 24mm pitch; 13 inch reel (500 pieces per reel)



Mounting Detail



MATERIAL:

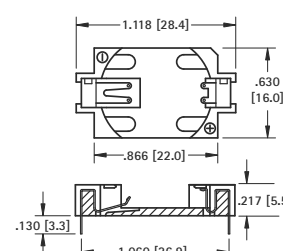
Contacts: .006 (.15) Phosphor Bronze, Tin Plate

Base: Glass Filled LCP, UL Rated 94V-0

CAT. NO.	BATTERY REFERENCE
1059	CR2025, DL2032



Thru Hole Mount



INSULATED RETAINERS

AVAILABLE ON TAPE AND REEL

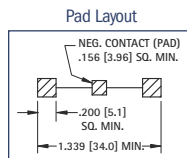
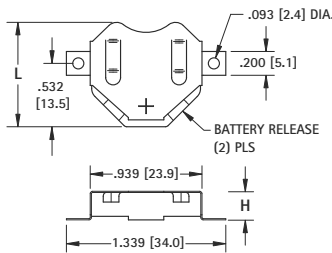
20mm CELLS

- Ideal for 6 volt or 3 volt applications
- Two coin cell batteries can be installed in series
- Plastic insulator prevents shorting of battery, within the holder, when installed improperly
- Low profile
- Battery release ports for easy battery replacement
- Refer to pages 6 & 7 for a complete offering of coin cell retainers

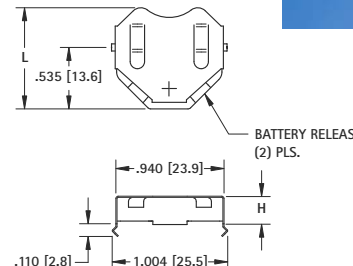
MATERIAL: Contacts: .010 (.25) Phosphor Bronze Insulator: High Temperature, Nylon 46, UL Rated 94V-0



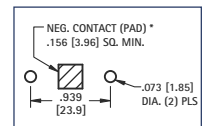
Surface Mount



Thru Hole Mount



Mounting Detail



Surface Mount						BATTERY REFERENCE				Thru Hole Mount			
Tin-Nickel Plate		Matte Tin Plate		L	H	6 VOLT (2) CELLS	3 VOLT (1) CELL	L	H	Tin-Nickel Plate			
CAT. NO. LOOSE*	CAT. NO. BULK	ON TAPE & REEL	CAT. NO. LOOSE*							CAT. NO. BULK	ON TAPE & REEL	CAT. NO. LOOSE*	CAT. NO. BULK
3020-2	3020	3020TR	3070-2	3070	3070TR	.890 (22.6)	.156 (4.0)	2012, 2016	2020, 2025	.890 (22.6)	.156 (4.0)	3021-2	3021
3022-2	3022	3022TR	3072-2	3072	3072TR	.877 (22.3)	.240 (6.1)	2020, 2025	2032	.877 (22.3)	.240 (6.1)	3023-2	3023
3024-2	3024	3024TR	3074-2	3074	3074TR	.877 (22.3)	.295 (7.5)	2032	Not Applicable	.877 (22.3)	.295 (7.5)	3025-2	3025

* Supplied Unassembled

Tape & Reel Spec's: 56mm wide; 28mm pitch; 13 inch reel: 3020TR, 3070TR 400 pieces per reel; 3022TR, 3072TR 250 pieces per reel; 3024TR, 3074TR 250 pieces per reel

THRU HOLE (THM) & SURFACE MOUNT (SMT) BUTTON CELL RETAINERS

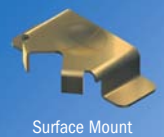
Economical and reliable SMT and THM coin cell retainers specifically designed for miniature electronic applications with limited board space.

- Available in Thru Hole Mount (THM) or Surface Mount (SMT) configurations
- SMT solder tail with "flow-hole" design for increased joint strength
- THM legs maintain relative position during and after soldering
- Ideally suited for High Density packaging
- Reliable spring tension assures low contact resistance
- Retains battery securely to withstand shock and vibration
- Solder tail located outside of retainer body which facilitates visual inspection of the solder joints

4 mm to 12 mm BUTTON CELL RETAINERS

AVAILABLE ON TAPE AND REEL

4.8 mm

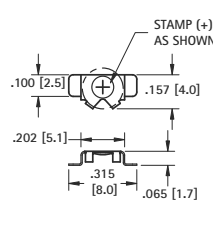


Surface Mount


MATERIAL: .006 (.15) Phosphor Bronze, Gold Plate (Flash)

CAT. NO. BULK	ON TAPE & REEL	BATTERY REFERENCE
2994	2994TR	ML414

Tape & Reel Specs: 16mm wide; 8mm pitch; 13 inch reel (1500 pieces per reel)



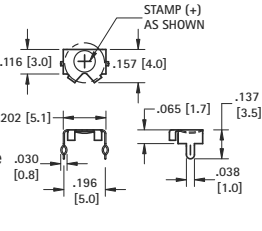
Mounting Detail



Thru Hole Mount

MATERIAL: .006 (.15) Phosphor Bronze, Tin-Nickel Plate


CAT. NO.	BATTERY REFERENCE
2995	ML414



Mounting Detail

AVAILABLE ON TAPE AND REEL

6.8 mm

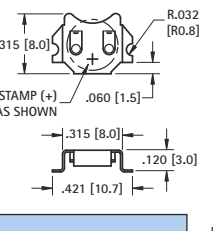


Surface Mount


MATERIAL: .010 (.25) Phosphor Bronze

CAT. NO. BULK	ON TAPE & REEL	FINISH	BATTERY REFERENCE
2998	2998TR	Tin-Nickel	MC621, V364, SC621, DR13H, V13AT
3098	3098TR	Matte Tin	

Tape & Reel Specs: 24mm wide; 12mm pitch; 13 inch reel (1000 pieces per reel)



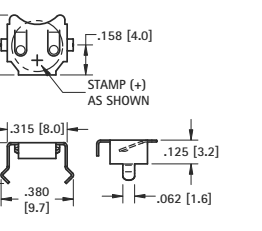
Mounting Detail



Thru Hole Mount

MATERIAL: .010 (.25) Phosphor Bronze, Tin-Nickel Plate


CAT. NO.	BATTERY REFERENCE
2999	MC621, V364, SC621



Mounting Detail

AVAILABLE ON TAPE AND REEL

7.9 mm

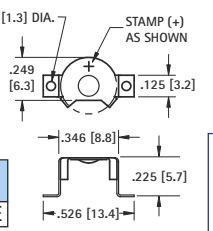


Surface Mount


MATERIAL: .010 (.25) Phosphor Bronze, Gold Plate (Flash)

CAT. NO. BULK	ON TAPE & REEL	BATTERY REFERENCE
2988	2988TR	Size 13, DA13, AZ13E

Tape & Reel Specs: 24mm wide; 12mm pitch; 13 inch reel (800 pieces per reel)



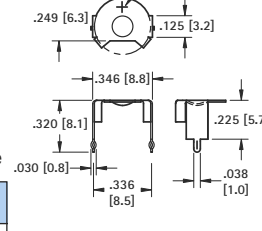
Mounting Detail



Thru Hole Mount

MATERIAL: .010 (.25) Phosphor Bronze, Tin-Nickel Plate


CAT. NO.	BATTERY REFERENCE
2989	Size 13, DA13, AZ13E



Mounting Detail

AVAILABLE ON TAPE AND REEL

9 - 10 mm

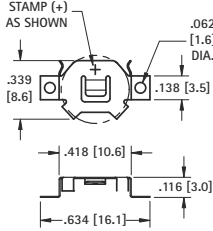


Surface Mount


MATERIAL: .006 (.15) Phosphor Bronze, Tin-Nickel Plate

CAT. NO. BULK	ON TAPE & REEL	FINISH	BATTERY REFERENCE
3030	3030TR	Tin-Nickel	CR927, CR1025
3050	3050TR	Matte Tin	

Tape & Reel Specs: 24mm wide; 12mm pitch; 13 inch reel (1500 pieces per reel)



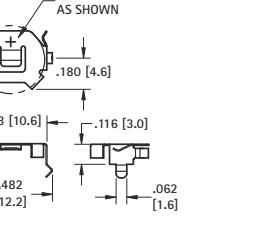
Mounting Detail



Thru Hole Mount

MATERIAL: .006 (.15) Phosphor Bronze, Tin-Nickel Plate


CAT. NO.	BATTERY REFERENCE
3031	CR927, CR1025



Mounting Detail

AVAILABLE ON TAPE AND REEL

11.6 mm

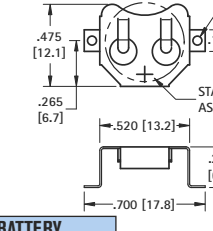


Surface Mount


MATERIAL: .010 (.25) Phosphor Bronze

CAT. NO. BULK	ON TAPE & REEL	FINISH	BATTERY REFERENCE
2996	2996TR	Tin-Nickel	SR44, LR44, 357, MS76,
3096	3096TR	Matte Tin	PX76A, G-13, 303, V313

Tape & Reel Specs: 32mm wide; 16mm pitch; 13 inch reel (600 pieces per reel)



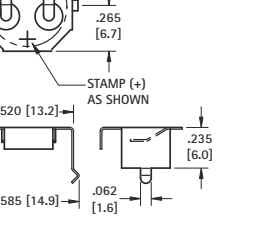
Mounting Detail



Thru Hole Mount

MATERIAL: .010 (.25) Phosphor Bronze, Tin-Nickel Plate

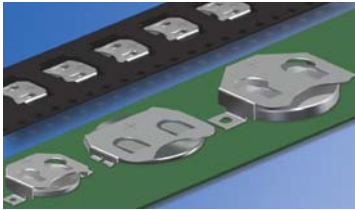
CAT. NO.	BATTERY REFERENCE
2997	SR44, LR44, 357, MS76, PX76A, G-13, 303, V313



Mounting Detail

THRU HOLE (THM) & SURFACE MOUNT (SMT) COIN CELL RETAINERS

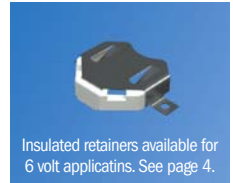
AVAILABLE ON TAPE AND REEL



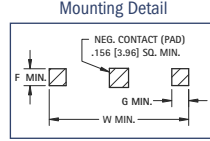
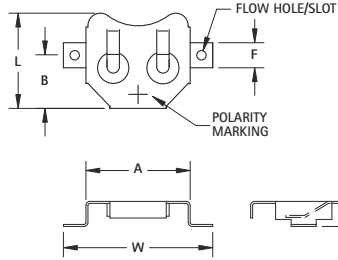
SURFACE MOUNT (SMT)

Battery retainers are suited for high density PCB packaging. Engineered with reliable spring tension, these contacts assure low resistance while firmly securing the battery within the retainer.

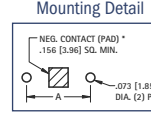
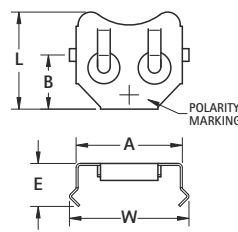
- Compatible with all wave and reflow operations
- Solder tails located outside of retainer body which facilitates visual inspection of the solder joints
- Flow-hole solder tail designed for increased joint strength
- Compatible with most vacuum and mechanical pick & place assembly systems
- Matte Tin Plate for lower soldering temperatures ideal where other temperature sensitive components are being used
- Tin-Nickel plated retainers are ideal for lead free, high temperature soldering applications
- All conductive polystyrene carrier tape meets ANSI/EIA-481 standards



Insulated retainers available for 6 volt applications. See page 4.



SURFACE MOUNT (SMT)

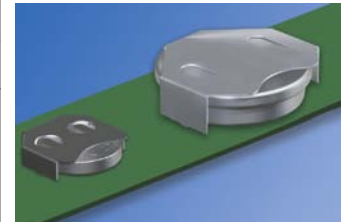


THRU HOLE MOUNT (THM)

MATERIAL: .010 (.25) Phosphor Bronze

TIN-NICKEL PLATE		MATTE TIN PLATE		REFER TO SURFACE MOUNT (SMT) DRAWING									
CAT. NO. BULK	ON TAPE & REEL	CAT. NO. BULK	ON TAPE & REEL	A	B	F	G	H	L	W	CELL DIA.	BATTERY REFERENCE	TAPE & REEL SPECS
3000	3000TR	3080	3080TR	.520 (13.2)	.265 (6.7)	.125 (3.2)	.125 (3.2)	.125 (3.2)	.475 (12.1)	.745 (18.9)	12mm	CR1216, BR1220, CL1225	32mm wide; 16mm pitch; 1000/reel
3012	3012TR	3092	3092TR	.664 (16.9)	.344 (8.7)	.125 (3.2)	.125 (3.2)	.156 (4.0)	.594 (15.1)	.914 (23.2)	16mm	BR1612, CR1616, CR1620, DL1632	44mm wide; 24mm pitch; 600/reel
3028	3028TR	3038	3038TR	.831 (21.1)	.298 (7.6)	.200 (5.1)	.050 (1.3)	.067 (1.7)	.618 (15.7)	.911 (23.1)	20mm	BR2012, CR2012, DL2012	44mm wide; 24mm pitch; 1000/reel
3026	3026TR	3078	3078TR	.831 (21.1)	.416 (10.6)	.200 (5.1)	.200 (5.1)	.085 (2.2)	.782 (19.9)	1.210 (30.7)	20mm	BR2016, CR2016, DL2016	44mm wide; 32mm pitch; 750/reel
3034	3034TR	3044	3044TR	.835 (21.2)	.291 (7.4)	.200 (5.1)	.050 (1.3)	.160 (4.1)	.635 (16.1)	0.915 (23.1)	20mm	DL2020, CR2025, CR2032	44mm wide; 24mm pitch; 500/reel
3002	3002TR	3082	3082TR	.831 (21.1)	.416 (10.6)	.200 (5.1)	.200 (5.1)	.156 (4.0)	.782 (19.9)	1.210 (30.7)	20mm	DL2020, CR2025, CR2032	44mm wide; 24mm pitch; 500/reel
3004	3004TR	3084	3084TR	.939 (23.9)	.475 (12.1)	.200 (5.1)	.200 (5.1)	.156 (4.0)	.832 (21.1)	1.339 (34.0)	23mm	BR2320, CL2325, CR2330, DL2335	56mm wide; 32mm pitch; 400/reel
3010	3010TR	3090	3090TR	.939 (23.9)	.475 (12.1)	.200 (5.1)	.200 (5.1)	.240 (6.1)	.819 (20.8)	1.339 (34.0)	23mm	CR2354, DL2354	56mm wide; 32mm pitch; 200/reel
3032	3032TR	3042	3042TR	1.000 (25.4)	.313 (8.0)	.200 (5.1)	.050 (1.3)	.067 (1.7)	.681 (17.3)	1.080 (27.4)	24mm	BR2412, CR2412	44mm wide, 24mm pitch, 1000/reel
3006	3006TR	3086	3086TR	1.000 (25.4)	.506 (12.9)	.200 (5.1)	.200 (5.1)	.156 (4.0)	.918 (23.3)	1.400 (35.6)	24mm	CR2430, DL2430	56mm wide; 32mm pitch; 400/reel
3008	3008TR	3088	3088TR	1.000 (25.4)	.506 (12.9)	.200 (5.1)	.200 (5.1)	.230 (5.8)	.890 (22.6)	1.400 (35.6)	24mm	CR2450, DL2450	56mm wide; 32mm pitch; 200/reel

TIN-NICKEL PLATE		REFER TO THRU HOLE MOUNT (THM) DRAWING								
CAT. NO. BULK		A	B	E	H	L	W	CELL DIA.	BATTERY REFERENCE	
3001		.520 (13.2)	.265 (6.7)	.210 (5.3)	.118 (3.0)	.475 (12.1)	.585 (14.9)	12mm	BR1216, CR1216, BR1220, CL1220, CR1220, BR1225	
3013		.664 (16.9)	.344 (8.7)	.265 (6.7)	.156 (4.0)	.594 (15.1)	.723 (18.4)	16mm	BR1616, CR1612, CR1616, CR1620, CR1632	
3029		.831 (21.1)	.298 (7.6)	.176 (4.5)	.067 (1.7)	.618 (15.7)	.890 (22.6)	20mm	BR2012, CR2012, DL2012	
3027		.831 (21.1)	.416 (10.6)	.194 (4.9)	.085 (2.2)	.782 (19.9)	.890 (22.6)		BR2016, CR2016, DL2016	
3003		.831 (21.1)	.416 (10.6)	.265 (6.7)	.156 (4.0)	.782 (19.9)	.890 (22.6)	23mm	BR2016, DL2020, CR2320, CR2025, CR2032	
3005		.939 (23.9)	.475 (12.1)	.265 (6.7)	.156 (4.0)	.832 (21.1)	1.004 (25.5)		BR2320, CL2330, CR2320, BR2325, CR2325, DL2325	
3011		.939 (23.9)	.475 (12.1)	.351 (8.9)	.240 (6.1)	.819 (20.8)	1.004 (25.5)	24mm	CR2354, DL2354	
3033		1.000 (25.4)	.313 (8.0)	.176 (4.5)	.067 (1.7)	.681 (17.3)	1.055 (26.8)		BR2412, CR2412	
3007		1.000 (25.4)	.506 (12.9)	.265 (6.7)	.156 (4.0)	.918 (23.3)	1.055 (26.8)	24mm	CR2430, DL2430	
3009		1.000 (25.4)	.506 (12.9)	.350 (8.9)	.230 (5.8)	.890 (22.5)	1.059 (26.9)		CR2450, DL2450	
3039		1.000 (25.4)	.506 (12.9)	.450 (11.4)	.336 (8.5)	.890 (22.5)	1.059 (26.9)		CR2477, DL2477	



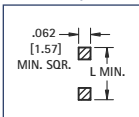
THRU HOLE MOUNT (THM)

NEGATIVE BATTERY CONTACTS*

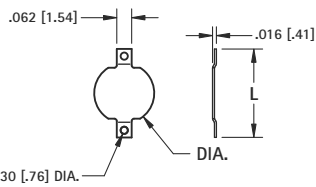
AVAILABLE ON TAPE AND REEL



- Assures proper contact



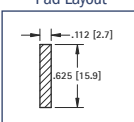
COMPACT



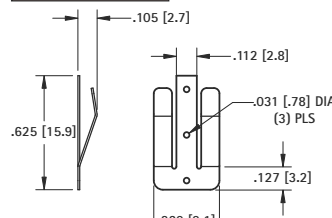
DWG. 1 MATERIAL: .008 (.20) Brass



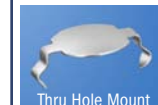
- Assures proper contact



SPRING CONTACT

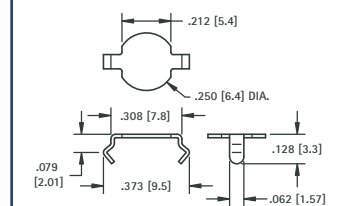


DWG. 2 MATERIAL: .010 (.25) Phosphor Bronze



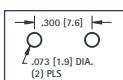
Thru Hole Mount

- Snap-In
- Assures proper contact



MATERIAL: .008 (.20) Phosphor Bronze, Tin-Nickel Plate

Mounting Detail



CAT. NO. 2990

TIN-NICKEL PLATE		MATTE TIN PLATE					
CAT. NO. BULK	ON TAPE & REEL	CAT. NO. BULK	ON TAPE & REEL	DWG.	L	DIA.	TAPE & REEL SPECS
2991	2991TR	2981	2981TR	1	.368 (9.4)	.250 (6.4)	16mm wide, 8mm pitch, 1500/7 reel
2992	2992TR	2982	2982TR	1	.289 (7.4)	.186 (4.7)	16mm wide, 12mm pitch, 1000/7 reel
2993	2993TR	2983	2983TR	2	.625 (15.9)	-	24mm wide, 16mm pitch, 1000/13 reel

*Note: Cannot be used with Cat. No. 3028, 3029, 3032, 3033.