



常利興業股份有限公司

COMFORTABLE ELECTRONIC CO., LTD.



WATERPROOF BATTERY HOLDERS & ACCESSORIES
BATTERY SNAPS & WIRE ASSEMBLIES

COMPANY PROFILE

Comfortable Electronic Co., Ltd. (COMF) specializes in the production of Battery Holders, Battery Snaps and Plastic Injection Molding. Over the years, COMF has actively extended their product offering to include Coin Cell Holders, Battery Clips, Battery Contacts and Wire Assemblies. Always aiming to meet the client's need, COMF offers the best solution for design, development and production.

COMF has been a professional component manufacturer and designer for over 50 years, constantly developing and refining our products through our R&D team. We strive to provide quality at all levels of our organization and were an early adopter of ISO 9001 and ISO 14001 certification for our factories. Our products also comply to many international and regional standards such as RoHS, REACH & UL764. The Safety Battery Holders and the Battery Snaps innovated and made by us are patented in China, Japan, Thailand, Vietnam, New Zealand, Singapore, Malaysia, Indonesia, Taiwan, United States of America, United Kingdom and Germany.

Due to the good relations in regional ASEAN markets, COMF cooperated with a local company in Indonesia in 2011 and went into operation next year. Furthermore, 2014 economic benefits reached the target as we expected. For sustainable business, COMF expands the R&D team in Taiwan and will keep investing into the future.

常利興業以電池盒、電池扣及塑膠射出起家，近年來積極跨入周邊產品，如鋰電池盒、端子、連接器、五金彈片與線束產品。除提供標準化產品外，亦可依客戶需求，進行設計、開發與生產。

常利興業已有50年餘專業設計及製造經驗，通過ISO9001、ISO14001認證；並符合RoHS及REACH歐盟環保認證及線束UL764規範。常利興業不斷投入多款產品改良與研發，自80年起陸續取得英國、美國、日本、德國、泰國、越南、紐西蘭、新加坡、馬來西亞、印尼、中國、及台灣等多項專利權。

因應東協市場發展，及中國製造成本提高，常利興業自2011年與印尼廠商合作，並於2012年開始投產；初步預期經濟效益已於2014年底達成。為達到永續經營，常利興業持續擴充工程人員與投資自動化生產設備項目，計畫在台擴充研發團隊與生產項目。



PRODUCT SPOTLIGHT

CONTENTS

PAGE

UM-1 Battery Holder	01
UM-2 Battery Holder	03
UM-3 Battery Holder	05
UM-4 Battery Holder	09
UM-5 Battery Holder	11
Other Battery Holder	12
Battery Holder Contact	13
Safety Battery Holder	15
Waterproof Battery Holder	20
Coin Cell Holder	21
Battery Snap	24
Battery Clips	28
Battery Contacts	31
Wire Harness	41

HOW TO USE THIS CATALOG

電池盒電池釦號碼讀法如下圖所示

The method of reading the battery holder number is as shown below.
(Example)



The method of reading the battery snap number is as shown below.
(Example)



TYPE	CRIMPING			CT-CRIMPING				
	PVC.VINYL	RIGID		SAFETY	PVC.VINYL	RIGID		SAFETY
I	BS-IC	BS-IR	BS-IR-1 BS-IR-2	SBS-IR-1	BS-ICCT	BS-IRCT	BS-IRCT-1	SBS-IRCT-1
E	BS-EC	BS-ER	BS-ER-1	SBS-ER	BS-ECCT	BS-ERCT	BS-ERCT-1	SBS-ERCT
T	BS-TC	BS-TR			BS-TCCT	BS-TRCT		
P	BS-PC				BS-PCCT			

CERTIFICATION

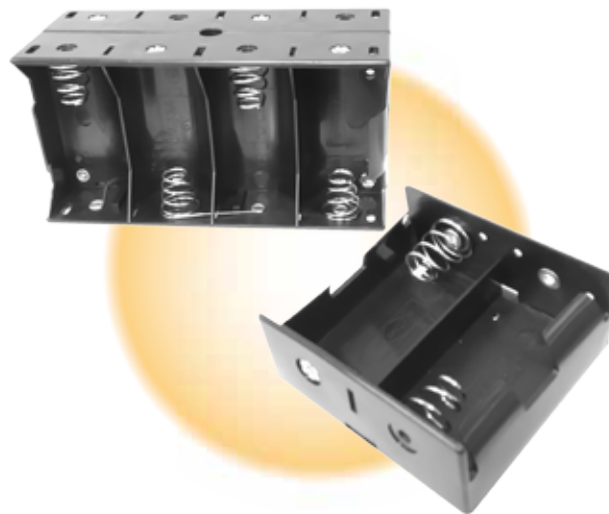
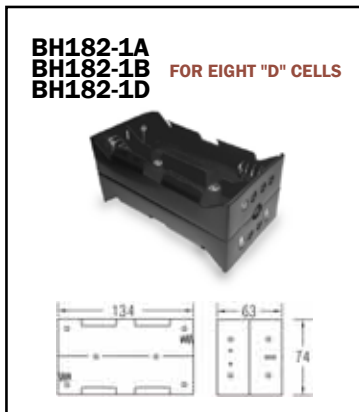
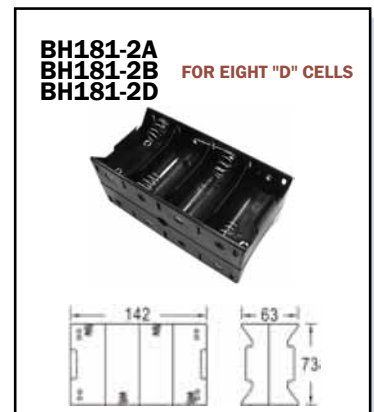


PATENTS

We're a holder of many innovative and multinational patent.







BH211-1A
BH211-1D FOR ONE "C" CELL




BH211-2A
BH211-2D FOR ONE "C" CELL




BH221A
BH221B
BH221D FOR TWO "C" CELLS




BH221-1A
BH221-1B
BH221-1D FOR TWO "C" CELLS




BH225A
BH225D FOR TWO "C" CELLS




BH231A
BH231D
BH231P FOR THREE "C" CELLS




BH232A
BH232B
BH232D FOR THREE "C" CELLS




BH241A
BH241D FOR FOUR "C" CELLS




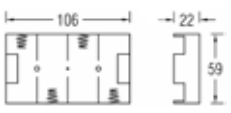

BH242-1A
BH242-1B
BH242-1D FOR FOUR "C" CELLS




BH242-2A
BH242-2B
BH242-2D FOR FOUR "C" CELLS




BH243A
BH243B
BH243D FOR FOUR "C" CELLS

BH261A
BH261B
BH261D FOR SIX "C" CELLS






BH311-1A
BH311-1D
BH311-1P FOR ONE "AA" CELL




57 14 17

BH311-2A
BH311-2D
BH311-2P FOR ONE "AA" CELL




57 14 17

BH311-3A
BH311-3D
BH311-3P FOR ONE "AA" CELL




71 57 13 10 16

BH311-4A
BH311-4D
BH311-4P FOR ONE "AA" CELL




57 13 17

BH321-1A
BH321-1B
BH321-1D
BH321-1P FOR TWO "AA" CELLS




57 16 32

BH321-1AS FOR TWO "AA" CELLS




57 16 32

BH321-2A, AS
BH321-2D
BH321-2P FOR TWO "AA" CELLS




59 15 33

BH321-3A
BH321-3D
BH321-3P FOR TWO "AA" CELLS




79 57 16 18 32

BH321-4A
BH321-4D
BH321-4P FOR TWO "AA" CELLS




71 57 16 12 32

BH321-5A
BH321-5B
BH321-5D
BH321-5P FOR TWO "AA" CELLS




57 16 32

BH321-6A
BH321-6B
BH321-6D
BH321-6P FOR TWO "AA" CELLS




59 15 33

BH322-1A
BH322-1B
BH322-1D FOR TWO "AA" CELLS




58 17 26

BH322-2A
BH322-2B FOR TWO "AA" CELLS
BH322-2D




BH324A
BH324D FOR TWO "AA" CELLS




BH325A
BH325AS FOR TWO "AA" CELLS




BH325-1A
BH325-1AS FOR TWO "AA" CELLS




BH331-2A
BH331-2B FOR THREE "AA" CELLS
BH331-2D
BH331-2P




BH331-3A
BH331-3B FOR THREE "AA" CELLS
BH331-3D
BH331-3P




BH331-4A
BH331-4B FOR THREE "AA" CELLS
BH331-4D
BH331-4P




BH332A FOR THREE "AA" CELLS




BH333A
BH333D FOR THREE "AA" CELLS
BH333P




BH341-1A
BH341-1B FOR FOUR "AA" CELLS
BH341-1D
BH341-1P




BH341-2A
BH341-2B FOR FOUR "AA" CELLS
BH341-2D
BH341-2P




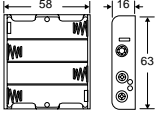

BH341-4A
BH341-4B FOR FOUR "AA" CELLS
BH341-4D
BH341-4P




BH341-5A
BH341-5B FOR FOUR "AA" CELLS
BH341-5D
BH341-5P




BH341-6A
BH341-6B FOR FOUR "AA" CELLS
BH341-6D
BH341-6P

BH342-1A
BH342-1B FOR FOUR "AA" CELLS
BH342-1D




BH343-1A
BH343-1B FOR FOUR "AA" CELLS
BH343-1D




BH343-2A
BH343-2B FOR FOUR "AA" CELLS
BH343-2D




BH343-3A
BH343-3B FOR FOUR "AA" CELLS
BH343-3D




BH343-4A
BH343-4B FOR FOUR "AA" CELLS
BH343-4D




BH344A
BH344B FOR FOUR "AA" CELLS
BH344D
BH344P




BH351A
BH351B FOR FIVE "AA" CELLS
BH351D




BH361A
BH361B FOR SIX "AA" CELLS
BH361D




BH362A
BH362B FOR SIX "AA" CELLS
BH362D
BH362P




BH363-1A
BH363-1B FOR SIX "AA" CELLS
BH363-1D






BH411-2A
BH411-2D FOR ONE "AAA" CELL
BH411-2P




BH411-3A
BH411-3D FOR ONE "AAA" CELL
BH411-3P




BH411-4A
BH411-4D FOR ONE "AAA" CELL
BH411-4P




BH411-5A
BH411-5D FOR ONE "AAA" CELL
BH411-5P




BH421A
BH421B FOR TWO "AAA" CELLS
BH421D
BH421P




BH421-1A
BH421-1B FOR TWO "AAA" CELLS
BH421-1D
BH421-1P




BH421-3A
BH421-3B FOR TWO "AAA" CELLS
BH421-3D
BH421-3P




BH421-4A
BH421-4B FOR TWO "AAA" CELLS
BH421-4D
BH421-4P




BH422A
BH422B FOR TWO "AAA" CELLS
BH422D




BH422-1A
BH422-1B FOR TWO "AAA" CELLS
BH422-1D




BH425A
BH425D FOR TWO "AAA" CELLS
BH425P




BH431-1A
BH431-1B FOR THREE "AAA" CELLS
BH431-1D
BH431-1P






UM- 5 or 'N' SIZE or EQUIV

BH511-2A
BH511-2D
BH511-2P FOR ONE "N" CELL



BH511-3A
BH511-3D
BH511-3P FOR ONE "N" CELL



BH511-4A
BH511-4D
BH511-4P FOR ONE "N" CELL



BH521A
BH521D
BH521P FOR TWO "N" CELLS



BH522-3A
BH522-3D
BH522-3D FOR TWO "N" CELLS

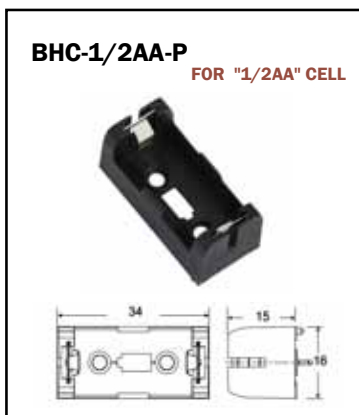
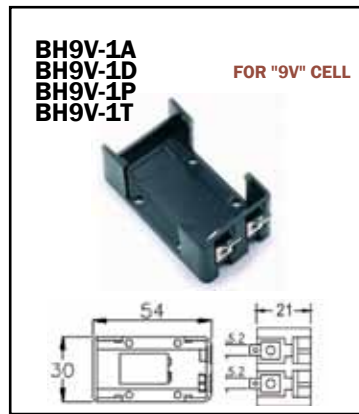


BH522-4A
BH522-4D
BH522-4D FOR TWO "N" CELLS



BH543A
BH543D FOR FOUR "N" CELLS







Patent of Battery Holder Contact:

TW PAT NO. M 485568

CH PAT NO. ZL 201420309549.4

GE PAT NO. Nr. 202014007329.5

ID PAT NO. ID P000050964

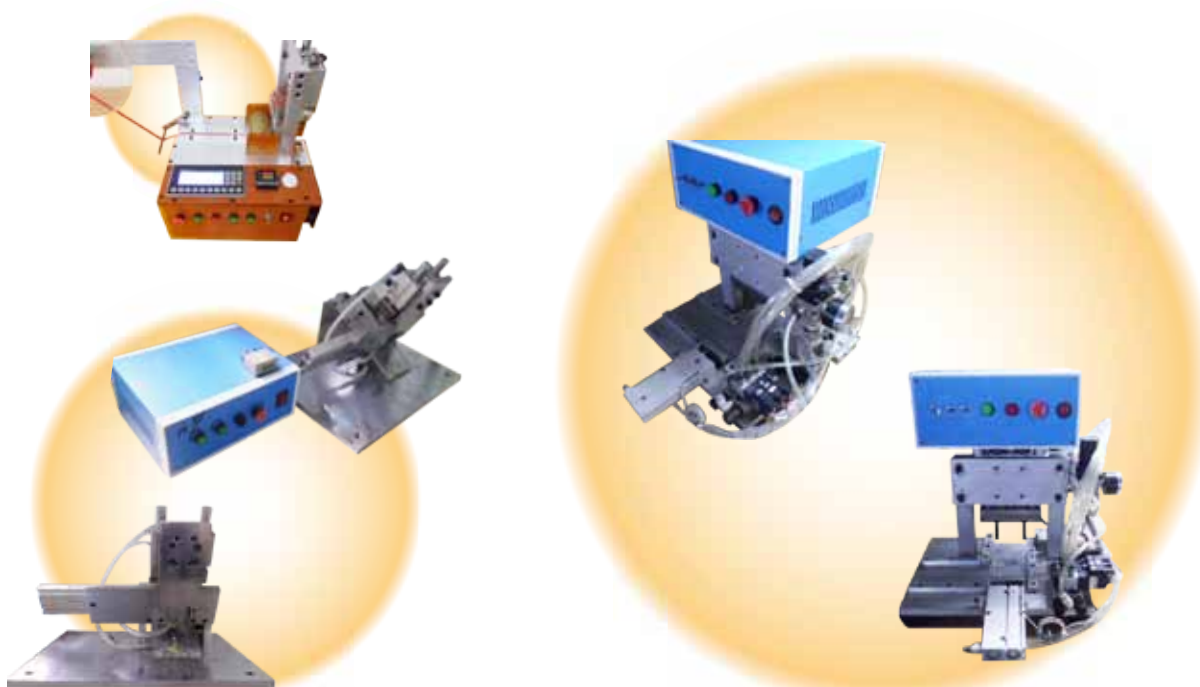
SG PAT NO. 10201405520V

Patent Applications: US, UK,





Automatic Machines for Battery Holder Contact



SAFETY BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001

**SBH-131A
SBH-131B
SBH-131D** FOR THREE "D" CELLS

**SBH-141A
SBH-141B
SBH-141D** FOR FOUR "D" CELLS

**SBH-221A
SBH-221AS** FOR TWO "C" CELLS

**SBH-231A
SBH-231B
SBH-231D** FOR THREE "C" CELLS

**SBH-321-1A
SBH-321-1AS** FOR TWO "AA" CELLS

SBH-321-2A FOR TWO "AA" CELLS

SAFETY BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001



SAFETY BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001

**SBH-341-3A
SBH-341-3AS
SBH-341-3S/USB**

FOR FOUR "AA" CELLS




**SBH-341-4A
SBH-341-4AS**

FOR FOUR "AA" CELLS




**SBH-341-6A/
WATERPROOF**

FOR FOUR "AA" CELLS




**SBH-361A
SBH-361D**

FOR SIX "AA" CELLS




**SBH-381A
SBH-381AS**

FOR EIGHT "AA" CELLS




SBH-3201S/MV

FOR TWENTY "AA" CELLS



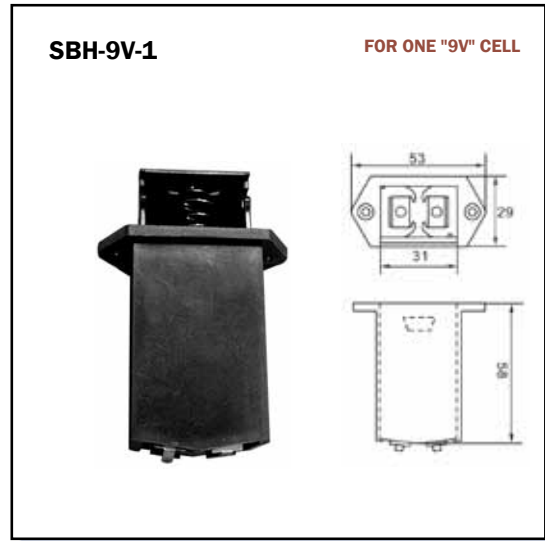

SAFETY BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001



SAFETY BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001


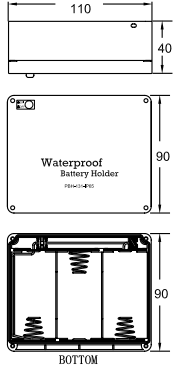


WATERPROOF BATTERY HOLDER

SAI ISO 9001
SAI ISO 14001

PBH-131-IP65-A
PBH-131-IP65-AS

FOR THREE "D" CELLS

PBH-321-IP65-A
PBH-321-IP65-AS

FOR TWO "AA" CELLS



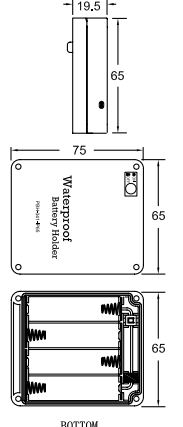

PBH-331-IP65-A
PBH-331-IP65-AS

FOR THREE "AA" CELLS




PBH-341-IP65-A
PBH-341-IP65-AS

FOR FOUR "AA" CELLS

PBH-341-IP68-A

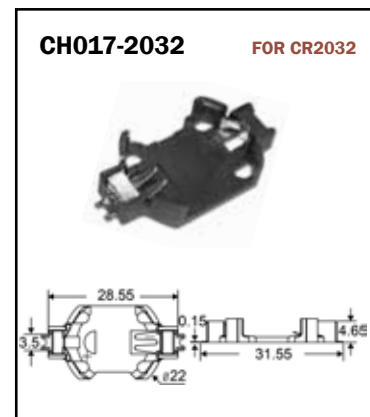
FOR FOUR "AA" CELLS



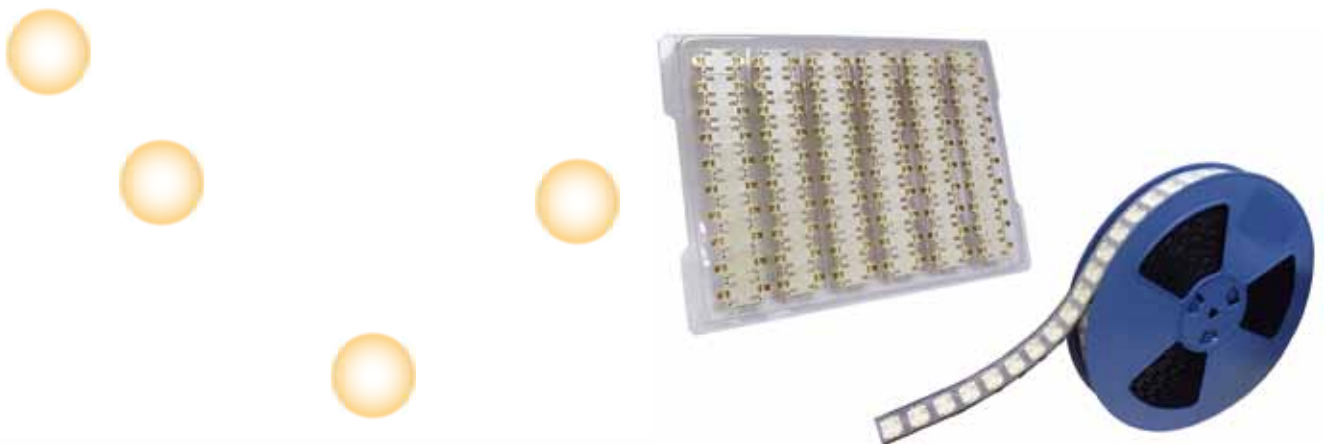

PBH-421-IP65-A
PBH-421-IP65-AS

FOR TWO "AAA" CELLS



















TYPE: I, E, T, P

PATENT OF BATTERY SNAP:

CRIMPING: CH PAT NO. ZL 93 2 11734.1
 TW PAT NO. 88476
 U.S. PAT NO. 5.312.269
 UK PAT NO. 2277838
 VN PAT NO. HI-0144
 ZA PAT NO. 94/2542

CT-CRIMPING: CH PAT NO. ZL 01 2 24559.3
 GE PAT NO. Nr. 201 10 120.3
 TW PAT NO. 198102
 U.S. PAT NO. 6,478,633B1

FOR 9V CELL

TYPE	CRIMPING				SAFETY
	PVC. VINYL	RIGID			
I	BS-IC 	BS-IR 	BS-IR-1 	BS-IR-2 	SBS-IR-1 
E	BS-EC 	BS-ER 	BS-ER-1 	SBS-ER 	
T	BS-TC 	BS-TR 	-----	-----	-----
P	BS-PC 	-----	-----	-----	-----

CYLINDRICAL TERMINAL RIVET (CT-CRIMPING)














ADVANTAGES:

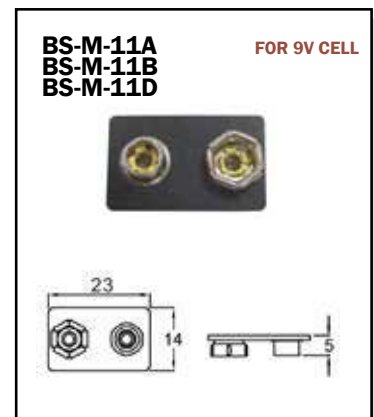
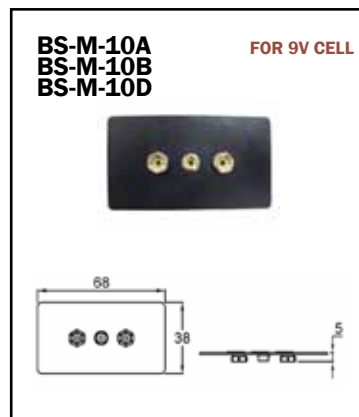
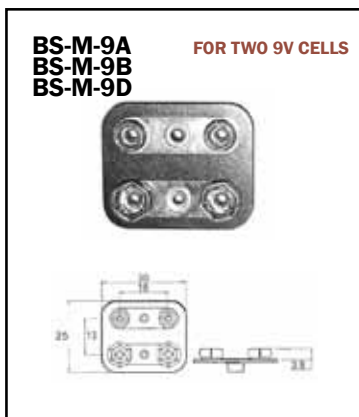
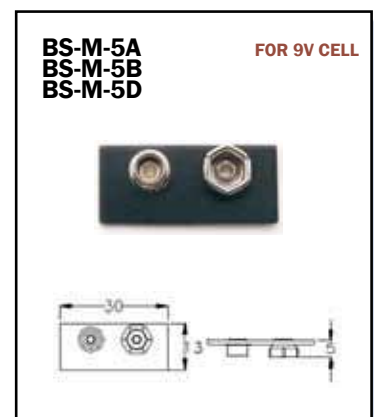
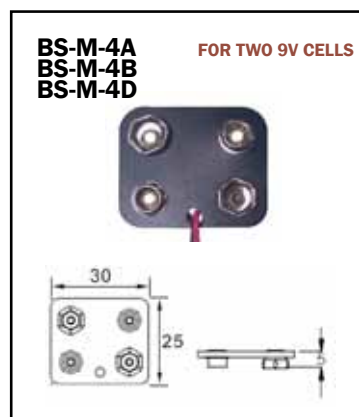
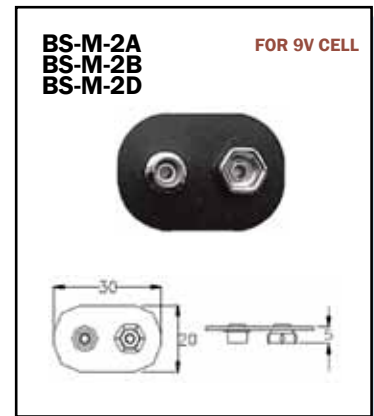
LeadFree

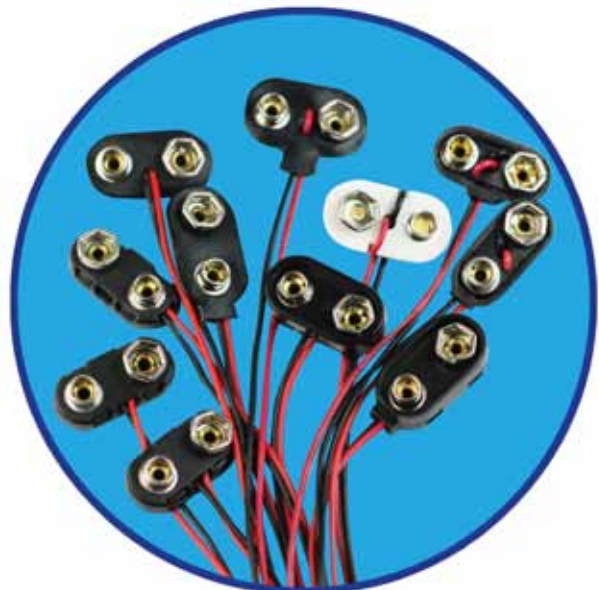
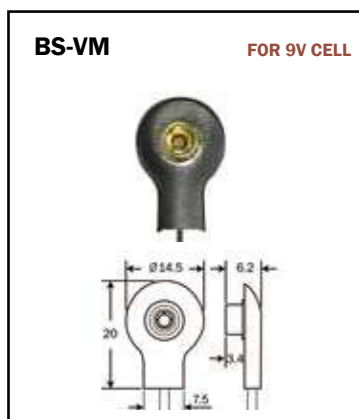
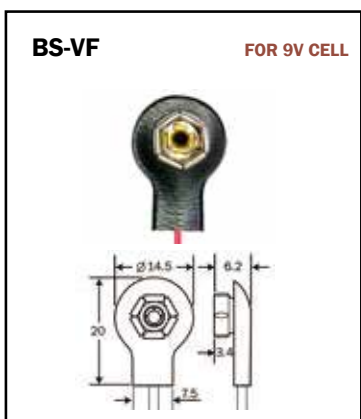
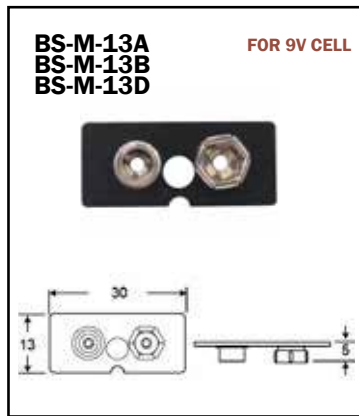
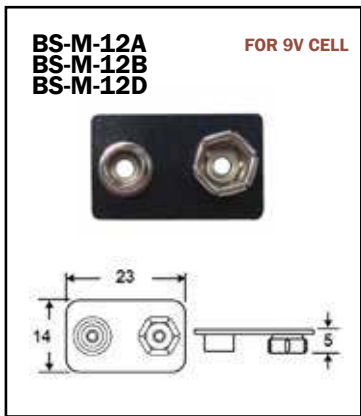
Prevent the foreign liquid spread into riveted spot.

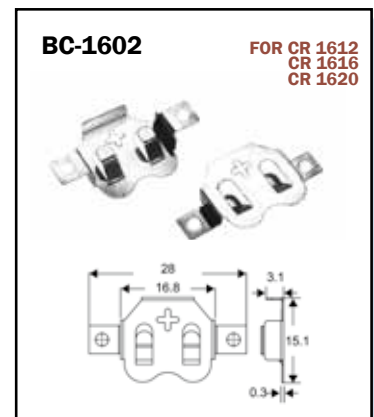
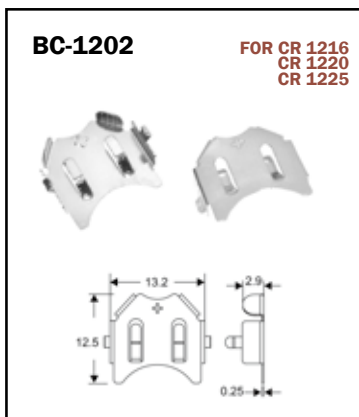
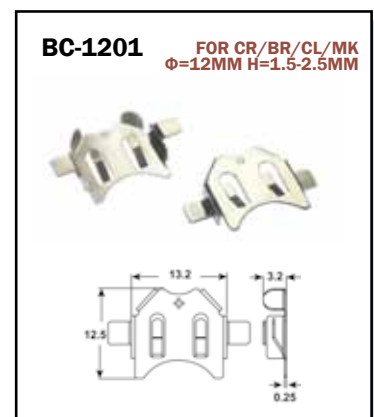
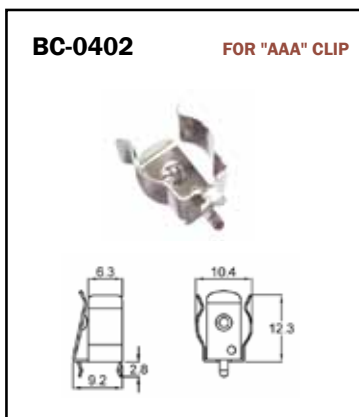
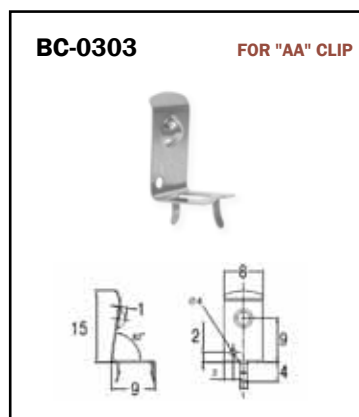
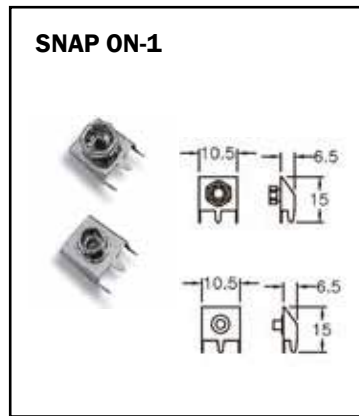
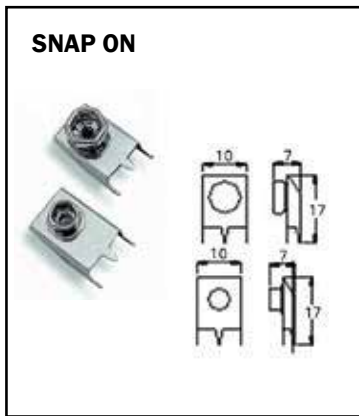
Increase the torque strength

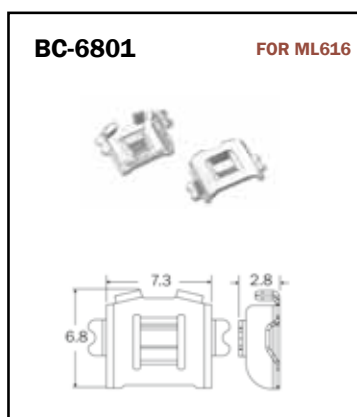
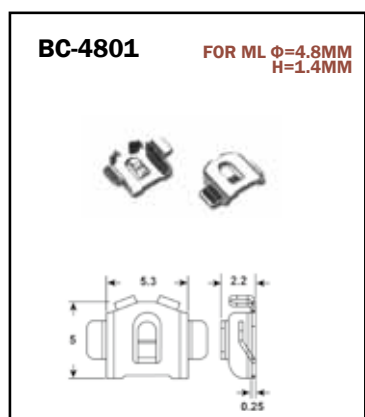
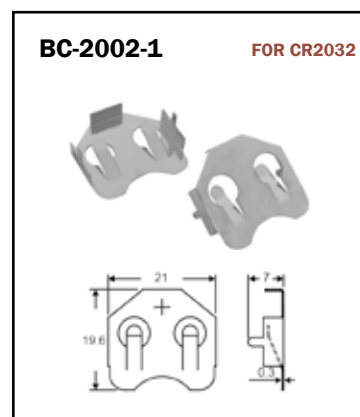
FOR 9V CELL

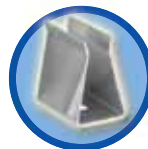
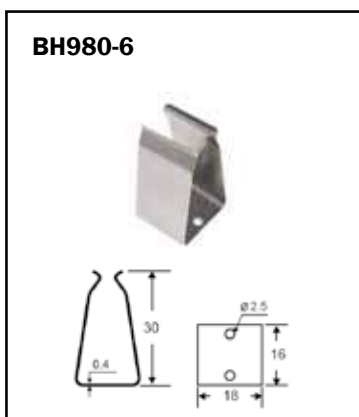
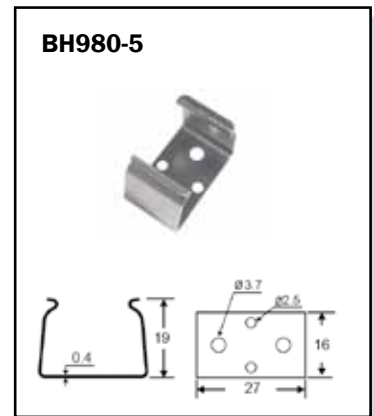
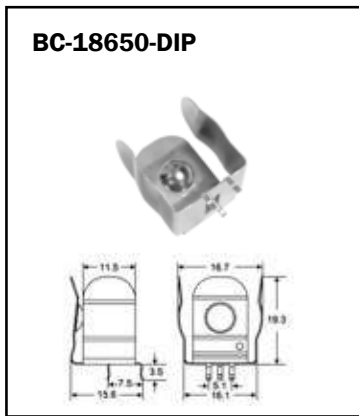
TYPE	CT-CRIMPING			
	PVC. VINYL	RIGID		SAFETY
I	BS-ICCT 	BS-IRCT 	BS-IRCT-1 	SBS-IRCT-1 
E	BS-ECCT 	BS-ERCT 	BS-ERCT-1 	SBS-ERCT 
T	BS-TCCT 	BS-TRCT 	-----	-----
P	BS-PCCT 	-----	-----	-----







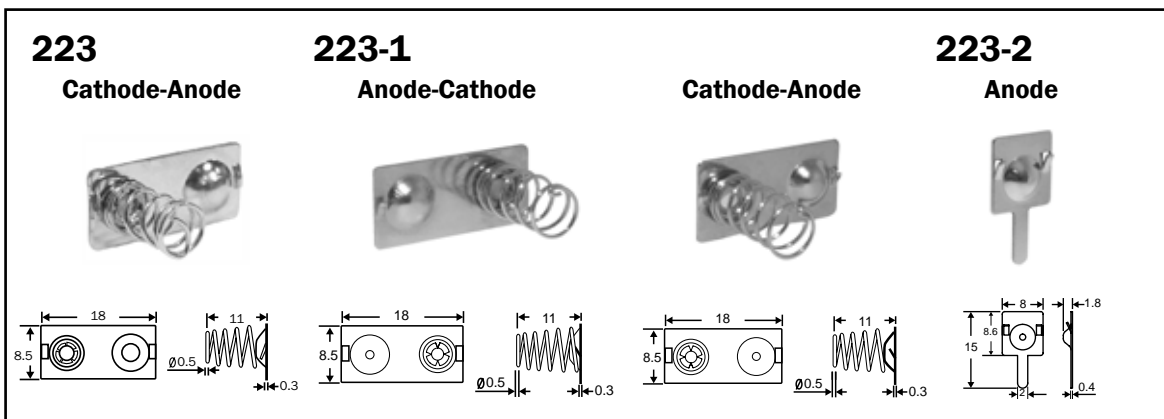
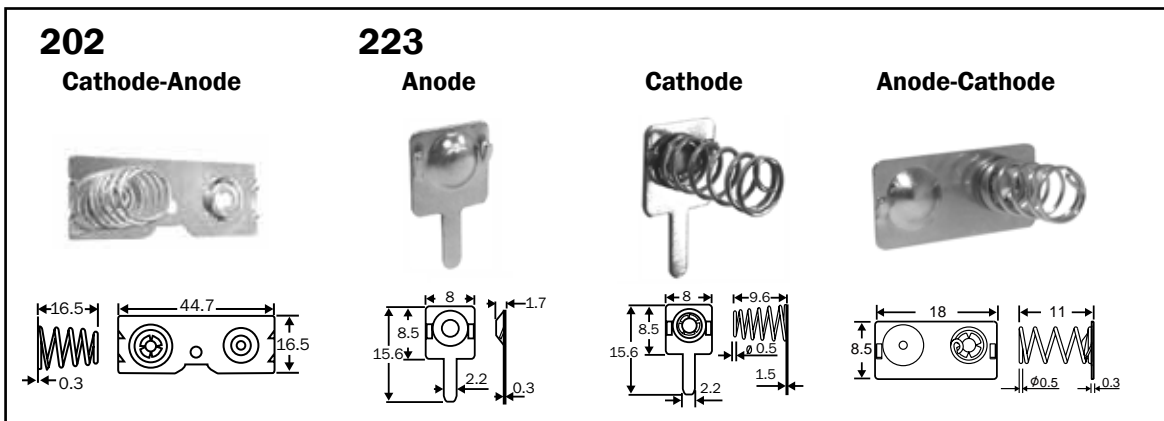
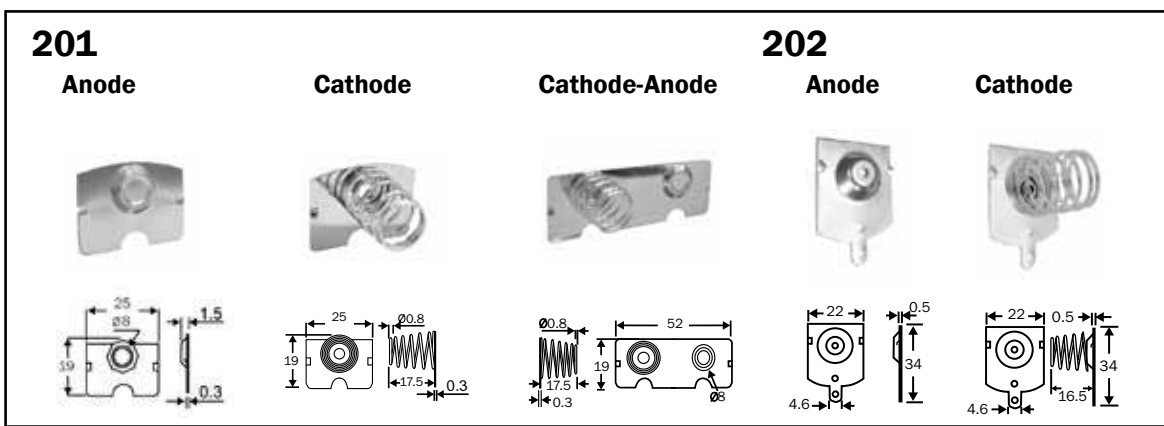
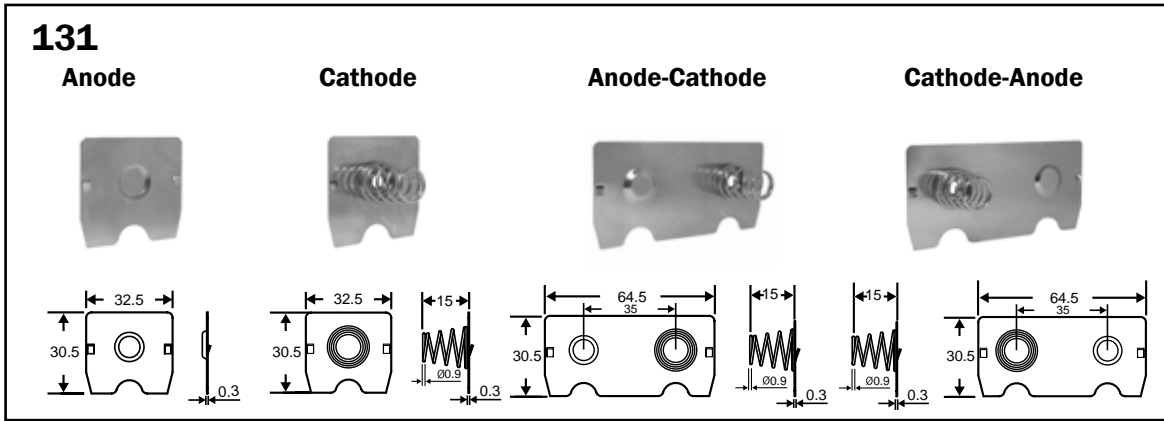


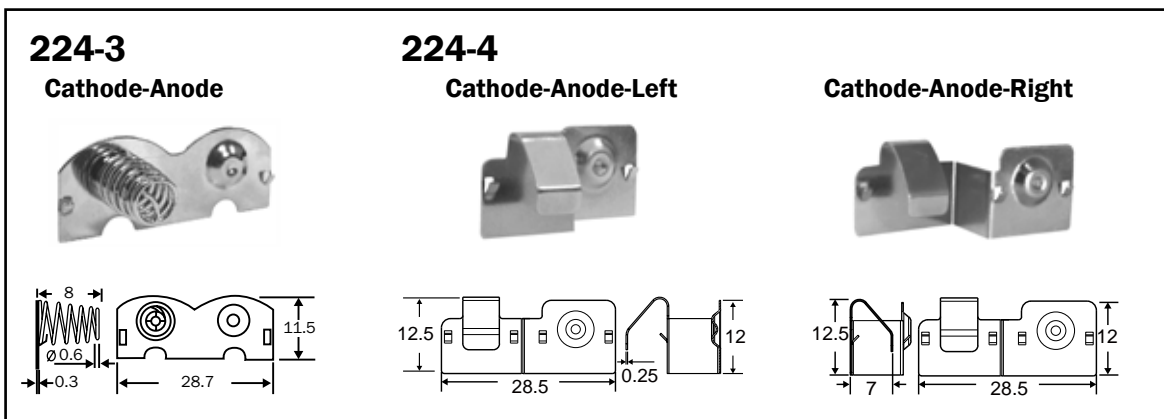
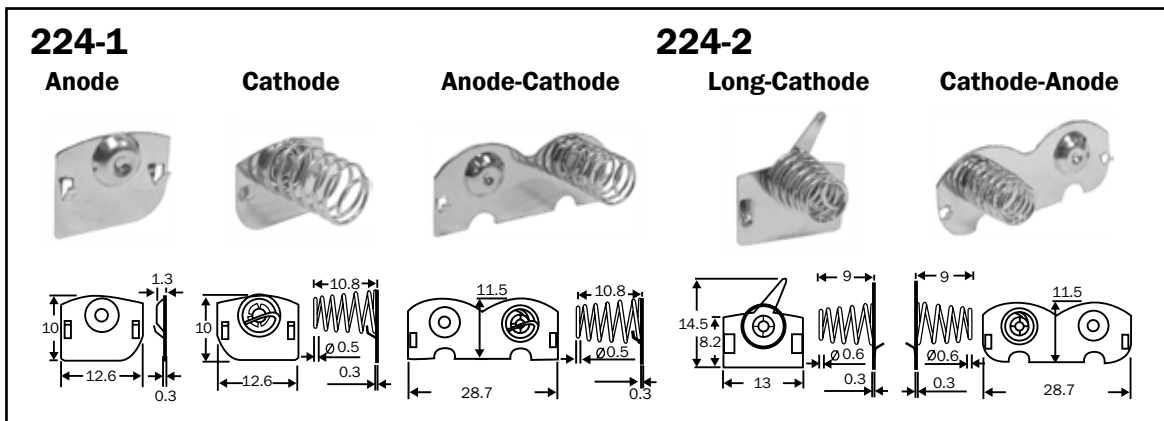
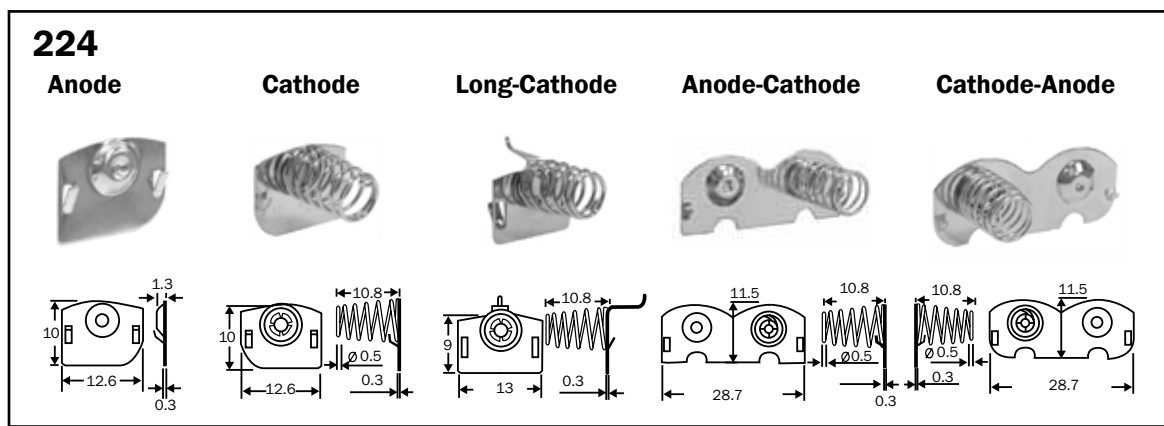
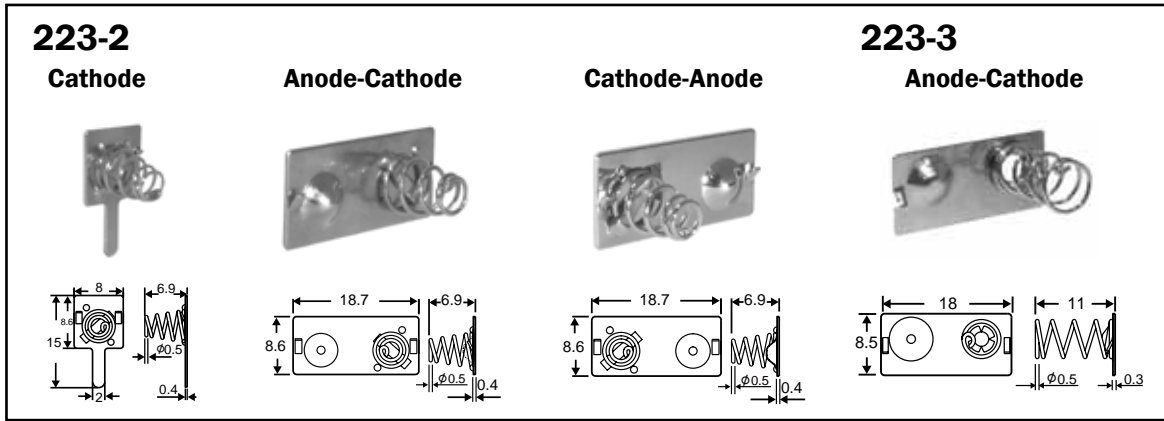


彈片平整度檢測 / 校正儀
Flatness analyzer for battery clips



2.5D 影像測量儀
2.5D Vision Measuring Machine







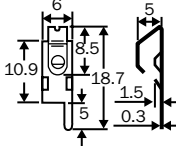
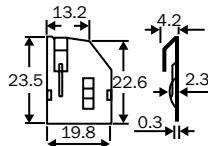
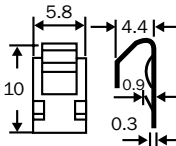
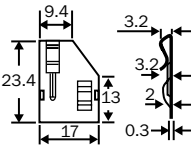






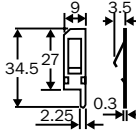
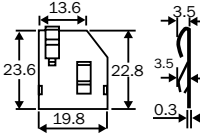
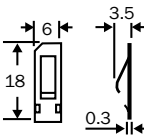
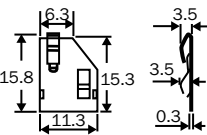
228	Anode	Cathode	Anode-Cathode	Cathode-Anode





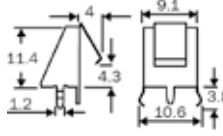
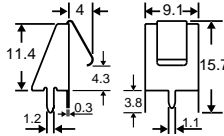
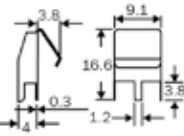
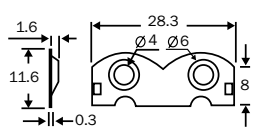
228-1	301	302
Anode	Anode	Anode-Cathode




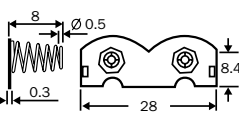
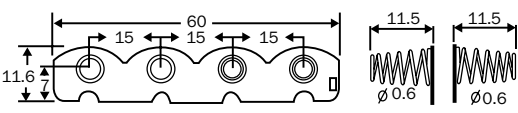
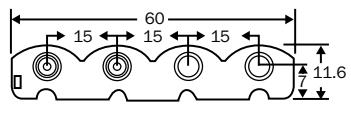
302	303	303	303
Cathode-Anode	Anode	Cathode	Anode-Cathode



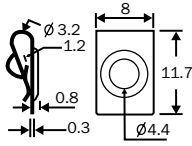
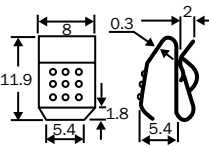


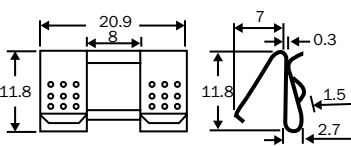
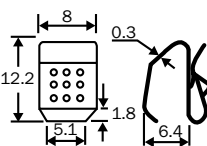
303	303-1
Cathode-Anode	Anode-Cathode




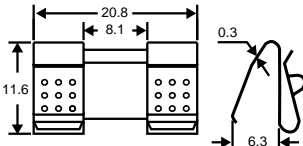
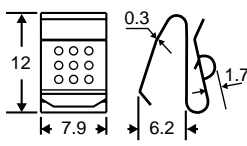
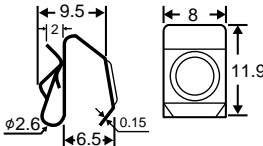
304	304-1	304-1	304-1
Anode	Anode-Cathode	Anode	Anode-Cathode
			
			



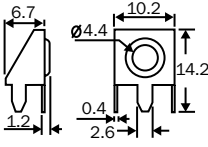
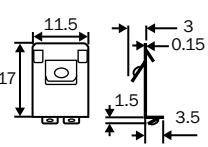


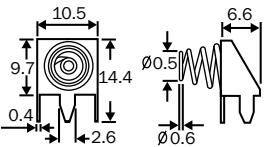
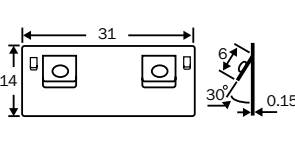
304-2	304-3	304-3	304-3
Anode	Anode-Cathode	Anode	Anode-Cathode
			
			




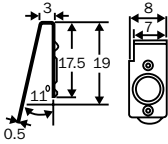
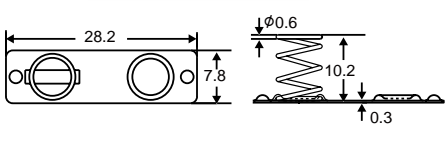
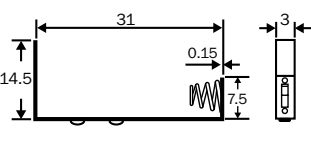
305	305-1	306	307
Anode	Anode	Anode	Anode-Anode
			
			

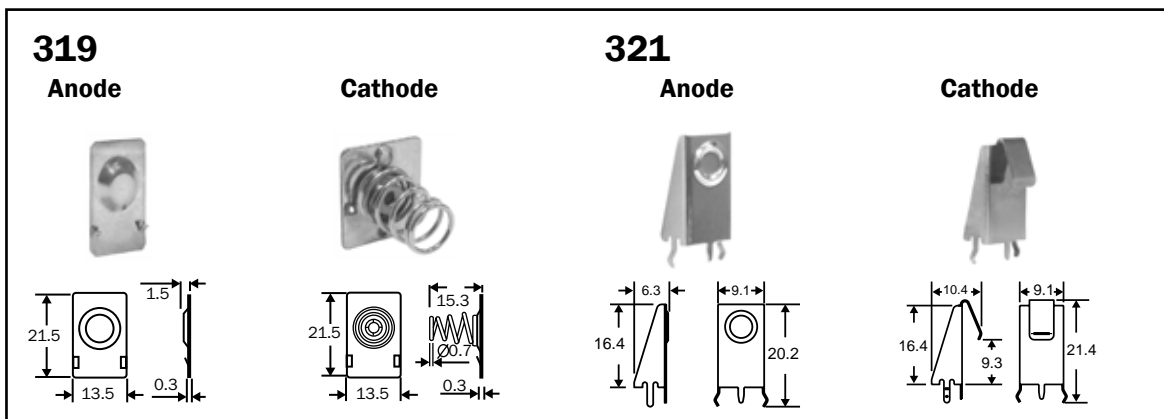
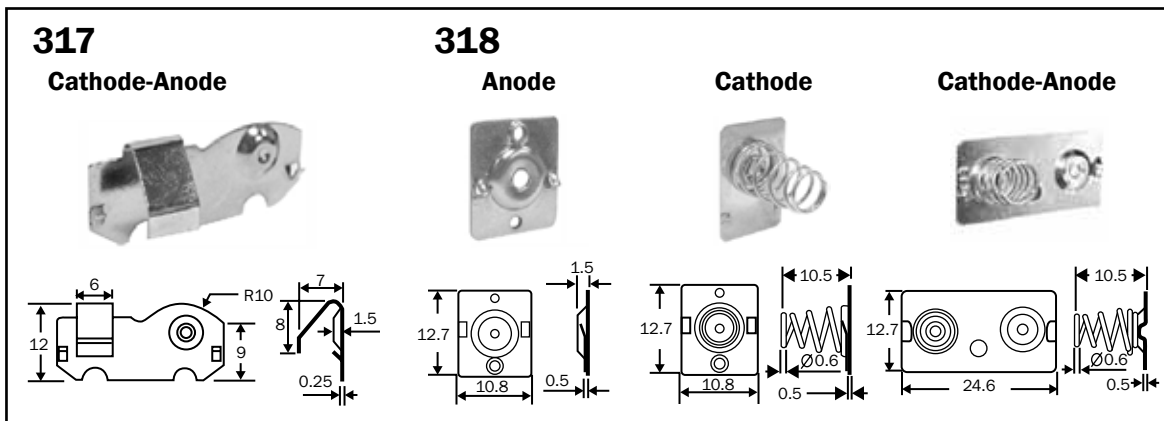
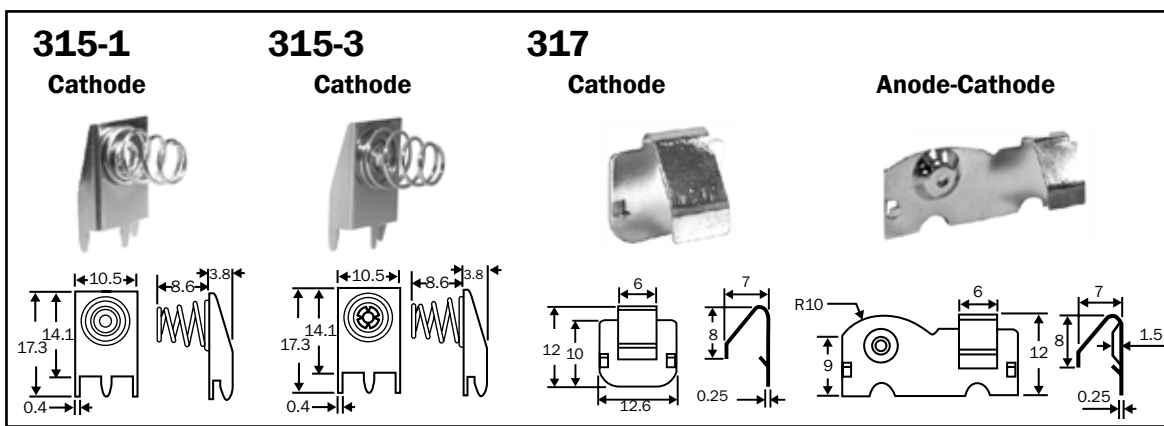
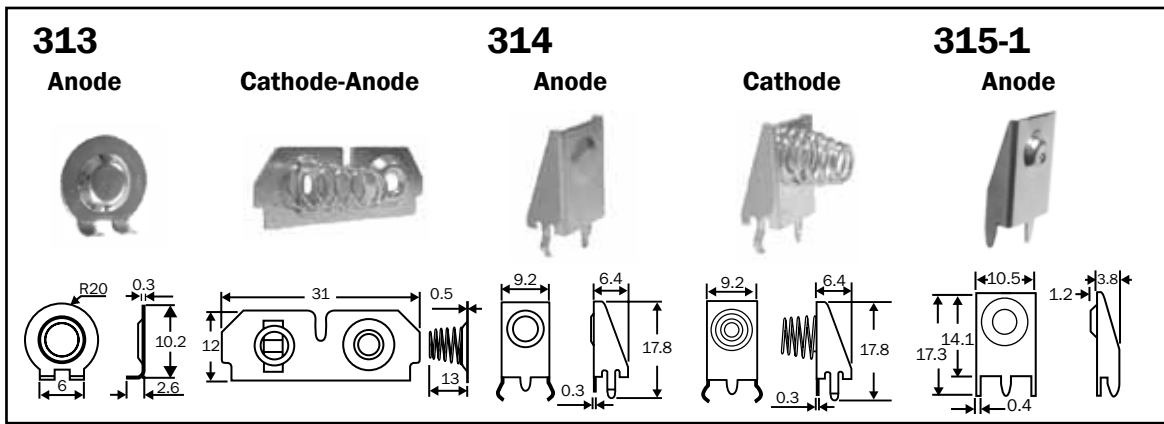
307	307	307
Cathode-Cathode	Double Anode-Cathode	Double Cathode-Anode
		
		

308	308-1
Anode	Cathode
	
	
Cathode-Cathode	Cathode
	
	

308-1	308-2	308-3
Cathode-Cathode	Cathode	Cathode
		
		

309	310
Anode	Anode
	
	
Cathode	Anode-Cathode
	
	

311	311	311
Anode	Cathode-Anode	Long-Cathode
		
		



401

Anode	Cathode	Long-Cathode	Anode-Cathode	Cathode-Anode

402

Anode	Anode-Cathode	402-1 Anode	402-1 Anode-Cathode

402-2

Anode	Anode-Cathode	402-3 Anode	402-3 Anode-Cathode

403

Anode	Cathode	Anode-Cathode

404 Anode	Cathode	Cathode-Cathode	405 Anode

405 Cathode	406 Anode	Anode-Cathode	407 Cathode

407 Anode-Cathode	Cathode-Anode	Outside Anode	Outside Cathode

407-1 Anode	407-2 Cathode	Cathode-Long

408		409		
Anode	Cathode	Anode	Cathode	Cathode-Anode

CR123A	BHC-2/3	9V
Anode/Cathode	Anode	Cathode

18650	18650-2
Anode/Cathode	Anode

Pin Anode/Cathode	Pin Anode

18650-2	18650-2	18650-2
Cathode	Pin Cathode	Anode-Cathode

BH-3.6V

Anode/Cathode	Pin2.5 Anode/Cathode	Pin5 Anode/Cathode

CR2032

Anode	Cathode	Anode-Cathode

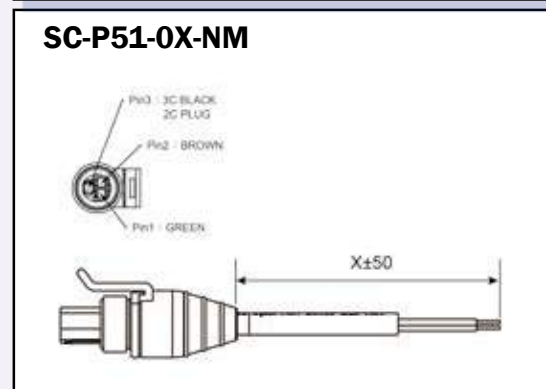
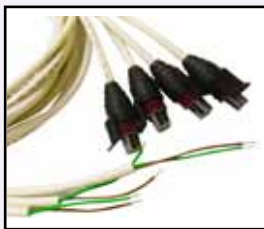
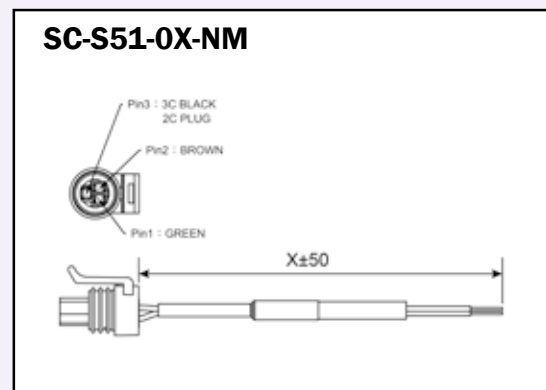
Big Contact	Small Contact	Long Contact	P2 Contact	Pin14 Contact	Pin24 Contact
Female Contact (6 Prong)	Male Contact	Female Contact (4 Prong)	Switch	Metal Switch (big)	Metal Switch (small)

Rivet

5x2.4x4	5x2.4x5	5x2.5x3.8	4x2.4x4	7x4x4.5	7x4x5	7x4x7	8x2.4x4
Contact	Hook (0.8)	Hook (0.8x40)	Hook (0.8x19)	Hook (0.8x17)	Hook (0.8x33)	Hook (0.8x31)	

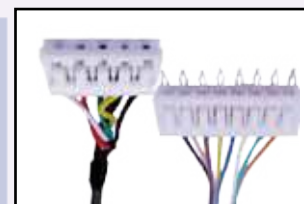
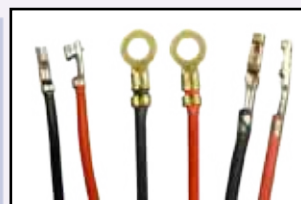
WIRE HARNESS / CABLE ASSEMBLIES

With years of experience as a leading wire harness manufacturer, COMF owns and operates manufacturing facilities in Taiwan and China to manufacture our customer's products. We commit to understanding our customer's expectations, and meeting those expectations by performing the correct tasks, defect free, on time, every time.



- CABLE:
UL 2517 #22x3C (GREEN, BROWN, BLACK), OD=5.5MM, WHITE
UL 2517 #22x2C (GREEN, BROWN), OD=5.5MM, WHITE
- IP RATING: IPX7 WITH MATED
- RoHS COMPLIANT

LEAD WIRE, TERMINAL, CONNECTOR



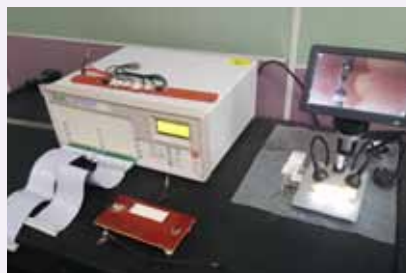
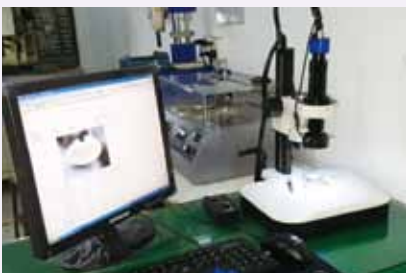
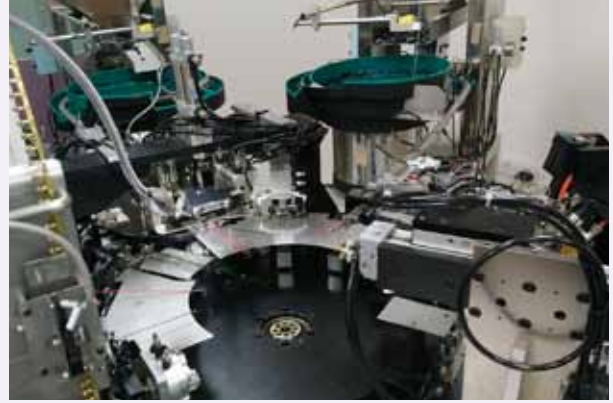
CUSTOMIZED WIRE HARNESS

- Cable Assembly, Flexible Flat Cable (FFC), LVDS Cable offered
- Complete OEM service available
- Small order acceptable
- Good quality products with competitive price
- Obtain UL 764 Wiring Harnesses (E507494)



DESIGN, SOURCE, TEST AND SUPPLY ON TIME. COMF'S QUALITY SYSTEM AND AUTOMATED PRODUCTION FACILITIES ARE YOUR ADVANTAGE.

MANUFACTURING FACILITIES



Comfortable Electronic Co., Ltd.(COMF) has been a professional battery holder accessories manufacturer and designer for over 50 years, with over a decade of experience in wire harness/wire assembly manufacturing. Our manufacturing and materials comply to many international standards such RoHS, REACH, UL764, etc.



Patents:

- Enclosed Battery Holder
- Cylindrical Terminal Rivet and Battery Snap
- Charger with Replaceable Signal Line for a Car
- USB Power Pack and Charger
- Battery Case Having Retaining Function
- Waterproof Battery Case
- Battery Case and Electrode Plate Set for Use in the Same



Taiwan Office:

COMFORTABLE ELECTRONIC CO., LTD.
 3F No.142 Li-Teh Street,
 Chung Ho Dist., New Taipei City,
 23512, Taiwan.
 常利興業股份有限公司
 23512新北市中和區
 立德街142號3樓
 TEL: +886-2-3234-7735
 FAX: +886-2-3234-7739
[http:// www.comf.com.tw](http://www.comf.com.tw)
 E-mail:sales@comf.com.tw

Hong Kong Office:

COMF ELECTRONIC COMPANY
 11/15F, Metro Centre 1,
 No.32 Lam Hing St.,
 Kowloon Bay, Hong Kong.
 常利貿易(H.K)有限公司
 香港九龍灣臨興街32號
 美羅中心1期15樓11室
 TEL: +852-2770-5181
 FAX: +852-2798-8129
[http:// www.comf-hk.com](http://www.comf-hk.com)
 E-mail:sales@comf-hk.com

China Factory:

DONG GUAN EAGLE ELECTRONIC CO.,LTD.
 東莞市英利電子有限公司
 廣東省東莞市石排鎮塘尾李橫路306號
 TEL: +86-769-8665-2535
 FAX: +86-769-8665-3700

