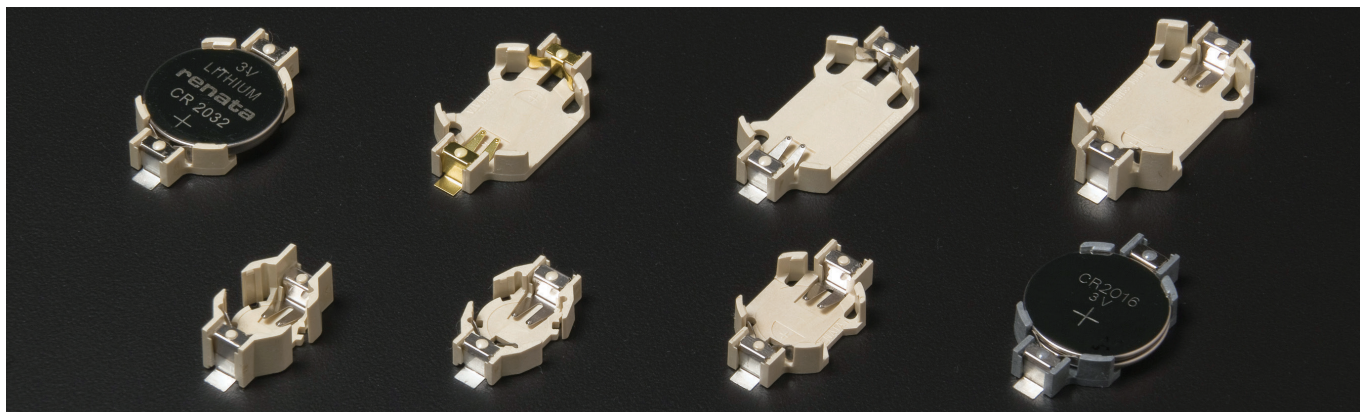


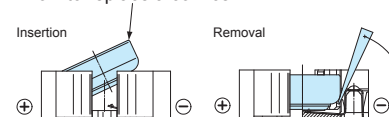


- Coin cell holder for 9 different coin cell types.
- Surface mount type with compact body.
- Heat resistant glass fiber filled LCP for lead free reflow soldering.
- Tape reel packages (-TR models) are available for bulk purchase.
- SMTU1220-G, SMTU1632-G and SMTU2032-1-G are gold plated models.

Technical Data

Operating temperature: -40°C ~ +100°C

How to replace a coin cell.



Components

Holder material	Holder color	Contact material	Contact finish
Glass fiber filled LCP (UL94V-0)	Ivory (Gray for SMTU2-2016)	SUS301	Battery contact : Nickel plated • Soldered area : Sn plated over nickel
			Gold plated over nickel (SMTU1220G • 1632-G • 2032-1-G models)

Product no. / Feature

Product no.	Matching coin cell	Contact type	Weight (g)	Pack of
SMTU357	LR44 / SR44	Surface mount x 2	0.9	1
SMTU1220	CR1220	Surface mount x 2	0.8	1
SMTU1220-G	CR1220	Surface mount x 2	0.8	1
SMTU1225	CR1225	Surface mount x 2	0.7	1
SMTU1632	CR1632	Surface mount x 2	0.8	1
SMTU1632-G	CR1632	Surface mount x 2	0.8	1
SMTU2-2016	CR2016×2 *1	Surface mount x 2	1.0	1
SMTU2032	CR2032	Surface mount x 2	1.0	1
SMTU2032-1-G	CR2032	Surface mount x 2	1.0	1
SMTU2430	CR2430	Surface mount x 2	1.0	1
SMTU2450	CR2450 *2	Surface mount x 2	1.5	1
NEW SMTU2477	CR2477 *3	Surface mount x 2	1.7	1
SMTU357-T	LR44 / SR44	Surface mount x 2	—	50 pcs / tray
SMTU1220-TR	CR1220	Surface mount x 2	—	750 pcs / reel
SMTU1220-G-TR	CR1220	Surface mount x 2	—	750 pcs / reel
SMTU1225-TR	CR1225	Surface mount x 2	—	750 pcs / reel
SMTU1632-T	CR1632	Surface mount x 2	—	50 pcs / tray
SMTU1632-G-TR	CR1632	Surface mount x 2	—	520 pcs / reel
SMTU2032-TR	CR2032	Surface mount x 2	—	485 pcs / reel
SMTU2032-1-G-TR	CR2032	Surface mount x 2	—	485 pcs / reel
SMTU2430-TR	CR2430	Surface mount x 2	—	490 pcs / reel
SMTU2450-TR	CR2450 *2	Surface mount x 2	—	350 pcs / reel
NEW SMTU2477-TR	CR2477 *3	Surface mount x 2	—	250 pcs / reel

*1 • *2 : Some coin cells are not suitable for SMTU2-2016 and SMTU2450. Please refer to the chart below.

To use a non-listed coin cell, please check and confirm before use.

*3 SMTU2477 can only be used with a Renata coin cell.

SMTU-2016 Suitability Chart

Brand (Product no.)	Suitability
FDK (CR2016C)	○
maxell (CR2016 1BS)	○
MITSUBISHI (CR2016)	○
Panasonic (CR2016)	×
renata (CR2016 MFR)	○
SONY (CR2016-ECO)	○
TOSHIBA (CR2016EC)	○

Reason for × : Coin cell is too thin.

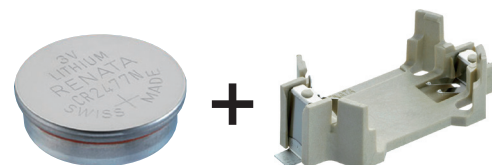
SMTU2450 Suitability Chart

Brand (Product no.)	Suitability
FDK (CR2450C)	○
maxell (CR2450)	○
maxell (CR2450HR)	×
maxell (CR2450HR-Ex)	×
MITSUBISHI (CR2450B)	○
Panasonic (CR2450)	×
renata (CR2450N)	○
SANYO (CR2450-1BP)	○
SONY (CR2450B-ECO)	○

Reason for × : Coin cell shape does not fit.

SMTU2477 can only be used with a Renata coin cell.

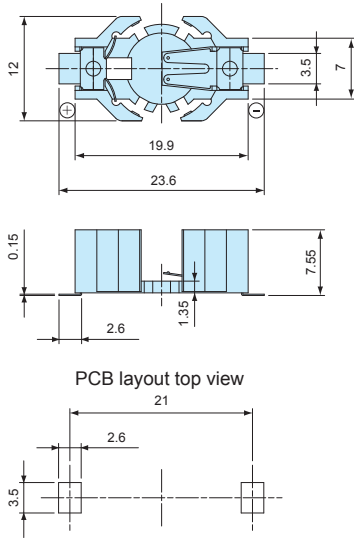
SMTU2477 is exclusively designed for use with a Renata CR2477N coin cell.



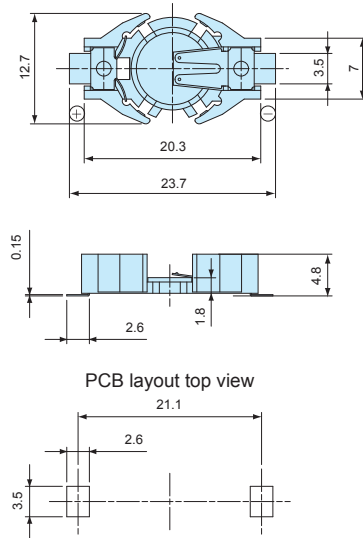
SMTU dimensions

■ DXF/DWG/PDF drawings available on our website.

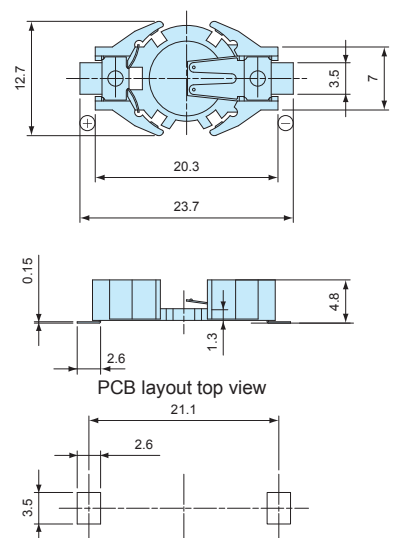
SMTU357



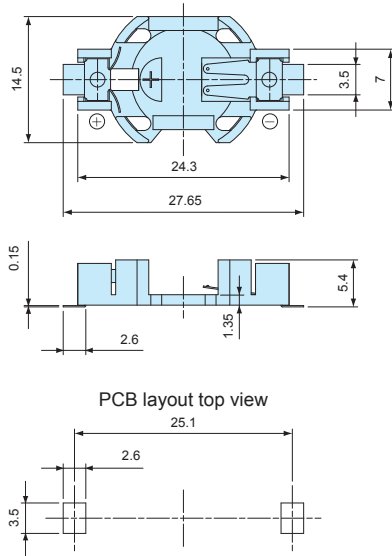
SMTU1220 / 1220-G



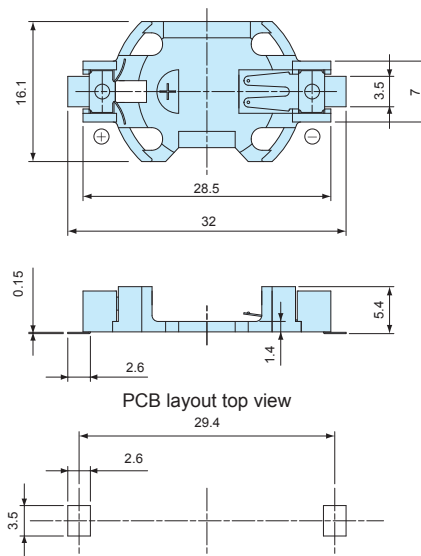
SMTU1225



SMTU1632 / 1632-G

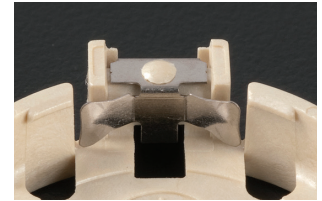


SMTU2032 / 2032-1-G / 2-2016

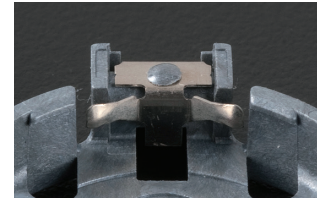


■ External dimensions of SMTU2032 and SMTU2-2016 are similar. However, each holder has a different positive contact and holder color. Refer to the images below.

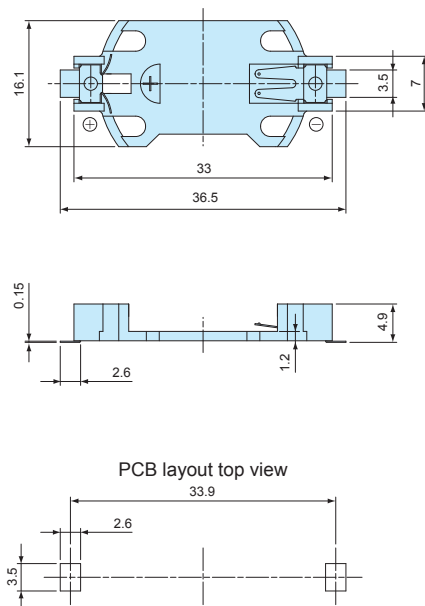
SMTU2032



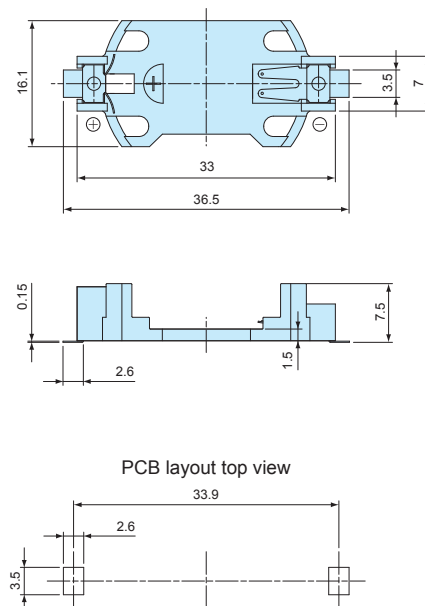
SMTU2-2016



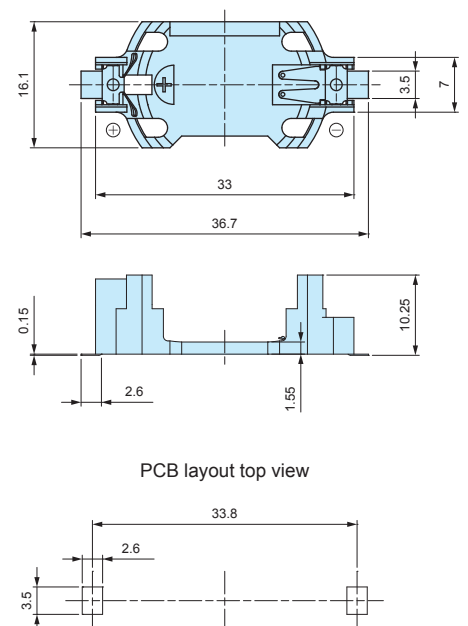
SMTU2430



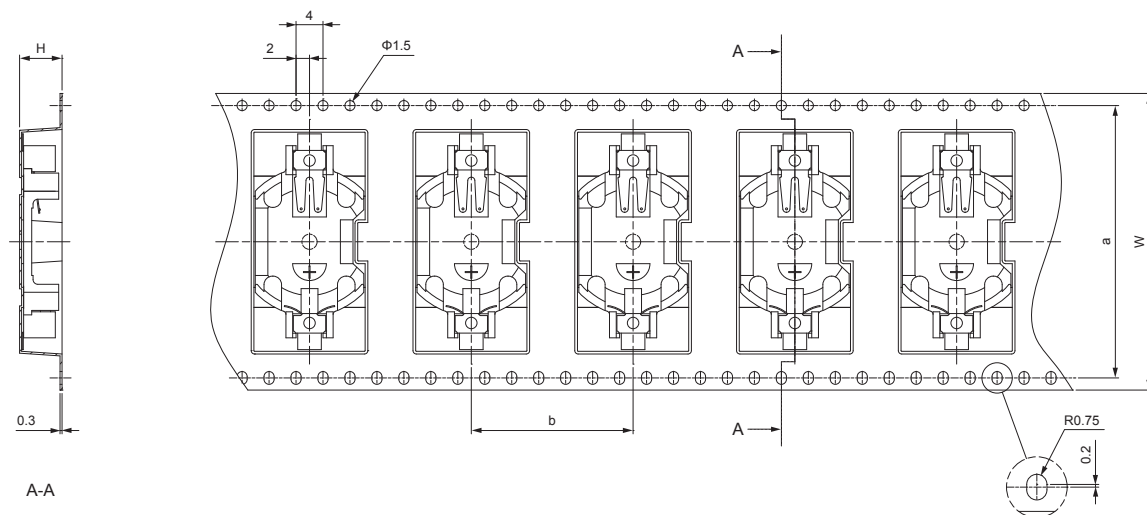
SMTU2450



SMTU2477



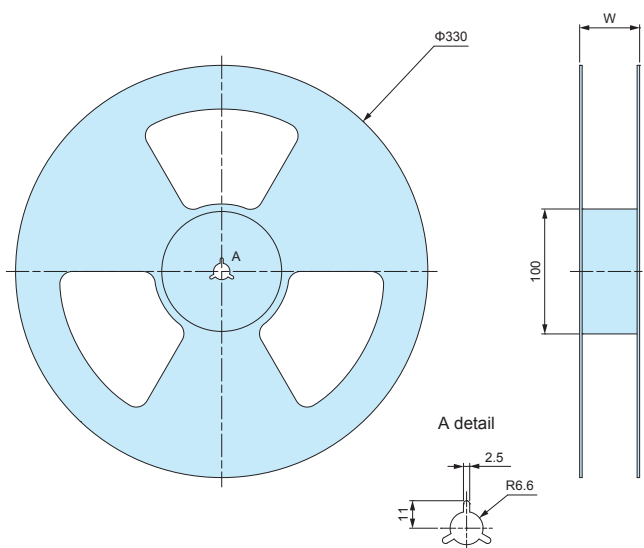
Tape dimensions



※Holder storage spacing will vary depending on model.

Product no.	W	H	a	b
SMTU1220-TR	44	6	40.4	16
SMTU1220-G-TR	44	6	40.4	16
SMTU1225-TR	44	6	40.4	16
SMTU1632-G-TR	44	6.1	40.4	20
SMTU2032-TR	44	6.3	40.4	24
SMTU2032-1-G-TR	44	6.3	40.4	24
SMTU2430-TR	56	6	52.4	24
SMTU2450-TR	56	8.5	52.4	24
SMTU2477-TR	56	10.8	52.4	24

Reel dimensions



Product no.	Pcs / Reel	w
SMTU1220-TR	750	48.5
SMTU1220-G-TR		
SMTU1225-TR	750	48.5
SMTU1632-G-TR	520	48.5
SMTU2032-TR	485	48.5
SMTU2032-1-G-TR		
SMTU2430-TR	490	61.5
SMTU2450-TR	350	61.5
SMTU2477-TR	250	61.5

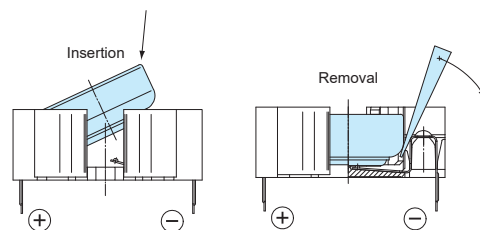


- Coin cell holder for 8 different coin cell types.
- Through-hole type with pins in a compact body.
- Heat resistant glass fiber filled LCP for lead-free reflow soldering.

Technical Data

Operating temperature: -40°C ~ +100°C

How to replace a coin cell.


Components

Holder material	Holder color	Contact material	Contact finish
Glass fiber filled LCP (UL94V-0)	Ivory	SUS301	Nickel plated • Sn plated over nickel Gold plated over nickel (HU2032-G)

Battery contact : Nickel plated • Soldered area : Sn plated over nickel

Product no. / Feature

Product no.	Matching coin cell	Contact type	Weight (g)	Pack of
HU357	LR44/SR44	Through hole x 3	0.8	1
HU1220	CR1220	Through hole x 3	0.8	1
HU1225	CR1225	Through hole x 3	0.7	1
HU1632	CR1632	Through hole x 3	0.8	1
HU2032	CR2032	Through hole x 3	1.0	1
NEW HU2032-G	CR2032	Through hole x 3	1.0	1
HU2430	CR2430	Through hole x 3	1.1	1
HU2450	CR2450 * ¹	Through hole x 3	1.5	1
HU2477	CR2477 * ²	Through hole x 3	1.7	1
HU1220-T	CR1220	Through hole x 3	—	50 pcs / tray
HU1225-T	CR1225	Through hole x 3	—	50 pcs / tray
HU1632-T	CR1632	Through hole x 3	—	50 pcs / tray
HU2032-T	CR2032	Through hole x 3	—	50 pcs / tray
NEW HU2032-G-T	CR2032	Through hole x 3	—	50 pcs / tray
HU2430-T	CR2430	Through hole x 3	—	50 pcs / tray
HU2450-T	CR2450 * ¹	Through hole x 3	—	50 pcs / tray
HU2477-T	CR2477 * ²	Through hole x 3	—	50 pcs / tray

 *¹: Some coin cells are not suitable for HU2450. Please refer to the chart below.

To use a non-listed coin cell, please check and confirm before use.

 *² HU2477 can only be used with a Renata coin cell.

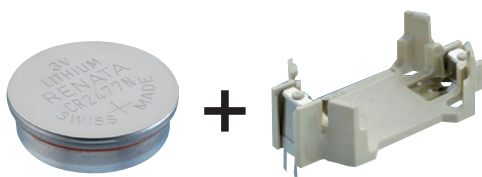
 *¹ HU2450 Suitability Chart

Brand (Product no.)	Suitability
FDK (CR2450C)	○
maxell (CR2450)	○
maxell (CR2450HR)	×
maxell (CR2450HR-Ex)	×
MITSUBISHI (CR2450B)	○
Panasonic (CR2450)	×
renata (CR2450N)	○
SANYO (CR2450-1BP)	○
SONY (CR2450B-ECO)	○

Reason for X : Coin cell shape does not fit.

 *² HU2477 can only be used with a Renata coin cell.

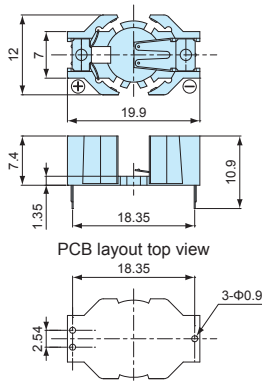
HU2477 is exclusively designed for use with a Renata CR2477N coin cell.



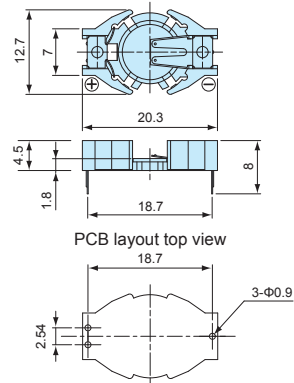
HU dimensions

■ DXF/DWG/PDF drawings available on our website.

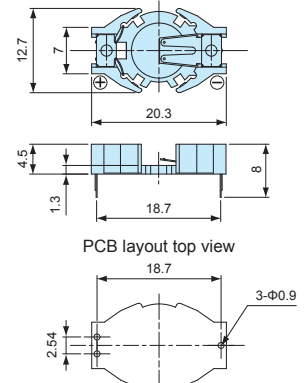
HU357



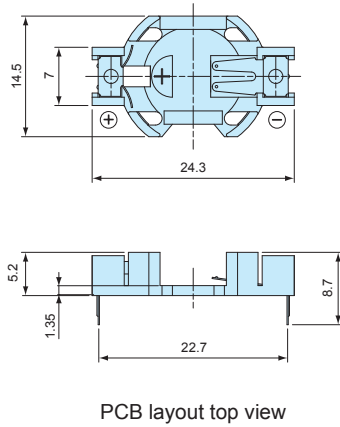
HU1220



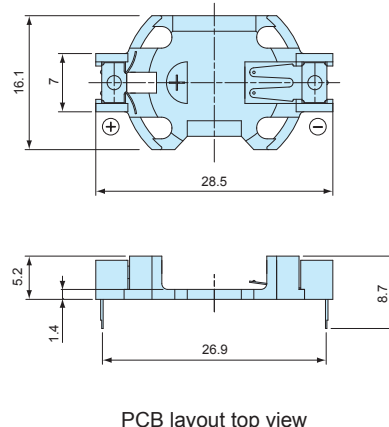
HU1225



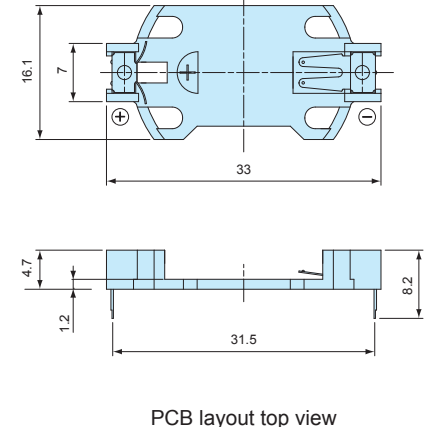
HU1632



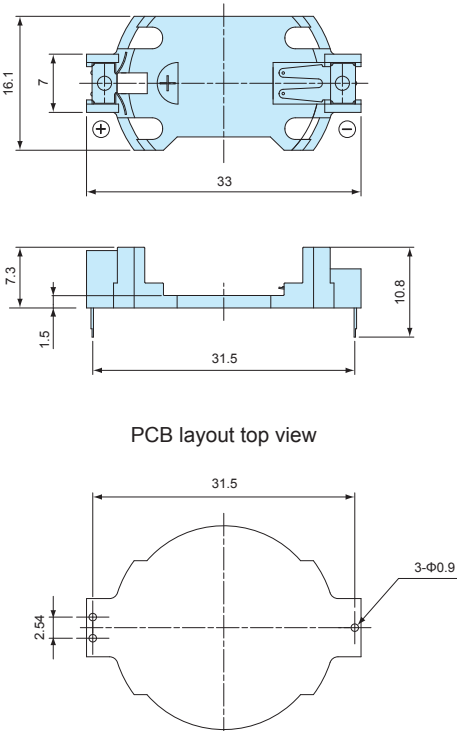
HU2032/HU2032-G



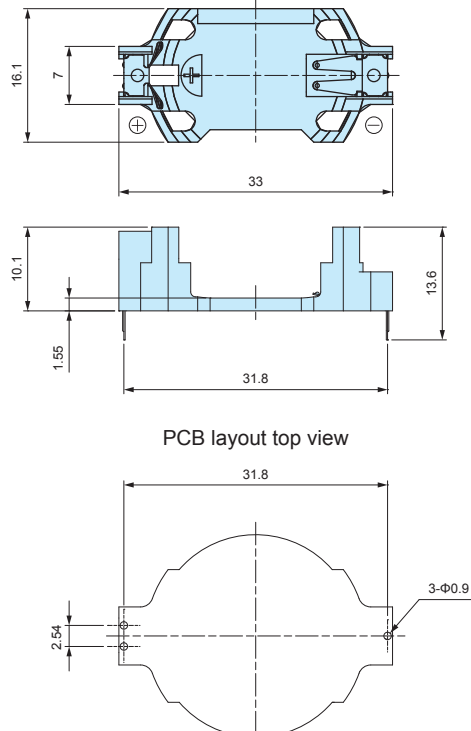
HU2430



HU2450



HU2477



PB621

ML621 • SR621 SMALL BATTERY HOLDER

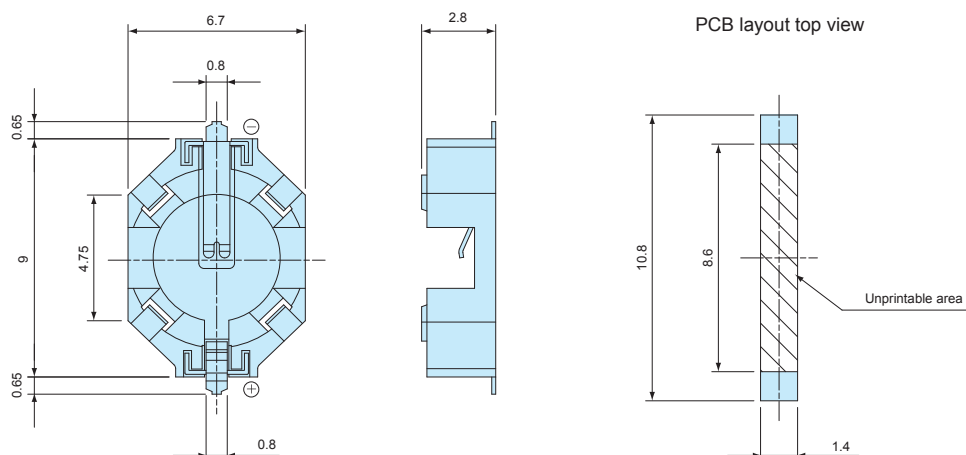


Technical Data

Operating temperature: -25°C ~ +85°C

- Heat resistant glass fiber filled LCP for lead free reflow soldering.

■ DXF/DWG/PDF drawings available on our website.



Components

Holder material	Holder color	Contact material	Contact finish
Glass fiber filled LCP (UL94V-0)	Ivory	Copper alloy	Gold plated

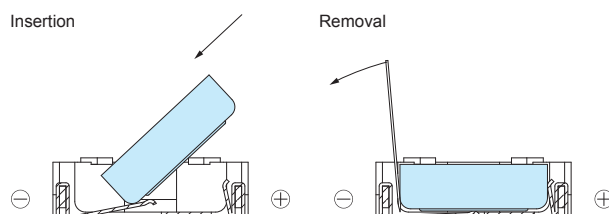
Product no. / Feature

Product no.	Matching battery	Contact type	Weight (g)	Pack of
PB621	ML621 / SR621	Surface mount x 2	0.1	10

NOTE

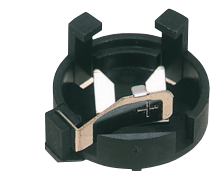
Be careful not to damage the holder when removing the battery without tools. Recommended to use a fine tipped stick or a flat head screwdriver to remove the battery.

How to replace a coin cell.



PD SERIES

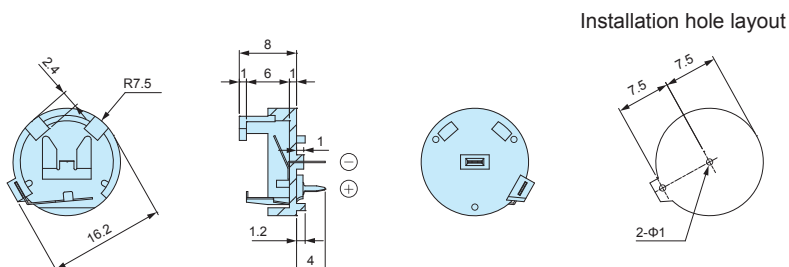
BUTTON BATTERY HOLDER



Technical Data

Operating temperature: -40°C ~ +80°C

■ DXF/DWG/PDF drawings available on our website.



Components

Holder material	Holder color	Contact material	Contact finish
PBT (UL94V-0)	Black	Phosphor bronze	Sn plated

NOTE

Insert battery fully in until it is completely flat, otherwise there may be a risk of short-circuiting.

Product no. / Feature

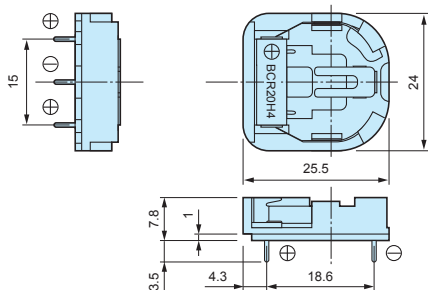
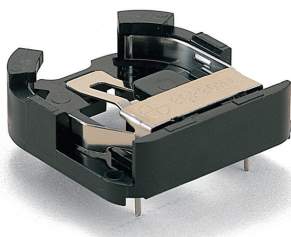
Product no.	Matching battery	Contact type	Weight (g)	Pack of
PD23	LR44 / SR44	Through hole pin x 2	0.7	1
PD23-T	LR44 / SR44	Through hole pin x 2	—	100

BCR SERIES

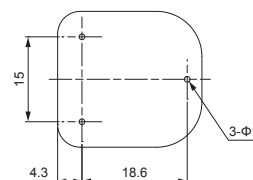
CR2032 COIN CELL HOLDER

■ DXF/DWG/PDF drawings available on our website.

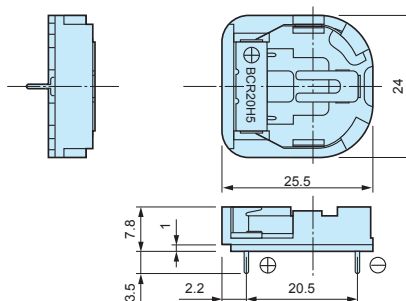
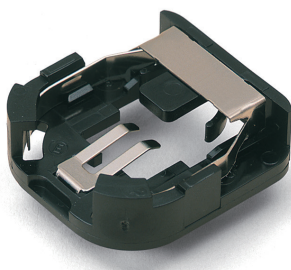
BCR20H4



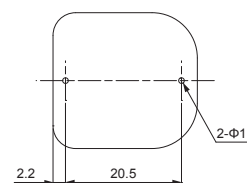
Installation hole layout



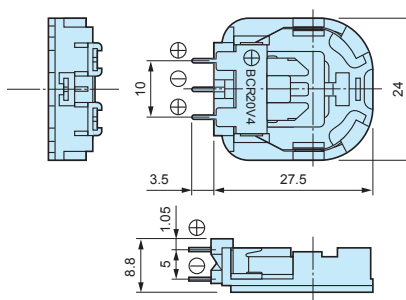
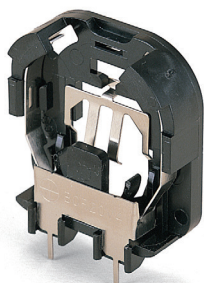
BCR20H5



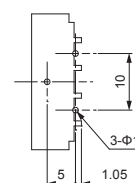
Installation hole layout



BCR20V4



Installation hole layout



Components

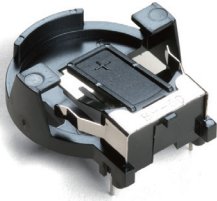
Holder material	Holder color	Contact material	Contact finish
PAR	Black	Stainless steel	Nickel plated

Technical Data

Operating temperature: -10°C ~ +85°C

Product no. / Feature

Product no.	Matching battery	Contact type	Weight (g)	Pack of
BCR20H4	CR2032	Through hole x 3	2.0	1
BCR20H5	CR2032	Through hole x 2	2.0	1
BCR20V4	CR2032	Through hole x 3	2.0	1
BCR20H4-T	CR2032	Through hole x 3	—	100 (20 pcs tray x 5)
BCR20H5-T	CR2032	Through hole x 2	—	100 (20 pcs tray x 5)
BCR20V4-T	CR2032	Through hole x 3	—	100 (20 pcs tray x 5)

BH-50N SERIES**CR2450 COIN CELL HOLDER****Technical Data**

Operating temperature: -20°C ~ +70°C

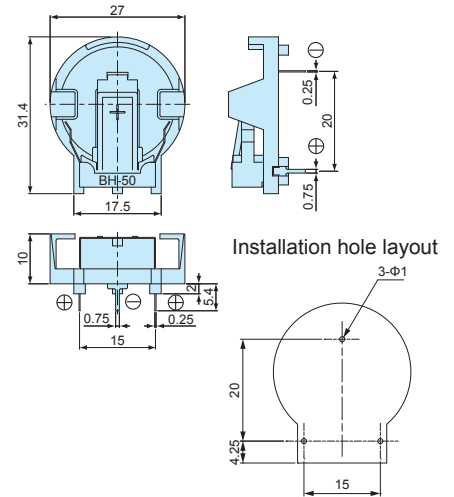
Components

Holder material	Holder color	Contact material	Contact finish
Polyphenylene oxide (UL94V-0)	Black	Stainless steel	Nickel plated

Product no. / Feature

Product no.	Battery	Contact type	Weight (g)	Pack of
BH-50N	CR2450	Through hole x 3	2.7	1
BH-50N-T	CR2450	Through hole x 3	—	50 pcs / tray

■ DXF/DWG/PDF drawings available on our website.

**BV-50N** SERIES**CR2450 VERTICAL COIN CELL HOLDER****Technical Data**

Operating temperature: -20°C ~ +70°C

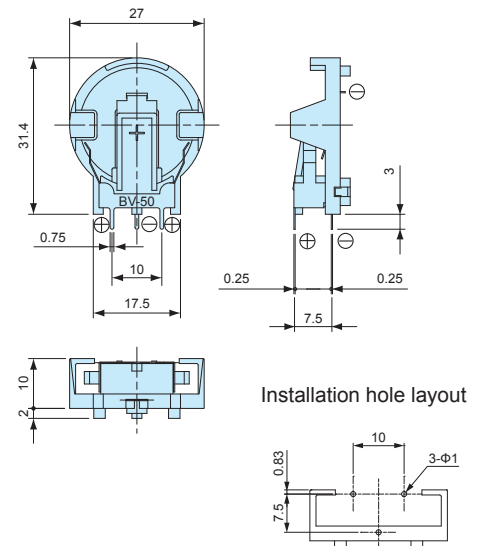
Components

Holder material	Holder color	Contact material	Contact finish
Polyphenylene oxide (UL94V-0)	Black	Stainless steel	Nickel plated

Product no. / Feature

Product no.	Battery	Contact type	Weight (g)	Pack of
BV-50N	CR2450	Through hole x 3	2.7	1
BV-50N-T	CR2450	Through hole x 3	—	50 pcs / tray

■ DXF/DWG/PDF drawings available on our website.

**CH74** SERIES**CR2032 VERTICAL COIN CELL HOLDER****Technical Data**

Operating temperature: -40°C ~ +80°C

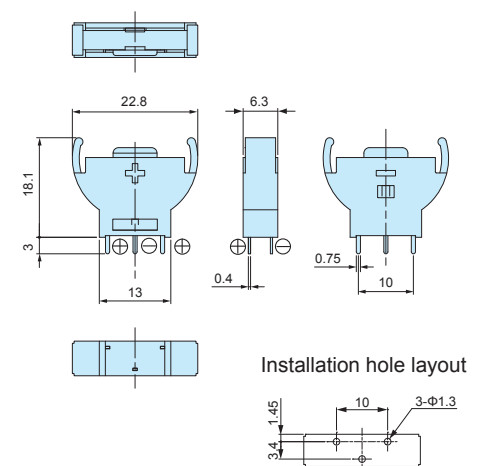
Components

Holder material	Holder color	Contact material	Contact finish
Nylon 66 (UL94V-0)	Black	Phosphor bronze	Sn plated

Product no. / Feature

Product no.	Battery	Contact type	Weight (g)	Pack of
CH74-2032LF	CR2032	Through hole x 3	1.8	1
CH74-2032LF-T	CR2032	Through hole x 3	—	75 pcs / tray

■ DXF/DWG/PDF drawings available on our website.

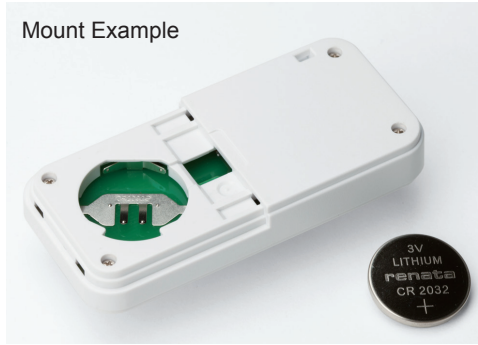


CST SERIES

CR2032 BATTERY CONTACT



Mount Example



■ Material : SUS304 / Nickel plated

■ Battery contact for CR2032 coin cell.

■ "CR2032" and " - " indicators are engraved on the negative side.

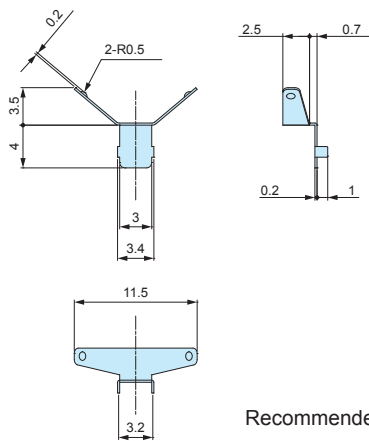
■ Use with enclosures that utilizes CR2032 coin cells.

Product no. / Feature

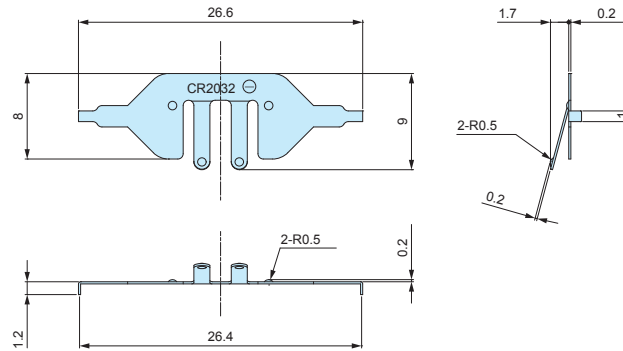
Product no.	Matching coin cell	Contact type	Weight (g)	Pack of
CST-2032P	CR2032	Through hole x 2	0.1	10
CST-2032M	CR2032	Through hole x 2	0.2	10

■ DXF/DWG/PDF drawings available on our website.

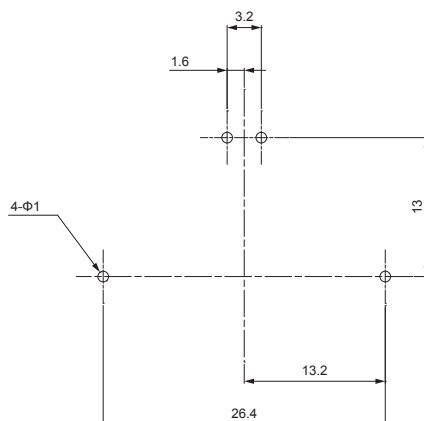
CST-2032P



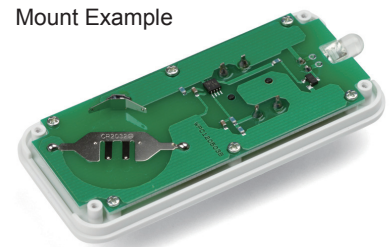
CST-2032M



Recommended PCB hole layout



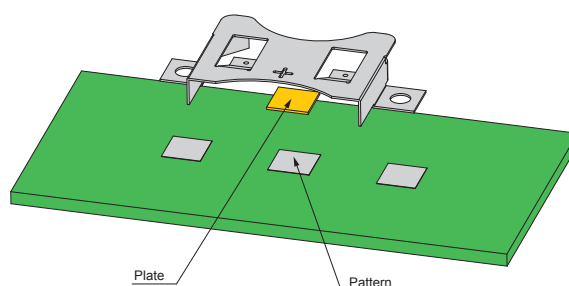
Mount Example



■ Refer to the mount example for mounting direction of contacts.



- Material / Finish : Phosphor bronze / Nickel plated
- Metal coin cell holder.
- Tape reel packages (-TR models) are available for bulk purchase.
- Make a negative pole on the PCB and place or solder a plate onto it.
BK2032M negative contact can be used for SMTM2032 and BK-888.



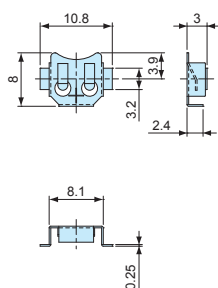
Product no. / Feature

Product no.	Matching coin cell	Contact type	Weight (g)	Pack of
BK-879	SR621/ML621	Surface mount x 2	0.2	10
BK-5091	LR44	Through hole x 2	0.5	10
NEW SMTM1225	CR1220/CR1225	Surface mount x 2	0.4	10
BK-890	CR1220/CR1225	Through hole x 2	0.4	10
SMTM1632	CR1632	Surface mount x 2	0.7	10
BK-869	CR1620/CR1632	Through hole x 2	0.7	10
BK-5067	CR2016	Surface mount x 2	0.8	10
SMTM2032	CR2032/CR2025	Surface mount x 2	0.9	10
BK-888	CR2032/CR2025	Through hole x 2	0.9	10
NEW SMTM1225-TR	CR1220/CR1225	Surface mount x 2	—	1,000 pcs / reel
SMTM1632-TR	CR1632	Surface mount x 2	—	700 pcs / reel
SMTM2032-TR	CR2032/CR2025	Surface mount x 2	—	600 pcs / reel

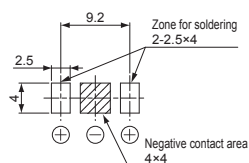
SMTM • BK dimensions

■ DXF/DWG/PDF drawings available on our website.

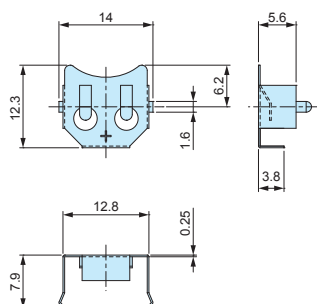
BK-879



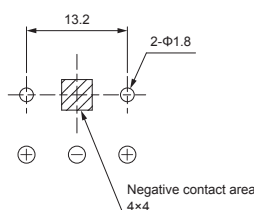
PCB layout top view



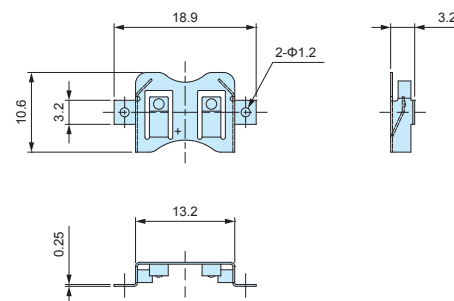
BK-5091



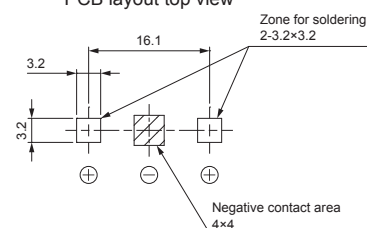
PCB layout top view



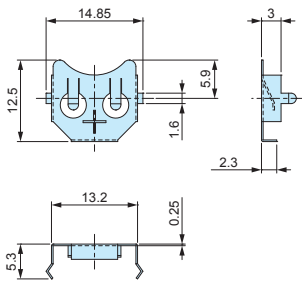
SMTM1225



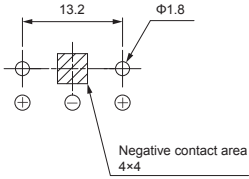
PCB layout top view



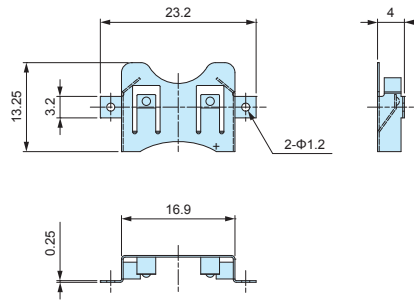
BK-890



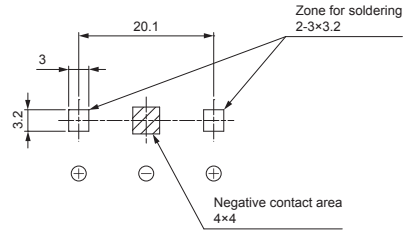
PCB layout top view



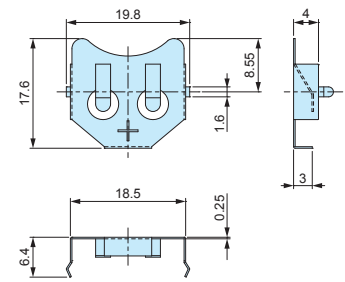
SMTM1632



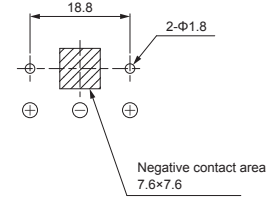
PCB layout top view



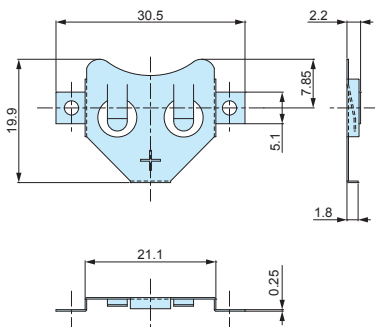
BK-869



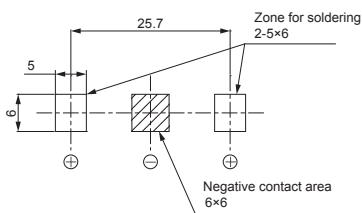
PCB layout top view



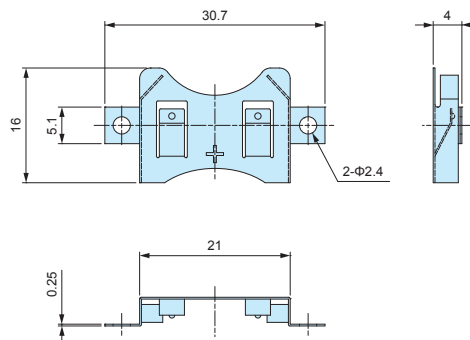
BK-5067



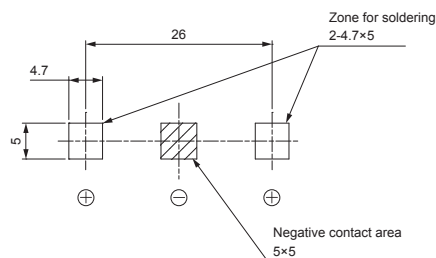
PCB layout top view



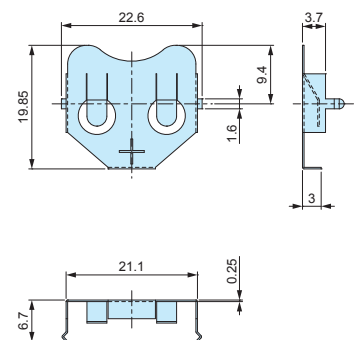
SMTM2032



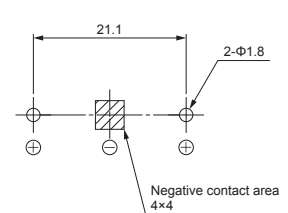
PCB layout top view



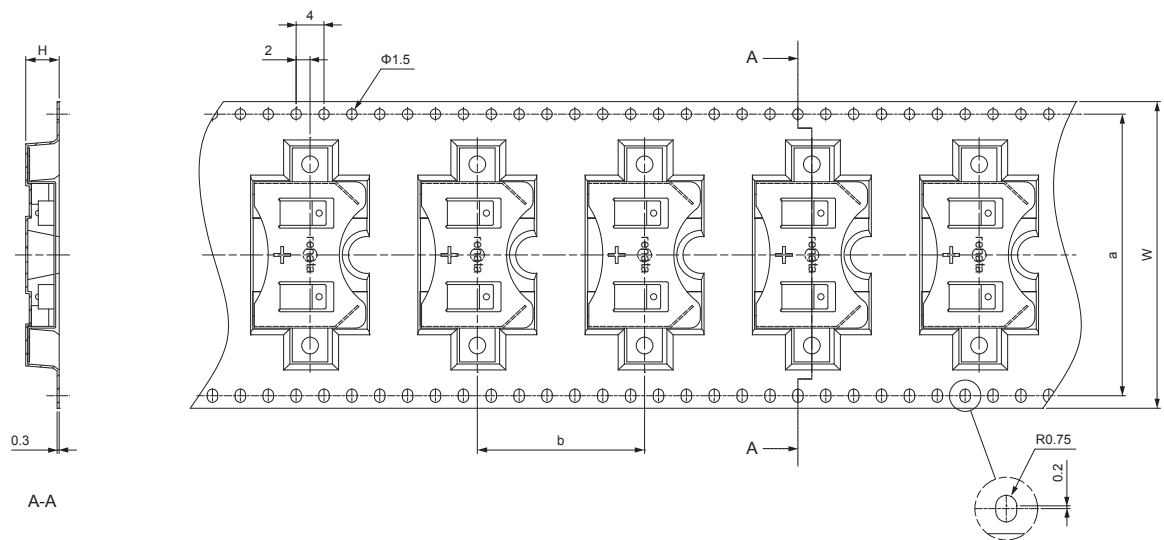
BK-888



PCB layout top view



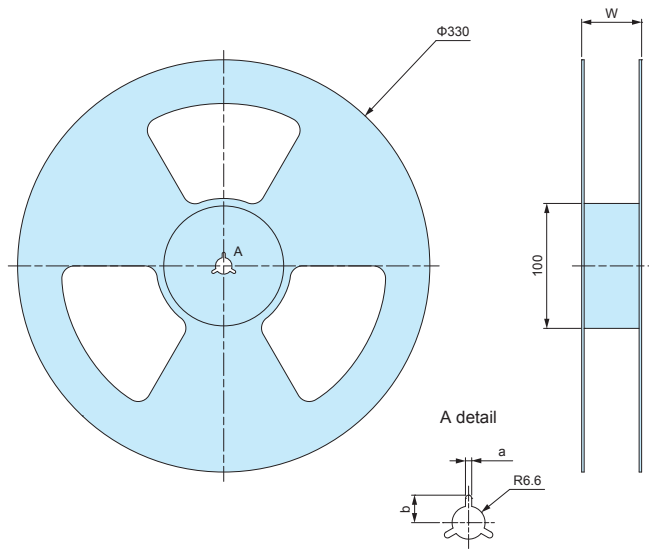
Tape dimensions



※Holder storage spacing will vary depending on model.

Product no.	W	H	a	b
SMTM1225-TR	32	3.8	28	16
SMTM1632-TR	44	4.5	40.4	20
SMTM2032-TR	44	4.8	40.4	24

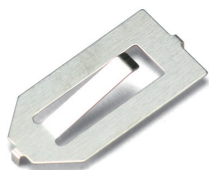
Reel dimensions



Product no.	Pcs / Reel	w	a	b
SMTM1225-TR	1,000	38.5	2.1	10.4
SMTM1632-TR	700	50.5	2.1	10.4
SMTM2032-TR	600	48.5	2.4	11

BK-2032M**NEGATIVE COIN CELL CONTACT for CR2032**

■ DXF/DWG/PDF drawings available on our website.

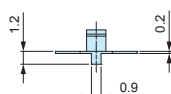
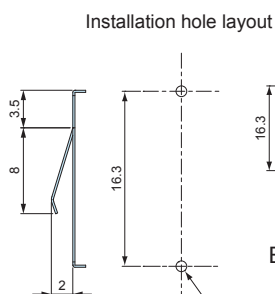
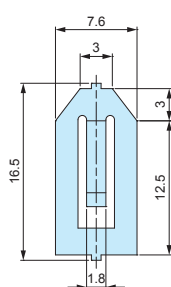
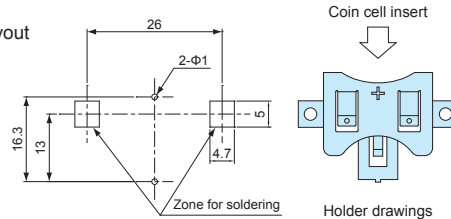
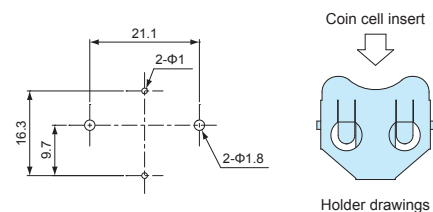


■ Material / Finish : Phosphor bronze / Nickel plated

■ Negative contact for CR2032 coin cell.

■ Suitable to be used with SMTM2032 or BK-888 holders.

■ Cut area will have base material exposed (unfinished).

**SMTM + BK-2032M PCB layout top view****BK-888 + BK-2032M PCB layout top view**

■ Recommended PCB thickness for installation is 1.0mm or thinner.

Product no. / Feature

Product no.	Matching coin cell	Contact type	Weight (g)	Pack of
BK-2032M	CR2032	Through hole x 2	0.2	10

CR2•CR123A-PC SERIES

LITHIUM BATTERY HOLDER

■ DXF/DWG/PDF drawings available on our website.



Technical Data

Operating temperature: -10°C ~ +60°C

Components

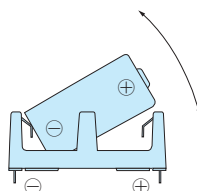
Holder material	Holder color	Contact material	Contact finish
ABS UL94V-0	Black	Phosphor bronze	Nickel plated

Product no. / Feature

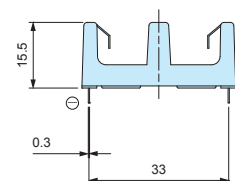
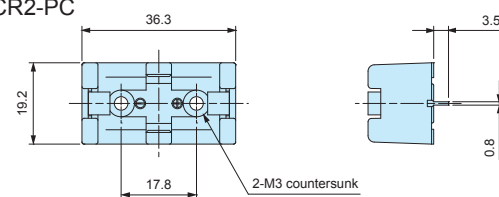
Product no.	Battery	Mounting	Weight (g)
CR2-PC	CR2×1	Through-hole mount pin x 2	4.3
CR123A-PC	CR123A×1	Through-hole mount pin x 2	5.0

Caution

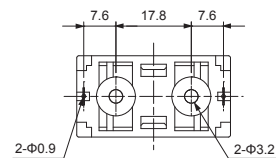
- Please remove the battery from the positive (+) side. Removing it from the negative (-) side may damage the battery or the battery contacts.



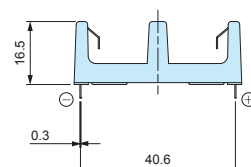
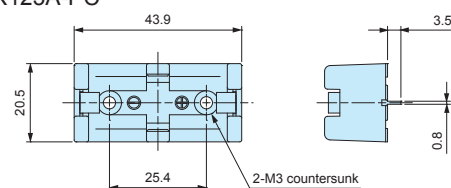
CR2-PC



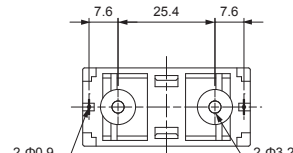
PCB mounting hole



CR123A-PC

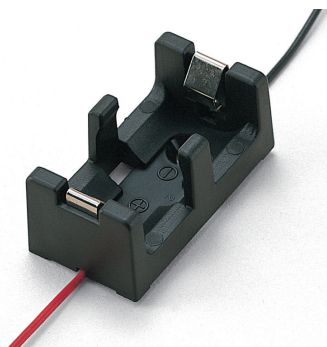


PCB mounting hole



CR2•CR123A-R SERIES

LITHIUM BATTERY HOLDER with LEAD WIRE



Technical Data

Operating temperature: -10°C ~ +60°C

Components

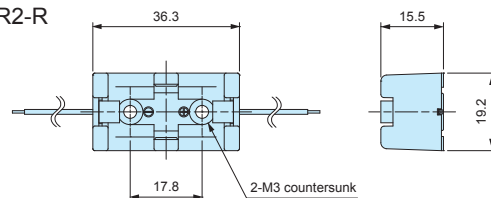
Holder material	Holder color	Contact material	Contact finish
ABS UL94V-0	Black	Phosphor bronze	Nickel plated

Product no. / Feature

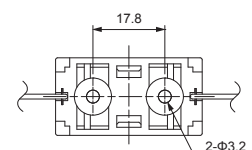
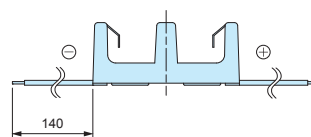
Product no.	Battery	Lead wire	Weight (g)
CR2-R	CR2×1	UL1007 AWG26 L=140	5.3
CR123A-R	CR123A×1	UL1007 AWG26 L=140	6.0

■ DXF/DWG/PDF drawings available on our website.

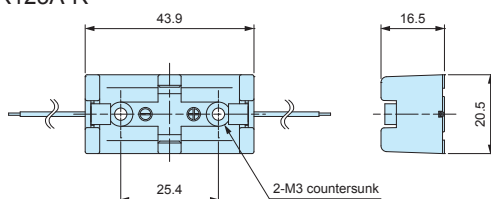
CR2-R



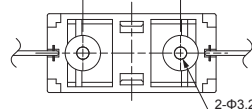
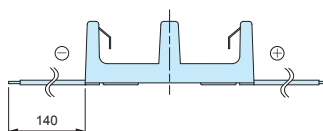
PCB mounting hole

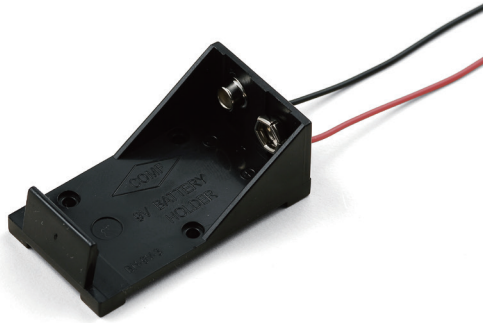


CR123A-R

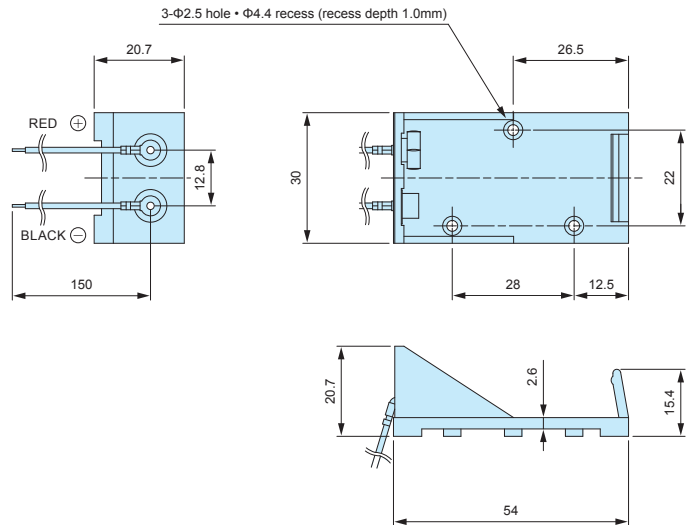


PCB mounting hole



BH-9V-3A**9V BATTERY HOLDER with LEAD WIRE**

■ DXF/DWG/PDF drawings available on our website.

**Technical Data**

Operating temperature: -10°C ~ +60°C

Components

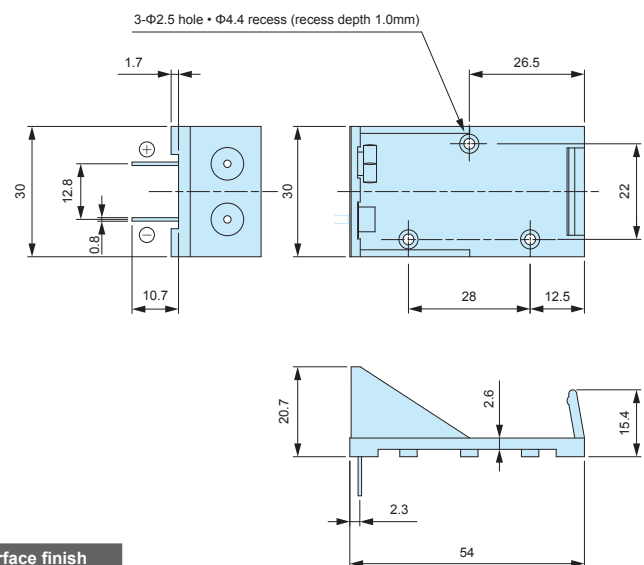
Holder material	Holder color	Lead wire	Contact material	Contact surface finish
ABS	Black	UL1007 AWG26 L=150	Brass	Nickel plated

Product no. / Feature

Product no.	Battery	Weight (g)
BH-9V-3A	9V x 1	8

BH-9V-3P**9V BATTERY HOLDER with THROUGH HOLE PIN**

■ DXF/DWG/PDF drawings available on our website.



■ Through hole pin for installation on PCB.

Technical Data

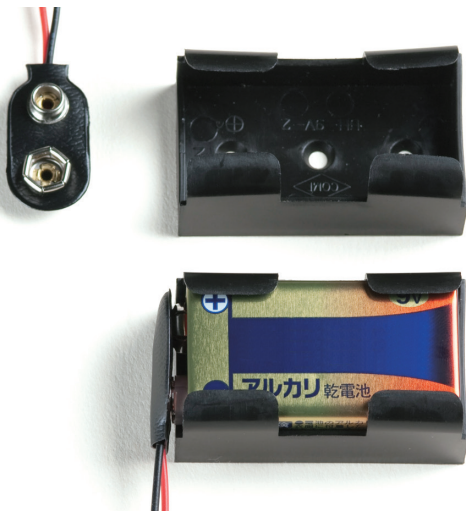
Operating temperature: -10°C ~ +60°C

Components

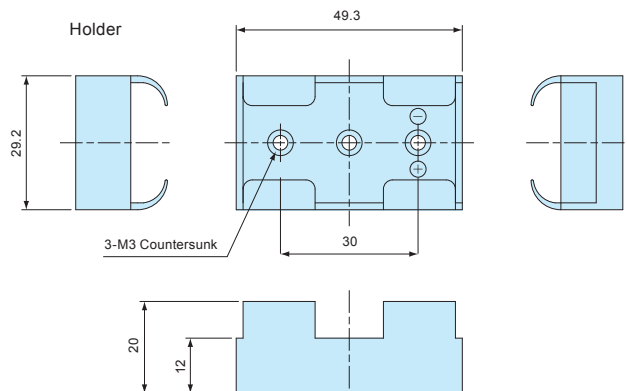
Holder material	Holder color	Contact material	Contact surface finish
ABS	Black	Brass	Nickel plated

Product no. / Feature

Product no.	Battery	Weight (g)
BH-9V-3P	9V x 1	7

BH-9V-2**9V BATTERY HOLDER**

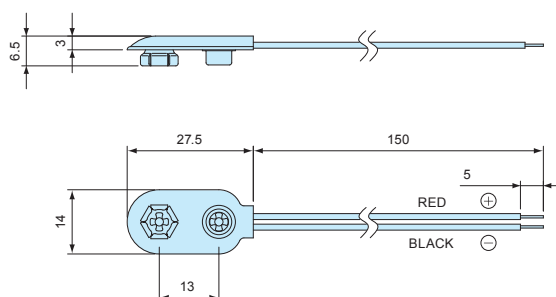
■ DXF/DWG/PDF drawings available on our website.



- 9V battery holder
- Battery snap comes with holder.

Technical Data

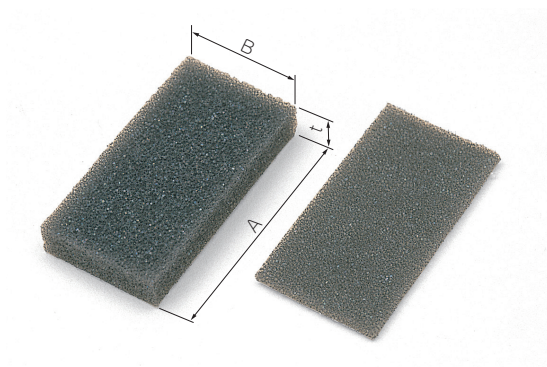
Operating temperature: -10°C ~ +60°C

Battery snap**Components**

Holder material	Holder color	Lead wire	Contact material	Battery snap cover	Contact surface finish
PP	Black	UL1007 AWG26 L=150	Brass	PVC	Nickel plated

Product no. / Feature

Product no.	Battery	Battery snap (included)	Weight (g)	Pack of
BH-9V-2	9V x 1	MP-1SN	6.8	1

SCM SERIES**BATTERY CUSHION SPONGE**

- Material : Moltoprene (UL94HF-1)

- Flame resistant moltoprene sponge with adhesive on the back side.
- Use to prevent battery from rattling inside the holder.

Suitable battery holder

Product no.	Suitable battery holder
SCM-1	MD-2, MD-4, MD-006P, LD-2, LD-3, LD-4, LDN-2, LDN-3, LDN-4
SCM-2	LD-006P, LDN-006P
SCM-3	MD-006P

Product no. / Dimensions

Product no.	A	B	t	Pack of
SCM-1	50	25	2	10
SCM-2	50	25	4	10
SCM-3	50	25	7.5	10

SN-S SERIES

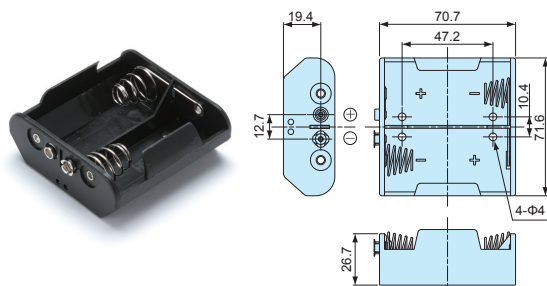
BATTERY HOLDER with SNAP TERMINAL

Technical Data

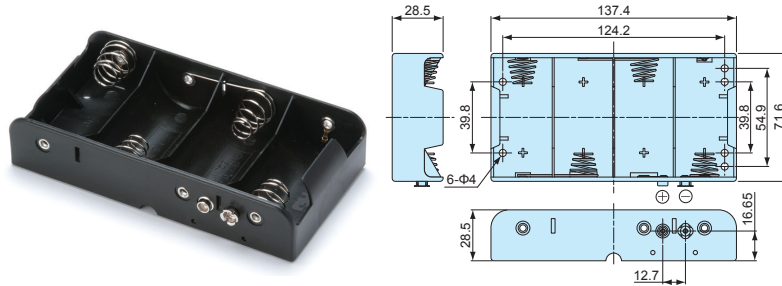
Operating temperature (PP Material) : -10°C ~ +60°C
 Operating temperature (PE Material) : -10°C ~ +50°C

■ DXF/DWG/PDF drawings available on our website.

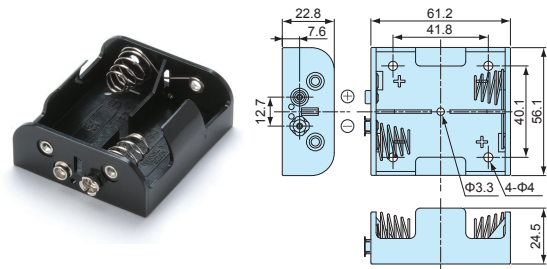
SN 1-2 S D x 2



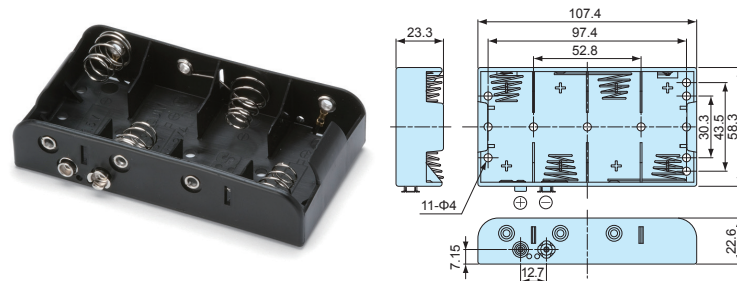
SN 1-4 S D x 4



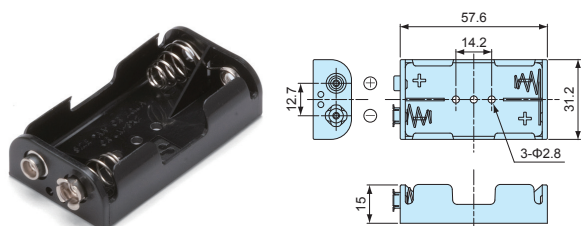
SN 2-2 S C x 2



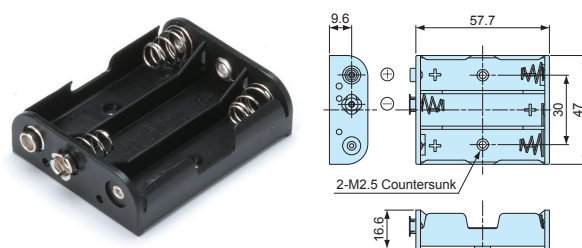
SN 2-4 S C x 4



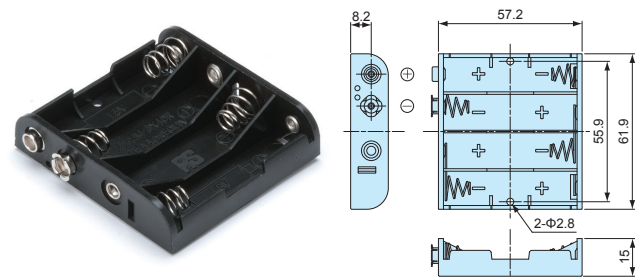
SN 3-2 S AA x 2



SN 3-3 S ※ AA x 3



SN 3-4 S ※ AA x 4



※ A steel wire may protrude out from the underside of SN3-3S and SN3-4S.
 Insulation processing is required for installation on conductive material.

■ Recommended to be used with MP battery snap
 (see page MP-1)



Components

Holder material	Holder color	Spring / Finish	Battery contact / Finish
PP or PE	Black	Steel / Nickel plated	Brass / Nickel plated

Product no. / Feature

Product no.	Matching battery	Holder material	Weight (g)	Pack of
SN 1-2 S	D x 2	PP	22.7	1
SN 1-4 S	D x 4	PP	43.6	1
SN 2-2 S	C x 2	PP	16.5	1
SN 2-4 S	C x 4	PP	26.0	1
SN 3-2 S	AA x 2	PE	7.2	1
SN 3-3 S	AA x 3	PP	9.6	1
SN 3-4 S	AA x 4	PP	11.8	1

SN•MP-PC SERIES

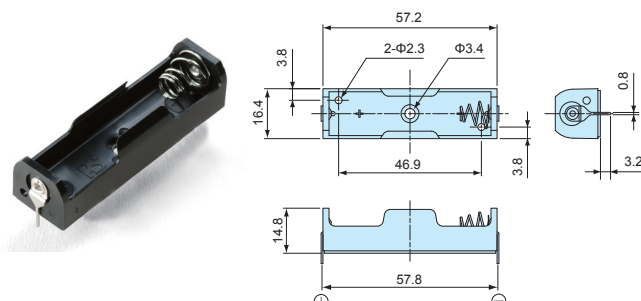
BATTERY HOLDER with THROUGH HOLE PIN

Technical Data

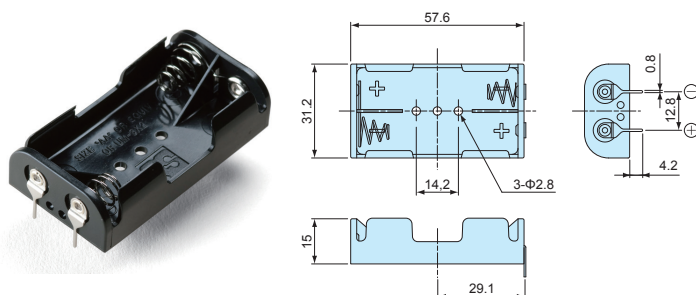
Operating temperature (PP Material) : -10°C ~ +60°C
 Operating temperature (PE Material) : -10°C ~ +50°C
 Operating temperature (ABS Material) : -10°C ~ +60°C

■ DXF/DWG/PDF drawings available on our website.

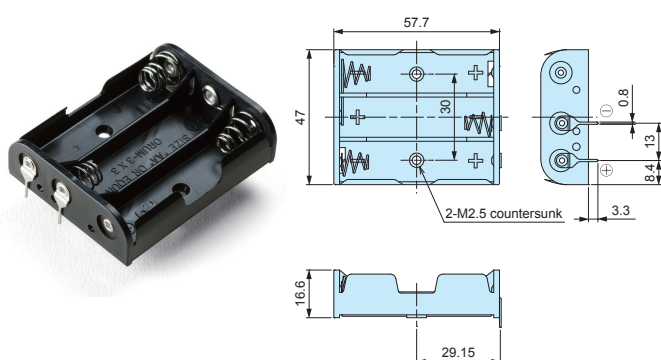
SN 3-1PC AA x 1



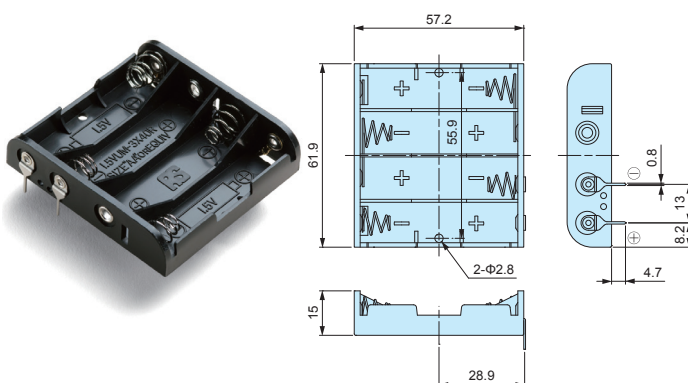
SN 3-2PC AA x 2



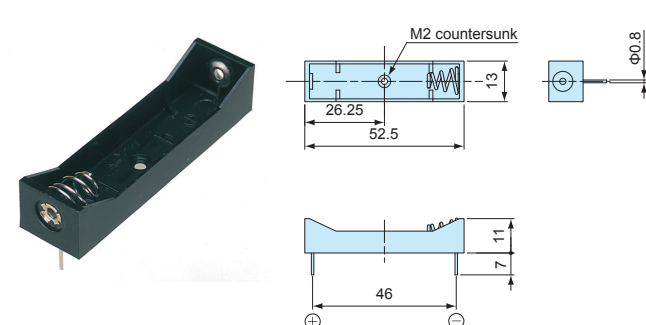
SN 3-3PC ※ AA x 3



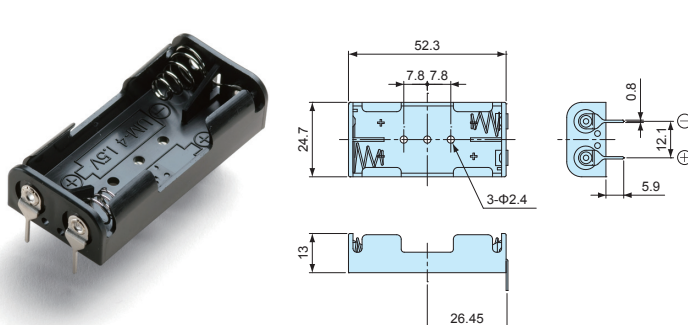
SN 3-4PC ※ AA x 4



MP-4-1PC AAA x 1



SN 4-2PC AAA x 2



※ A steel wire may protrude out from the underside of SN3-3PC and SN3-4PC.
 Insulation processing is required for installation on conductive material.

Components

Holder material	Holder color	Spring / Finish	Battery contact / Finish	Through-hole pin / Finish
PP, PE or ABS	Black	Steel / Nickel plated	Brass / Nickel plated	Steel / Nickel plated • Copper / Sn plated

Product no. / Feature

Product no.	Matching battery	Holder material	Weight (g)	Pack of
SN 3-1PC	AA x 1	PP	3.6	1
SN 3-2PC	AA x 2	PE	7.0	1
SN 3-3PC	AA x 3	PP	9.4	1
SN 3-4PC	AA x 4	PP	11.5	1
MP-4-1PC	AAA x 1	ABS	2.5	1
SN 4-2PC	AAA x 2	PP	4.5	1

■ 50 pcs bulk package is available. (Not for MP-4-1PC)

Product no.	Pack of
SN3-1PC-P	50
SN3-2PC-P	50
SN3-3PC-P	50
SN3-4PC-P	50
-	-
SN4-2PC-P	50

SN•MP•BH SERIES

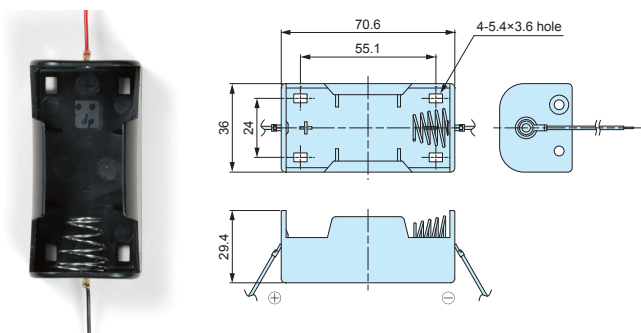
BATTERY HOLDER with LEAD WIRE

Technical Data

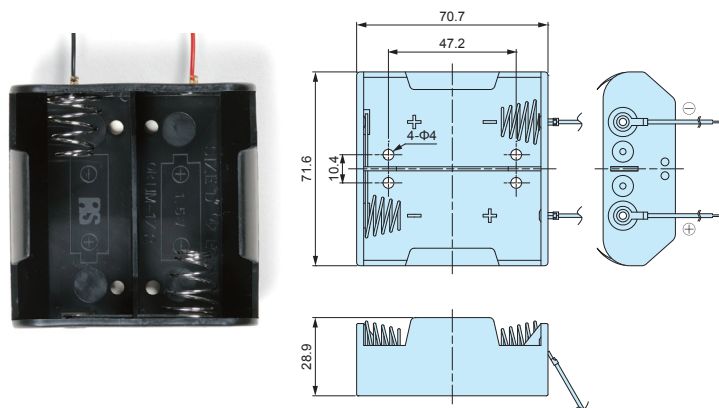
Operating temperature (PP Material) : -10°C ~ +60°C
 Operating temperature (PE Material) : -10°C ~ +50°C
 Operating temperature (ABS Material) : -10°C ~ +60°C

■ DXF/DWG/PDF drawings available on our website.

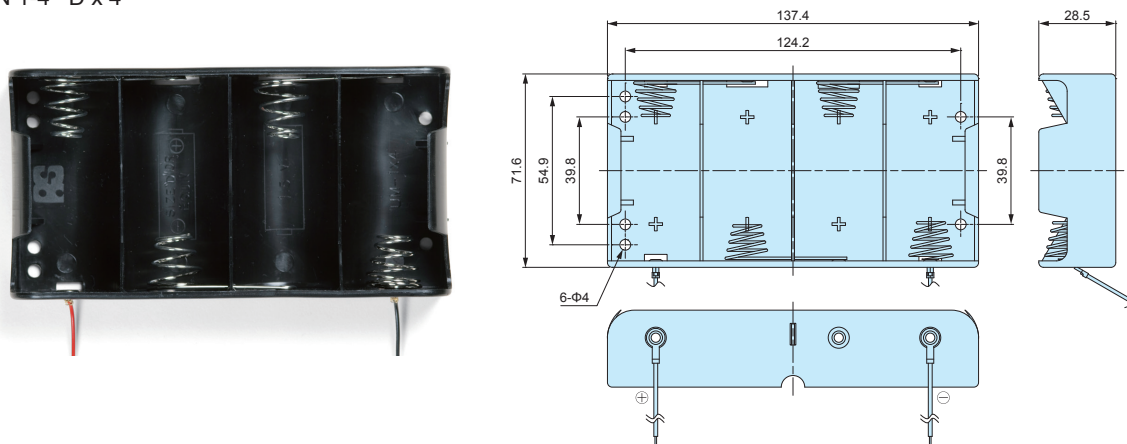
SN 1-1 D x 1



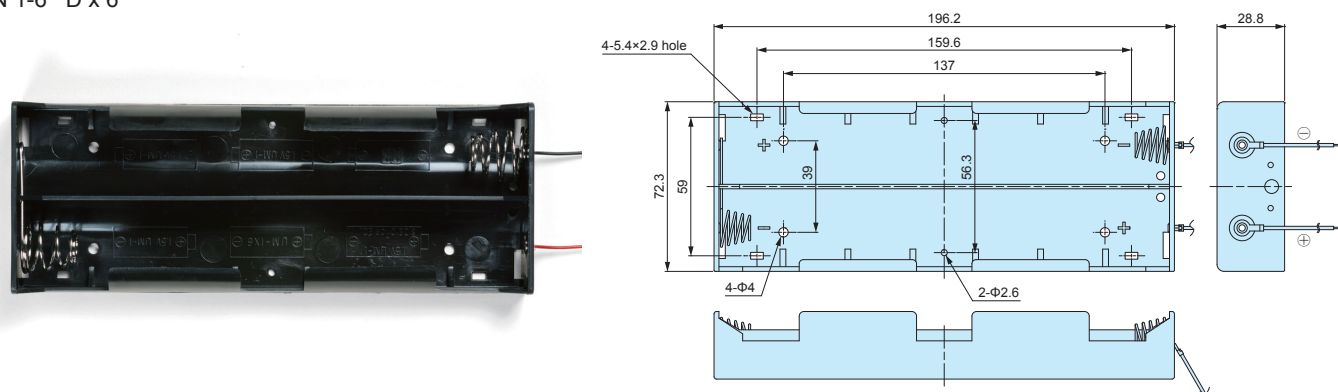
SN 1-2 D x 2



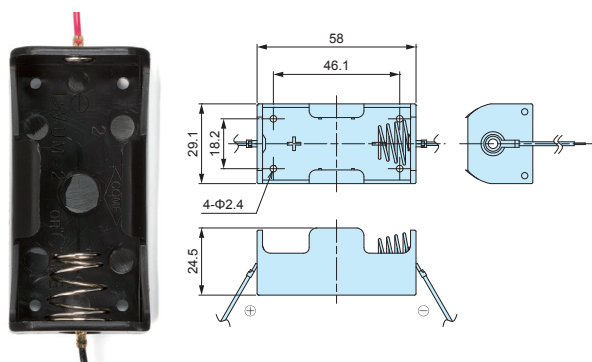
SN 1-4 D x 4



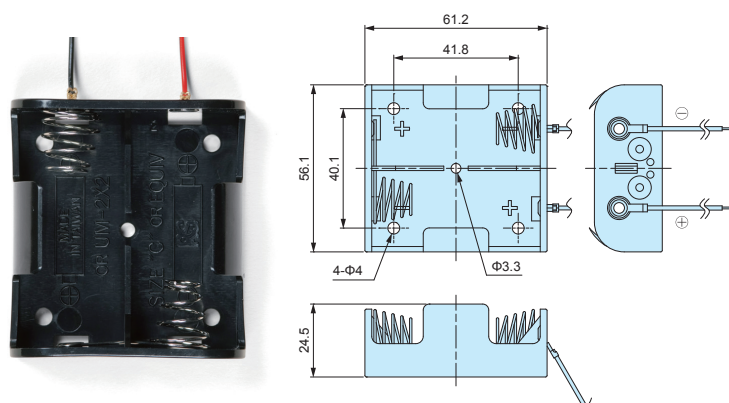
SN 1-6 D x 6



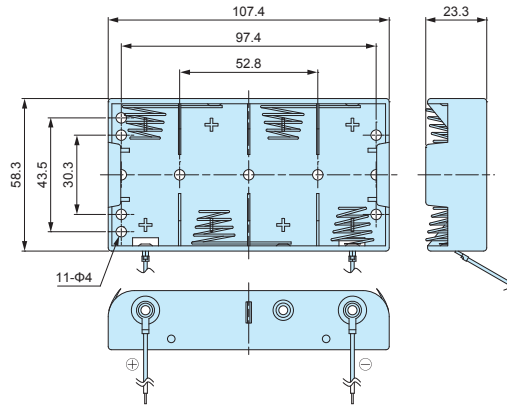
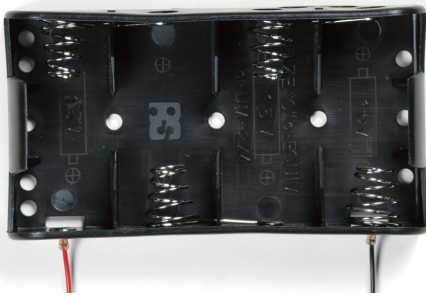
BH211-1 C x 1



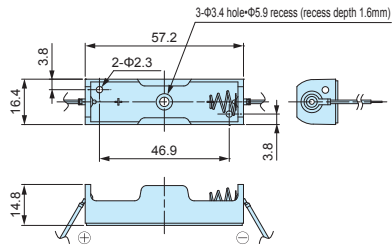
SN 2-2 C x 2



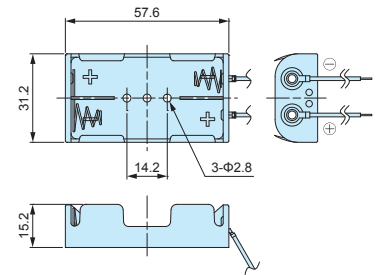
SN 2-4 C x 4



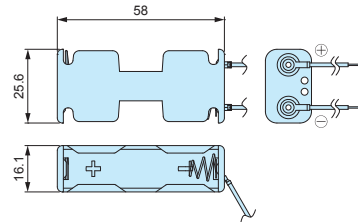
SN 3-1 AA x 1



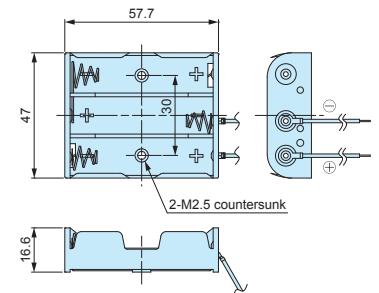
SN 3-2 AA x 2



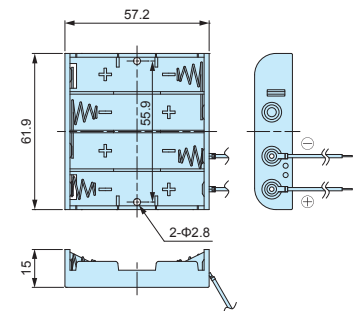
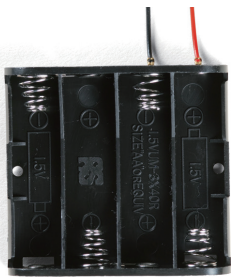
SN 3-2A AA x 2



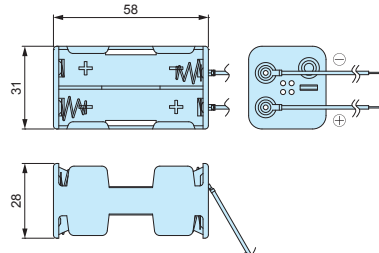
SN 3-3 ※ AA x 3



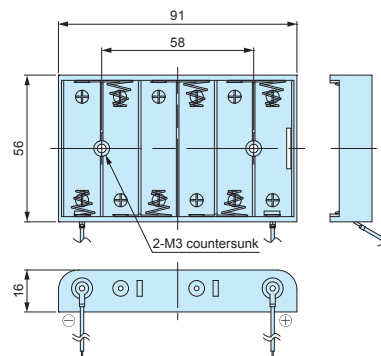
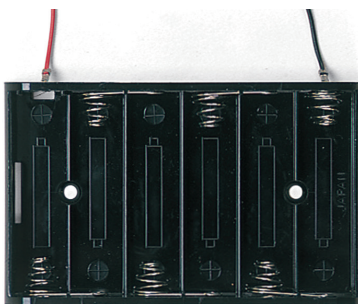
SN 3-4 ※ AA x 4



SN 3-4A ※ AA x 4

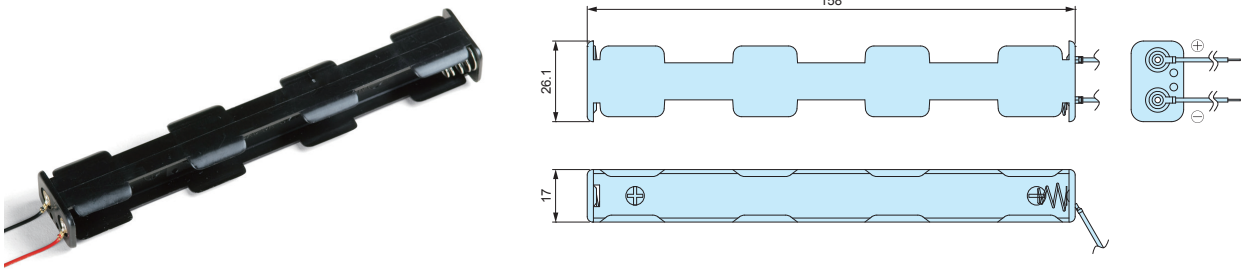


MP-3-6 AA x 6

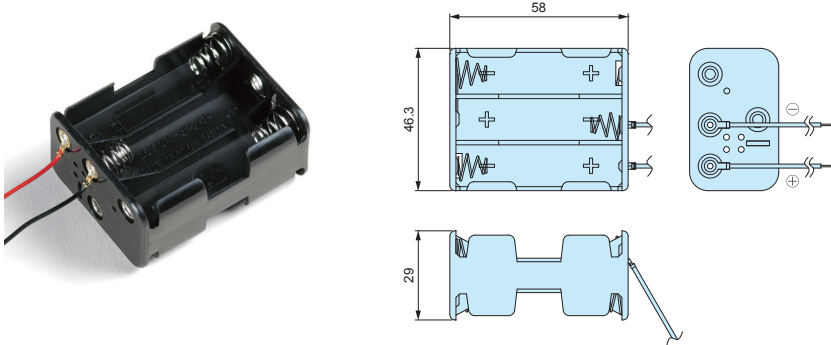


※ A steel wire may protrude out from the underside of SN3-3 and SN3-4. Insulation processing is required for installation on conductive material.

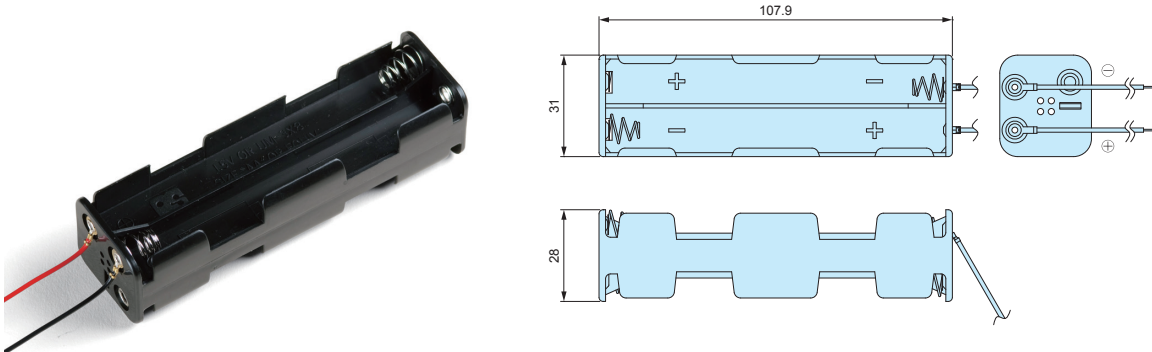
SN 3-6A AA x 6



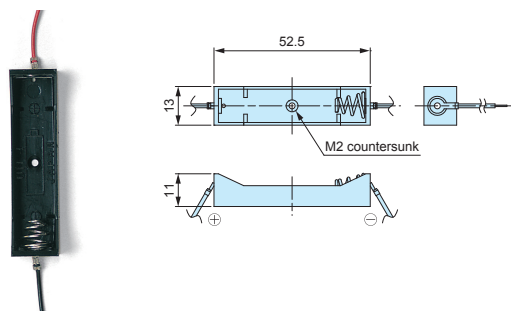
SN 3-6B AA x 6



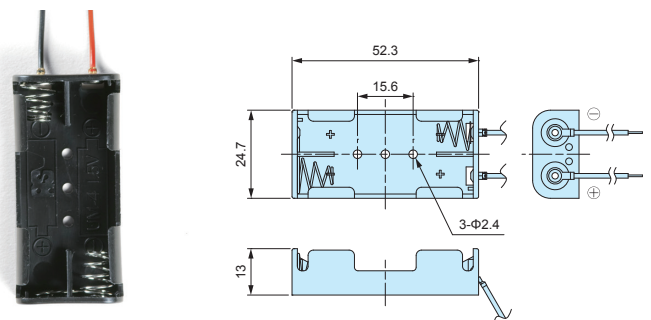
SN 3-8A AA x 8



MP-4-1 AAA x 1

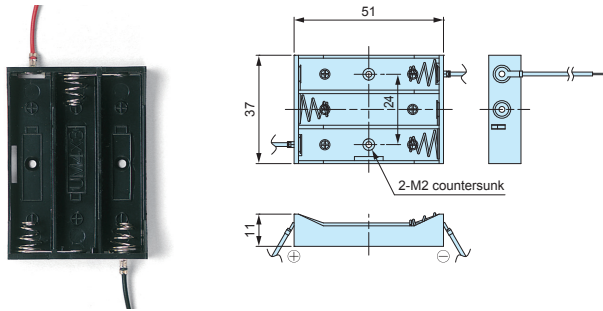


SN 4-2 AAA x 2

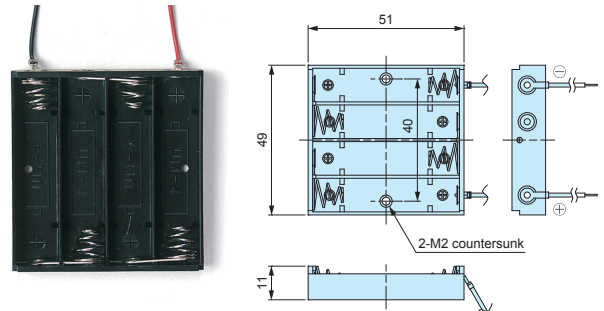


■ DXF/DWG/PDF drawings available on our website.

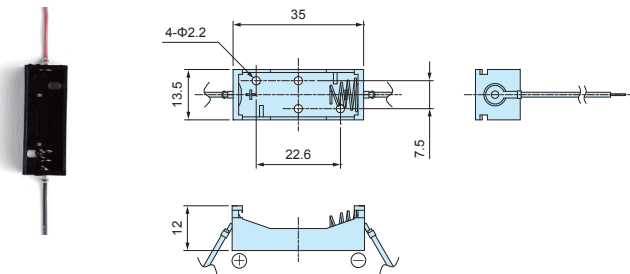
MP-4-3 AAA x 3



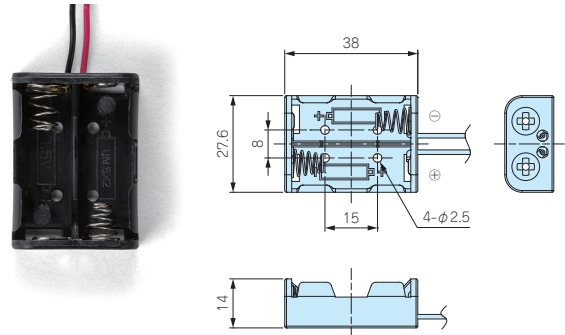
MP-4-4 AAA x 4



MP-5-1N N x 1



BH-521A N x 2



Components

Holder material	Holder color	Spring / Finish	Battery contact / Finish	Wire material
PP • PE • ABS	Black	Steel wire / Nickel plated	Brass / Nickel plated	AWG24 • AWG26 (UL1007)

Product no. / Feature

Product no.	Matching battery	Holder material	Lead wire	Weight (g)	Pack of	Product no.	Pack of
SN 1-1	D x 1	PP	AWG26 L=170	14.0	1	SN1-1-P	50
SN 1-2	D x 2	PP	AWG26 L=170	22.8	1	SN1-2-P	20
SN 1-4	D x 4	PP	AWG26 L=170	43.0	1	SN1-4-P	20
SN 1-6	D x 6	PP	AWG26 L=170	52.7	1	SN1-6-P	20
BH211-1	C x 1	PP	AWG24 L=150	9.3	1	BH211-1-P	50
SN 2-2	C x 2	PP	AWG26 L=170	16.5	1	SN2-2-P	50
SN 2-4	C x 4	PP	AWG26 L=170	26.0	1	SN2-4-P	50
SN 3-1	AA x 1	PP	AWG26 L=160	4.4	1	SN3-1-P	50
SN 3-2	AA x 2	PE	AWG26 L=160	7.8	1	SN3-2-P	50
SN 3-2A	AA x 2	PP	AWG26 L=160	6.2	1	SN3-2A-P	50
SN 3-3	AA x 3	PP	AWG26 L=160	10.2	1	SN3-3-P	50
SN 3-4	AA x 4	PP	AWG26 L=160	12.1	1	SN3-4-P	50
SN 3-4A	AA x 4	PP	AWG26 L=160	9.8	1	SN3-4A-P	50
MP-3-6	AA x 6	ABS	AWG26 L=150	21.4	1	—	—
SN 3-6A	AA x 6	PP	AWG26 L=160	12.9	1	SN3-6A-P	50
SN 3-6B	AA x 6	PP	AWG26 L=160	15.3	1	SN3-6B-P	50
SN 3-8A	AA x 8	PP	AWG26 L=160	14.8	1	SN3-8A-P	50
MP-4-1	AAA x 1	ABS	AWG26 L=150	3.3	1	—	—
SN 4-2	AAA x 2	PP	AWG26 L=160	5.1	1	SN4-2-P	50
MP-4-3	AAA x 3	ABS	AWG26 L=150	6.9	1	—	—
MP-4-4	AAA x 4	ABS	AWG26 L=150	8.0	1	—	—
MP-5-1N	N x 1	ABS	AWG26 L=150	2.6	1	—	—
BH-521A	N x 2	PP	AWG26 L=150	4.9	1	—	—

■ Bulk package (pack of 50pcs) is available. (Not for MP-3-6, MP-4-1, MP-4-3, MP-4-4, MP-5-1N, and BH521-A models)

Matching Chart (Battery Box : Battery Holder)

Box product no.	Holder product no.
MD-006P	MP-4-1 • SN4-2
LD-006P	MP-4-1 • SN4-2
LDN-006P	MP-4-1 • SN4-2

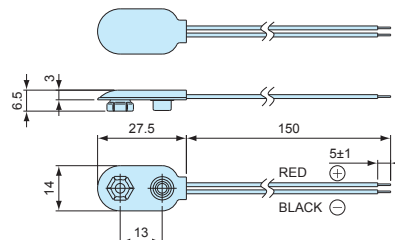
MP SERIES

BATTERY SNAP

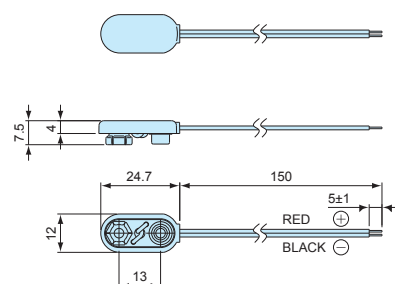
■ Battery snap with crimp terminal.

■ DXF/DWG/PDF drawings available on our website.

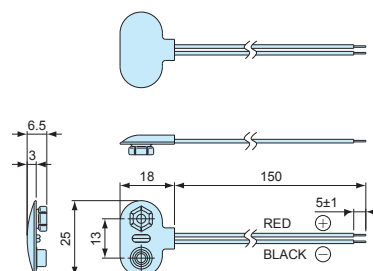
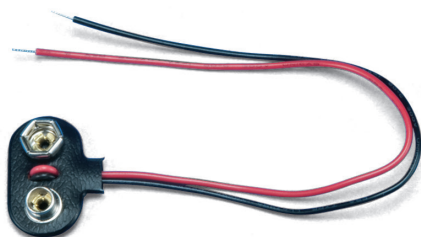
MP-1SN



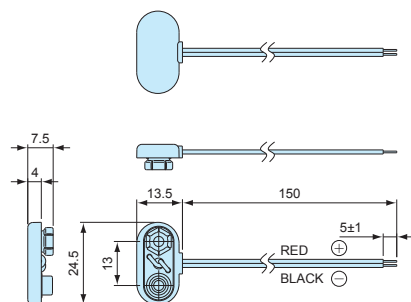
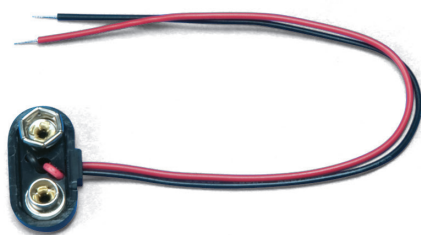
MP-1LN



MP-TSN



MP-TLN



Components

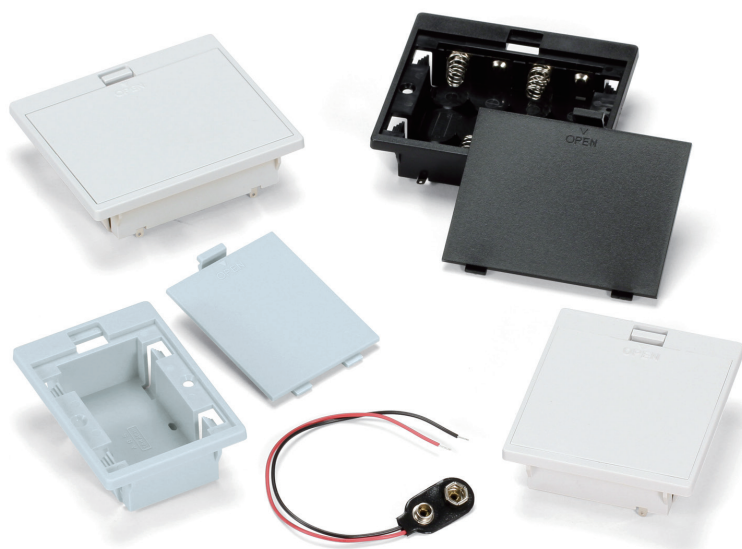
Wire material	Cover material	Battery contact / Finish
UL1007 AWG26 (L=150)	PVC • ABS	Brass / Nickel plated

Product no. / Feature

Product no.	Cover material	Matching battery	Weight g)	Pack of
MP-1SN	PVC	9V x 1	2.1	10
MP-1LN	ABS	9V x 1	2.5	10
MP-TSN	PVC	9V x 1	2.1	10
MP-TLN	ABS	9V x 1	2.5	10

LD SERIES

SNAP-IN BATTERY BOX



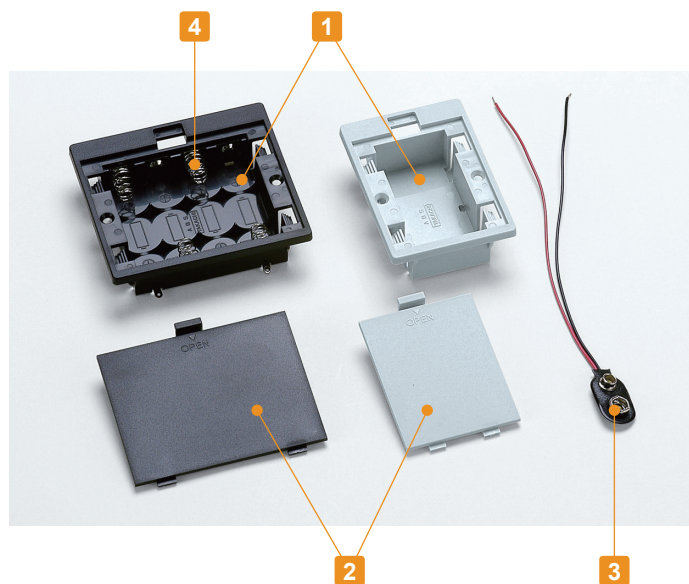
Installation Example



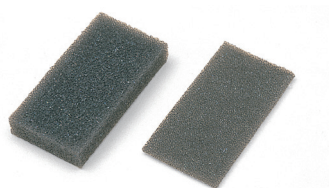
Technical Data

Operating temperature: -10°C ~ +60°C

- Snap-in battery box for enclosures.
 - Suitable to be installed into enclosures with a panel thickness of 1.0mm to 3.0mm.
 - Screw mounting is also possible with built-in M3 countersunk holes.
 - ⊕ ⊖ markings are available to avoid incorrect placement of the battery.
 - LD-006P box can be used with battery holder (see page SN • MP • BH211-1 ~ SN • MP • BH211-4).
 - Battery dimensions may vary depending on country and brand.
- Use optional battery cushion sponge to preventing rattling.



Accessories (Optional parts)

Battery cushion sponge SCM series
See page BH9V-2 • SCM-1

Components (LD-006P models)

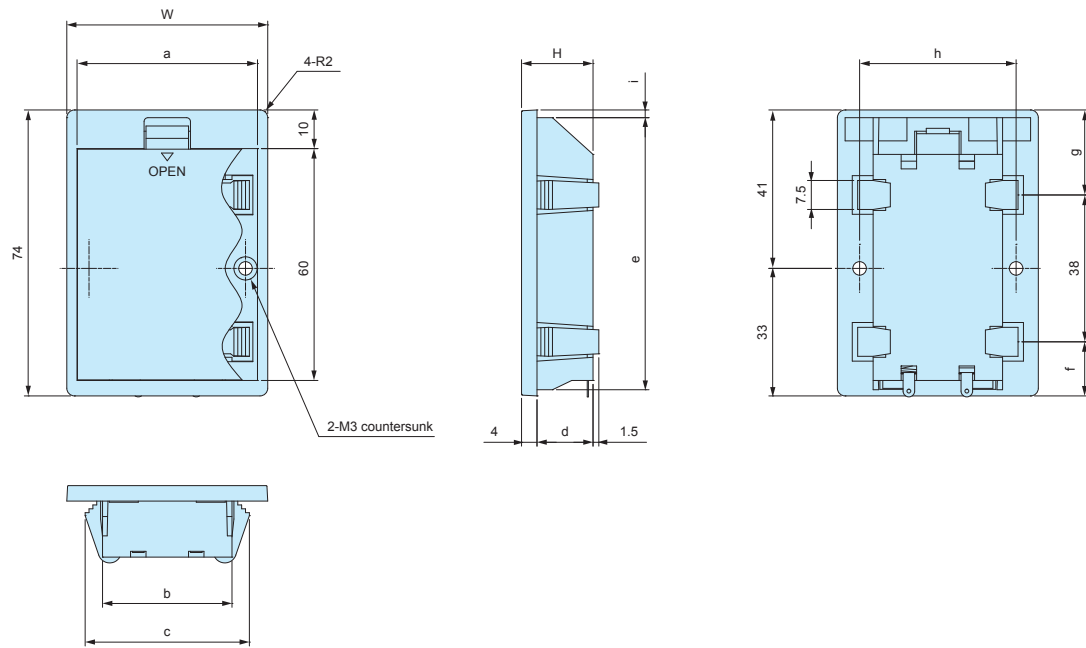
No.	Part name	Material	Color
1	Box	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
2	Cover	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
-	Battery snap (MP-ISN)	PVC + Copper wire (UL1007 AWG26)	Black • Red/Black

Components (LD-2 • LD-3 • LD-4 models)

No.	Part name	Material	Color
1	Box	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
2	Cover	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
3	Battery contact (IT-3 models)	Brass t = 0.3 • Steel wire Φ0.6	Nickel plated

LD dimensions

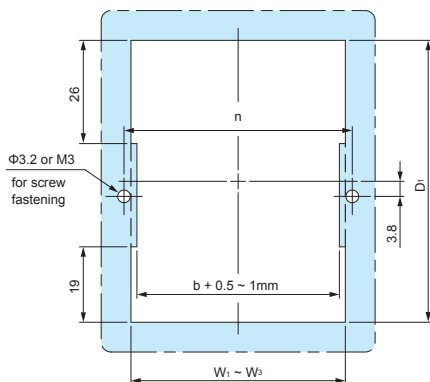
- DXF/DWG/PDF drawings available on our website.
- Battery contact position vary by models.
- See page MP-1 for the details of battery snap.



Product no.	W	H	a	b	c	d	e	f	g	h	i
LD-006P□	52	21.5	46.7	33.5	42.5	17.5	70.4	14	22	40.5	2
LD-2□	52	18.5	46.7	33.5	42.5	14.5	70.4	14	22	40.5	2
LD-3□	64.5	18.5	60.5	48	56.5	14.5	70.2	14.25	21.75	53	2.1
LD-4□	82	18.5	77	63.5	72.5	14.5	70.4	14	22	70.1	2

Mounting hole

※Snap-in mounting hole required would be $D_1 \times W_1 \sim W_3$.



Hole dimensions

Product no.	W1 (thickness $t = 1.0$)	W2 (thickness $t = 2.0$)	W3 (thickness $t = 3.0$)	D_1	n
LD-006P□ • LD-2□	36.5	38.5	40.5	70.6	40.5
LD-3□	51	52.5	54	70.4	53
LD-4□	66.5	68.5	70.5	70.6	70.1

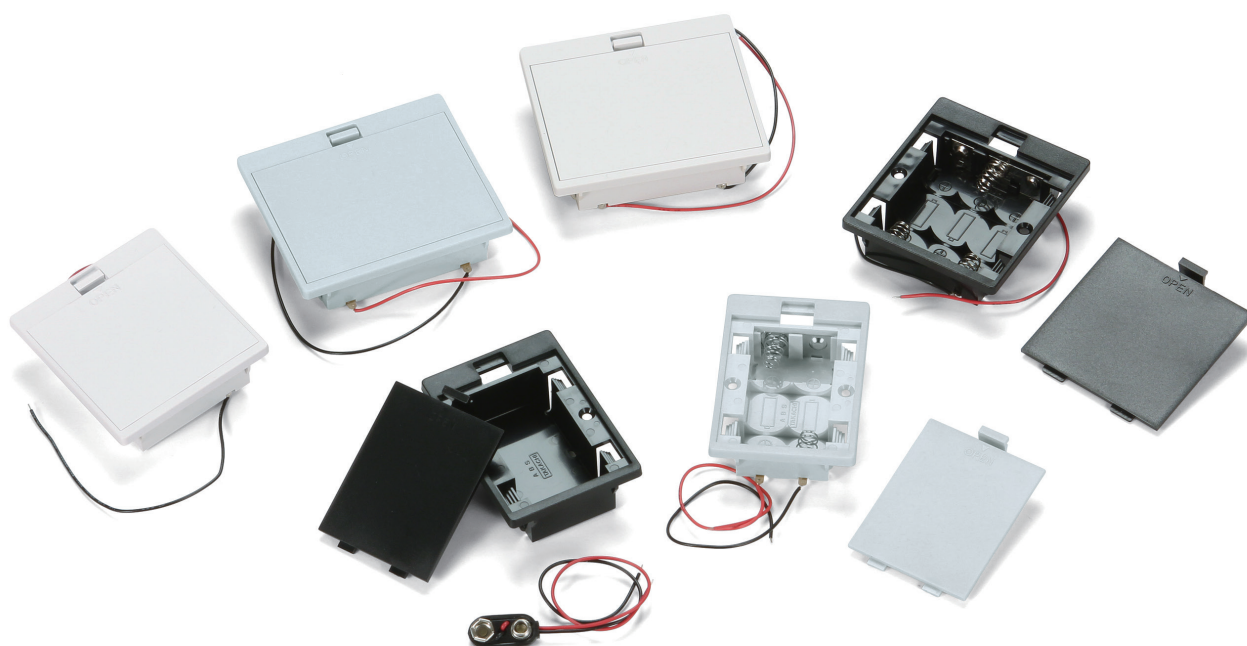
- $W_1 \sim W_3$ values differ depending on panel thickness; see above table to determine required dimension.
- For mounting on panel thickness not listed above, please confirm before proceeding.

Product no. / Feature

Product no.			Matching battery	Weight (g)	Suitable cushion sponge
ABS		PC+ABS			
● Black	● Light gray	● White			
LD-006PB	LD-006PG	LD-006PW	9V x 1	24	SCM-2
LD-2B	LD-2G	LD-2W	AA x 2	24	SCM-1
LD-3B	LD-3G	LD-3W	AA x 3	26	SCM-1
LD-4B	LD-4G	LD-4W	AA x 4	35	SCM-1

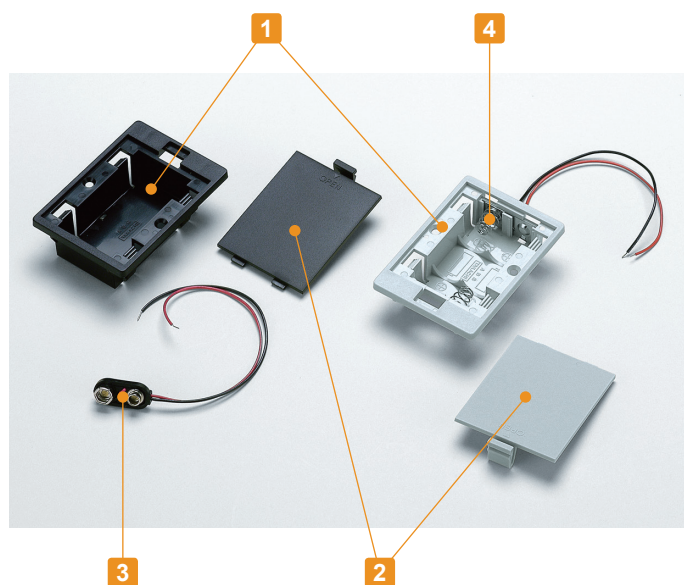
LDN SERIES

SNAP-IN BATTERY BOX with LEAD WIRE



Technical Data

Operating temperature: -10°C ~ +60°C



- Snap-in battery box for enclosures.
 - Suitable to be installed into enclosures with a panel thickness of 1.0mm to 3.0mm.
 - Screw mounting is also possible with built-in M3 countersunk holes.
 - Lead-free soldered lead wire (UL certified $\ell = 140\text{mm}$).
 - $\oplus$ $\ominus$ markings are available to avoid incorrect placement of the battery.
 - LDN-006P box can be used with battery holder (see page SN • MP • BH211-1 ~ SN • MP • BH211-4).
 - Battery dimensions may vary depending on country and brand.
- Use optional battery cushion sponge to preventing rattling.

Accessories (Optional parts)



Battery cushion sponge SCM series
See page BH9V-2 • SCM-1

Components (LD-006P models)

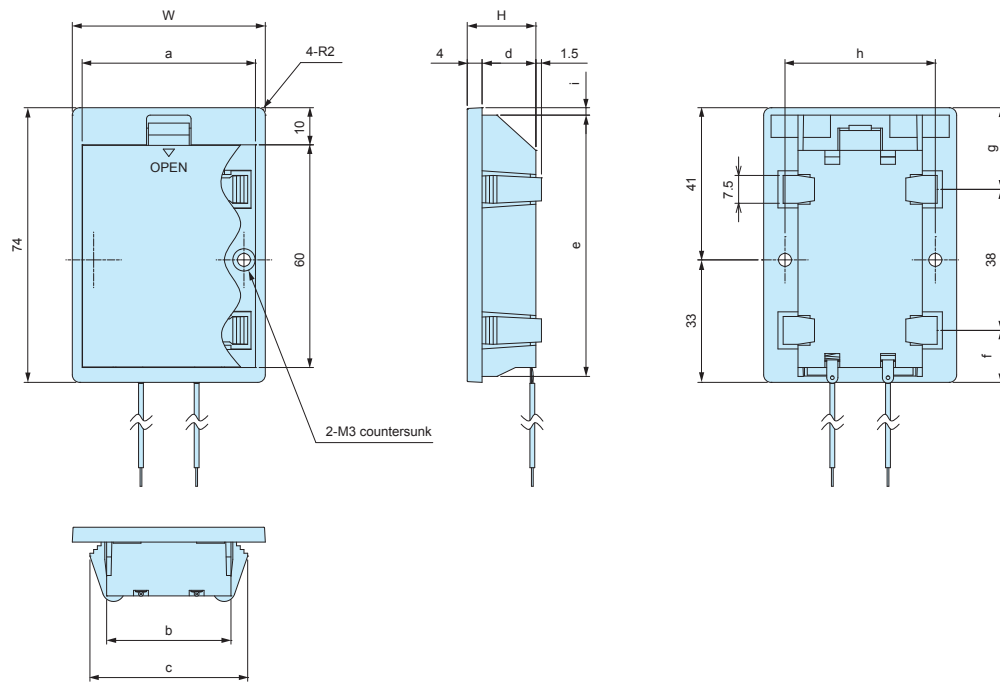
No.	Part name	Material	Color
1	Box	ABS UL94HB • PC+ABS (UL94V-0)	Black • Light gray • White
2	Cover	ABS UL94HB • PC+ABS (UL94V-0)	Black • Light gray • White
3	Battery snap (MP-ILN)	ABS UL94HB • PVC + Copper wire (UL1007 AWG26)	Black • Red/Black

Components (LD-2 • LD-3 • LD-4 models)

No.	Part name	Material	Color
1	Box	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
2	Cover	ABS (UL94HB) • PC+ABS (UL94V-0)	Black • Light gray • White
4	Battery contact (IT-3 models)	Brass $t = 0.3$ • Steel wire $\Phi 0.6$	Nickel plated
-	Lead wire	PVC + Copper wire $L = 140\text{mm}$ (UL1007 AWG26)	Red • Black

LDN dimensions

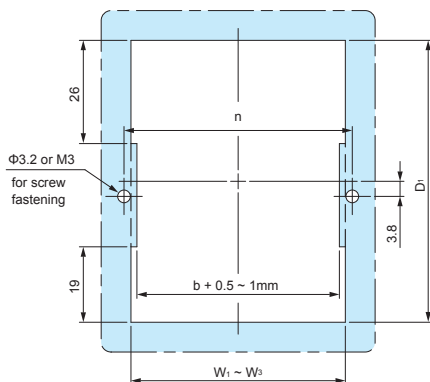
- DXF/DWG/PDF drawings available on our website.
- Lead wire • battery contact position vary by models.
- See page MP-1 for the details of battery snap.



Product no.	W	H	a	b	c	d	e	f	g	h	i
LDN-006P□	52	21.5	46.7	33.5	42.5	17.5	70.4	14	22	40.5	2
LDN-2□	52	18.5	46.7	33.5	42.5	14.5	70.4	14	22	40.5	2
LDN-3□	64.5	18.5	60.5	48	56.5	14.5	70.2	14.25	21.75	53	2.1
LDN-4□	82	18.5	77	63.5	72.5	14.5	70.4	14	22	70.1	2

Mounting hole

※Snap-in mounting hole required would be $D_1 \times W_1 \sim W_3$



Hole dimensions

Product no.	W1 (thickness t = 1.0)	W2 (thickness t = 2.0)	W3 (thickness t = 3.0)	D ₁	n
LDN-006P□ • LDN-2□	36.5	38.5	40.5	70.6	40.5
LDN-3□	51	52.5	54	70.4	53
LDN-4□	66.5	68.5	70.5	70.6	70.1

- W₁ ~ W₃ values differ depending on panel thickness; see above table to determine required dimension.
- For mounting on panel thickness not listed above, please confirm before proceeding.

Product no. / Feature

Product no.			Matching battery	Weight (g)	Suitable cushion sponge
ABS		PC+ABS			
● Black	● Light gray	● White			
LDN-006PB	LDN-006PG	LDN-006PW	9V x 1	24	SCM-2
LDN-2B	LDN-2G	LDN-2W	AA x 2	24	SCM-1
LDN-3B	LDN-3G	LDN-3W	AA x 3	26	SCM-1
LDN-4B	LDN-4G	LDN-4W	AA x 4	35	SCM-1

MD SERIES

EXTERNAL BATTERY BOX

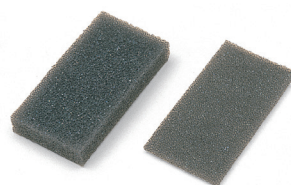


- External battery box.
 - Simple construction for easy opening and closing.
 - MD-006P box can be used with battery holder (see page SN • MP • BH211-1 ~ SN • MP • BH211-4).
 - ⊕ ⊖ markings are available to avoid incorrect placement of the battery.
 - Battery dimensions may vary depending on country and brand.
- Use optional battery cushion sponge to preventing rattling.

Technical Data

Operating temperature: -10°C ~ +60°C

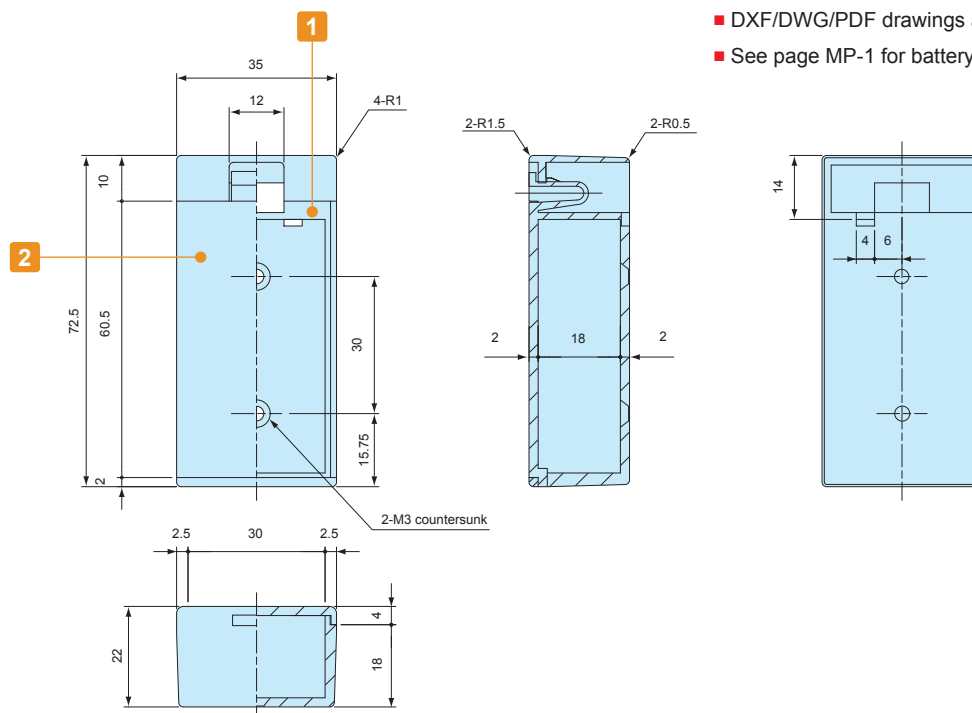
Accessories (Optional parts)



Battery cushion sponge SCM series
See page BH9V-2 • SCM-1

MD dimensions

MD-006P



- DXF/DWG/PDF drawings available on our website.
- See page MP-1 for battery snap information.

Components (MD-006P)

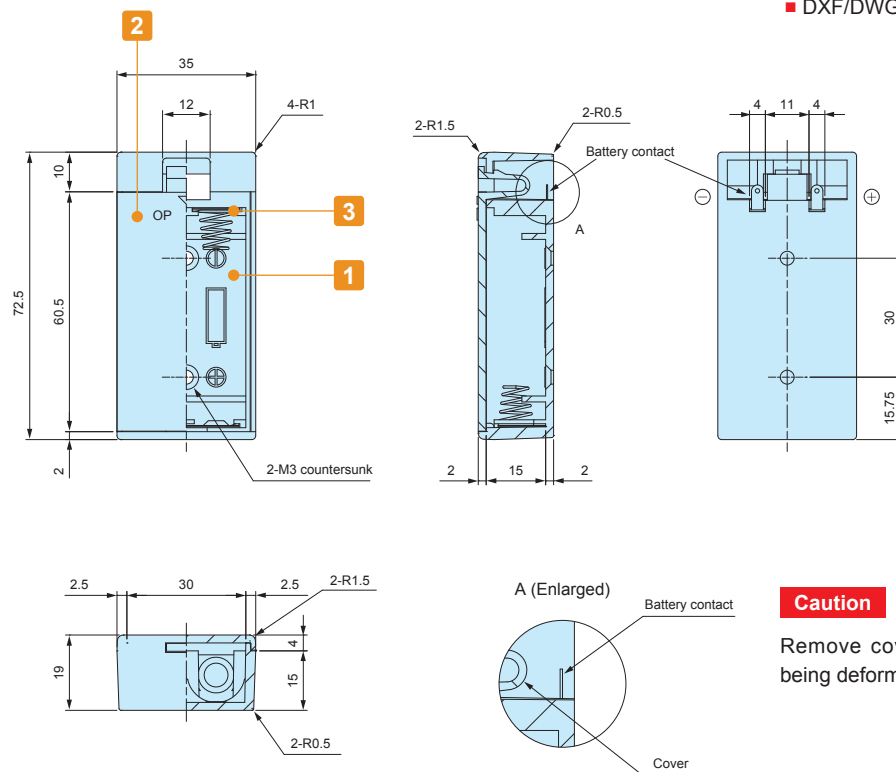
No.	Part name	Material	Color
1	Box	ABS UL94V-0	Black • Light gray
2	Cover	ABS UL94V-0	Black • Light gray
-	Battery snap (MP-ILN)	ABS UL94HB • PVC + Copper wire (UL1007 AWG26)	Black • Red/Black

Components (MD-2 • MD-4)

No.	Part name	Material	Color
1	Box	ABS UL94V-0	Black • Light gray
2	Cover	ABS UL94V-0	Black • Light gray
3	Battery contact (IT-3 models)	Brass t = 0.3 • Steel wire Φ0.6	Nickel plated

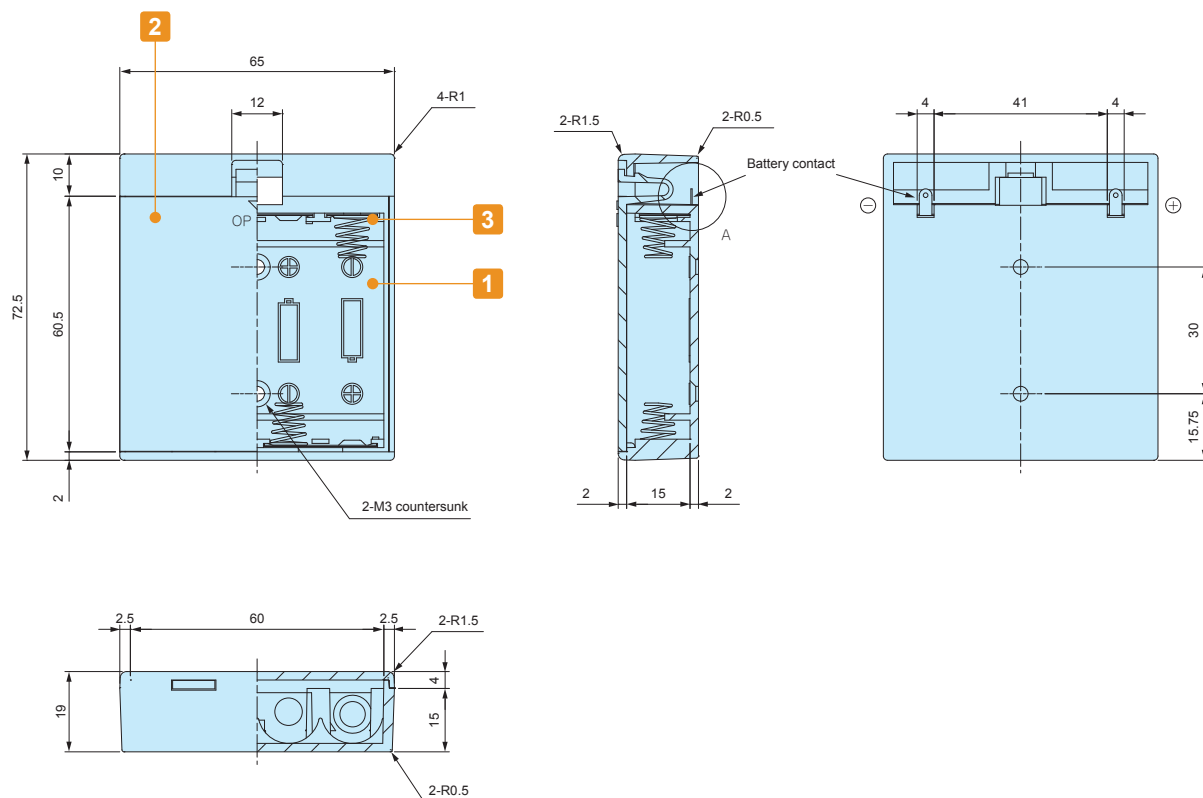
MD-2

■ DXF/DWG/PDF drawings available on our website.

**Caution**

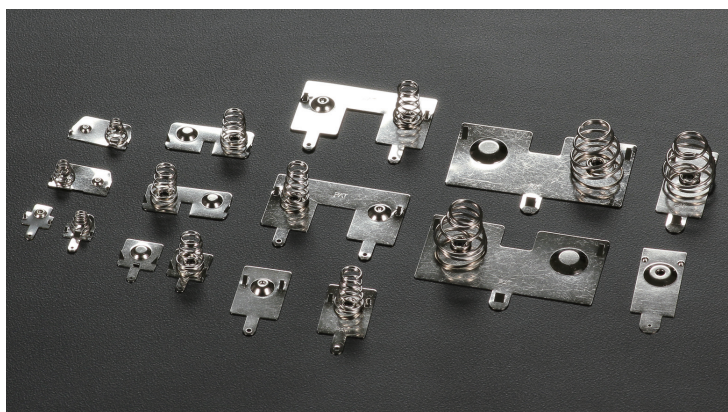
Remove cover when soldering to prevent it from being deformed by heat.

MD-4

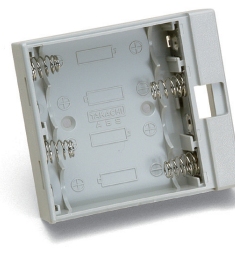


Product no. / Feature

Product no.		Matching battery	Weight (g)	Suitable cushion sponge
● Black	● Light gray			
MD-006PB	MD-006PG	9V x 1	24	SCM-1
MD-2B	MD-2G	AA x 2	22	SCM-1
MD-4B	MD-4G	AA x 4	38	SCM-1



Installation Example



Installation Example



Components

Plate material	Plate finish	Spring material	Spring finish
Brass	Nickel plated	Stainless steel SUS304	Unfinished
		Steel wire	Nickel plated

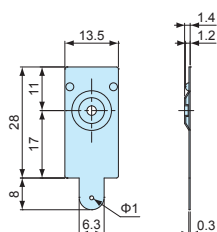
Product no. / Feature

Product no.	Spring diameter	Spring material	Matching battery / Details	Weight (g)	Pack of
IT-1SP	—	—	D : + (Positive)	1.2	10
IT-1SM	Φ1.0	Stainless steel SUS304	D : - (Negative)	2.5	10
IT-1WP	Φ1.0	Stainless steel SUS304	D : Left + (Positive) • Right - (Negative)	5.0	10
IT-1WM	Φ1.0	Stainless steel SUS304	D : Left - (Negative) • Right - (Positive)	5.0	10
IT-2SP	—	—	C : + (Positive)	0.9	10
IT-2SM	Φ0.7	Steel wire	C : - (Negative)	1.4	10
IT-2WP	Φ0.7	Steel wire	C : Left + (Positive) • Right - (Negative)	2.7	10
IT-2WM	Φ0.7	Steel wire	C : Left - (Negative) • Right - (Positive)	2.7	10
IT-3SP	—	—	AA : + (Positive)	0.4	10
IT-3SM	Φ0.6	Steel wire	AA : - (Negative)	0.7	10
IT-3WP	Φ0.6	Steel wire	AA : Left + (Positive) • Right - (Negative)	1.1	10
IT-3WM	Φ0.6	Steel wire	AA : Left - (Negative) • Right - (Positive)	1.1	10
IT-4SP	—	—	AAA : + (Positive)	0.2	10
IT-4SM	Φ0.5	Steel wire	AAA : - (Negative)	0.4	10
IT-4WP	Φ0.5	Steel wire	AAA : Left + (Positive) • Right - (Negative)	0.6	10
IT-4WM	Φ0.5	Steel wire	AAA : Left - (Negative) • Right - (Positive)	0.6	10

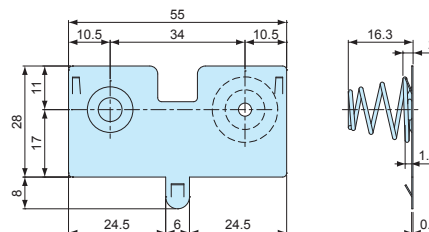
IT dimensions

■ DXF/DWG/PDF drawings available on our website.

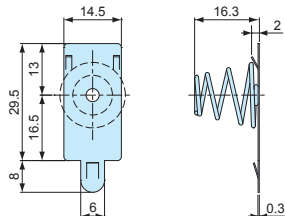
IT-1SP



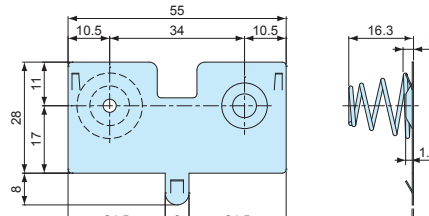
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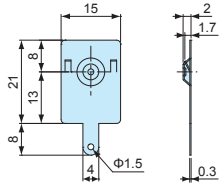
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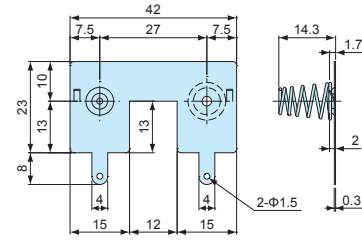
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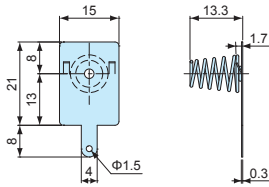
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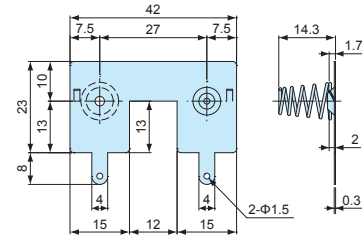
IT-2WP



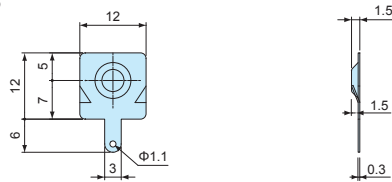
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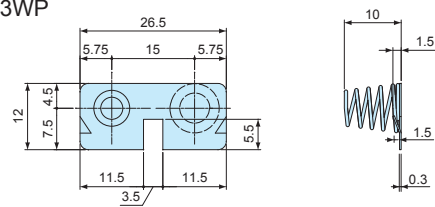
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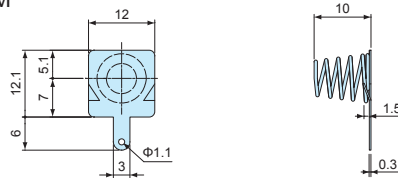
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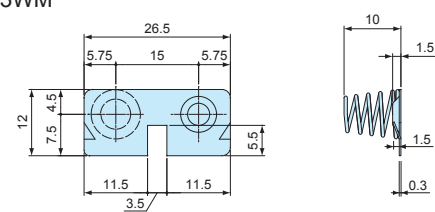
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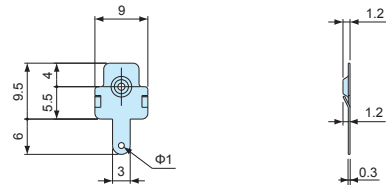
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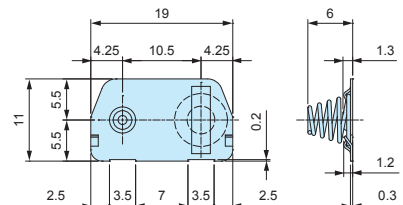
IT-3WM



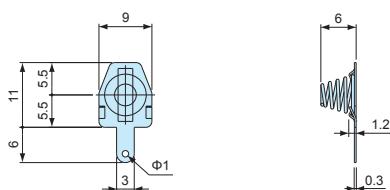
IT-4SP



IT-4WP



IT-4SM



IT-4WM

