



- Simple designed box with 10° angle of inclination for operational ease.
- Both the Slide or Screwed panel side can be utilized as a front panel.
- Rubber feet can be attached in any position based on your design requirements.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Side plate	2	ABS UL94V-0	Black • Gray
2	Front frame	1	Extruded aluminium A6063S-T5	Black • Silver / Anodized with clear coating
3	Rear frame	1	Extruded aluminium A6063S-T5	Black • Silver / Anodized with clear coating
4	Slide panel	1	Aluminium A1100P t=1.5	Black / Painted • Silver / Anodized
5	Screwed panel	1	Aluminium A1100P t=1.5	Black / Painted • Silver / Anodized
6	Screw	12	Steel	Black trivalent chromate • Nickel plated
7	Rubber feet	4	Rubber	Black

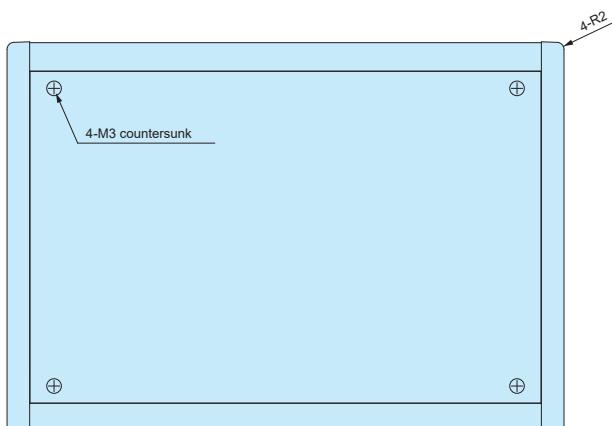
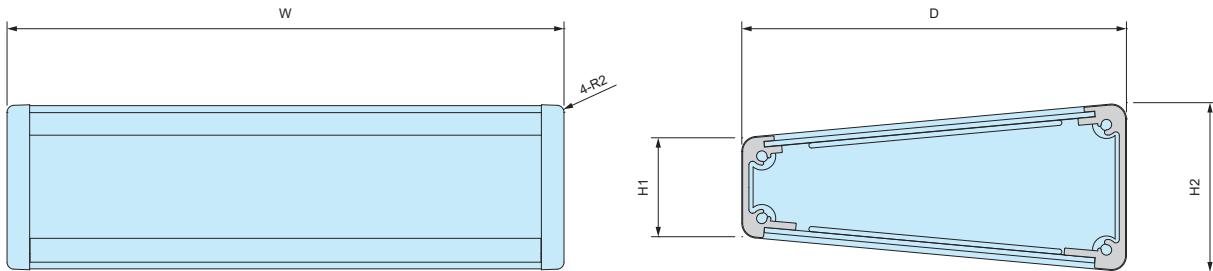
■ Please peel off the protection sheet cover on both panels before application.

■ Low-cost digital printed overlay customization is available with a short lead time.
Refer to page Custom 11 ~ 12 for more details.



CF dimensions

■ Drawings below are reference examples only.
DXF/DWG/PDF/STP drawings available on our website.



Included screws

CF□- 11 models

M3-5 slotted raised countersunk - Black trivalent chromate x 4 pcs

M3-5 slotted raised countersunk - Nickel plated x 4 pcs

M3-10 countersunk - Black trivalent chromate x 8 pcs

CF□- 18, CF□- 23, and CF□- 28 models

M3-5 slotted raised countersunk - Black trivalent chromate x 4 pcs

M3-5 slotted raised countersunk - Nickel plated x 4 pcs

M4-12 countersunk - Black trivalent chromate x 8 pcs

Product no. / Details

Product no.		W	H1	H2	D	Weight (kg)
● Black	● Gray/Silver					
CF 7-11BB	CF 7-11GS	70	28.4	48.6	110.5	0.15
CF11-11BB	CF11-11GS	110	28.4	48.6	110.5	0.21
CF16-11BB	CF16-11GS	160	28.4	48.6	110.5	0.29
CF22-11BB	CF22-11GS	220	28.4	48.6	110.5	0.38
CF28-11BB	CF28-11GS	280	28.4	48.6	110.5	0.47
CF12-18BB	CF12-18GS	120	32.4	66.7	180.5	0.38
CF18-18BB	CF18-18GS	180	32.4	66.7	180.5	0.53
CF27-18BB	CF27-18GS	270	32.4	66.7	180.5	0.76
CF35-18BB	CF35-18GS	350	32.4	66.7	180.5	0.97
CF43-18BB	CF43-18GS	430	32.4	66.7	180.5	1.17
CF15-23BB	CF15-23GS	150	39.8	80	230	0.52
CF21-23BB	CF21-23GS	210	39.8	80	230	0.7
CF27-23BB	CF27-23GS	270	39.8	80	230	0.88
CF36-23BB	CF36-23GS	360	39.8	80	230	1.14
CF45-23BB	CF45-23GS	450	39.8	80	230	1.41
CF21-28BB	CF21-28GS	210	50	99	280	0.93
CF28-28BB	CF28-28GS	280	50	99	280	1.17
CF36-28BB	CF36-28GS	360	50	99	280	1.46
CF45-28BB	CF45-28GS	450	50	99	280	1.77

*H1, H2 dimensions are intersection-to-intersection on the drawing.
Refer to the CAD file or actual product for detailed dimensions.

BC series

EMBEDDED BATTERY BOX



Technical Data

Operating temperature: -10°C ~ +60°C

Mount Example



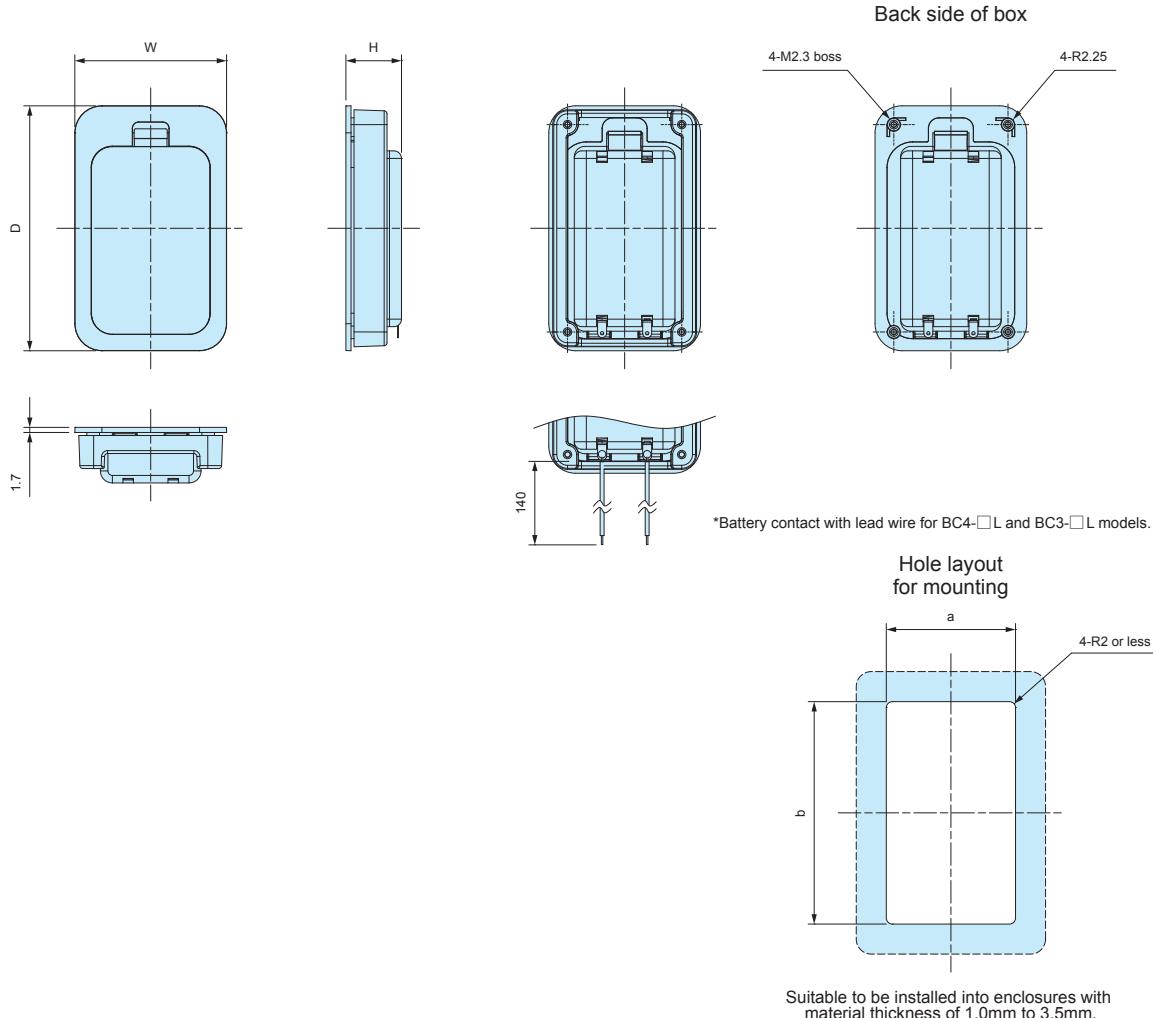
- Suitable to be installed into enclosures with material thickness of 1.0mm to 3.5mm.
- Cover can be opened/closed without any tool for easy battery replacement.
- 5 different battery layouts are available as AA x 2, AA x 3, AA x 4, AAA x 2 and AAA x 4. Each layout comes in 2 models: with lead-wire, and without lead-wire.
- $\oplus\ominus$ markings prevents incorrect placement of battery.
- The dimensions of alkaline or manganese batteries may vary depending on country and brand. Use optional battery cushion sponge to prevent rattling.

Components

No.	Part name	Pcs	Material	Color / Finish
1	Box	1	ABS UL94V-0	Black • Off-white
2	Cover	1	ABS UL94V-0	Black • Off-white
3	Frame	1	ABS UL94V-0	Black • Off-white
4	Battery contact Lead wire (BC-L models)	1 set	Battery contact : Brass & steel wire Lead wire : PVC + Copper wire (UL1007 AWG26)	Nickel plated Black • Red
5	Self-tapping screw	4	Steel	Nickel plated

BC dimensions

- DXF/DWG/PDF/STP drawings available on our website.
- The shape and position of battery contacts vary by model.



Type: Without Lead Wire

Product no. / Details

Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2-B	BC4-2-W	40	14.8	78.5	32.5	71	*AAA x 2	24.5
BC4-4-B	BC4-4-W	62	14.8	78.5	54.5	71	*AAA x 4	34.5
BC3-2-B	BC3-2-W	50.5	18.5	81.5	43	74	*AA x 2	31.5
BC3-3-B	BC3-3-W	65.5	18.5	81.5	58	74	*AA x 3	39
BC3-4-B	BC3-4-W	80.5	18.5	81.5	73	74	*AA x 4	46

*Alkaline or manganese batteries

Type: With Lead Wire

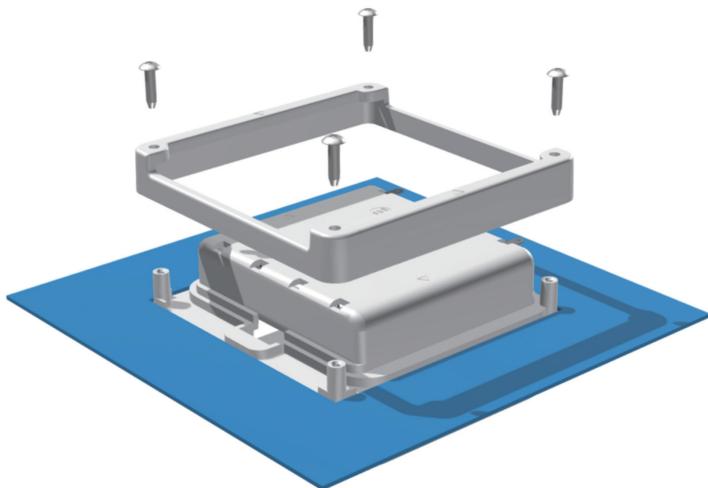
Product no. / Details

Product no.		Dimensions					Battery layout	Weight (g)
● Black	● Off-white	W	H	D	a	b		
BC4-2L-B	BC4-2L-W	40	14.8	78.5	32.5	71	*AAA x 2	25.5
BC4-4L-B	BC4-4L-W	62	14.8	78.5	54.5	71	*AAA x 4	35.5
BC3-2L-B	BC3-2L-W	50.5	18.5	81.5	43	74	*AA x 2	32.5
BC3-3L-B	BC3-3L-W	65.5	18.5	81.5	58	74	*AA x 3	40
BC3-4L-B	BC3-4L-W	80.5	18.5	81.5	73	74	*AA x 4	47

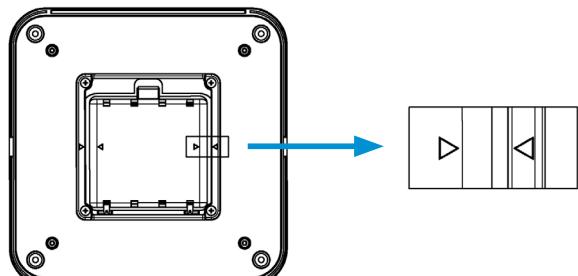
*Alkaline or manganese batteries

How to mount on the enclosures

- Insert battery box into the milled hole first, and fit the frame on the back side. Once mounted, secure the frame with screws.



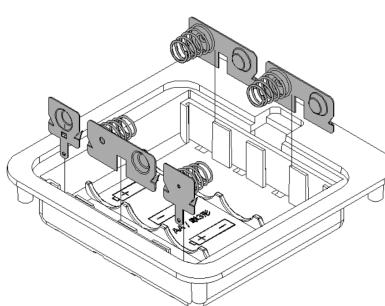
- For BC3-4□ models, ▷ markings are shown on the frame. Install by matching the markings.



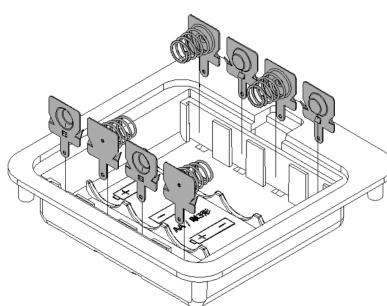
Parallel circuit conversion on BC series battery box

- BC-3□ models can be converted from a series to a parallel circuit. See below illustration for further details.
- IT series (IT-3 models) optional battery contacts can be used for parallel circuit conversion. (See website for more information)
- Use caution when installing or replacing the terminals to avoid the damage to the material.
- Parallel series conversion is available via our customization services.

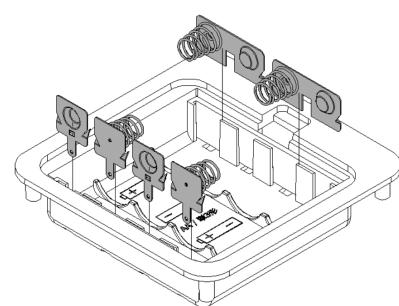
Conversion Example



Series Circuit (Standard)



Parallel Circuit (4 batteries)



Parallel Circuit (2 batteries x 2)

Customization Available



For more information, contact us here:

Online form: https://www.takachi-enclosure.com/contact/form_contact
E-mail : sales@takachi-el.co.jp

AST series

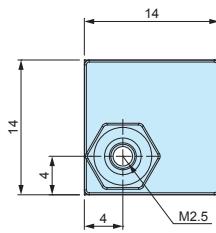
INSERT NUT ADHESIVE STANOFF



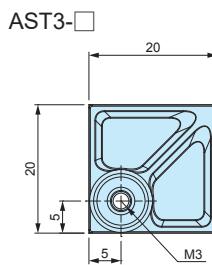
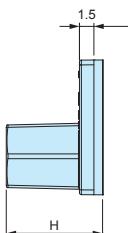
- Double-sided adhesive tape allows the standoff to be mounted quickly and easily; allows PCB mounting in non-boss enclosures.
- Convenient for installing PCBs into enclosures without the need for customization.
- Please ensure that surface is cleaned and grease-free before adhering.
- Once removed, it cannot be adhered on again.

AST dimensions

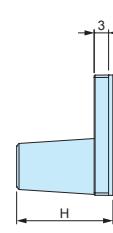
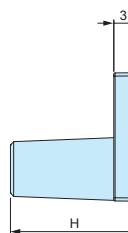
AST2.5-□



AST3-□



AST4-□



Product no. / Details

Product no	H dimension	Included screw	Recommended PCB thickness (mm)	Recommended torque (N · m)	Weight (g)	Pack of	Product no	Pack of
AST2.5-5B	5	M2.5-5 pan head	1.0 ~ 2.0	0.3	0.6 (1 piece)	4	AST2.5-5B-P	100
AST2.5-10B	10	M2.5-5 pan head	1.0 ~ 2.0	0.3	0.8 (1 piece)	4	AST2.5-10B-P	100
AST3-6B	6	M3-6 pan head	1.0 ~ 3.0	0.4	1.5 (1 piece)	4	AST3-6B-P	100
AST3-10B	10	M3-6 pan head	1.0 ~ 3.0	0.4	1.6 (1 piece)	4	AST3-10B-P	100
AST3-15B	15	M3-6 pan head	1.0 ~ 3.0	0.4	1.8 (1 piece)	4	AST3-15B-P	100
AST3-20B	20	M3-6 pan head	1.0 ~ 3.0	0.4	2.1 (1 piece)	4	AST3-20B-P	100
AST4-10.5B	10.5	M4-8 pan head	1.0 ~ 3.5	0.8	2.6 (1 piece)	4	AST4-10.5B-P	50
AST4-20B	20	M4-8 pan head	1.0 ~ 3.5	0.8	3.2 (1 piece)	4	AST4-20B-P	50

■ Base material / color : Nylon 66 (UL94V-2) / Black

■ Nut • screw material / finish : Steel / Trivalent chromate

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

AST package

Bulk package

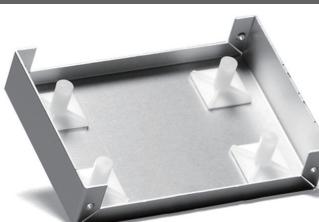
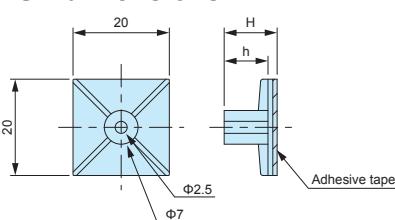
■ Bulk packaging is available. See "Bulk package" column above.

■ Screws are not included for bulk packages.

ASR series

ADHESIVE PCB STANOFF

ASR dimensions



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

Technical Data

Recommended torque : 0.4N · m

■ M3 tapping screw use adhesive standoff.

Recommended to be used with EM-3 or EM-3-6 self-tapping screws (See page 398).

■ Please ensure that surface is cleaned and grease-free before adhering.

■ Once removed, it cannot be adhered on again.

Product no. / Details

■ Material / Color: Nylon 66 (UL94V-2) / Natural

Product no	H	h	Weight (g)	Pack of
ASR- 5	5.1	3.1	0.9 (1 piece)	10
ASR- 6	6.4	4.4	1.0 (1 piece)	10
ASR- 7	7.2	5.1	0.9 (1 piece)	10
ASR- 8	8.1	6.3	0.9 (1 piece)	10
ASR- 9	9	7	1.0 (1 piece)	10
ASR-11	11	9	1.0 (1 piece)	10
ASR-13	12.7	10.7	1.2 (1 piece)	10
ASR-14.5	14.7	12.8	1.1 (1 piece)	10
ASR-16	15.9	13.9	1.3 (1 piece)	10
ASR-19	19.1	17.1	1.4 (1 piece)	10

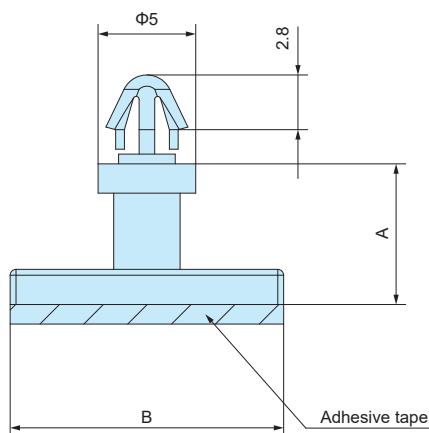
ASL series

LOCKING PCB ADHESIVE STANOFF

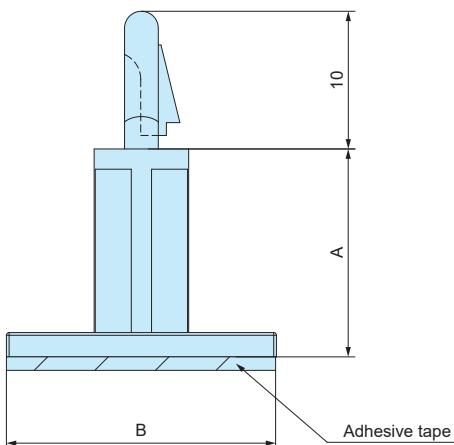


- Standoff for securing PCB by simply snapping it in.
- Adhesive standoff can be freely and easily affixed on.
- Once removed, it cannot be adhered on again.

ASL-3 ~ 12



ASL-15 & 19

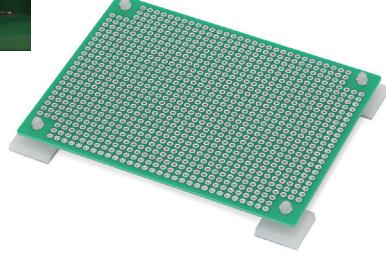


Product no. / Details

■ Material / Color : PA66 / Natural

Product no.	A	B	Mounting hole	Mounting thickness	Weight (g)	Pack of
ASL- 3	2.7	□14	Φ3	1.2 ~ 1.6	0.5 (1 piece)	10
ASL- 4	4	□14	Φ3	1.2 ~ 1.6	0.5 (1 piece)	10
ASL- 6	5.6	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL- 7	7.2	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL- 9	9.2	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL-10	9.7	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL-12	11.9	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL-15	15.4	□20	Φ4	1.2 ~ 1.7	1.3 (1 piece)	10
ASL-19	18.5	□18	Φ4	1.2 ~ 2.0	1.4 (1 piece)	10

APPLICATION EXAMPLE : ASL-3 ~ 12



APPLICATION EXAMPLE : ASL-15 & 19

