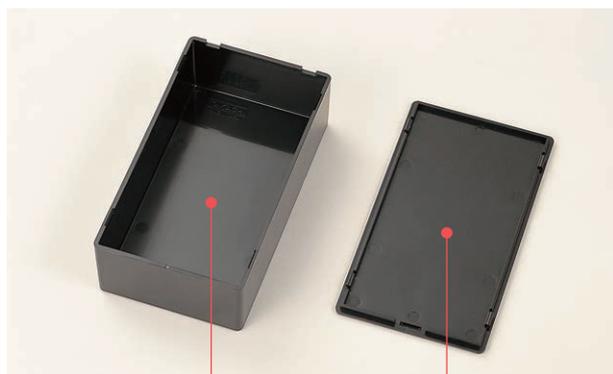




Technical Data
Protection class: IP40
Operating temperature:
SW-SW-N: -10°C ~ +60°C
SW-T: -10°C ~ +100°C



1

2

- No screws required; simple snap on / off cover.
- General purpose compact type case.
- Ample interior space.
- Exclusive PCB is available.
- 3 different material types (standard, flame-resistant, and heat-resistant) are available.

Components

No.	Part name	Material / Color
1	Base	SW : ABS UL94HB / Light gray • Black
		SW-N : ABS UL94V-1 : UL94V-0 / Gray
		SW-T : ABS flame-resistant / Black
2	Cover	SW : ABS UL94HB / Light gray • Black
		SW-N : ABS UL94V-1 : UL94V-0 / Gray
		SW-T : ABS flame-resistant / Black

Accessories (Optional parts)

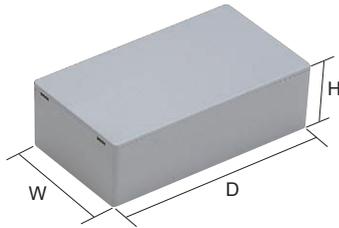


Adhesive standoff T-600, 700, ASR
See page Standoff-1



Neodymium magnet NMG series
See page NMG-1

SW-SW-N-SW-T dimensions



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

Color Type

Series	Code	Color
SW	S	Light gray
	B	Black
SW-N	G	Gray
SW-T	B	Black

SW standard (ABS UL94HB)

Product no. / Dimensions

Product no.		Dimensions			Weight (g)
● Light gray	● Black	W	H	D	
SW- 15S	SW- 15B	10	10	15	1
SW- 20S	SW- 20B	15	15	20	2
SW- 30S	SW- 30B	20	18	30	4
SW- 40S	SW- 40B	30	20	40	10
SW- 50S	SW- 50B	35	25	50	14
SW- 53S	SW- 53B	36	11	53	10
SW- 55S	SW- 55B	40	20	55	17
SW- 60S	SW- 60B	18	17	60	9
SW- 65S	SW- 65B	45	25	65	21
SW- 75S	SW- 75B	50	30	75	32
SW- 85S	SW- 85B	60	40	85	43
SW- 90S	SW- 90B	25	21	90	17
SW- 95S	SW- 95B	58	18	95	34
SW-100S	SW-100B	65	35	100	55
SW-120S	SW-120B	60	24	120	50
SW-125S	SW-125B	70	40	125	77
SW-130S	SW-130B	40	25	130	43

SW-N flame-resistant (ABS UL94V-1 : UL94V-0)

Product no. / Dimensions

Product no.	W	H	D	UL class	Weight (g)
SW-N 20G	15	15	20	UL94V-1	3
SW-N 30G	20	18	30	UL94V-1	5
SW-N 40G	30	20	40	UL94V-0	11
SW-N 50C	35	25	50	UL94V-0	17
SW-N 55G	40	20	55	UL94V-0	19
SW-N 65G	45	25	65	UL94V-0	23
SW-N 75G	50	30	75	UL94V-0	35
SW-N 85G	60	40	85	UL94V-0	50
SW-N 95G	58	18	95	UL94V-0	37
SW-N100C	65	35	100	UL94V-0	60
SW-N120G	60	24	120	UL94V-0	56
SW-N125C	70	40	125	UL94V-0	95
SW-N130G	40	25	130	UL94V-0	48

Cross out products are discontinued.

SW-T heat-resistant (ABS heat distortion temperature 100°C)

Product no. / Dimensions

Product no.	W	H	D	Weight (g)
SW-T 20B	15	15	20	2
SW-T 40B	30	20	40	9
SW-T 55B	40	20	55	16
SW-T 75B	50	30	75	30
SW-T 95B	58	18	95	31
SW-T100B	65	35	100	50

DST series

DOUBLE-SIDED MOUNTING TAPE

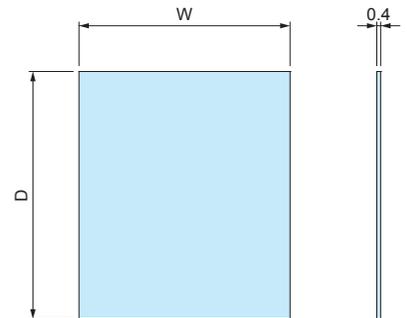


- Super strong double-sided mounting tape with excellent cold and heat resistance.
 - Allow cases to be attached onto any place.
 - Easily attached onto walls where holes cannot be drilled.
 - Can be used with a range of products, such as small IoT type enclosures.
-
- Please ensure that surface is cleaned and grease-free before adhering.
 - Once removed, it cannot be adhered on again.

Notes:

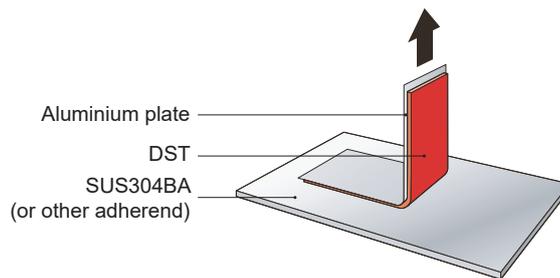
Due to the strong adhesive strength, do ensure that the surface or product is suitable to be adhered onto.

Technical Data
Operating temperature: -30°C ~ +200°C



Adhesion Performance (90° peel adhesion)

90° direction peel force N/cm	Stainless steel (SUS304BA)	24
	Aluminium (A1050P)	21
	Bonded steel plate (SECC)	30
	ABS	10
	Acrylic (PMMA)	16
	Polypropylene	6
	Polyethylene (HDPE)	3
	Glass	27



[Test Method]

Backed with specially treated Aluminium foil (130 μ m), crimped with a 10kg steel roller back and forth twice, cured at room temperature for 72 hours, tensile speed 300mm/min.

*Data values listed are test results based on the test conditions, and are to be used as reference only.

*Adhesive strength and other physical properties vary depending on the adherend, bonding and curing conditions, and other factors.

Product no. / Details

■ Material / Color: Acrylic foam base, acrylic adhesive / gray

Product no.	W	D	Suitable models	Weight (g)	Pack of
NEW DST14-22	14	22	SIC2-4-1 SW-30	0.3 / pc	5
NEW DST14-36	14	36	SIC2-5-1	0.4 / pc	5
DST18-40	18	40	SIC3-5-2 SW-(T)40 • 60	0.7 / pc	5
DST22-26	22	26	SIC3-4-2 SW-(T)40	0.5 / pc	5
DST24-48	24	48	SIC3-6-2 SW-50 • 53 • (N)(T)55 • (N)65 TW/TWN4-2-5 • 4-2-6 • 4-2-8	0.8 / pc	5

NMG series

NEODYMIUM MAGNET

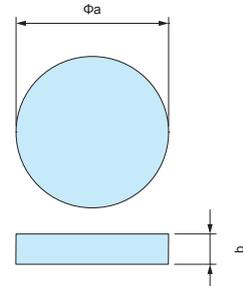
Round magnet

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



- Material / Finish: Neodymium / Nickel plated
- Please attach using a strong adhesive.

NMG dimensions

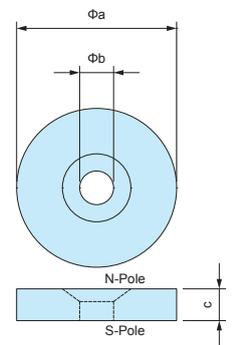


Product no. / Details

Product no.	a	b	Weight (g)	Flux Density	Absorption
NMG3-15N	15	3	4	214.4 mT	2.44 kgf
NMG3-20N	20	3	7.1	170.7 mT	3.26 kgf
NMG5-22N	22	5	11.4	247.2 mT	5.91 kgf
NMG5-25N	25	5	18.4	221.9 mT	6.89 kgf

Round magnet with countersunk hole

- Please fasten with a screw.

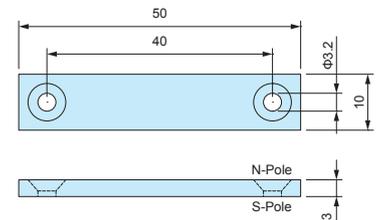


Product no. / Details

Product no.	a	b	c	Countersunk size	Weight (g)	Flux Density	Absorption
NMG3-15M3	15	3.2	3	M3	3.8	214.3 mT	2.33 kgf
NMG3-20M3	20	3.2	3	M3	6.9	170.6 mT	3.17 kgf
NMG5-22M4	22	4.3	5	M4	13.7	247.2 mT	5.68 kgf
NMG5-25M5	25	5.3	5	M5	17.6	221.9 mT	6.58 kgf

Rectangular magnet with countersunk holes

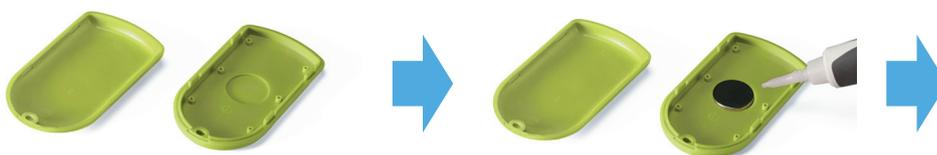
- Please fasten with a screw.



Product no. / Details

Product no.	a	b	c	Countersunk size	Weight (g)	Flux Density	Absorption
NMG3-50M3	50	10	3	M3	11.3	210.0 mT	9.1 kgf

Example 1 The magnetic force remains strong even through plastic.

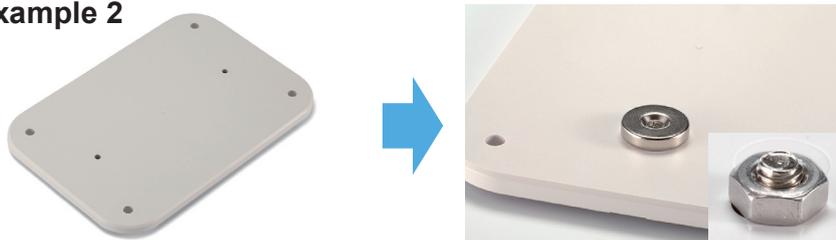


Make recessed pocket on the inside wall.

Glue on.

Attach onto a metallic surface.

Example 2

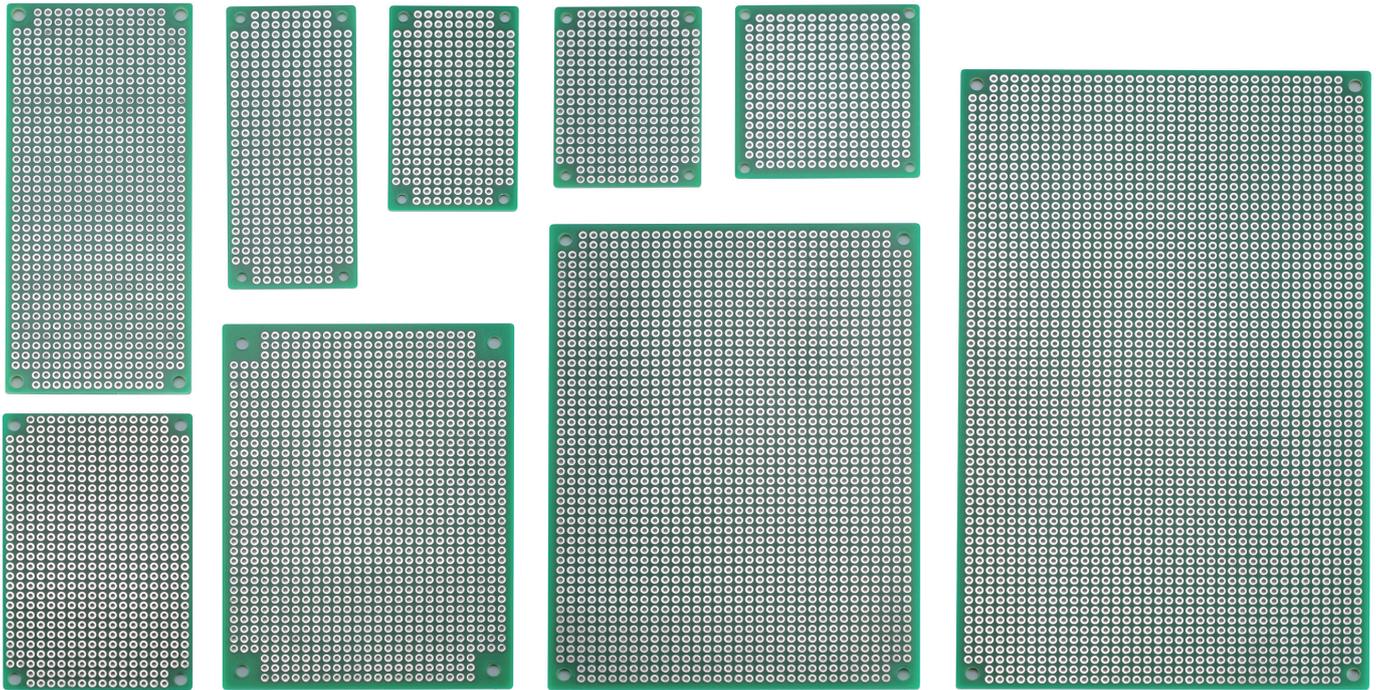


Make holes

Fasten with a screw and nut.

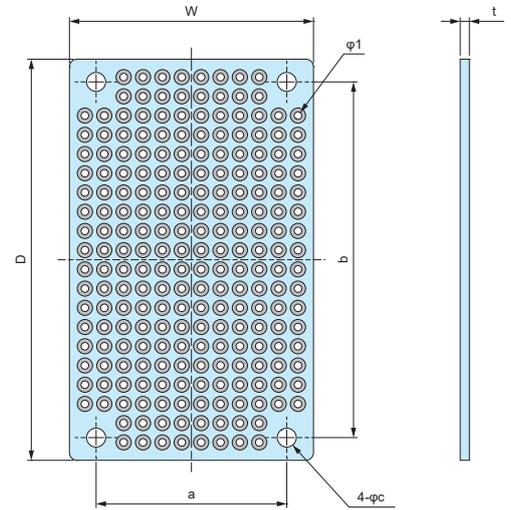
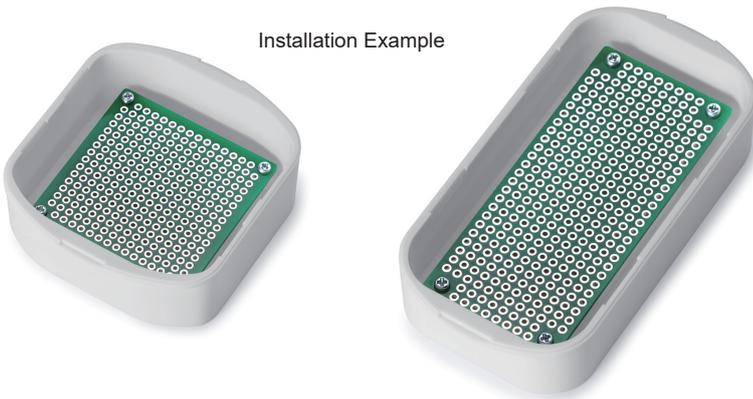
Attach onto a metallic surface.

CAUTION: Handle with care to avoid personal injury or damage to the magnet.



- Plated Through Hole (PTH) type PCB with a 2.54mm hole-to-hole pitch.
Inexpensive and economical PCB made with robust, heat-resistant and non-conductive glass epoxy material.
- Easily mounted onto bosses or standoffs with the mounting holes at each corner.
- Made with environmentally friendly lead-free solder. RoHS3 compliant.
- 4 new sizes added to extend the lineup to a total of 9 sizes. PCB100-160 is Eurocard (3U) format size.
- 3 new SIC and SIM plastic case series compatible sizes have been released, now with 4 compatible sizes available.
- DXF/DWG/PDF drawings available on our website.

Installation Example

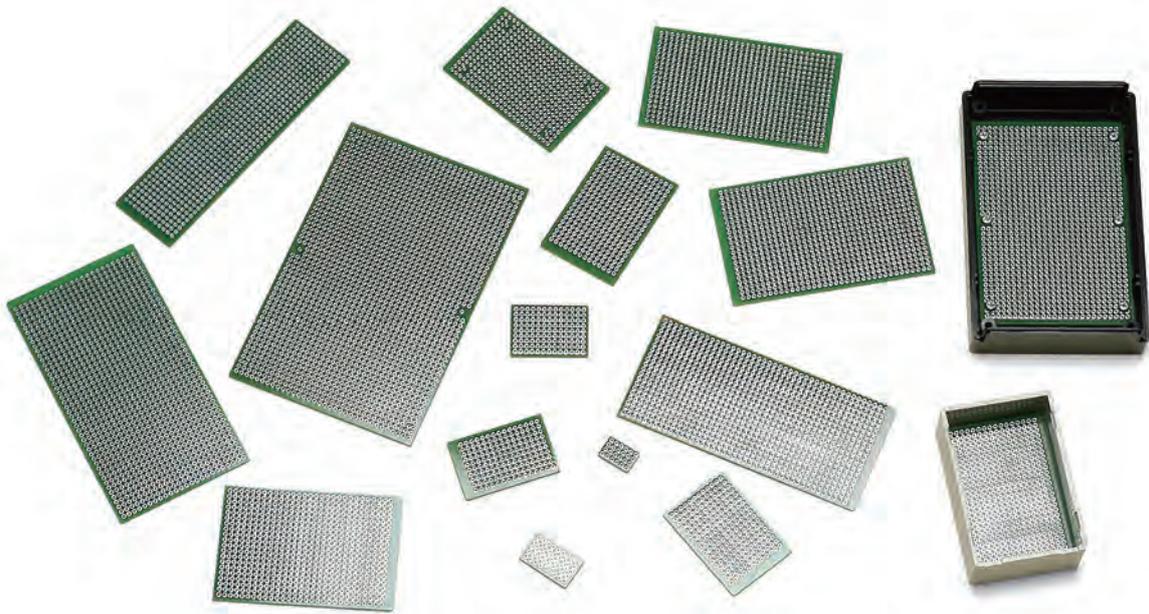


Material / Finish : Glass epoxy (FR-4) / Through-hole - Lead-free solder resist

*When installing PCB46-101 with M2 mounting screws, use EM-B2 (see page 398).

Product no. / Details

Product no.	W	D	a	b	c	t	Mounting screw	Weight (g)	Compatible SIC & SIM size
PCB 32- 53	32	53	25	47	2.5	1.2	M2 / M2.5	3.9	SIC • SIM5- 7-□
NEW PCB 32- 73	32	73	25	67	2.5	1.2	M2 / M2.5	5.2	SIC • SIM5- 9-□
NEW PCB 36- 47	36	47	30	41	2.5	1.2	M2 / M2.5	3.7	—
NEW PCB 45- 45	45	45	40	40	2.5	1.2	M2 / M2.5	4.6	SIC • SIM6- 7-□
NEW PCB 46-101	46	101	40	95	3.2	1.6	M2 / M2.5 / M3	13.2	SIC • SIM6-12-□
PCB 47- 72	47	72	41	66	3.2	1.2	M3	7.4	—
PCB 72- 95	72	95	62	85	3.2	1.2	M3	15.7	—
PCB 90-120	90	120	82	112	3.2	1.6	M3	32.5	—
PCB100-160	100	160	92	152	3.2	1.6	M3	49.2	—



- Material / Finish : Glass epoxy (FR-4) / Through-hole - Lead-free solder resist
- Environmentally friendly lead-free solder.
- 25 different sizes available. See chart on page TNF-2 for suitable cases/boxes.
- TNF160-240 is for multi-size use. Cut it to fit your needs when using.

Accessories (Optional parts)



Tapping standoff TPS series
See page TPS • MT-1



Adhesive standoff T-600, 700 series
See page Standoff-1

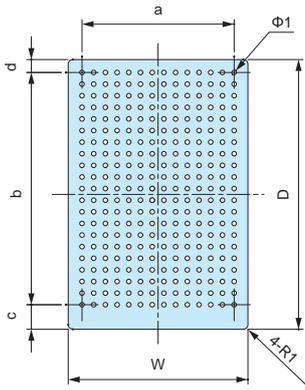


Adhesive standoff ASR series
See page Standoff-1

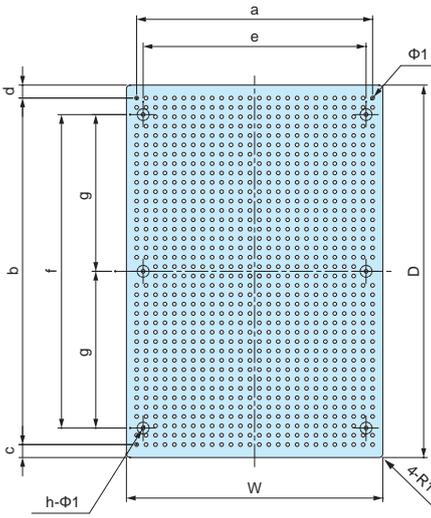


PCB mounting screw EM series
See page EM • MR-1

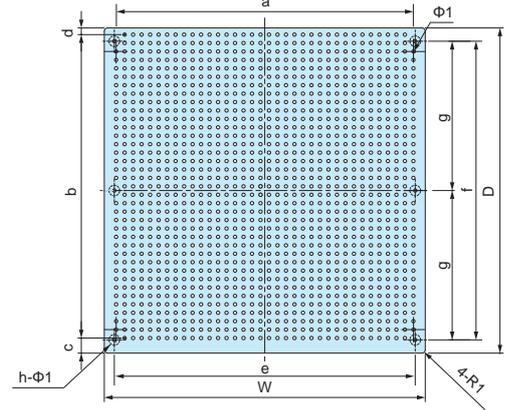
Pattern A



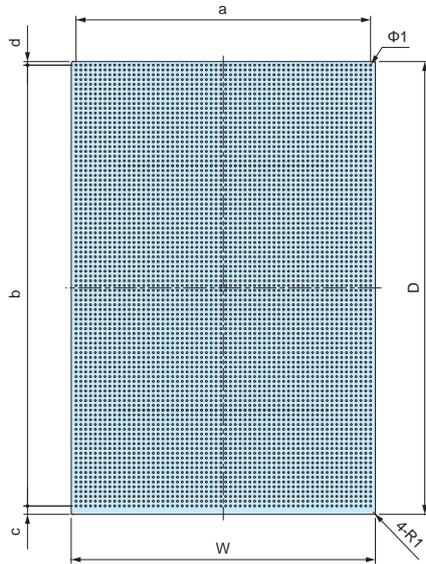
Pattern B



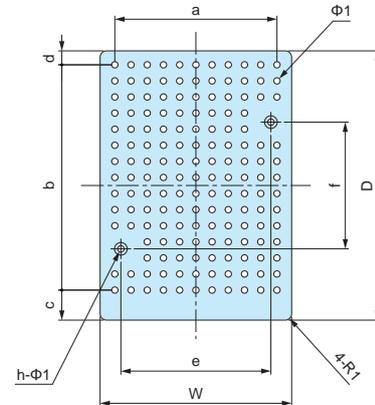
Pattern C



Pattern D



Pattern E



Product no. / Dimensions

■ Pattern B, C, and E PCBs come with holes for boss mounting.

Product no.	W	D	a	b	c	d	e	f	g	h	Holes	Pattern	Suitable case
TNF 11- 16	10.7	15.8	7.62	12.7	1.55	1.55	—	—	—	—	4 x 6	A	SW-20
TNF 15- 25	15	25	10.16	20.32	2.34	2.34	—	—	—	—	5 x 9	A	SW-30
TNF 25- 35	25	35	20.32	30.48	2.26	2.26	—	—	—	—	9 x 13	A	SW-40
TNF 29- 32	29.5	32.5	25.4	25.4	4.82	2.28	23.5	20	—	2	11 x 11 ■	E	TW • TWN4-2-5
TNF 29- 42	29.5	42.5	25.4	35.56	4.74	2.2	23.5	20	—	2	11 x 15 ■	E	TW • TWN4-2-6
TNF 29- 44	29	44	22.86	35.56	5.49	2.95	—	—	—	—	10 x 15	A	SW-50 • 53
TNF 34- 49	34	49	27.94	40.64	5.45	2.91	—	—	—	—	12 x 17	A	SW-55
TNF 34- 62	34.5	62.5	30.48	55.88	4.58	2.04	28.5	40	—	2	13 x 23 ■	E	TW • TWN4-2-8
TNF 34-124	34	124	27.94	116.84	4.85	2.31	—	—	—	—	12 x 47	A	SW-130
TNF 39- 59	39	59	33.02	50.8	5.37	2.83	—	—	—	—	14 x 21	A	
TNF 39- 70	39.5	70	33.02	60.96	5.79	3.25	27.94	58.42	—	4	14 x 25	A	TW • TWN5-3-9
TNF 43- 66	43	66	38.1	58.42	3.79	3.79	30	50	—	4	16 x 24 ■	B	
TNF 43- 79	43.5	79.5	38.1	73.66	2.92	2.92	—	—	—	—	16 x 30	A	TW5-3-10
TNF 44- 69	44	69	38.1	60.96	5.29	2.75	—	—	—	—	16 x 25	A	SW-75
TNF 52- 89	52	89	45.72	81.28	3.86	3.86	—	—	—	—	19 x 33	A	SW-95
TNF 53- 79	53	79	48.26	71.12	5.21	2.67	—	—	—	—	20 x 29	A	SW-85 • TW • TWN7-□-11
TNF 53-114	53	114	48.26	106.68	4.93	2.39	—	—	—	—	20 x 43	A	SW-120
TNF 59- 94	59	94	53.34	86.36	5.09	2.55	—	—	—	—	22 x 35	A	SW-100
TNF 63-119	63	119	58.42	111.76	4.89	2.35	—	—	—	—	24 x 45	A	SW-125
TNF 69-101	69	101	63.5	93.98	3.51	3.51	60	—	42.5	6	26 x 38 ■	B	
TNF 89-136	89	136	83.82	129.54	3.23	3.23	80	—	60	6	34 x 52 ■	B	
TNF 96- 98	96	98	88.9	91.44	4.55	2.01	90	90	45	6	36 x 37 ■	C	
TNF122- 99	122	99	116.84	91.44	3.78	3.78	—	—	—	—	47 x 37	A	
TNF128-136	136	128	129.54	121.92	4.31	1.77	130	120	60	6	52 x 50 ■	C	
TNF160-240	160	240	154.94	233.68	3.93	2.39	—	—	—	—	62 x 93	D	

AST series

INSERT NUT ADHESIVE STANDOFF

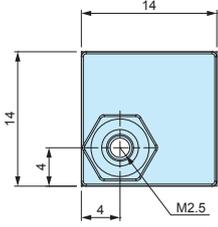


- Double-sided adhesive tape allows the standoff to be mounted quickly and easily; allows PCB mounting in non-boss enclosures.
- Convenient for installing PCBs into enclosures without the need for customization.
- Please ensure that surface is cleaned and grease-free before adhering.
- Once removed,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

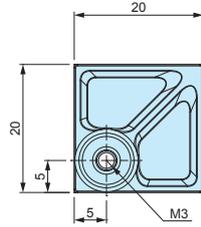
AST dimensions

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

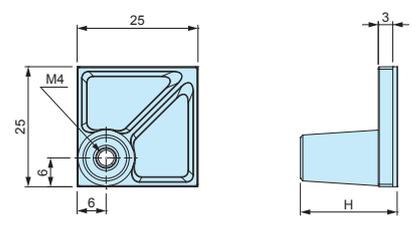
AST2.5-□



AST3-□



AST4-□



Product no. / Details

Bulk package

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

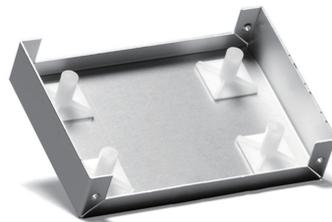
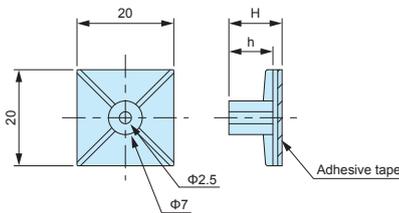
- Base material / color : Nylon 66 (UL94V-2) / Black
- Nut • screw material / finish : Steel / Trivalent chromate

- Bulk packaging is available. See "Bulk package" column above.
- Screws are not included for bulk packages.

ASR series

ADHESIVE PCB STANDOFF

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

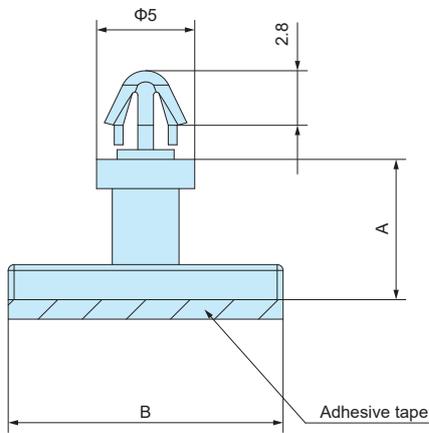
ASL series

LOCKING PCB ADHESIVE STANDOFF

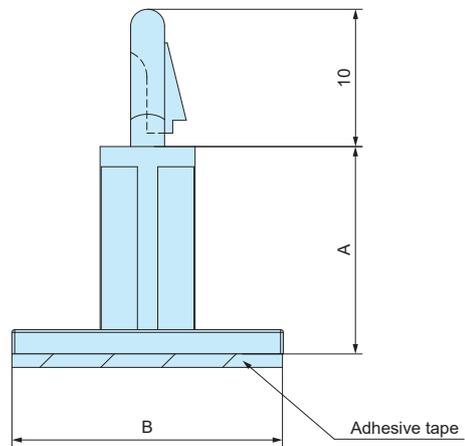


- Standoff for securing PCB by simply snapping it in.
- Adhesive standoff can be freely and easily affixed on.
- Once removed, it cannot be adhered on again.

ASL-3 ~ 12



ASL-15 & 19

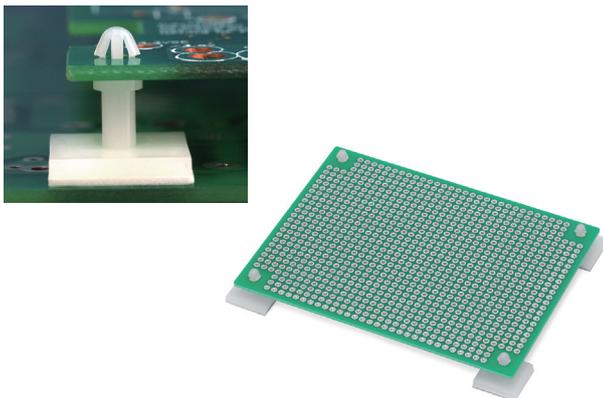


Product no. / Details

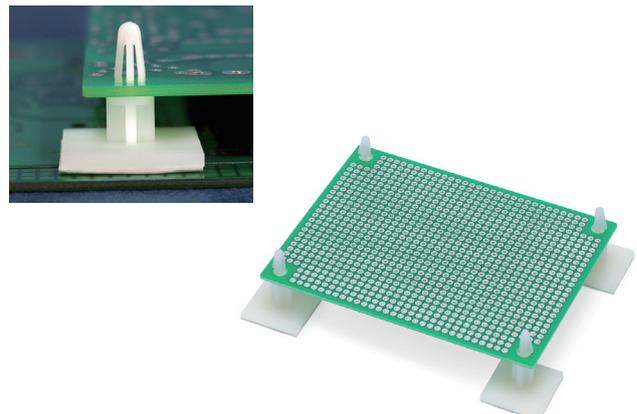
■ Material / Color : PA66 / Natural

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





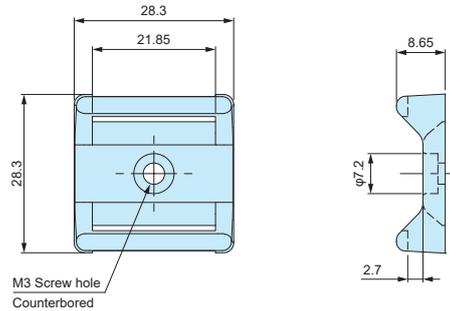
PMB-1

POLE MOUNTING BRACKET



Installation example

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



- Small size pole mounting bracket suitable for indoor use.
- Installation screws (M3 size) are separately sold. See page HES • HOS • MT for compatible MT3-4 screws.
- Minimum applicable pole diameter is $\Phi 35$.
- Use SNB • PKB • SCT mounting belt to install onto a pole.

Product no. / Details

■ Material / Color : PA66+GF(UL94HB) / Black

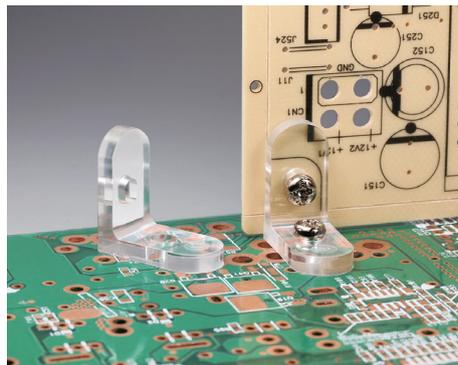
Product no.	Maximum load (kg)	Weight (g)	Pack of
PMB-1	1	3 (1 piece)	2

LPZA-1

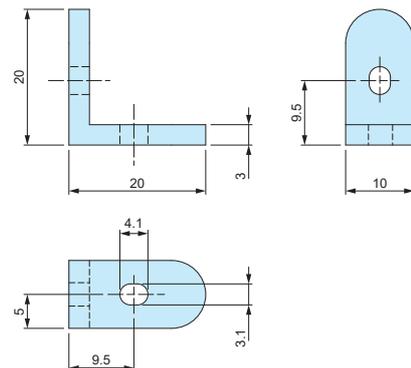
RIGHT ANGLE PCB STANDOFF



Installation example



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



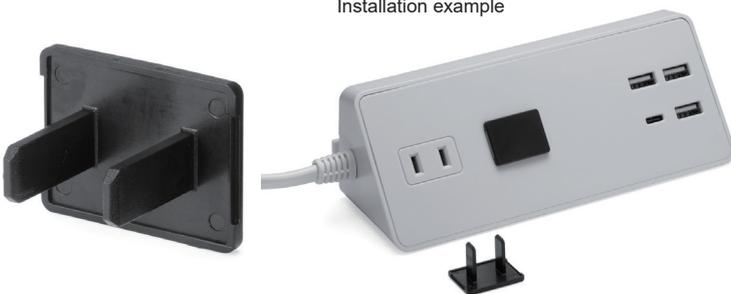
- Right angle standoff for mounting PCB vertically.
- Installation screws (M3 size) are separately sold. See page HES • HOS • MT for compatible MT3-8 screws.

Product no. / Details

Product no.	Material	Color	Weight (g)	Pack of
LPZA-1	PC (UL94V-2)	Transparent	1 (1 piece)	10

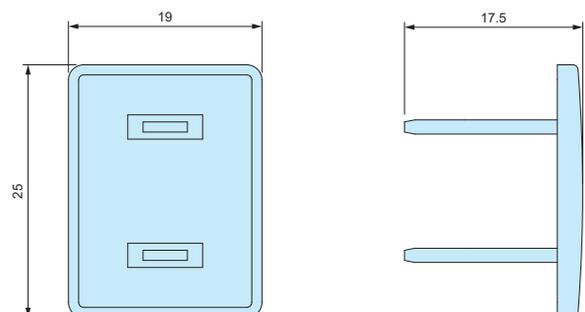
PLCC-3

POWER OUTLET PLUG COVER



Installation example

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



- Plug cover for 100V outlet.

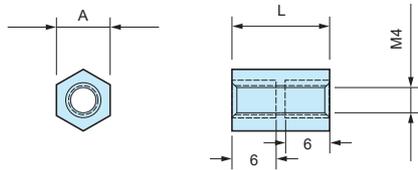
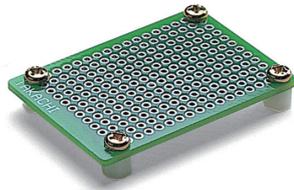
Product no. / Details

Product no.	Material	Color	Weight (g)	Pack of
PLCC-3	ABS (UL94HB)	Black	1 (1 piece)	5



HES series

PA66 HEX STANDOFF



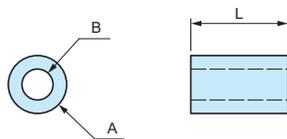
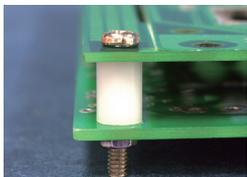
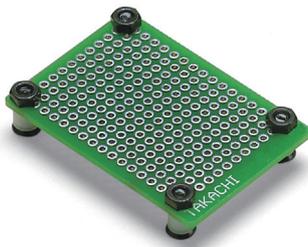
Product no. / Details

Material / Color : PA66 / Natural

Product no.	A	L	Weight (g)	Pack of
HES4- 6	7	6	0.22 (1 piece)	20
HES4- 8	7	8	0.28 (1 piece)	20
HES4-10	7	10	0.34 (1 piece)	20
HES4-12	7	12	0.42 (1 piece)	20
HES4-14	7	14	0.5 (1 piece)	20
HES4-16	7	16	0.56 (1 piece)	20

HOS series

PA66 ROUND SPACER



Product no. / Details

Material / Color : PA66 / Natural

Product no.	A	B	L	Weight (g)	Pack of
HOS4- 3	6.3	4.2	3	0.06 (1 piece)	20
HOS4- 5	6.3	4.2	5	0.1 (1 piece)	20
HOS4- 8	6.3	4.2	8	0.16 (1 piece)	20
HOS4-10	6.3	4.2	10	0.2 (1 piece)	20
HOS4-12	6.3	4.2	12	0.24 (1 piece)	20
HOS4-15	6.3	4.2	15	0.3 (1 piece)	20

Recommended torque : 0.3N • m or below

MT series

PCB MOUNTING SCREW



Self-tapping screws for mounting PCB on bosses or standoffs.

Product no. / Details

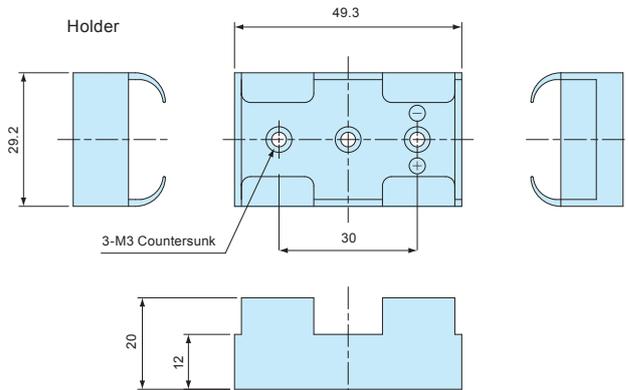
Product no.	M	L	Screw head	Material	Finish	Weight (g)	Pack of
MT3- 4	3	4	Pan head	Steel	Trivalent chromate	0.4 (1 piece)	20
MT3- 8	3	8	Pan head	Steel	Trivalent chromate	0.6 (1 piece)	20
MT4-10	4	10	Pan head	Stainless steel	Unfinished	1.3 (1 piece)	4
MT4-14	4	14	Pan head	Stainless steel	Unfinished	1.6 (1 piece)	4

BH-9V-2

9V BATTERY HOLDER

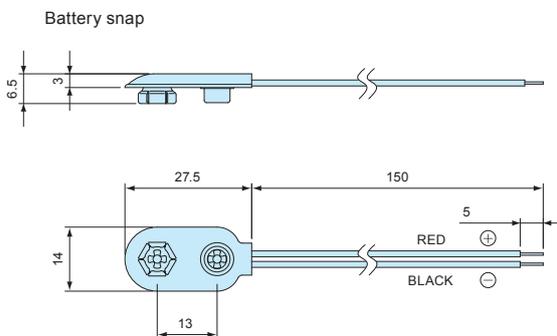


■ DXF/DWG/PDF drawings available on our website.



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

Technical Data
Operating temperature: -10°C ~ +60°C



Components

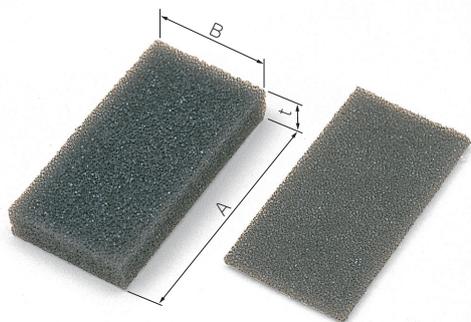
Holder material	Holder color	Lead wire	Contact material	Battery snap cover	Contact surface finish
PP	Black	UL1007 AWG26 L=150	Brass	PVC	Nickel plated

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