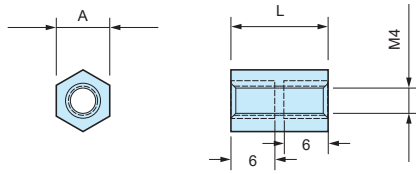
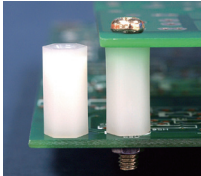
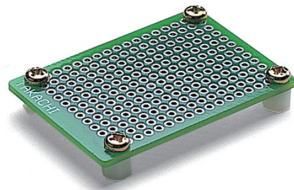




HES series

PA66 HEX STANDOFF



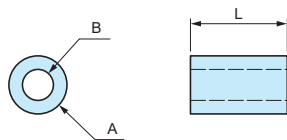
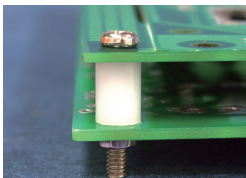
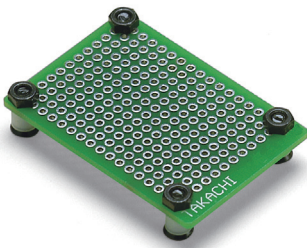
Product no. / Details

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

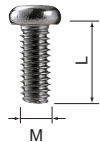
Product no.	A	B	L	Weight (g)	Pack of
HOS4- 3	6.3	4.2	3	0.06 (1 piece)	20
HOS4- 5	6.3	4.2	5	0.1 (1 piece)	20
HOS4- 8	6.3	4.2	8	0.16 (1 piece)	20
HOS4-10	6.3	4.2	10	0.2 (1 piece)	20
HOS4-12	6.3	4.2	12	0.24 (1 piece)	20
HOS4-15	6.3	4.2	15	0.3 (1 piece)	20

Recommended torque : 0.3N • m or below

MT series

PCB MOUNTING SCREW

Pan head



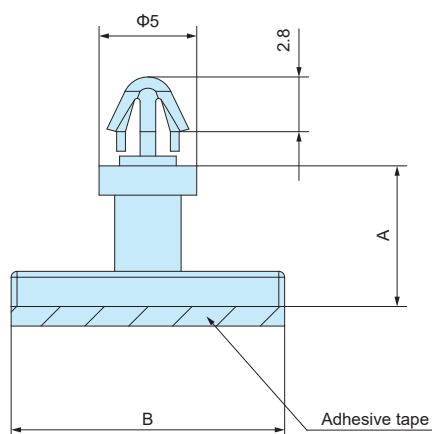
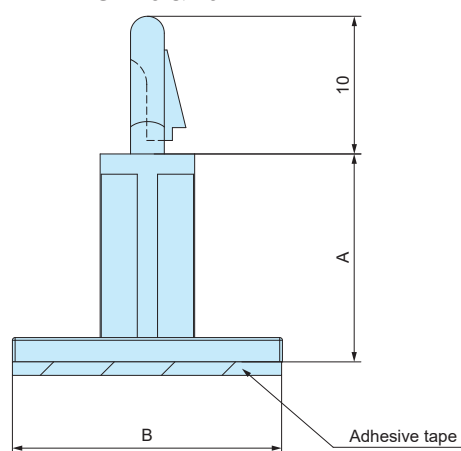
Self-tapping screws for mounting PCB on bosses or standoffs.

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

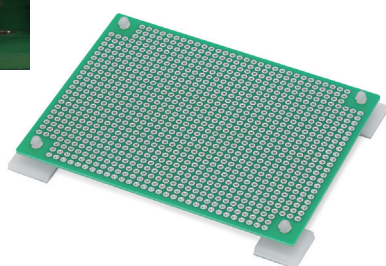
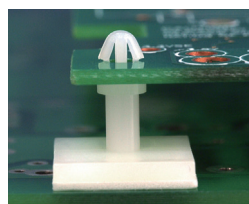
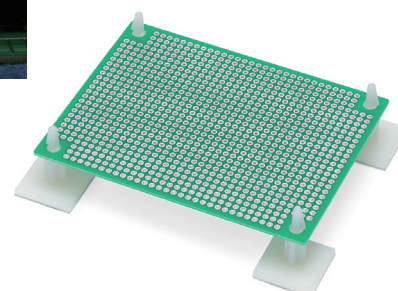
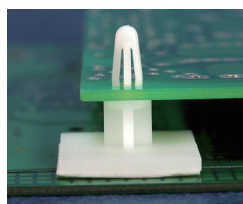
ASL series**LOCKING PCB ADHESIVE STANDOFF**

- 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

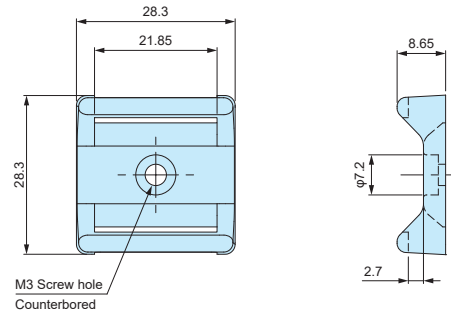
Product no.	A	B	Mounting hole	Mounting thickness	Weight (g)	Pack of
ASL- 3	2.7	□14	Φ3	1.2 ~ 1.6	0.5 (1 piece)	10
ASL- 4	4	□14	Φ3	1.2 ~ 1.6	0.5 (1 piece)	10
ASL- 6	5.6	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL- 7	7.2	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL- 9	9.2	□14	Φ3	1.2 ~ 1.6	0.6 (1 piece)	10
ASL-10	9.7	□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.

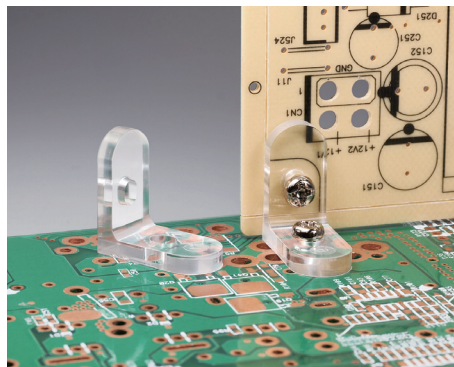
Product no. / Details

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

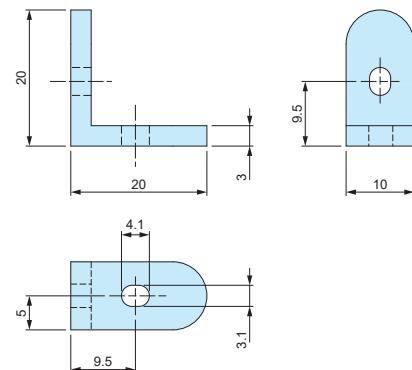
Product no.	Maximum load (kg)	Weight (g)	Pack of
PMB-1	1	3 (1 piece)	2

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

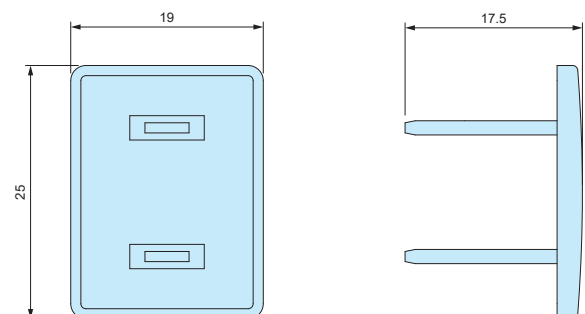
Product no.	Material	Color	Weight (g)	Pack of
LPZA-1	PC (UL94V-2)	Transparent	1 (1 piece)	10

PLCC-3**POWER OUTLET PLUG COVER**

Installation example



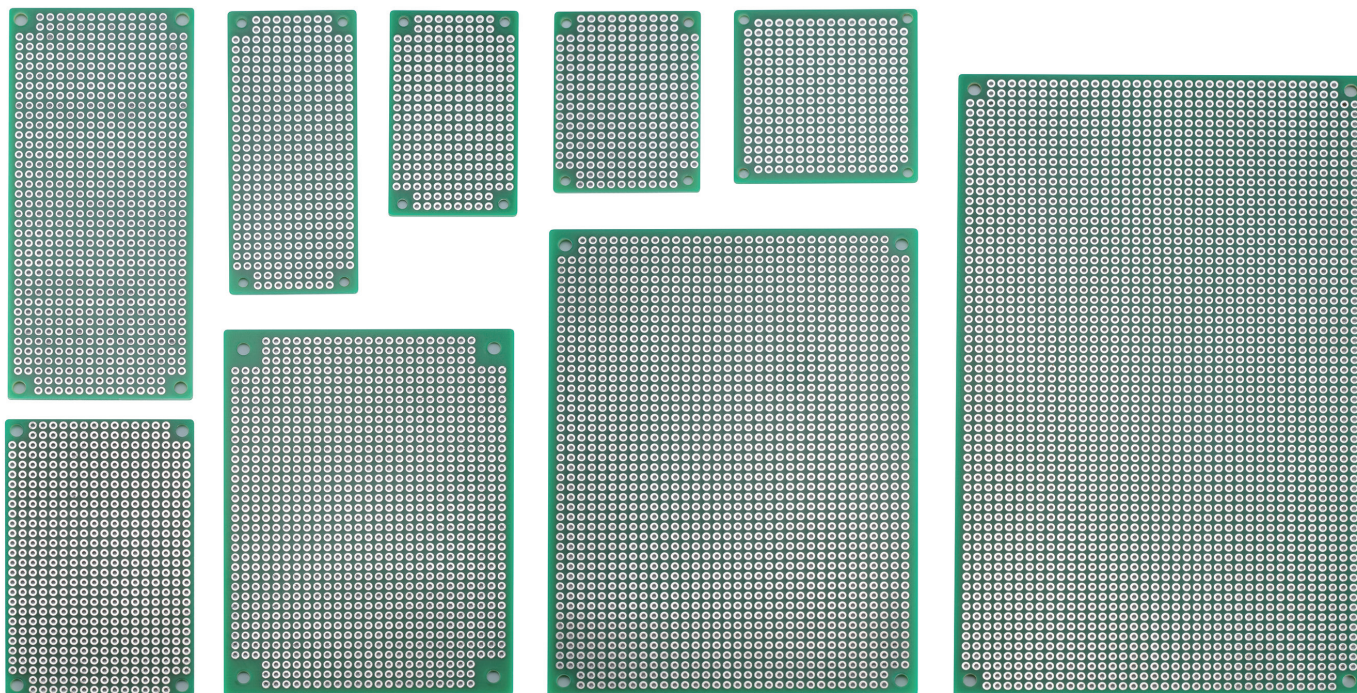
■ DXF/DWG/PDF drawings available on our website.



- Plug cover for 100V outlet.

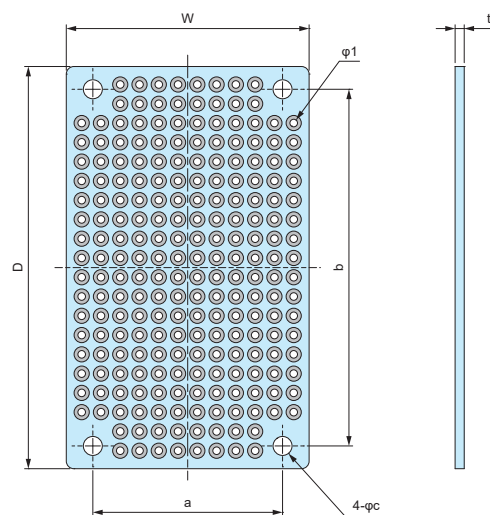
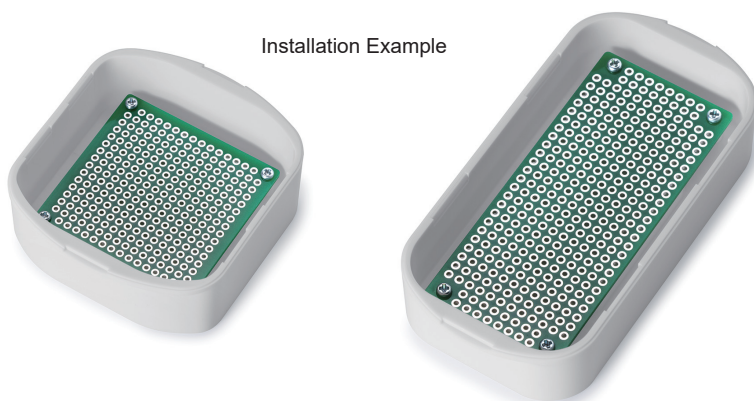
Product no. / Details

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



- 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

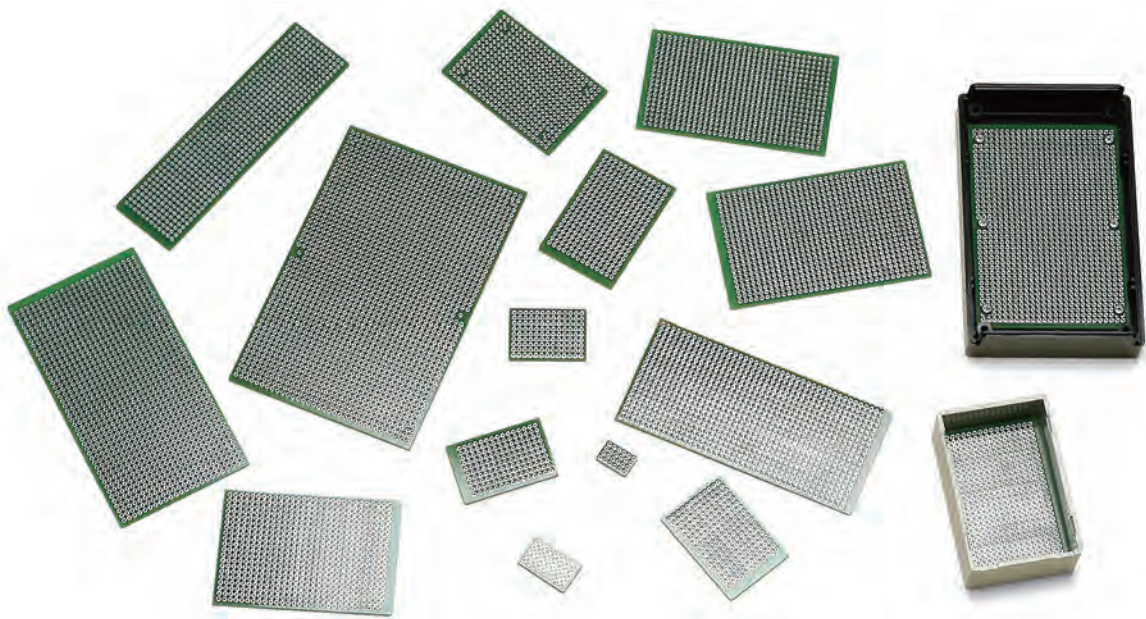
*When installing PCB46-101 with M2 mounting screws, use EM-B2 (see page 398).

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	—

TNF SERIES

LEAD-FREE UNIVERSAL PCB



- 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

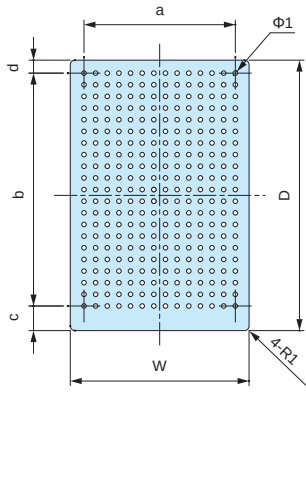


Adhesive standoff ASR series
See page Standoff-1

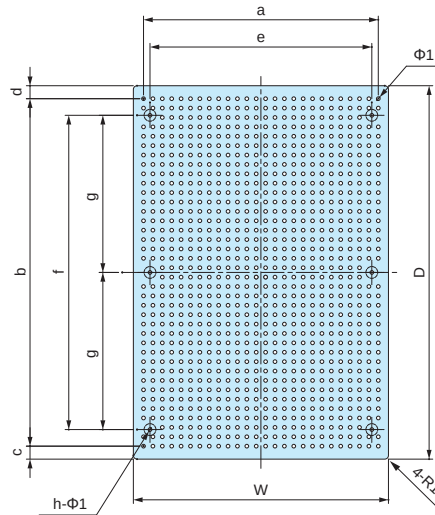


PCB mounting screw EM series
See page EM • MR-1

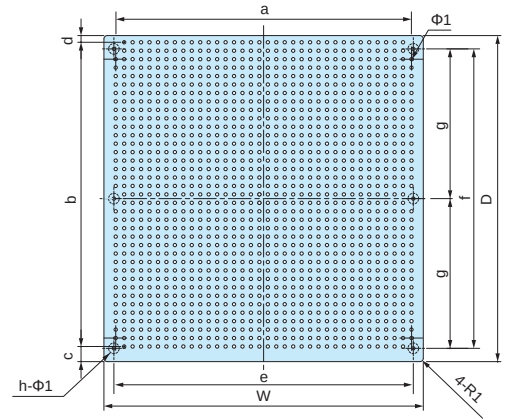
Pattern A



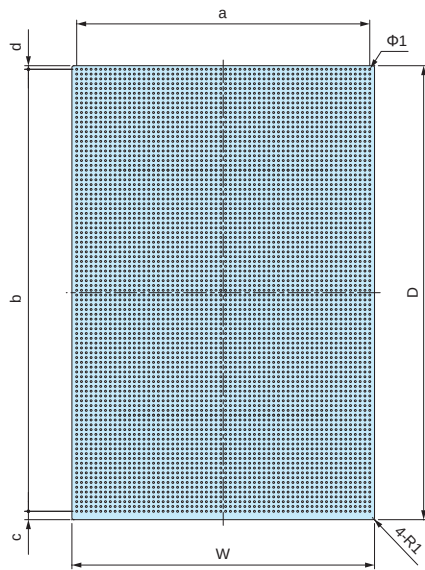
Pattern B



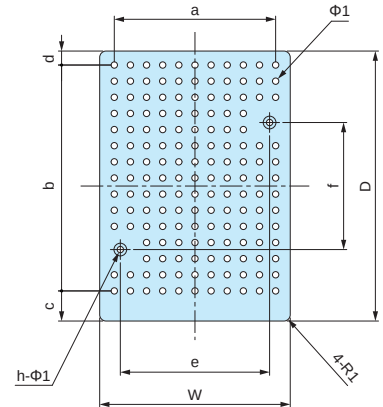
Pattern C



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	

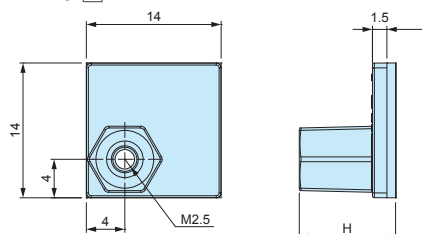
AST series**INSERT NUT ADHESIVE STANDOFF**

- 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.

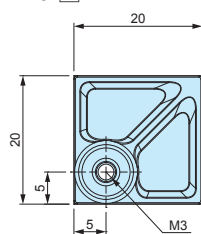
AST dimensions

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

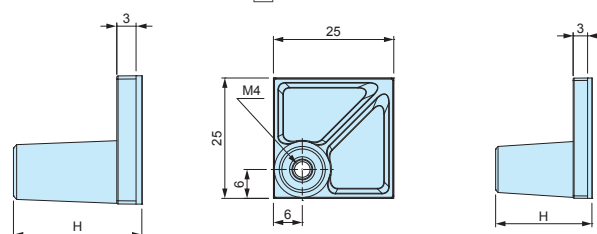
AST2.5-□



AST3-□



AST4-□

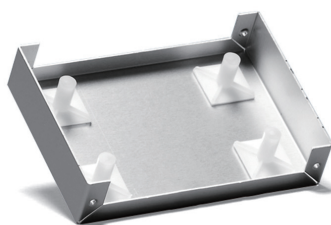
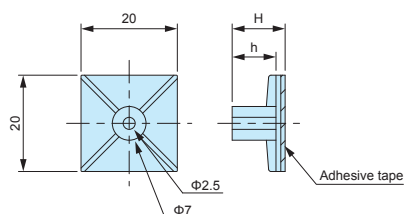
**Product no. / Details**

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

Bulk package

- 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.

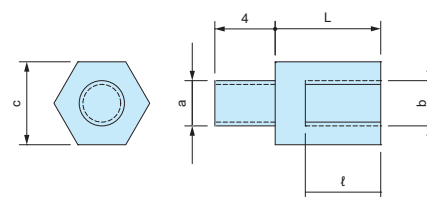
Product no. / Details

- 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

TPS series

TAPPING STANDOFF



■ Tapping screw head allows for easy installation onto existing enclosure boss mount.

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

■ 4 different sizes available : M2.3, M2.6, M3 and M4 size.

Product no. / Details

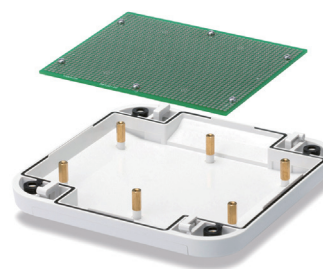
■ Material / Finish : Brass / Unfinished

Product no.	Screw size (a)	Screw size (b)	c	L	ℓ	Weight (g)	Pack of	Suitable models
TPS-M2.3-4	2.3	M2.3	5	4	3	0.7	4	WH series • PFE series LC • LCE • LCS • LCT series PF • PFF series (M2.3 boss models) TW • TWN • TWF series (M2.3 boss models) WP series (M2.3 boss models)
TPS-M2.3-5	2.3	M2.3	5	5	3	0.9	4	
TPS-M2.3-6	2.3	M2.3	5	6	4	1	4	
TPS-M2.3-7	2.3	M2.3	5	7	5	1.2	4	
TPS-M2.3-8	2.3	M2.3	5	8	6	1.3	4	
TPS-M2.3-10	2.3	M2.3	5	10	6	1.7	4	
TPS-M2.3-12	2.3	M2.3	5	12	6	2	4	PF • PFF series (M2.6 boss models) WP series (M2.6 boss models)
TPS-M2.6-4	2.6	M2.6	5	4	3	0.7	4	
TPS-M2.6-5	2.6	M2.6	5	5	3	0.8	4	
TPS-M2.6-7	2.6	M2.6	5	7	5	1.1	4	
TPS-M2.6-10	2.6	M2.6	5	10	6	1.6	4	SU • OP TWS • TW • TWN • TWF series (M3 boss models)
TPS-M2.6-12	2.6	M2.6	5	12	6	2	4	
TPS-M3-4	3	M3	5.5	4	3	0.8	4	
TPS-M3-5	3	M3	5.5	5	3	1.1	4	
TPS-M3-6	3	M3	5.5	6	4	1.2	4	
TPS-M3-7	3	M3	5.5	7	5	1.3	4	
TPS-M3-8	3	M3	5.5	8	5	1.6	4	BCAS • BCAP • BCPC • BCPK series (M4 boss models) BCAR • BCPR series (M4 boss models) SPCP • SPCM • WG • WGV • WGPC
TPS-M3-10	3	M3	5.5	10	6	1.9	4	
TPS-M3-12	3	M3	5.5	12	6	2.3	4	
TPS-M4-6	4	M4	7	6	4	2	4	
TPS-M4-10	4	M4	7	10	6	3.1	4	
TPS-M4-15	4	M4	7	15	8	4.7	4	
TPS-M4-20	4	M4	7	20	10	6.5	4	



■ Please use a suitable sized socket driver to both secure and loosen the tapping standoff.

Installation example



MT series

PCB MOUNTING SCREWS for TPS



■ Pan head PCB mounting Screws for TPS tapping standoffs.

Product no. / Details

Product no.	M	L	Material	Finish	Pack of
MT2.3-4	2.3	4	Steel	Trivalent chromate	20
MT2.3-6	2.3	6	Steel	Trivalent chromate	20
MT2.6-4	2.6	4	Steel	Trivalent chromate	20
NEW MT2.6-6	2.6	6	Steel	Trivalent chromate	20
MT3-4	3	4	Steel	Trivalent chromate	20
NEW MT3-6	3	6	Steel	Trivalent chromate	20
NEW MT4-4	4	4	Steel	Trivalent chromate	20
NEW MT4-6	4	6	Steel	Trivalent chromate	20