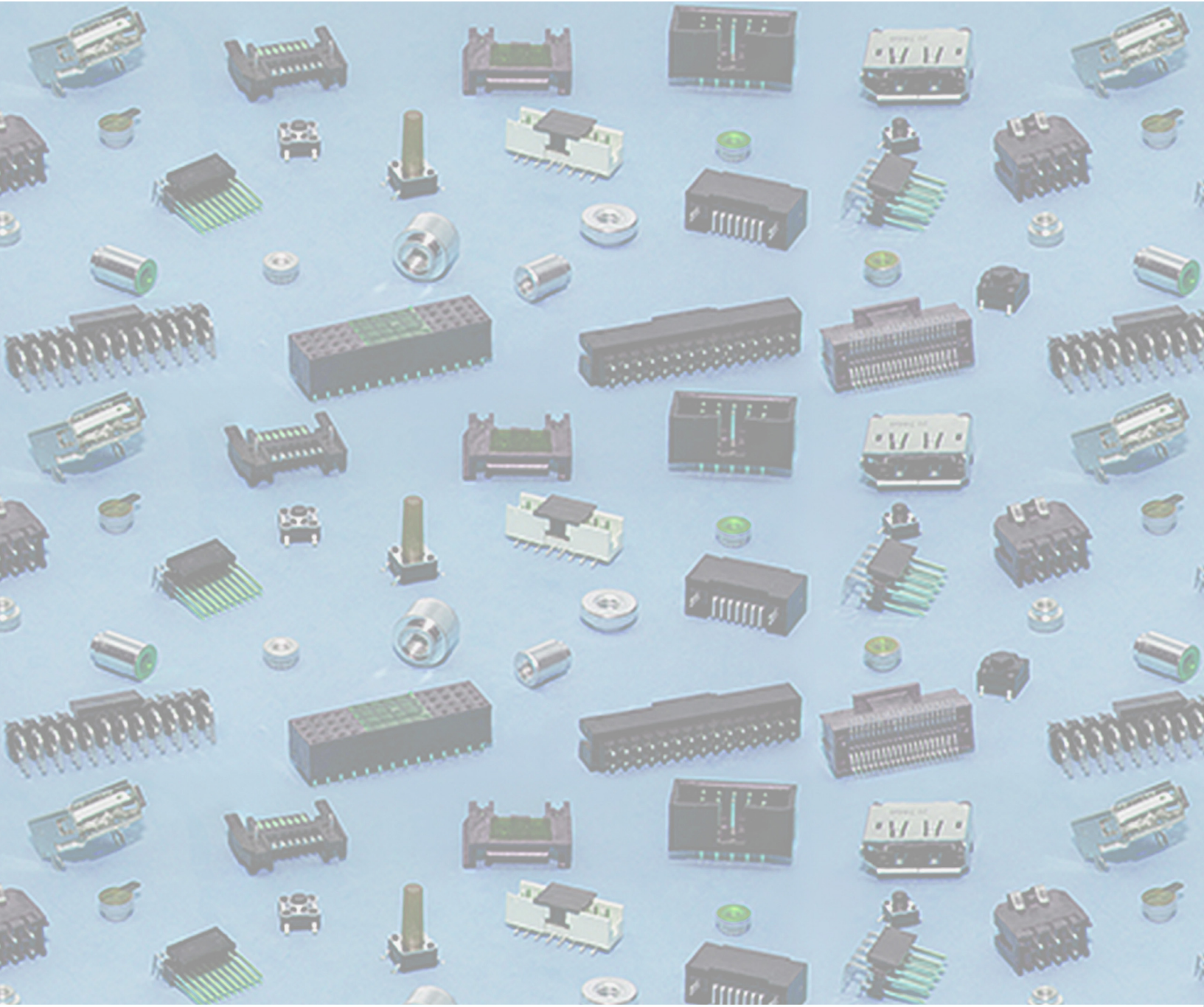
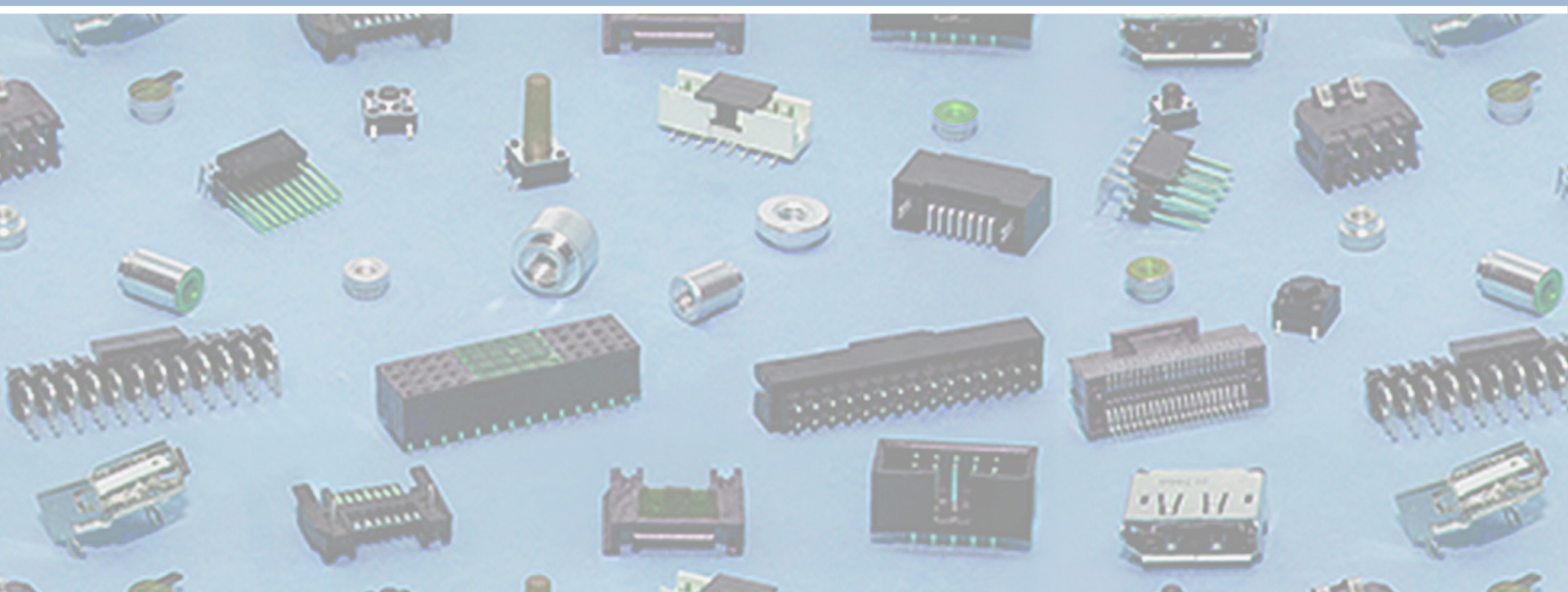


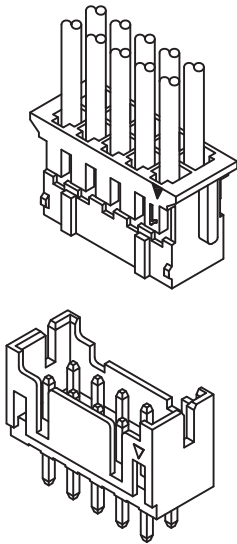


SamyTronic

Connectors, fasteners and more for PC Boards



This is a 2.0 mm pitch, crimp style, double row, wire to board connector. It is specially designed for THR applications / machine assembly, pick and place.

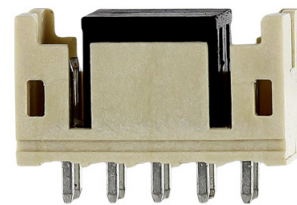
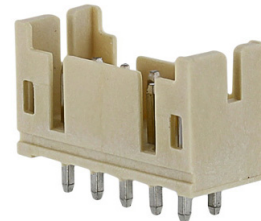


Specification:

- Material: LCP or PA46 (color - natur)
- Contacts Terminal: Brass
- Plating: Tin-Plated / Gold Plated
- Operating Voltage (Max.) 250V AC/DC
- Current Rating (Max.) 3A DC/AC
- Operating Temperature -40°C to +105°C (including temperature rise in applying electrical current)
- Contact resistance: 20 mΩ max.
- Insulation resistance: 1000 MΩ min.
- Dielectric withstanding voltage: 800V AC/minute

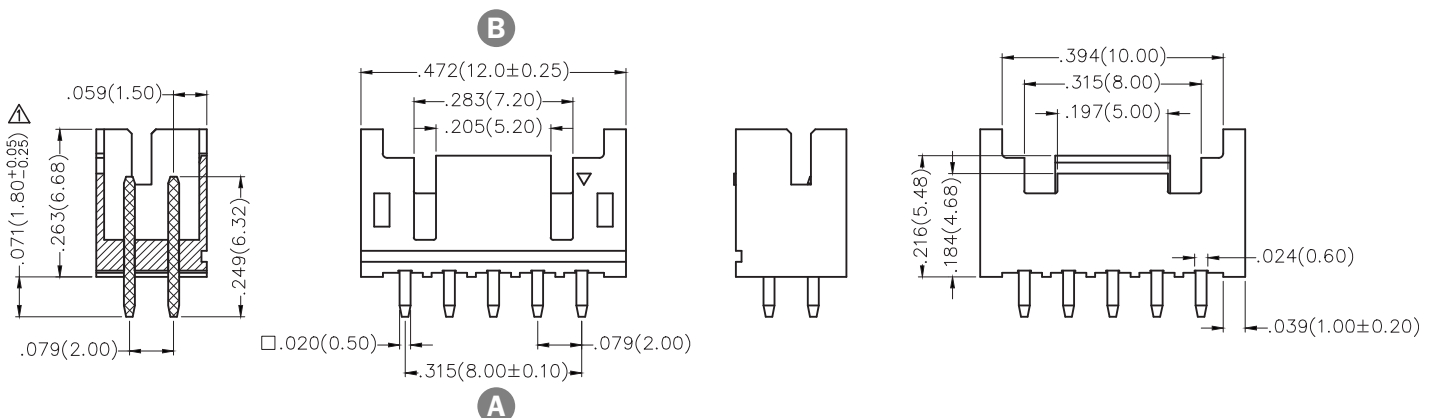
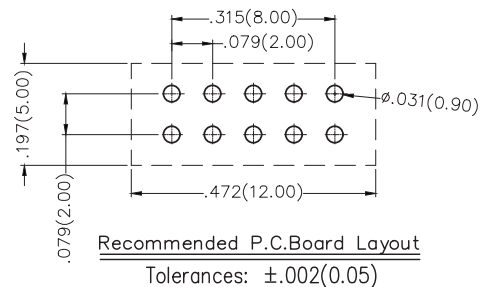
Packaging:

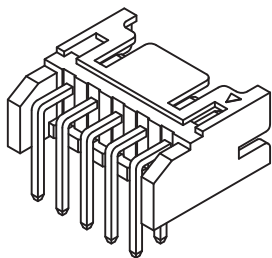
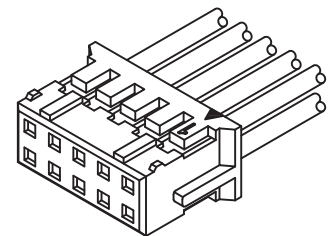
- Tape & reel with Pick Pad



180° Dual Row Wafer

Contacts	Part number	Dimensions (mm)	
		A	B
10	FWF20005-D10S33W5MA	8	12
12	FWF20005-D12S33W5MA	10	14
14	FWF20005-D14S33W5MA	12	16
16	FWF20005-D16S33W5MA	14	18
18	FWF20005-D18S33W5MA	16	20
20	FWF20005-D20S33W5MA	18	22
22	FWF20005-D22S33W5MA	20	24
24	FWF20005-D24S33W5MA	22	26
26	FWF20005-D26S33W5MA	24	28
28	FWF20005-D28S33W5MA	26	30
30	FWF20005-D30S33W5MA	28	32
32	FWF20005-D32S33W5MA	30	34
34	FWF20005-D34S33W5MA	32	36





Specification:

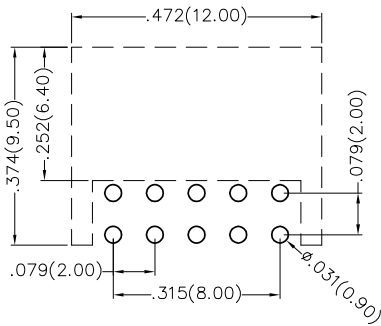
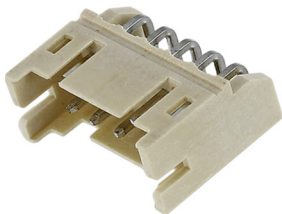
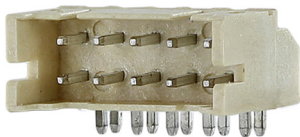
- Material: LCP or PA46 (color - natur)
- Contacts Terminal: Brass
- Plating: Tin-Plated / Gold Plated
- Operating Voltage (Max.) 250V AC/DC
- Current Rating (Max.) 3A DC/AC
- Operating Temperature -40°C to +105°C (including temperature rise in applying electrical current)
- Contact resistance: 20 mΩ max.
- Insulation resistance: 1000 MΩ min.
- Dielectric withstanding voltage: 800V AC/minute

Packaging:

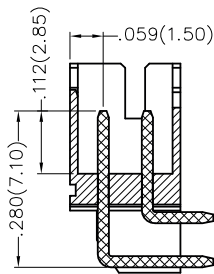
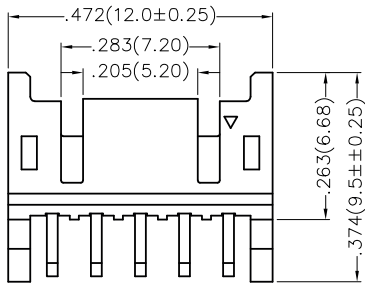
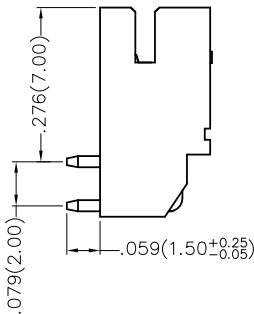
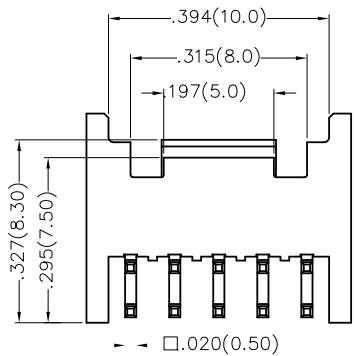
- Tape & reel with Pick Area

90° Dual Row Wafer

Contacts	Part number	Dimensions (mm)	
		A	B
10	FWF20006-D10B33W5MA	8	12
12	FWF20006-D12B33W5MA	10	14
14	FWF20006-D14B33W5MA	12	16
16	FWF20006-D16B33W5MA	14	18
18	FWF20006-D18B33W5MA	16	20
20	FWF20006-D20B33W5MA	18	22
22	FWF20006-D22B33W5MA	20	24
24	FWF20006-D24B33W5MA	22	26
26	FWF20006-D26B33W5MA	24	28
28	FWF20006-D28B33W5MA	26	30
30	FWF20006-D30B33W5MA	28	32
32	FWF20006-D32B33W5MA	30	34
34	FWF20006-D34B33W5MA	32	36



Recommended P.C.Board Layout
Tolerances: ±.002(0.05)



Duplex plating: gold plated on contact area and matte tin plated over nickel in solder area.

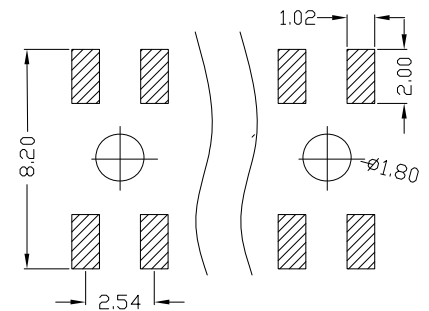
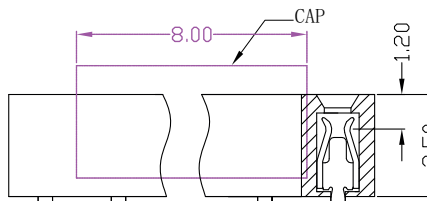
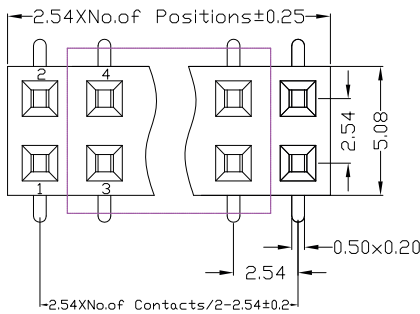
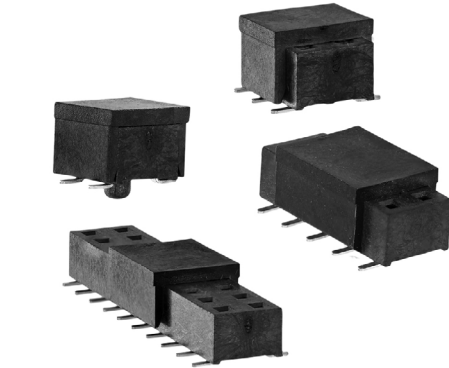
Meet Requirements of IPC JEDEC J-STD-001G

Specification:

- Housing: LCP+30% G.F. UL94V-0, Color: Black
- Contact: Copper alloy with XX μm (XX μm) Gold on Contact Area,
- 2 μm (80 μm) Min Matte Tin on Tail Over 1.27 μm (50 μm) Min Nickel
- Rating Current: 3AMP
- Contact Resistance: 20m Ω Max
- Insulating Resistance: 1000m Ω Min
- Withstanding Voltage: AC 500V
- Temperature Range: -40°C to +105°C
- All Materials Meet the RoHS
- Meet Requirements of IPC JEDEC J-STD-001G
- Pins Coplanarity no more then 100 microns

Packaging:

- Tape & reel with cap



Ordering Information

F136A - 12 05 C4 D MU B 1

**NO. OF PINS
Per Row**
2 ~ 40P

Contact Plating

<i>Full of Gold</i>	<i>Semi-gold</i>
A0=0.8u"	B0=0.8u"
A1=1u"	B1=1u"
A2=1.5u"	B2=1.5u"
A3=2u"	B3=2u"
A3=2u"	B3=2u"
A5=5u"	B5=5u"
A6=10u"	B6=10u"
A7=15u"	B7=15u"
A8=20u"	B8=20u"
A9=30u"	B9=30u"

S1=Ordinary Tin Plated
S2=Matte Tin Plated
S3=Tin-plated High-temperature
C4=0.076 μm (3 μm) Gold in Contact
Area, 2 μm (80 μm) Min Matte Tin on
Tail Over 1,27 μm (50 μm) Min Nickel

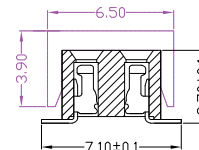
INSULATOR MATERIAL:

B: PA6T
C: PA9T
D: LCP

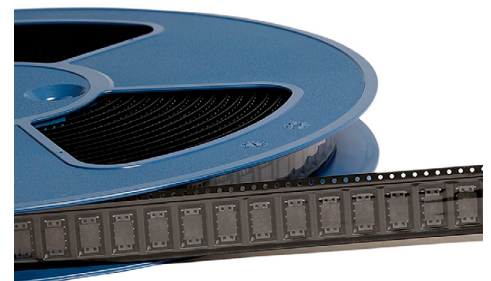
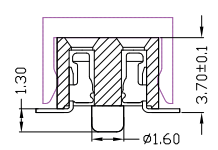
PACKING

A: PE Bag
B: Tape & Real
C: Tube
D: Tube & CAP
E: Tray

Type 1



Type 2



SURFACE MOUNT NUTS

The best solution for SMT/PCB assembly

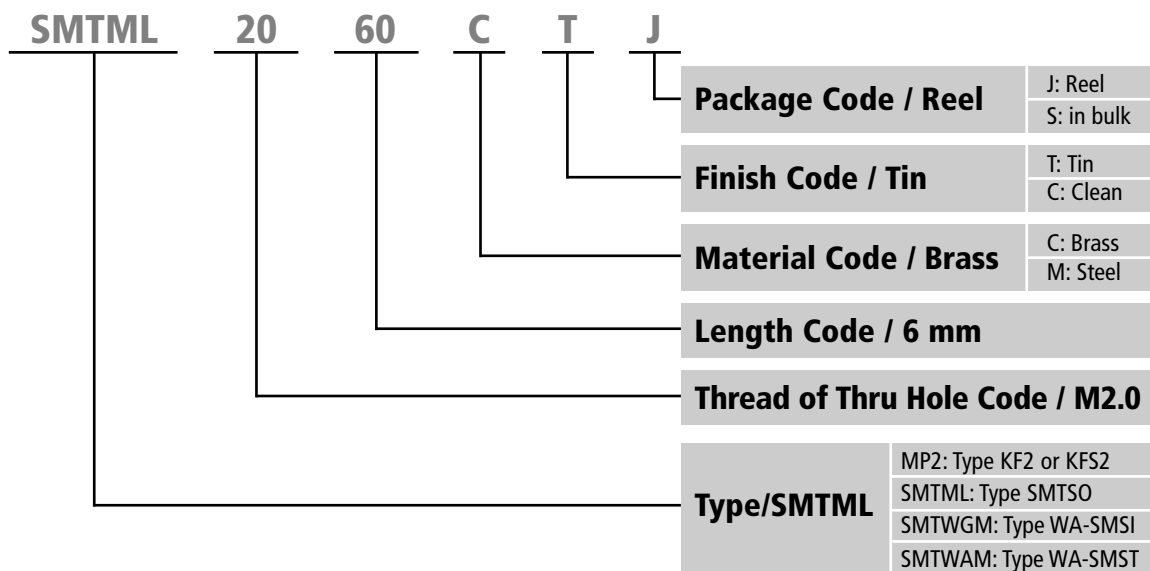


Surface mount nuts and spacers / standoffs

Whether a fan is to be attached to the circuit board or the circuit board itself is built into the housing, you need threaded supports such as nuts or spacers. In most cases these must be installed in a separate operation.

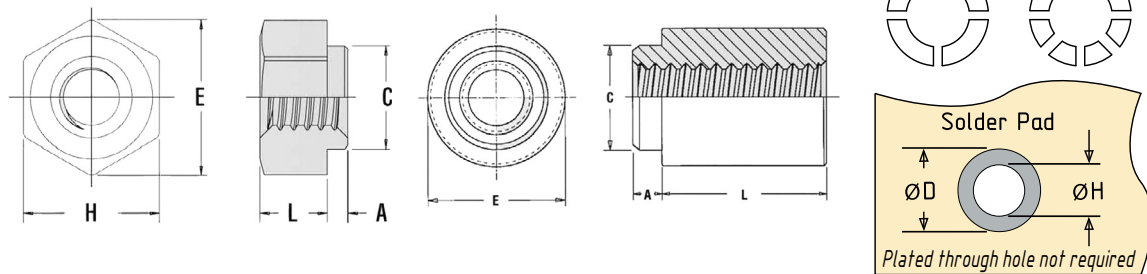
The ST thread mounts are components that have been specially developed for SMT applications. Since the threaded nuts and sockets are supplied in convenient, machine-compliant tape & reel packaging, they can be machine-fitted directly in the assembly process on pads preprinted with solder paste. In the reflow oven, the threaded carrier connects to the circuit board without destroying the circuit board, as might be the case when it is pressed in.

Threaded carriers or sockets can be supplied in various heights and diameters. The basic material is usually steel, but it can also be a copper alloy, tin-plated or nickel-plated surface. ROHS compliant.



SMTML (Type SMTSO)

Example of Stencil Masks



All dimensions are in millimeters

Thread Size x Pitch	Thru Hole +0.1-0.08	Type	Thread or Thru Hole Code	Length Code "L"±0,13 (Length code in millimeters)*						Min Sheet Thickness	A Max.	C Max.	E		H Nom.	Ø H Hole Size in Sheet +0.08	Ø D Min. Solder Pad
				1	2	3	—	—	—				Ref.	±0.13			
M1x0,25	—	SMTML	010	1	2	3	—	—	—	0,5	0,48	2,41	3,45	—	3	2,5	4,19
M1,2x0,25	—	SMTML	012	1	2	3	—	—	—	0,5	0,48	2,41	3,45	—	3	2,5	4,19
M1,4x0,3	—	SMTML	014	1	2	3	—	—	—	0,5	0,48	2,41	3,45	—	3	2,5	4,19
M1,6x0,35	—	SMTML	016	1	2	3	—	—	—	0,5	0,48	2,41	3,45	—	3	2,5	4,19
M2x0,4	—	SMTML	020	—	2	3	4	6	8	10	1,53	1,53	3,6	—	5,56	—	6,2
M2,5x0,45	—	SMTML	025	—	2	3	4	6	8	10	1,53	1,53	4,09	—	5,56	—	6,2
M3x0,5	—	SMTML	030	—	2	3	4	6	8	10	1,53	1,53	4,09	—	5,56	—	6,2
M3,5x0,6	—	SMTML	035	—	2	3	4	6	8	10	1,53	1,53	5,28	—	7,14	—	7,77
M4x0,7	—	SMTML	040	—	2	3	4	6	8	10	1,53	1,53	6,22	—	8,74	—	9,37
—	3,6	SMTML	036	—	2	3	4	6	8	10	1,53	1,53	5,28	—	7,14	—	7,77
—	4,2	SMTML	042	—	2	3	4	6	8	10	1,53	1,53	6,22	—	8,74	—	9,37

* - other sizes can be provided under customer's inquiry

Number of parts per reel

Thread/Thru-Hole Size	Length Code							
	1	2	3	4	6	8	10	12
0-80	—	3500	—	2000	—	—	—	—
2-56,4-40,6-32,116,143	—	2000	—	1000	—	700	—	380
8-32	—	1500	—	700	—	500	—	300
M1, M1.2, M1.4, M1.6	4000	3000	2000	—	—	—	—	—
M2, M2.5, M3,	—	1500	1000	1000	700	500	500	—
M3.5, 3.6	—	1500	1000	1000	600	400	300	—
M4, 4.2	—	1000	800	700	500	400	300	—

Processing

1. With adhesive patch by means of standard vacuum pipette
2. Without adhesive patch by means of special vacuum pipette

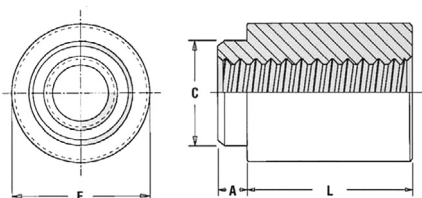


Fasteners for use with PC boards

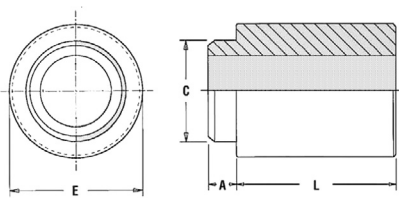


SMTWGM (Type WA-SMSI) & SMTWAM (Type WA-SMST)

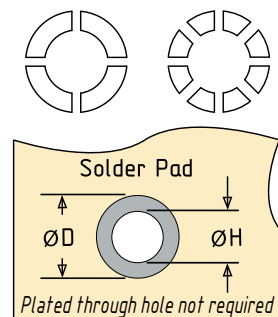
**SMTWGM (Type WA-SMSI)
with Thread**



**SMTWAM (Type WA-SMST)
with Through Hole**



Example of Stencil Masks



All dimensions are in millimeters

Thread Size x Pitch	Type	Thread Code	Length Code "L"±0,13 (Length code in millimeters)*															A ±0.10	C ±0.10	E ±0.10	Ø H Hole Size In Sheet +0.08	Ø D Min. Solder Pad				
M2x0,4	SMTWGM	M2	1	1,5	2	2,5	3	3,5	4	4,5	5	6	7	8	—	—	—	—	—	—	1,4	2,8	4,35	3	5,3	
M2,5x0,45	SMTWGM	M2,5	1	1,5	2	2,5	3	—	4	—	5	6	7	8	9	10	—	—	—	—	1,4	3,5	5,1	3,7	6	
M3x0,5	SMTWGM	M3	1	1,5	2	2,5	3	—	4	—	5	6	7	8	9	10	11	12	13	14	15	1,4	4,2	6	4,4	7,4
M4x0,7	SMTWGM	M4	1	—	2	—	3	—	4	—	5	6	7	8	9	10	—	—	—	—	—	1,4	5,2	8,2	5,4	9,4

Thru-Hole Size	Type	Thru-Hole Code	Length Code "L" ±0,13 (Length code in millimeters)*																	A ±0.10	C ±0.10	E ±0.10	Ø H Hole Size In Sheet +0.08	Ø D Min. Solder Pad																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																						
2,25	SMTWAM	2,25	1	1,5	2	2,5	3	3,5	4	4,5	5	6	7	8	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

* - other sizes can be provided under customer's inquiry

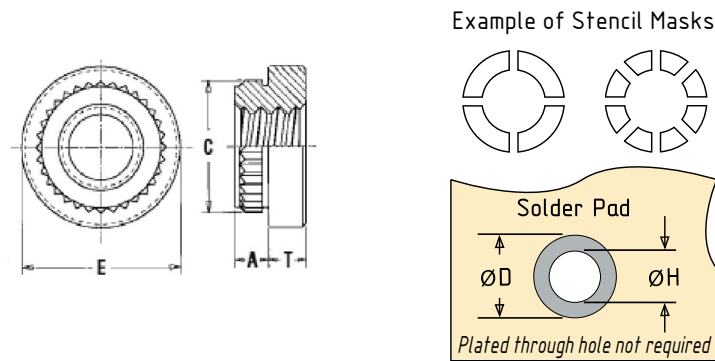
Number of parts per reel

Thread/ Thru-Hole Size	Length Code																		
	1	1,5	2	2,5	3	3,5	4	4,5	5	6	7	8	9	10	11	12	13	14	15
M 2/2.25	2000	1500	1500	1000	1000	1000	1000	800	800	700	600	500	—	—	—	—	—	—	—
M 2.5/2.7	2000	1500	1500	1000	1000	1000	1000	800	800	700	600	500	500	500	—	—	—	—	—
M 3/3.3	2000	1500	1500	1000	1000	1000	1000	800	800	700	600	500	500	500	300	300	300	250	200
M 4/4.5	1500	—	1000	—	800	—	700	—	600	500	400	400	300	300	—	—	—	—	—

Processing

1. With adhesive patch by means of standard vacuum pipette
2. Without adhesive patch by means of special vacuum pipette





All dimensions are in millimeters

Thread Size x Pitch	Type	Thread Code	A (Shank) Max.	Min. Sheet Thickness	H in PC board +0,01	C ±0,08	E ±0,13	T* ±0,13	D min	Number of parts per reel
M2 x 0,4	MP2	M2	1,53	1,53	4,3	4,19	5,56	1,5	6,2	1500
M2.5x0,45	MP2	M2,5	1,53	1,53	4,8	4,68	5,56	1,5	6,2	1500
M3 x 0,5	MP2	M3	1,53	1,53	4,8	4,68	5,56	1,5	6,2	1500
M4 x 0,7	MP2	M4	1,53	1,53	7	6,86	8,74	2	9,4	900
M5 x 0,8	MP2	M5	1,53	1,53	7,5	7,37	9,53	3	10,3	800

* - other sizes can be provided under customer's inquiry

Type MP2 broaching and broach/flare mount fasternes

Type	Thread Code	Max. Nut Tightening Torque (N•m)	Test Sheet Thickness & Test Sheet Material	Installation (kN)	Pushout (N) (2)	Torque-out (N•m)
MP2	M2/2.5/3	(3)	1.5 mm FR-4 Fiberglass	2.2	290	1.7
	M4	(3)	1.5 mm FR-4 Fiberglass	2.2	420	3.4
	M5	(3)	1.5 mm FR-4 Fiberglass	2.9	440	4.5

(1) The values reported are averages when all installation specifications and procedures are followed. Variations in mounting hole size, sheet material, and installation procedure will affect this data. Performance testing of this product in your application is recommended. We will be happy to provide samples for this purpose or perform the installation for you.

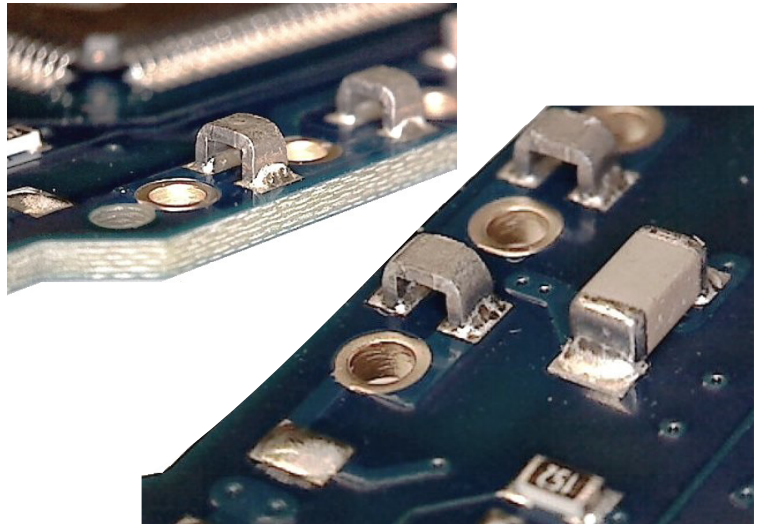
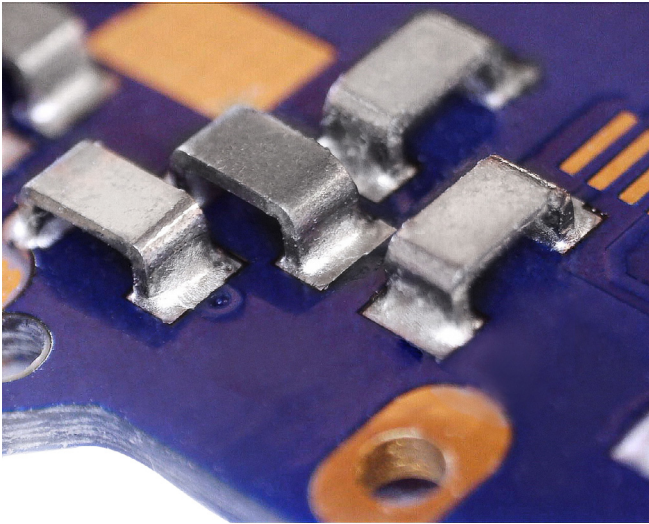
(2) These are typical values for parts installed in drilled mounting holes. Punched mounting holes yield values approximately 15% less.

(3) Not applicable.

Processing

1. With adhesive patch by means of standard vacuum pipette
2. Without adhesive patch by means of special vacuum pipette





The JP series has been specially developed for SMT applications. An inexpensive solution to connect two points on a circuit board with a current-proof zero-ohm resistor. This jumper / bridge is made of a copper alloy coated with a thin layer of lead-free tin (ROHS compliant).

The jumper / bridge provides sufficient space for circuit board paths, which means that expensive or time-consuming insulation is no longer required. This keeps production costs down.
The jumper / JP bridge can be assembled by machine and is supplied in standard tape & reel packaging, suitable for most assembly machines.

The JP Jumper / current-proof bridge is delivered on a 13" reel (10,000 pieces). Possible delivery sizes of the components are 0603, 0805 and 1206. Other designs are also possible, please inquire.

Specification:

- Contact Material: Brass
- Finish: 1µm - 3µm tin plated
- Package Size: 13" reel, (10,000 pieces)
- Taping Specification: Tape & reel
- RoHS compliant

Electrical:

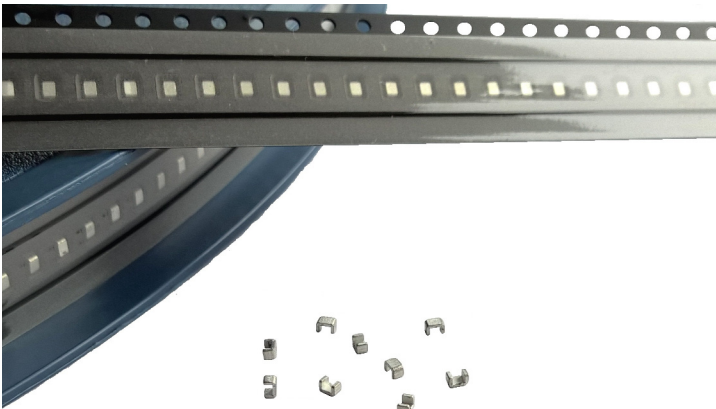
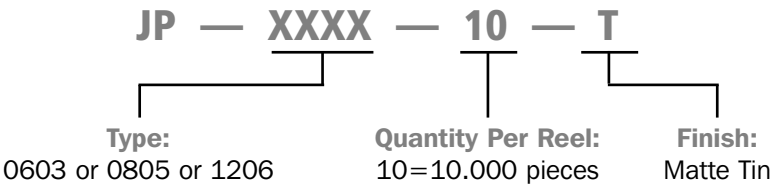
- Maximum Current: 2.0 amperes

All dimensions are in millimeters

Dimension/Type	0603	0805	1206
Length (L)	1,60	2,00	3,10
Width (W)	0,80	1,27	1,57
Height (H)	0,80	1,27	1,27

* - other sizes can be provided under customer's inquiry

Ordering Information





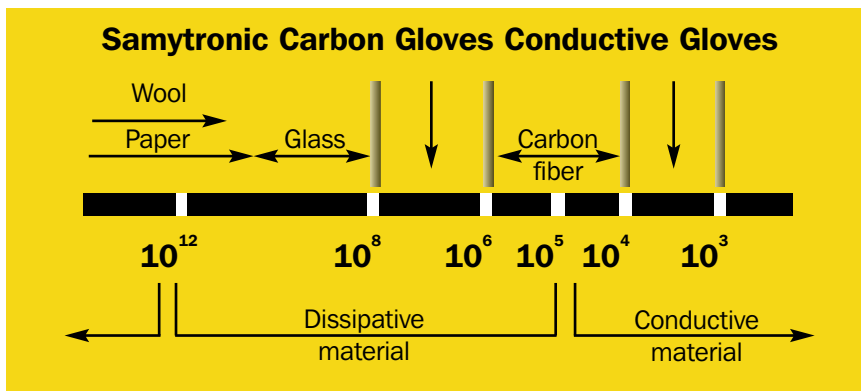
The Smart Flex series is intended for assembly, quality inspection and packaging work in the following areas:

- Fine electronics
- Electronics accessories in various industrial sectors
- The antistatic properties of the Smart Flex series are achieved by adding carbon fibers to the nylon carrier, which are highly effective in preventing electrostatic discharges. The flexible, seamless nylon carrier (15-gauge) offers good dexterity and ensures a comfortable fit.
- Thanks to the polyurethane coating on the fingertips, the Smart Flex series offers good grip and durability. This further improves fit and flexibility.
- The coating of the fingertips also prevents the transfer of sweat to electronic components.

Minimum order quantity 10 pairs (one package).
Each pair has a size mark and is individually wrapped.

Samytronic ESD PU Top Coated Carbon gloves are made of high electricity conductive yarns (10 Pow 6-8). It has good elasticity with delicate materials, and washable. Polyurethane is coated on fingertip of gloves; Having excellent anti-static effect, and prevent skin irritations caused by corona discharge.

Specifikation:



15 g carbon fiber finger top PU coated glove

Tear SER No:
Calibration Date:
Temperature: 21°C

SAMPLE REFERENCE:
Machine operations functional: OK
Humidity: 40%rH

Name	(Ω) Anti-static electricity
Sample 1	10 ⁷
Sample 2	10 ⁶
Sample 3	10 ⁸
Sample 4	10 ⁷

ALL testing carried out within controlled environment