

1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

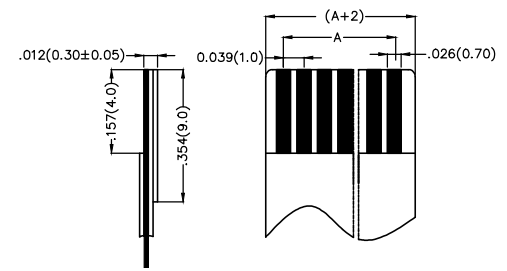
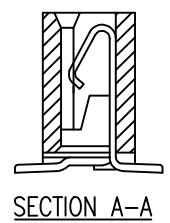
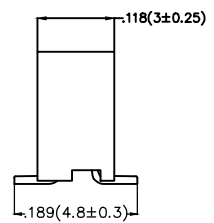
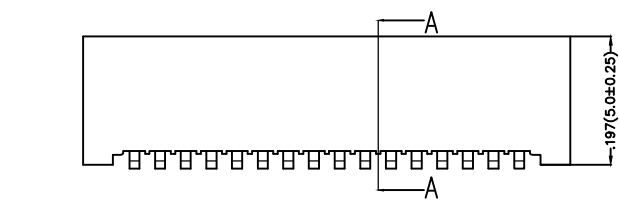
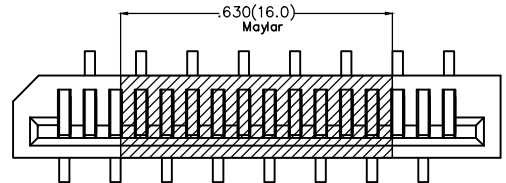
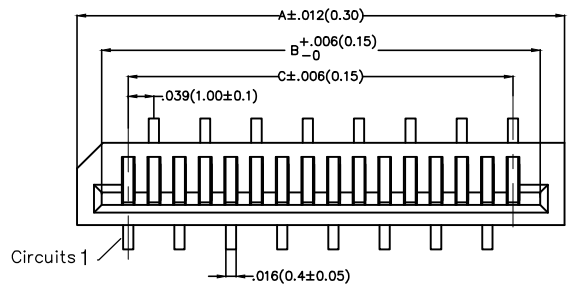
SPECIFICATIONS

Electrical

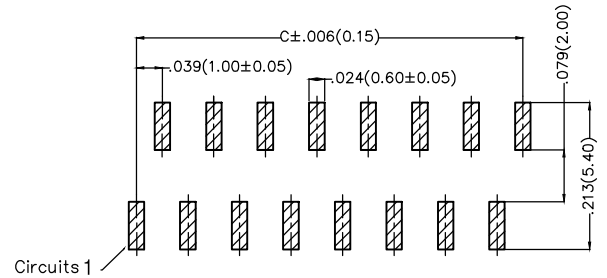
Current Rating: 1A AC(rms)/DC
 Voltage Rating: 50V AC(rms)/DC
 Contact Resistance: 20 mΩ Max
 Insulation Resistance: 800 MΩ MIN
 Withstanding Voltage: 500V AC r.m.s
 Temperature Range-Operating: -40°C~+85°C

Material and Plating

Housing: PA6T UL 94V-0
 Actuator: Heat Resistant Polymer UL 94V-0
 Terminal: Copper Alloy /Tin-Plated



Applicable FFC Recommended Dimension



A-Positive Needle Recommended P.C.Board Layout

Ordering Information



FFC 100 31 — XX S S A 2 2 4 W5 M
 1 2 3 4 5 6 7 8 9 10 11 12

1 Category FFC-FPC	2 Series Number 100-1.0mm Pitch	3 Distinction No. 31	4 Circuits XX	5 Assemble Layout S-SMT	6 Entry Angle S-Vertical
7 Contact Position A-Positive Needle	8 ZIF 2-Non ZIF	9 Plating 2-Tin Plated All	10 Material-Resin 4-LCP	11 Color-Resin W5-Natural	12 Packaging M-Reel

 THIRD ANGLE PROJECTION DESIGN UNITS Inch (metric) SCALE 5:1 SIZE A4	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 5/JUL/13	PART NO. FFC10031-XXSSA224W5M	ITEM NO. FFC10031	 Leader Of Industry	
	X.±.012(0.30)	.X'±5'	CHECKED BY CHERRY	DATE 5/JUL/13	TITLE FPC .039'(1.00mm) SMT			REV 0
	X.X±.008(0.20)	.X'±2'	DRAWN BY JACOB	DATE 5/JUL/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
	X.XX±.006(0.15)	.XX'±1'						
	X.XXX±.004(0.10)	.XXX'±0.5'						

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

Circuits (n)	Dimensions(in/mm)				Circuits (n)	Dimensions(in/mm)			
	Part No.	A	B	C		Part No.	A	B	C
4	FFC10031-04SSA224W5M	.276(7.00)	.201(5.10)	.118(3.00)	23	FFC10031-23SSA224W5M	1.028(26.00)	.949(24.10)	.866(22.00)
5	FFC10031-05SSA224W5M	.315(8.00)	.240(6.10)	.157(4.00)	24	FFC10031-24SSA224W5M	1.063(27.00)	.992(25.10)	.906(23.00)
6	FFC10031-06SSA224W5M	.354(9.00)	.280(7.10)	.197(5.00)	25	FFC10031-25SSA224W5M	1.102(28.00)	1.032(26.10)	.945(24.00)
7	FFC10031-07SSA224W5M	.394(10.00)	.319(8.10)	.236(6.00)	26	FFC10031-26SSA224W5M	1.141(29.00)	1.067(27.10)	.988(25.00)
8	FFC10031-08SSA224W5M	.433(11.00)	.358(9.10)	.276(7.00)	27	FFC10031-27SSA224W5M	1.181(30.00)	1.106(28.10)	1.028(26.00)
9	FFC10031-09SSA224W5M	.472(12.00)	.398(10.10)	.315(8.00)	28	FFC10031-28SSA224W5M	1.220(31.00)	1.145(29.10)	1.063(27.00)
10	FFC10031-10SSA224W5M	.512(13.00)	.437(11.10)	.354(9.00)	29	FFC10031-29SSA224W5M	1.256(32.00)	1.185(30.10)	1.102(28.00)
11	FFC10031-11SSA224W5M	.551(14.00)	.476(12.10)	.394(10.00)	30	FFC10031-30SSA224W5M	1.299(33.00)	1.224(31.10)	1.141(29.00)
12	FFC10031-12SSA224W5M	.591(15.00)	.516(13.10)	.433(11.00)	31	FFC10031-31SSA224W5M	1.338(34.00)	1.260(32.10)	1.181(30.00)
13	FFC10031-13SSA224W5M	.630(16.00)	.555(14.10)	.472(12.00)	32	FFC10031-32SSA224W5M	1.378(35.00)	1.302(33.10)	1.220(31.00)
14	FFC10031-14SSA224W5M	.669(17.00)	.595(15.10)	.512(13.00)	33	FFC10031-33SSA224W5M	1.417(36.00)	1.342(34.10)	1.256(32.00)
15	FFC10031-15SSA224W5M	.708(18.00)	.634(16.10)	.551(14.00)	34	FFC10031-34SSA224W5M	1.456(37.00)	1.382(35.10)	1.299(33.00)
16	FFC10031-16SSA224W5M	.748(19.00)	.673(17.10)	.591(15.00)	35	FFC10031-34SSA224W5M	1.496(38.00)	1.421(36.10)	1.338(34.00)
17	FFC10031-17SSA224W5M	.787(20.00)	.712(18.10)	.630(16.00)	36	FFC10031-36SSA224W5M	1.535(39.00)	1.460(37.10)	1.378(35.00)
18	FFC10031-18SSA224W5M	.827(21.00)	.752(19.10)	.669(17.00)	37	FFC10031-37SSA224W5M	1.575(40.00)	1.500(38.10)	1.417(36.00)
19	FFC10031-19SSA224W5M	.866(22.00)	.791(20.10)	.708(18.00)	38	FFC10031-38SSA224W5M	1.614(41.00)	1.539(39.10)	1.456(37.00)
20	FFC10031-20SSA224W5M	.906(23.00)	.831(21.10)	.748(19.00)	39	FFC10031-39SSA224W5M	1.654(42.00)	1.579(40.10)	1.496(38.00)
21	FFC10031-21SSA224W5M	.945(24.00)	.870(22.10)	.787(20.00)	40	FFC10031-40SSA224W5M	1.693(43.00)	1.618(41.10)	1.535(39.00)
22	FFC10031-22SSA224W5M	.988(25.00)	.910(23.10)	.827(21.00)					

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 5/JUL/13	PART NO. FFC10031-XXSSA224W5M	ITEM NO. FFC10031	 Leader Of Industry	
	DESIGN UNITS Inch (metric)	X.±.012(0.30)	X.±5'	CHECKED BY CHERRY	DATE 5/JUL/13	TITLE FPC .039'(1.00mm) SMT		REV 0
SCALE 5:1	SIZE A4	X.XX±.008(0.20)	X.±2'	DRAWN BY JACOB	DATE 5/JUL/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		X.XX±.006(0.15)	.XX±1'					
		X.XXX±.004(0.10)	.XXX±0.5'					

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

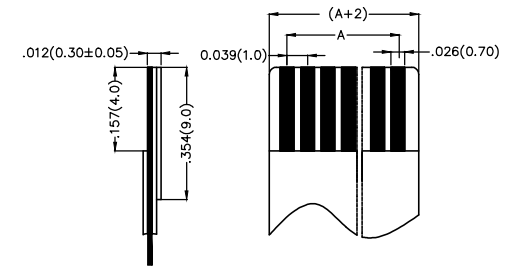
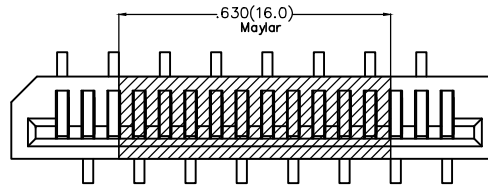
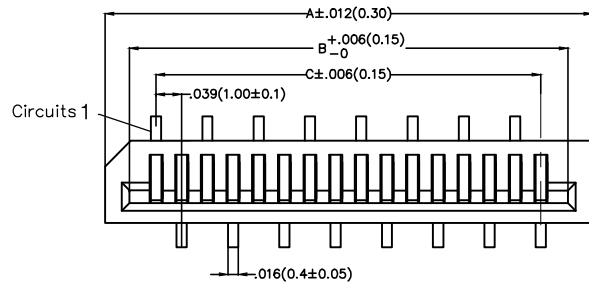
SPECIFICATIONS

Electrical

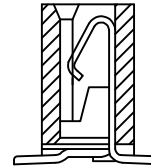
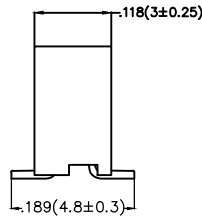
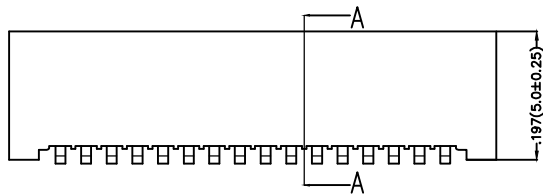
Current Rating: 1A AC(rms)/DC
Voltage Rating: 50V AC(rms)/DC
Contact Resistance: 20 mΩ Max
Insulation Resistance: 800 MΩ MIN
Withstanding Voltage: 500V AC r.m.s
Temperature Range-Operating: -40°C~+85°C

Material and Plating

Housing: PA6T UL 94V-0
Actuator: Heat Resistant Polymer UL 94V-0
Terminal: Copper Alloy /Tin-Plated



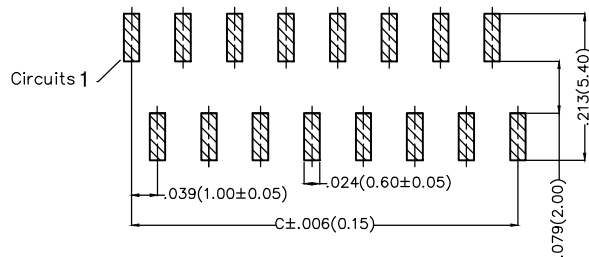
Applicable FFC Recommended Dimension



SECTION A-A

Ordering Information

FFC 100 31 — XX S S B 2 2 4 W5 M
1 2 3 4 5 6 7 8 9 10 11 12



B-Versa Needle Recommended P.C.Board Layout



1 Category FFC-FPC	2 Series Number 100-1.0mm Pitch	3 Distinction No. 31	4 Circuits XX	5 Assemble Layout S-SMT	6 Entry Angle S-Vertical
7 Contact Position B-Versa Needle	8 ZIF 2-Non ZIF	9 Plating 2-Tin Plated All	10 Material-Resin 4-LCP	11 Color-Resin W5-Natural	12 Packaging M-Reel

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 5/JUL/13	PART NO. FFC10031-XXSSB224W5M	ITEM NO. FFC10031	 TXGA Leader Of Industry	
	DESIGN UNITS Inch (metric)	X.±.012(0.30) X.X±.008(0.20) X.XX±.006(0.15) X.XXX±.004(0.10)	.X'±5' .X'±2' .XX'±1' .XXX'±0.5'	CHECKED BY CHERRY	DATE 5/JUL/13	TITLE FPC .039'(1.00mm) SMT		REV 0
SCALE 5:1	SIZE A4		DRAWN BY JACOB	DATE 5/JUL/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

Circuits (n)	Dimensions(in/mm)				Circuits (n)	Dimensions(in/mm)			
	Part No.	A	B	C		Part No.	A	B	C
4	FFC10031-04SSB224W5M	.276(7.00)	.201(5.10)	.118(3.00)	23	FFC10031-23SSB224W5M	1.028(26.00)	.949(24.10)	.866(22.00)
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6	FFC10031-06SSB224W5M	.354(9.00)	.280(7.10)	.197(5.00)	25	FFC10031-25SSB224W5M	1.102(28.00)	1.032(26.10)	.945(24.00)
7	FFC10031-07SSB224W5M	.394(10.00)	.319(8.10)	.236(6.00)	26	FFC10031-26SSB224W5M	1.141(29.00)	1.067(27.10)	.988(25.00)
8	FFC10031-08SSB224W5M	.433(11.00)	.358(9.10)	.276(7.00)	27	FFC10031-27SSB224W5M	1.181(30.00)	1.106(28.10)	1.028(26.00)
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10	FFC10031-10SSB224W5M	.512(13.00)	.437(11.10)	.354(9.00)	29	FFC10031-29SSB224W5M	1.256(32.00)	1.185(30.10)	1.102(28.00)
11	FFC10031-11SSB224W5M	.551(14.00)	.476(12.10)	.394(10.00)	30	FFC10031-30SSB224W5M	1.299(33.00)	1.224(31.10)	1.141(29.00)
12	FFC10031-12SSB224W5M	.591(15.00)	.516(13.10)	.433(11.00)	31	FFC10031-31SSB224W5M	1.338(34.00)	1.260(32.10)	1.181(30.00)
13	FFC10031-13SSB224W5M	.630(16.00)	.555(14.10)	.472(12.00)	32	FFC10031-32SSB224W5M	1.378(35.00)	1.302(33.10)	1.220(31.00)
14	FFC10031-14SSB224W5M	.669(17.00)	.595(15.10)	.512(13.00)	33	FFC10031-33SSB224W5M	1.417(36.00)	1.342(34.10)	1.256(32.00)
15	FFC10031-15SSB224W5M	.708(18.00)	.634(16.10)	.551(14.00)	34	FFC10031-34SSB224W5M	1.456(37.00)	1.382(35.10)	1.299(33.00)
16	FFC10031-16SSB224W5M	.748(19.00)	.673(17.10)	.591(15.00)	35	FFC10031-34SSB224W5M	1.496(38.00)	1.421(36.10)	1.338(34.00)
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22	FFC10031-22SSB224W5M	.988(25.00)	.910(23.10)	.827(21.00)					

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 5/JUL/13	PART NO. FFC10031-XXSSB224W5M	ITEM NO. FFC10031	 Leader Of Industry	
	DESIGN UNITS Inch (metric)	X.±.012(0.30)	.X'±5'	CHECKED BY CHERRY	DATE 5/JUL/13	TITLE FPC .039'(1.00mm) SMT		REV 0
SCALE 5:1	SIZE A4	X.XX±.006(0.15)	.XX'±1'	DRAWN BY JACOB	DATE 5/JUL/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

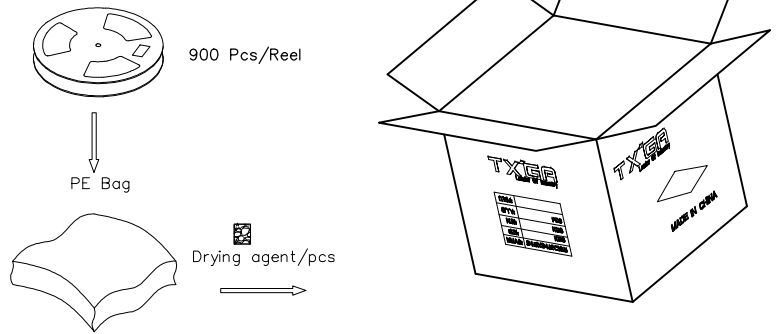
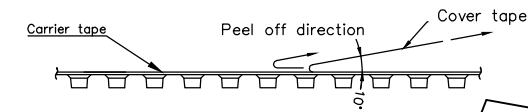
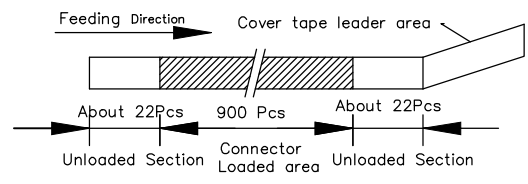
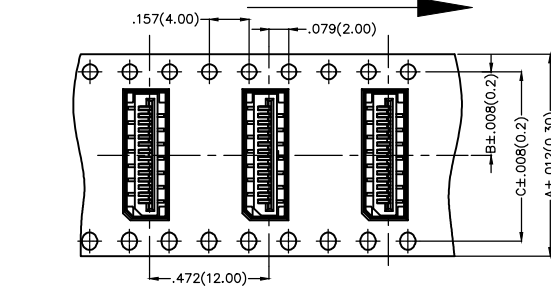
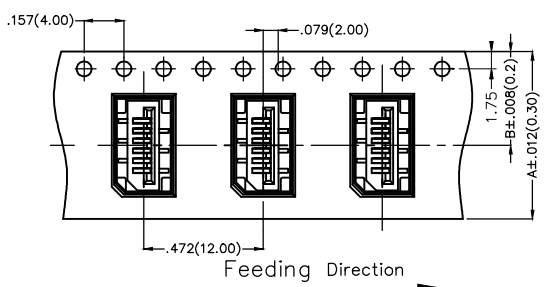
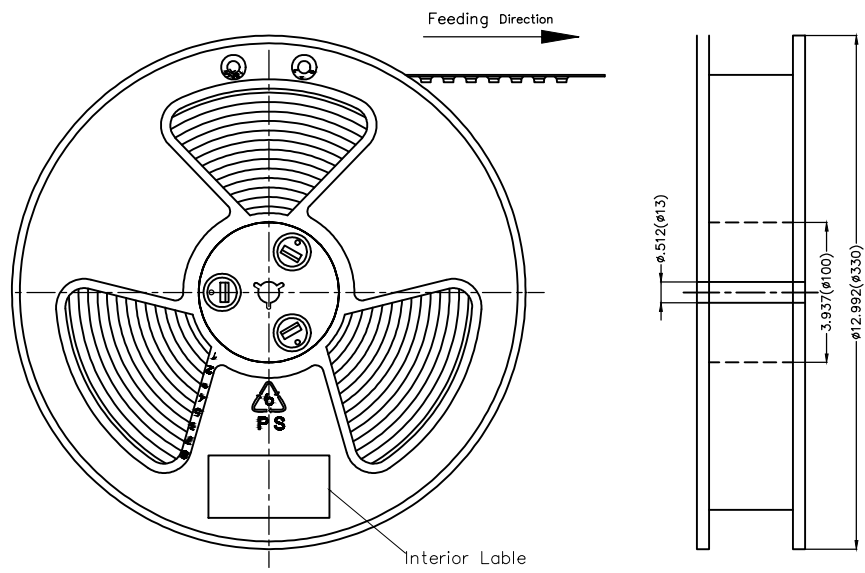
1 2 3 4 5 6 7 8

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

Note:

- 10 sprocket hole cumulative tolerance ± 0.2
- Carrier camber is within 1.0mm in 250mm
- Material: White Conductive polystyrene Alloy 100% recyclable
- All dimensions meet EIA-481-3 requirements
- Peel off force of cover tape & carrier tape: 20g~130g(0.2N~1.3N)
- Component load per 13" reel: 900 pcs

Circuits (n)	Dimensions(in/mm)		
	A	B	C
4	.630(16.0)	.295(7.50)	—
5~12	.945(24.0)	.453(11.5)	—
13~16	1.260(32.0)	.561(14.25)	1.033(28.50)
17~28	1.732(44.0)	.797(20.25)	1.594(40.50)
29~40	2.240(56.0)	1.033(26.25)	2.067(52.50)



 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY	DATE	PART NO.	ITEM NO.	 Leader Of Industry
	X.±.012(0.30)	X.'±5'	FRANK	18/JUN/13	FFC10031-XXSSX224W5M	FFC10031	
DESIGN UNITS Inch (metric)	X.X±.008(0.20)	.X'±2'	CHECKED BY	DATE	TITLE		REV 0 SHEET NO. 5/5
SCALE	X.XX±.006(0.15)	.XX'±1'	JACOB	18/JUN/13	FPC .039'(1.00mm) SMT		
SIZE	X.XXX±.004(0.10)	.XXX'±0.5'	DRAWN BY	DATE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
5:1	A4		CHERRY	18/JUN/13			