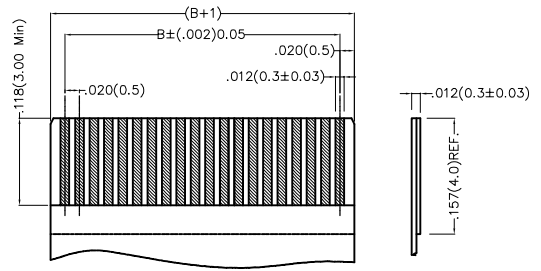
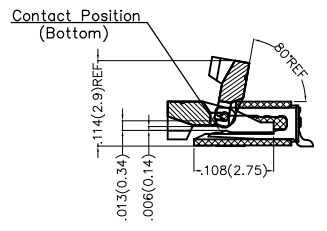
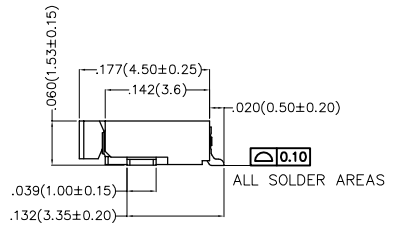
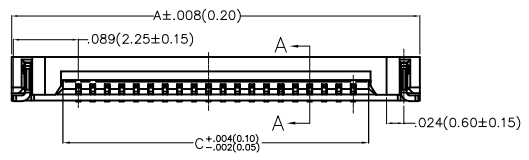
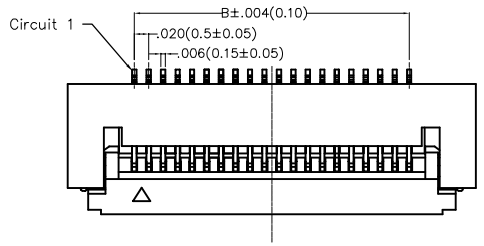


REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

SPECIFICATIONS

Electrical
 Current Rating: 0.5A AC(rms)/DC
 Voltage Rating: 50V AC(rms)/DC
 Contact Resistance: 20 mΩ Max
 Insulation Resistance: 500 MΩ MIN
 Withstanding Voltage: 200V AC r.m.s
 Temperature Range-Operating: -25°C~+85°C

Material and Plating
 Housing: PA6T UL 94V-0
 Actuator: PA6T UL 94V-0
 Contact: Phosphor Bronze/ Tin Plated/Gold Plated 3U"
 Stopper: Phosphor Bronze/ Tin Plated



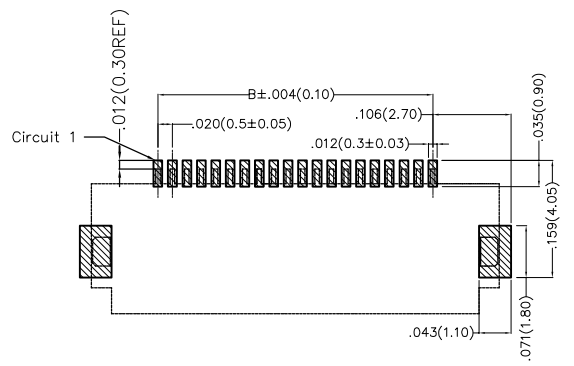
Circuits (n)	Part No.	Dimensions(in/mm)		
		A	B	C
4	FFC05020-04SBB1XXW5M	.240(6.10)	.059(1.50)	.101(2.57)
5	FFC05020-05SBB1XXW5M	.260(6.60)	.079(2.00)	.121(3.07)
6	FFC05020-06SBB1XXW5M	.280(7.10)	.098(2.50)	.141(3.57)
7	FFC05020-07SBB1XXW5M	.299(7.60)	.118(3.00)	.160(4.07)
8	FFC05020-08SBB1XXW5M	.319(8.10)	.138(3.50)	.180(4.57)
9	FFC05020-09SBB1XXW5M	.339(8.60)	.157(4.00)	.200(5.07)
10	FFC05020-10SBB1XXW5M	.358(9.10)	.177(4.50)	.219(5.57)
11	FFC05020-11SBB1XXW5M	.378(9.60)	.197(5.00)	.239(6.07)
12	FFC05020-12SBB1XXW5M	.398(10.10)	.217(5.50)	.259(6.57)
13	FFC05020-13SBB1XXW5M	.417(10.60)	.236(6.00)	.278(7.07)
14	FFC05020-14SBB1XXW5M	.437(11.10)	.256(6.50)	.298(7.57)
15	FFC05020-15SBB1XXW5M	.457(11.60)	.276(7.00)	.318(8.07)
16	FFC05020-16SBB1XXW5M	.476(12.10)	.295(7.50)	.337(8.57)
17	FFC05020-17SBB1XXW5M	.496(12.60)	.315(8.00)	.357(9.07)
18	FFC05020-18SBB1XXW5M	.516(13.10)	.335(8.50)	.377(9.57)
19	FFC05020-19SBB1XXW5M	.535(13.60)	.354(9.00)	.396(10.07)
20	FFC05020-20SBB1XXW5M	.555(14.10)	.374(9.50)	.416(10.57)
21	FFC05020-21SBB1XXW5M	.575(14.60)	.394(10.00)	.436(11.07)
22	FFC05020-22SBB1XXW5M	.594(15.10)	.413(10.50)	.456(11.57)

Applicable FFC Recommended Dimension


Ordering Information

FFC 050 20 - XX S B B 1 X X W5 M
 1 2 3 4 5 6 7 8 9 10 11 12

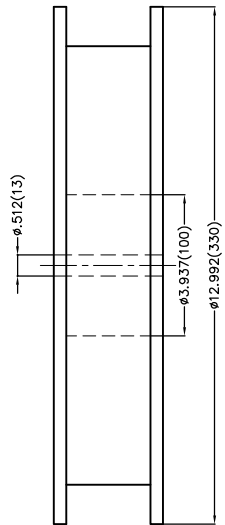
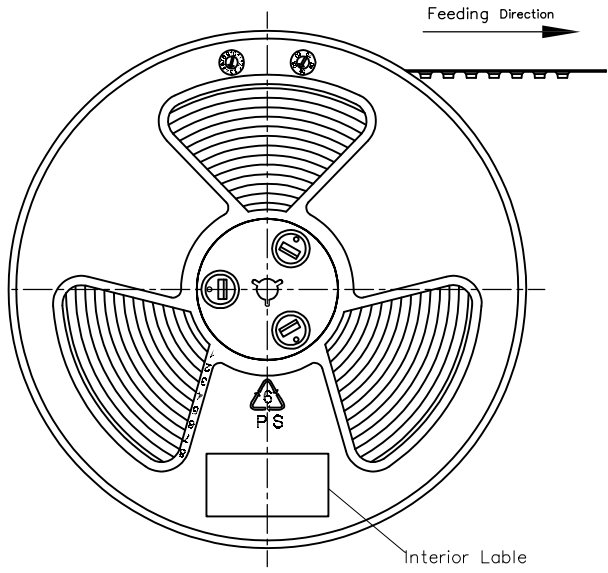
1 Category FFC-FPC	2 Series Number 050-Pitch 0.50mm	3 Distinction No. 20	4 Circuits XX	5 Assemble Layout S-SMT	6 Entry Angle B- 90° Angle
7 Contact Position B-Bottom	8 ZIF 1-ZIF	9 Plating 2-Tin Plated 1-Gold Plated	10 Material-Resin 4-PA6T 3-LCP	11 Color-Resin W5-Housing: Natural, Actuator: Black	12 Packaging M-Reel



Recommended P.C.Board Layout

THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 18/JUN/13	PART NO. FFC05020-XXSBB1XXW5M	ITEM NO. FFC05020	 Leader Of Industry
	X.±.012(0.30)	X'±5'	CHECKED BY JACOB	DATE 18/JUN/13	TITLE FPC/FFC connector 0.5mm Bottom contact SMT		
DESIGN UNITS Inch (metric)	X.XX±.008(0.20)	.X'±2'	DRAWN BY CHERRY	DATE 18/JUN/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		REV 0 SHEET NO.1/2
SCALE 1:1	SIZE A4	X.XX±.006(0.15)	.XX'±1'				
		X.XXX±.004(0.10)	.XX'±0.5'				

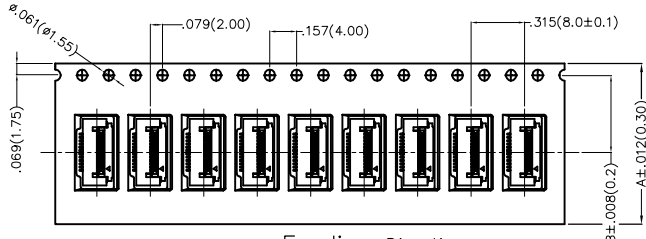
REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD



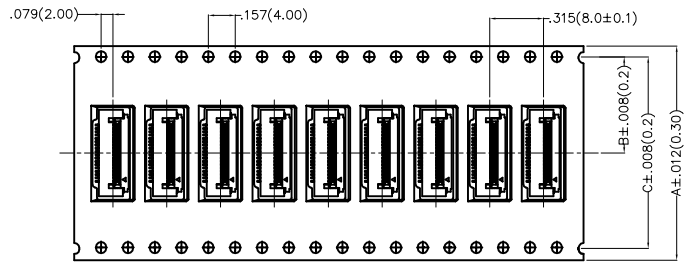
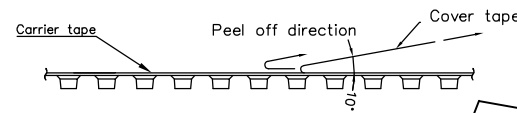
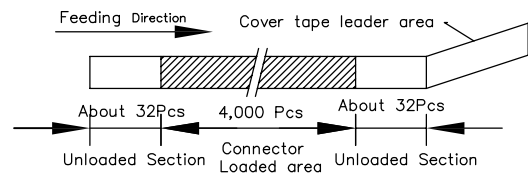
Note:

1. 10 sprocket hole cumulative tolerance ± 0.2
2. Carrier camber is within 1.0mm in 250mm
3. Material: White Conductive polystyrene Alloy 100% recyclable
4. All dimensions meet EIA-481-3 requirements
5. Peel off force of cover tape & carrier tape: 20g~130g(0.2N~1.3N)
6. Component load per 13" reel: 4,000 pcs

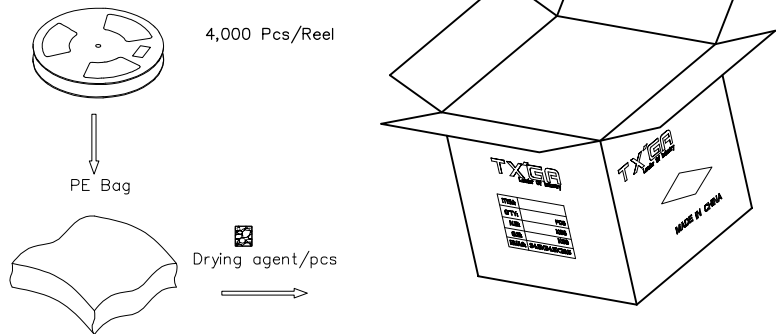
Circuits (n)	Dimensions(in./mm)		
	A	B	C
4~8	.630(16.0)	.295(7.50)	—
9~24	.945(24.0)	.453(11.50)	—
25~36	1.260(32.0)	.561(14.25)	1.122(28.50)
37~55	1.732(44.0)	.797(20.25)	1.594(40.50)
50~55	1.732(44.0)	.797(20.25)	1.594(40.50)
56~60	2.205(56.0)	1.033(26.25)	2.067(52.50)



Circuits: 4-24



Circuits: 25-60



<p>THIRD ANGLE PROJECTION</p>	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY	DATE	PART NO.	ITEM NO.	<p>Leader Of Industry</p>
	X. \pm .012(0.30)	X. \pm 5'	FRANK	18/JUN/13	FFC05020-XXSBB1XXW5M	FFC05020	
	X.X \pm .008(0.20)	X. \pm 2'	CHECKED BY	DATE	TITLE		
	X.XX \pm .006(0.15)	.XX \pm 1'	JACOB	18/JUN/13	FPC/FFC connector 0.5mm Bottom contact SMT		
SCALE	SIZE	X.XXX \pm .004(0.10)	.XX \pm 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	REV 0	SHEET NO. 2/2

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

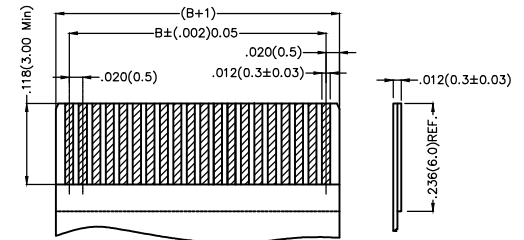
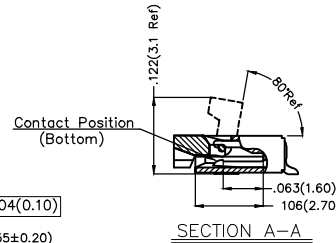
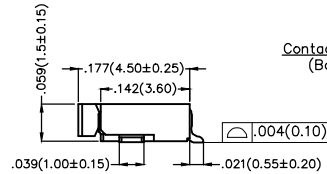
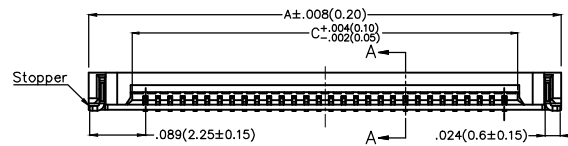
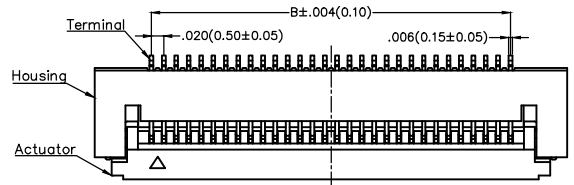
SPECIFICATIONS

Electrical

Current Rating: 0.5A AC(rms)/DC
Voltage Rating: 50V AC(rms)/DC
Contact Resistance: 20 mΩ Max
Insulation Resistance: 500 MΩ MIN
Withstanding Voltage: 200V AC r.m.s
Temperature Range—Operating: -25°C~+85°C

Material and Plating

Housing: LCP UL 94V-0
Actuator: LCP UL 94V-0
Contact: Phosphor Bronze/ Tin Plated
Stopper: Phosphor Bronze/ Tin Plated

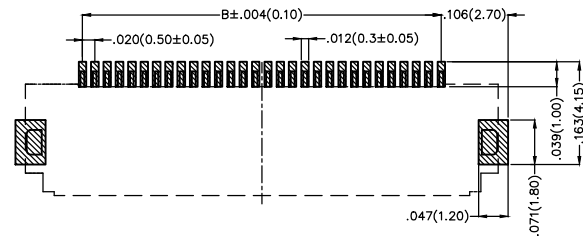


Applicable FFC Recommended Dimension

Ordering Information

FFC 050 20 — XX S B B 1 2 3 W5 M — C
1 2 3 4 5 6 7 8 9 10 11 12 13

1 Category FFC-FFC	2 Series Number 050-Pitch0.50mm	3 Distinction No. 20	4 Circuits XX	5 Assemble Layout S-SMT	6 Entry Angle B- 90° Angle	7 Contact Position B-Bottom
8 ZIF 1-ZIF	9 Plating 2-Tin Plated	10 Material-Resin 3-LCP	11 Color-Resin W5-Housing: Natural, Actuator: Black	12 Packaging M-Reel	13 Type C- Type C	





Recommended P.C.Board Layout

 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 18/JUN/13	PART NO. FFC05020-XXSBB123W5M-C	ITEM NO. FFC05020	 Leader Of Industry
	X.±.012(0.30)	X.±5'	CHECKED BY JACOB	DATE 18/JUN/13	TITLE FFC/FFC connector 0.5mm Bottom contact SMT		
DESIGN UNITS Inch (metric)	X.XX±.008(0.20)	.X'±2'	DRAWN BY CHERRY	DATE 18/JUN/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
SCALE 5:1	SIZE A4	X.XXX±.004(0.10)					SHEET NO.1/3

REV	LOCATIONS	DESCRIPTION	DATE	REVISER	APPD

Circuits (n)	Part No.	Dimensions(in/mm)		
		A	B	C
6	FFC05020-06SBB123W5M-C	.280(7.10)	.098(2.50)	.172(3.60)
8	FFC05020-08SBB123W5M-C	.319(8.10)	.138(3.50)	.181(4.60)
9	FFC05020-09SBB123W5M-C	.339(8.60)	.157(4.00)	.201(5.10)
10	FFC05020-10SBB123W5M-C	.358(9.10)	.177(4.50)	.220(5.60)
12	FFC05020-12SBB123W5M-C	.398(10.10)	.217(5.50)	.260(6.60)
20	FFC05020-20SBB123W5M-C	.555(14.10)	.374(9.50)	.417(10.60)
24	FFC05020-24SBB123W5M-C	.634(16.10)	.453(11.50)	.493(12.60)
26	FFC05020-26SBB123W5M-C	.673(17.10)	.492(12.50)	.535(13.60)
30	FFC05020-30SBB123W5M-C	.752(19.10)	.571(14.50)	.614(15.60)
34	FFC05020-34SBB123W5M-C	.830(21.10)	.650(16.50)	.693(17.60)
35	FFC05020-35SBB123W5M-C	.850(21.60)	.669(17.00)	.713(18.10)
36	FFC05020-36SBB123W5M-C	.870(22.10)	.689(17.50)	.732(18.60)
40	FFC05020-40SBB123W5M-C	.949(24.10)	.768(19.50)	.811(20.60)
50	FFC05020-50SBB123W5M-C	1.146(29.10)	.965(24.50)	1.008(25.60)
54	FFC05020-54SBB123W5M-C	1.224(31.10)	1.043(26.50)	1.087(27.60)
60	FFC05020-60SBB123W5M-C	1.343(34.10)	1.161(29.50)	1.205(30.60)

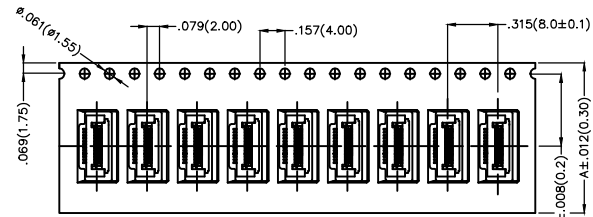
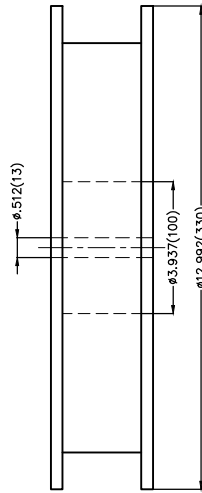
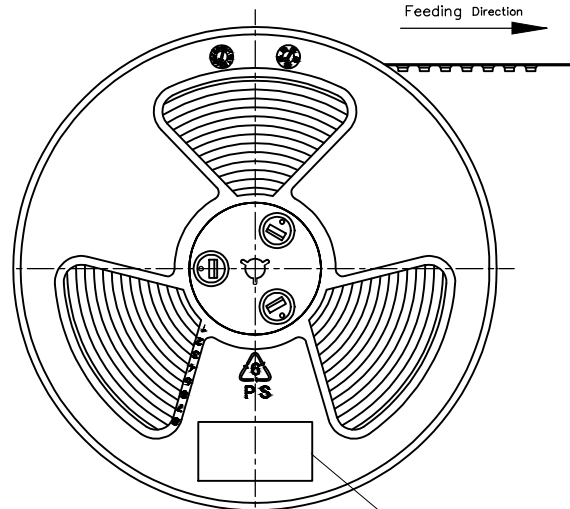
 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY FRANK	DATE 18/JUN/13	PART NO. FFC05020-XXSBB123W5M-C	ITEM NO. FFC05020	 Leader Of Industry	
	DESIGN UNITS Inch (metric)	X.±.012(0.30) X.X±.008(0.20) X.XX±.006(0.15) X.XXX±.004(0.10)	X.±5' X.±2' .XX±1' .XXX±0.5'	CHECKED BY JACOB	DATE 18/JUN/13	TITLE FPC/FFC connector 0.5mm Bottom contact SMT		REV 0
SCALE 5:1	SIZE A4	DRAWN BY CHERRY		DATE 18/JUN/13	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

REV	LOCATIONS	DESCRIPTION	DATE	REVISOR	APPD

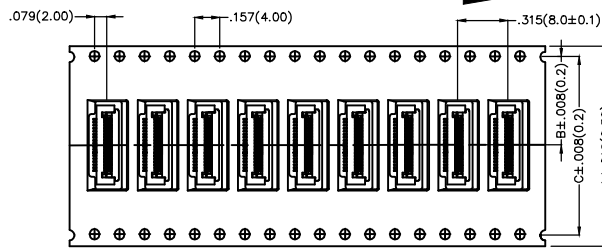
Note:

1. 10 sprocket hole cumulative tolerance ± 0.2
2. Carrier camber is within 1.0mm in 250mm
3. Material: White Conductive polystyrene Alloy 100% recyclable
4. All dimensions meet EIA-481-3 requirements
5. Peel off force of cover tape & carrier tape: 20g~130g(0.2N~1.3N)
6. Component load per 13" reel: 4,000 pcs

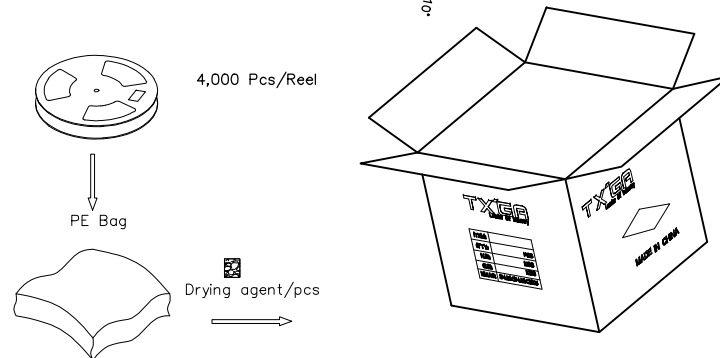
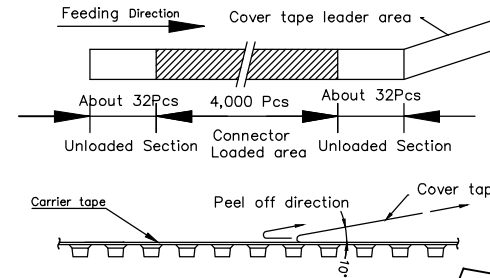
Circuits (n)	Dimensions(in/mm)		
	A	B	C
6~20	.945(24.0)	.453(11.5)	—
22~30	1.260(32.0)	.561(14.25)	1.033(26.50)
34~50	1.732(44.0)	.797(20.25)	1.594(40.50)
54~60	2.205(56.0)	1.033(26.25)	2.067(52.50)



Circuits: 6-20 Feeding Direction



Circuits: 22-60 Feeding Direction



 THIRD ANGLE PROJECTION	GENERAL TOLERANCES (UNLESS SPECIFIED)		APPROVE BY	DATE	PART NO.	ITEM NO.	 Leader Of Industry	
	X. \pm .012(0.30)	X. \pm 5'	FRANK	18/JUN/13	FFC05020-XXSBB123W5M-C	FFC05020		
	DESIGN UNITS	X.X \pm .008(0.20)	X. \pm 2'	CHECKED BY	DATE	TITLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO TXGA INDUSTRIAL ELECTRONICS(S.Z)CO.,LTD AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
	Inch (metric)	X.XX \pm .006(0.15)	.XX \pm 1'	JACOB	18/JUN/13	FPC/FFC connector 0.5mm Bottom contact SMT		
SCALE	SIZE	X.XXX \pm .004(0.10)	.XXX \pm 0.5'	DRAWN BY	DATE	REV 0	SHEET NO. 3/3	
5:1	A4			CHERRY	18/JUN/13			