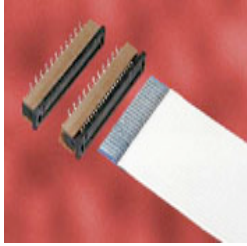


SFW12R-1STE1LF - FPC/FFC
: SFW-R series, 12 Pos, Down
Side Contact, Side Entry
Surface Mount ZIF Connector,
1 mm (0.039 in.), Lead Free



www.fci.com

Specifications

General	
Cable Insertion	ZIF
Cable Lock	No
Contact location	Lower
Number of contacts	12
Orientation	Right Angle
Product Series	SFW-R
Electrical	
Withstanding Voltage	500V AC for 1 minute
Current rating	1A AC/DC
Resistance (Contact)	30 milli ohms max.
Resistance (Insulation)	500 M-ohms min.
Voltage rating	100V AC/DC
Mechanical	
Durability (Mating cycles)	20 Cycles
Mounting	
Mounting style (Board)	Surface Mount
Physical	
Cable Type	FPC/FFC
Material (Contact)	Phosphor Bronze, Tin Plated
Material (Housing)	Glass Reinforced PPS, UL94 V-0
Material (Slider)	Glass Reinforced PPS, UL94 V-0
Temperature (Operating - range)	-55°C to +105°C
Approvals / Certifications	
Damp Heat per JIS C 0022	Contact Resistance 50 milli ohms max., Insulation Resistance 100 M-ohms min.
Salt Spray per JIS C 0023	Contact Resistance 50 milli ohms max.
Temperature Cycling per JIS C 0025	Contact Resistance 50 milli ohms max.
Vibration per JIS C 0040	No discontinuity > 1 μ second
Other Features	
Packaging (Type)	Embossed Tape on Reel



FCIconnect.com

Copyright FCI.

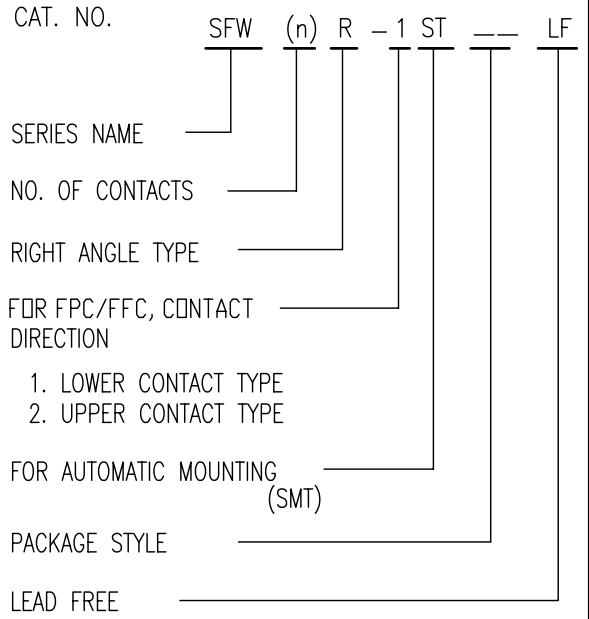
List of "SFW__R-1/2STE1LF" customer document

DOCUMENT NO.	LIST
SC-SFW10	SPEC.
JSA95854	CAT.NO.TABLE FOR 1mm SPACING SMT CONNECTOR (SFW__R-1/2ST__LF)
JSA95855	1mm SPACING SMT CONNECTOR (SFW__R-1ST__LF)
JSA95856	1mm SPACING SMT CONNECTOR (SFW__R-2ST__LF)
JSA95857	CAT.NO.TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-1/2STE1LF)
JSA95858	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-1STE1LF)
JSA95859	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-2STE1LF)
JSA91605	RECOMMENDED CABLE (FPC) (SFW__R-1/2ST__)
JSA91604	RECOMMENDED CABLE (FFC) (SFW__R-1/2ST__)
GS-20-129	HANDLING PROCEDURES


mat'l. code -				surface ISO 1302 <input checked="" type="checkbox"/> 58		tolerance ISO 406 ISO 1101		projection		product family 58RF		CODE JP	
ltr				tolerances unless otherwise specified		mm		title		1mm SPACING FPC/FFC CONNECTOR DOCUMENT LIST			
A J05-0055 H.T '05/2/4				angles linear		← →		scale X		(Cat. No. : SFW__R-1/2STE1LF)			
B J06-0398 H.T 9/26/'06													
C J09-0358 M.Y 2009-10-5													
D J09-0380 M.Y 2009-10-27				dr M. YAMASHITA 2009-10-27						dwg no sheet 1 of 1 size		A4	
				enr M. YAMASHITA 2007-10-27						JSA 96336			
				chr S. Waki 2009-10-27						type Product Customer Drawing			
				appd J. D. ... 2009-10-27									
sheet index		revision sheet		D 1								Rev. D	

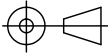
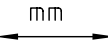

CAT. NO. & DIMENSIONS

NO. OF CONTACTS (n)	CAT. NO.	DIMENSIONS (NOTE2)			
		A ± 0.2	B ± 0.2	C ± 0.2	D ± 0.1
4	SFW4R-1/2ST__LF	9.8	8.6	3.0	5.3
5	SFW5R-1/2ST__LF	10.8	9.6	4.0	6.3
6	SFW6R-1/2ST__LF	11.8	10.6	5.0	7.3
7	SFW7R-1/2ST__LF	12.8	11.6	6.0	8.3
8	SFW8R-1/2ST__LF	13.8	12.6	7.0	9.3
9	SFW9R-1/2ST__LF	14.8	13.6	8.0	10.3
10	SFW10R-1/2ST__LF	15.8	14.6	9.0	11.3
11	SFW11R-1/2ST__LF	16.8	15.6	10.0	12.3
12	SFW12R-1/2ST__LF	17.8	16.6	11.0	13.3
13	SFW13R-1/2ST__LF	18.8	17.6	12.0	14.3
14	SFW14R-1/2ST__LF	19.8	18.6	13.0	15.3
15	SFW15R-1/2ST__LF	20.8	19.6	14.0	16.3
16	SFW16R-1/2ST__LF	21.8	20.6	15.0	17.3
17	SFW17R-1/2ST__LF	22.8	21.6	16.0	18.3
18	SFW18R-1/2ST__LF	23.8	22.6	17.0	19.3
19	SFW19R-1/2ST__LF	24.8	23.6	18.0	20.3
20	SFW20R-1/2ST__LF	25.8	24.6	19.0	21.3
21	SFW21R-1/2ST__LF	26.8	25.6	20.0	22.3
22	SFW22R-1/2ST__LF	27.8	26.6	21.0	23.3
23	SFW23R-1/2ST__LF	28.8	27.6	22.0	24.3
24	SFW24R-1/2ST__LF	29.8	28.6	23.0	25.3
25	SFW25R-1/2ST__LF	30.8	29.6	24.0	26.3
26	SFW26R-1/2ST__LF	31.8	30.6	25.0	27.3
27	SFW27R-1/2ST__LF	32.8	31.6	26.0	28.3
28	SFW28R-1/2ST__LF	33.8	32.6	27.0	29.3
29	SFW29R-1/2ST__LF	34.8	33.6	28.0	30.3
30	SFW30R-1/2ST__LF	35.8	34.6	29.0	31.3



NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPEs WITH AUTOMATIC MOUNTING (SMT).
2. SEE PART DRAWINGS FOR DIMENSIONS A~D.
3. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code				surface 58 / tolerance ISO 1302 ISO 406 ISO 1101		projection 		product family 58RF		CODE JP	
ltr ecn no dr date				tolerances unless otherwise specified		mm 		title CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1/2ST__LF)			
AA J05-0055 H.T 05-02-04				angles linear		scale \times		dwg no JSA 95854		sheet 1 of 1 size A4	
AB J06-0398 H.T 06-09-26								type Product Customer Drawing		Rev. AC	
AC S08-0276 DGOH 08-08-22				dr H. TAKAKURA 06-09-26							
				enr H. TAKAKURA 06-09-26							
				chr DENNIS GOH 08-08-22							
				appd JOEY NG 08-08-22							
sheet index		revision sheet 1		AC							

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com



A

B

C

D

A

B

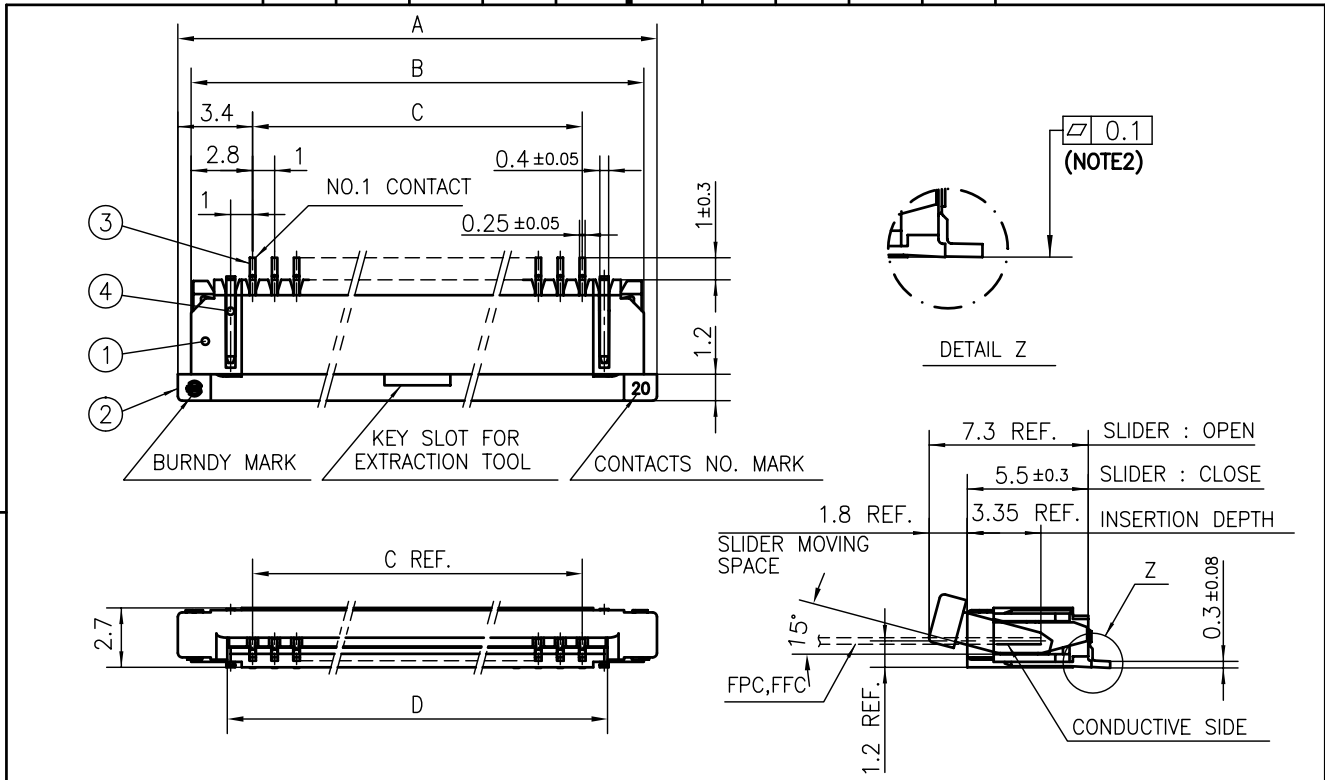
C

D

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com



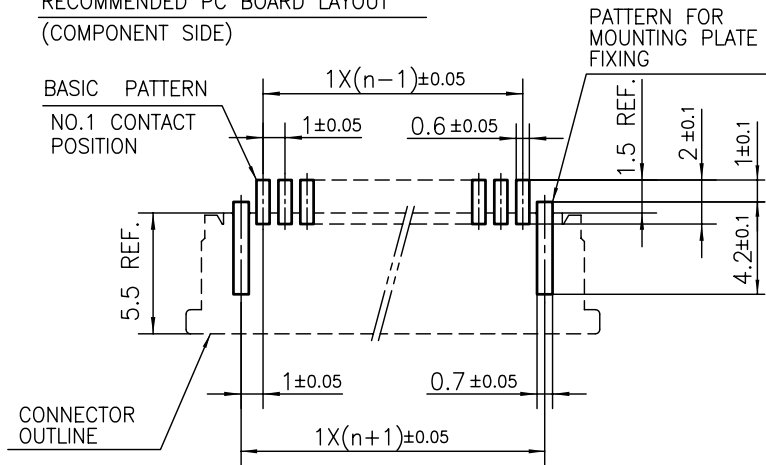
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BROWN
2	SLIDER		1	COLOR : BLACK
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

n : NO. OF CONTACTS

NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
 2. FLATNESS FOR CONTACT TERMINAL HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
 3. THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR.
 4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
 5. THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW SOLDERING OVEN.
3. A SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)



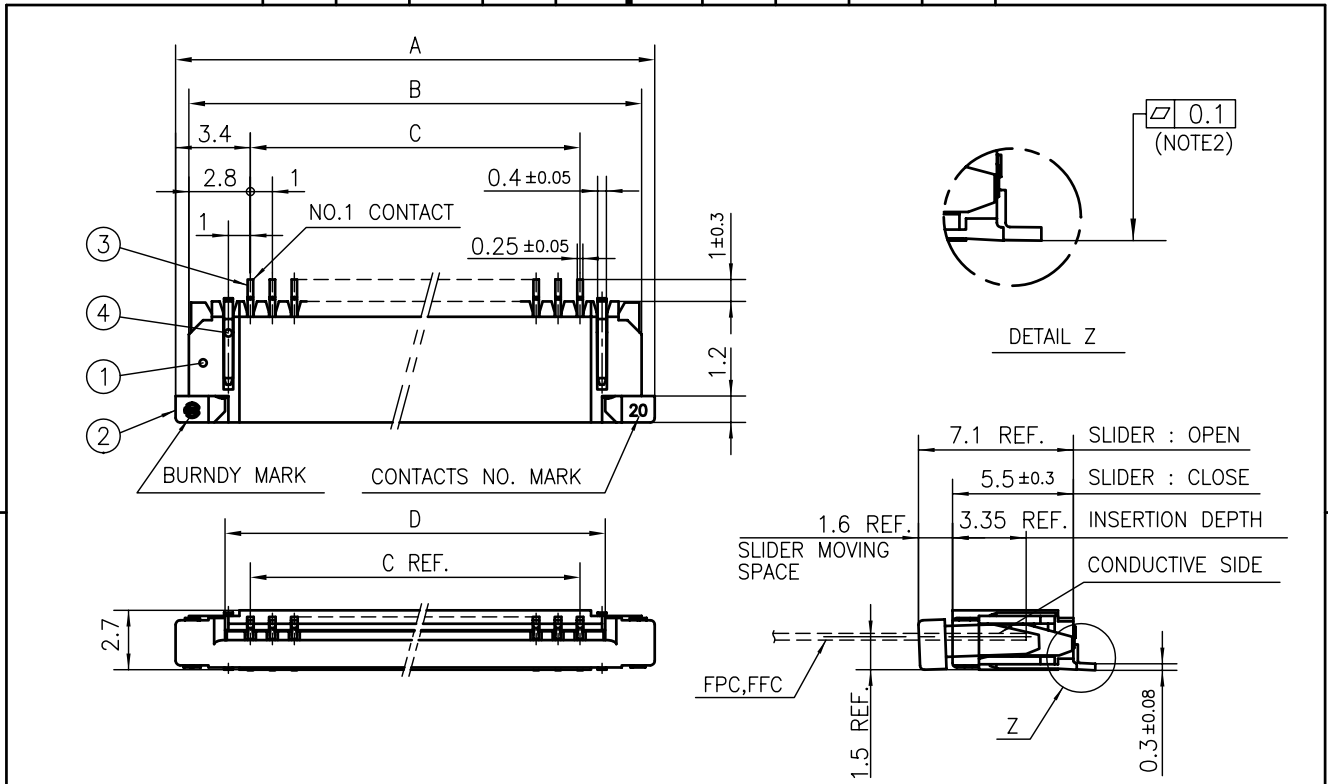
mat'l. code		surface 58 / tolerance ISO 1302		tolerance ISO 406 / ISO 1101		projection		product family 58RF		CODE JP	
ltr		ecn no		dr		date		title		1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1ST__LF)	
AA		J04-0180		H.T		04-07-02		mm		sheet 1 of 1	
AB		J05-0055		H.T		05-02-04		scale		size A4	
AC		J05-0736		H.T		05-10-28		FCI		dwg no JSA 95855	
AD		J06-0398		H.T		06-09-26		type Product Customer Drawing		Rev. AE	
AE		S08-0276		DGOH		08-08-22					
sheet index		revision sheet		AE		1					

SC_SFW10 JSA95854 form: A4

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com



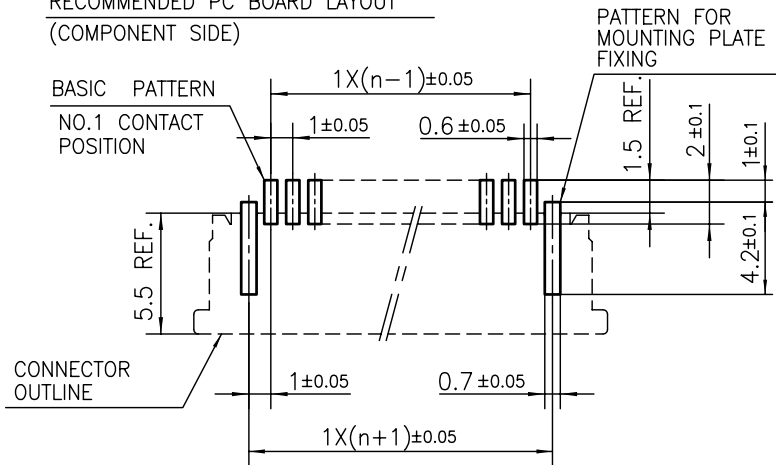
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BROWN
2	SLIDER	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

n : NO. OF CONTACTS

NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPEs WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS FOR CONTACT TERMINAL HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS UPPER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER?COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
5. THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW SOLDERING OVEN.
6. A \triangle AE SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

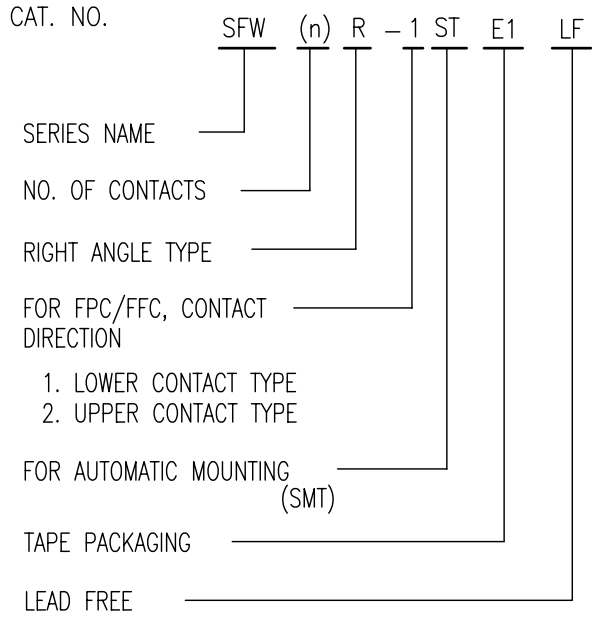


mat'l. code		surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection		product family 58RF		CODE JP	
ltr ecn no dr date		tolerances unless otherwise specified ±0.2		mm		title			
AA J04-0180 H.T 04-07-02		angles linear		mm		1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-2ST__LF)			
AB J05-0055 H.T 05-02-04				scale X		dwg no		sheet 1 of 1 size	
AC J05-0736 H.T 05-10-28				FCI		JSA 95856		A4	
AD J06-0398 H.T 06-09-26		dr H. TAKAKURA 06-09-26				type Product Customer Drawing			
AE S08-0276 DGOH 08-08-22		enr H. TAKAKURA 06-09-26							
		chr DENNIS GOH 08-08-22							
		appd JOEY NG 08-08-22							
sheet index		revision AE						Rev. AE	
1		1							


SC_SFW10 JSA95854 form: A4

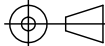
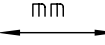

CAT. NO. & DIMENSIONS

NO. OF CONTACTS (n)	CAT. NO. (NOTE2)	DIMENSIONS (NOTE3)		
		E ± 5	F ± 0.3	G ± 0.1
4	SFW4R-1/2STE1 LF	20.4	16	—
5	SFW5R-1/2STE1 LF	28.4	24	—
6	SFW6R-1/2STE1 LF	28.4	24	—
7	SFW7R-1/2STE1 LF	28.4	24	—
8	SFW8R-1/2STE1 LF	28.4	24	—
9	SFW9R-1/2STE1 LF	28.4	24	—
10	SFW10R-1/2STE1 LF	28.4	24	—
11	SFW11R-1/2STE1 LF	28.4	24	—
12	SFW12R-1/2STE1 LF	28.4	24	—
13	SFW13R-1/2STE1 LF	36.4	32	28.4
14	SFW14R-1/2STE1 LF	36.4	32	28.4
15	SFW15R-1/2STE1 LF	36.4	32	28.4
16	SFW16R-1/2STE1 LF	36.4	32	28.4
17	SFW17R-1/2STE1 LF	48.4	44	40.4
18	SFW18R-1/2STE1 LF	48.4	44	40.4
19	SFW19R-1/2STE1 LF	48.4	44	40.4
20	SFW20R-1/2STE1 LF	48.4	44	40.4
21	SFW21R-1/2STE1 LF	48.4	44	40.4
22	SFW22R-1/2STE1 LF	48.4	44	40.4
23	SFW23R-1/2STE1 LF	48.4	44	40.4
24	SFW24R-1/2STE1 LF	48.4	44	40.4
25	SFW25R-1/2STE1 LF	48.4	44	40.4
26	SFW26R-1/2STE1 LF	48.4	44	40.4
27	SFW27R-1/2STE1 LF	48.4	44	40.4
28	SFW28R-1/2STE1 LF	60.4	56	52.4
29	SFW29R-1/2STE1 LF	60.4	56	52.4
30	SFW30R-1/2STE1 LF	60.4	56	52.4



NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPEs WITH AUTOMATIC MOUNTING (SMT).
2. THIS CATALOG NO. INDICATES PLASTIC TAPE PACKAGED CONNECTOR.
3. SEE PART DRAWINGS FOR DIMENSIONS E~G.
4. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code				surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection 		product family 58RF		CODE JP	
ltr ecn no dr date				tolerances unless otherwise specified		mm 		title CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1/2STE1 LF)			
AA J05-0055 H.T 05-02-04				angles linear		scale \times		dwg no JSA 95857		sheet 1 of 1 size A4	
AB J06-0398 H.T 06-09-26				dr H. TAKAKURA 06-09-26				type Product Customer Drawing		Rev. AC	
AC S08-0276 DGOH 08-08-22				enr H. TAKAKURA 06-09-26							
				chr DENNIS GOH 08-08-22							
				appd JOEY NG 08-08-22							
sheet index		revision sheet 1		AC							

SC_SFW10 JSA95854 95858 95859

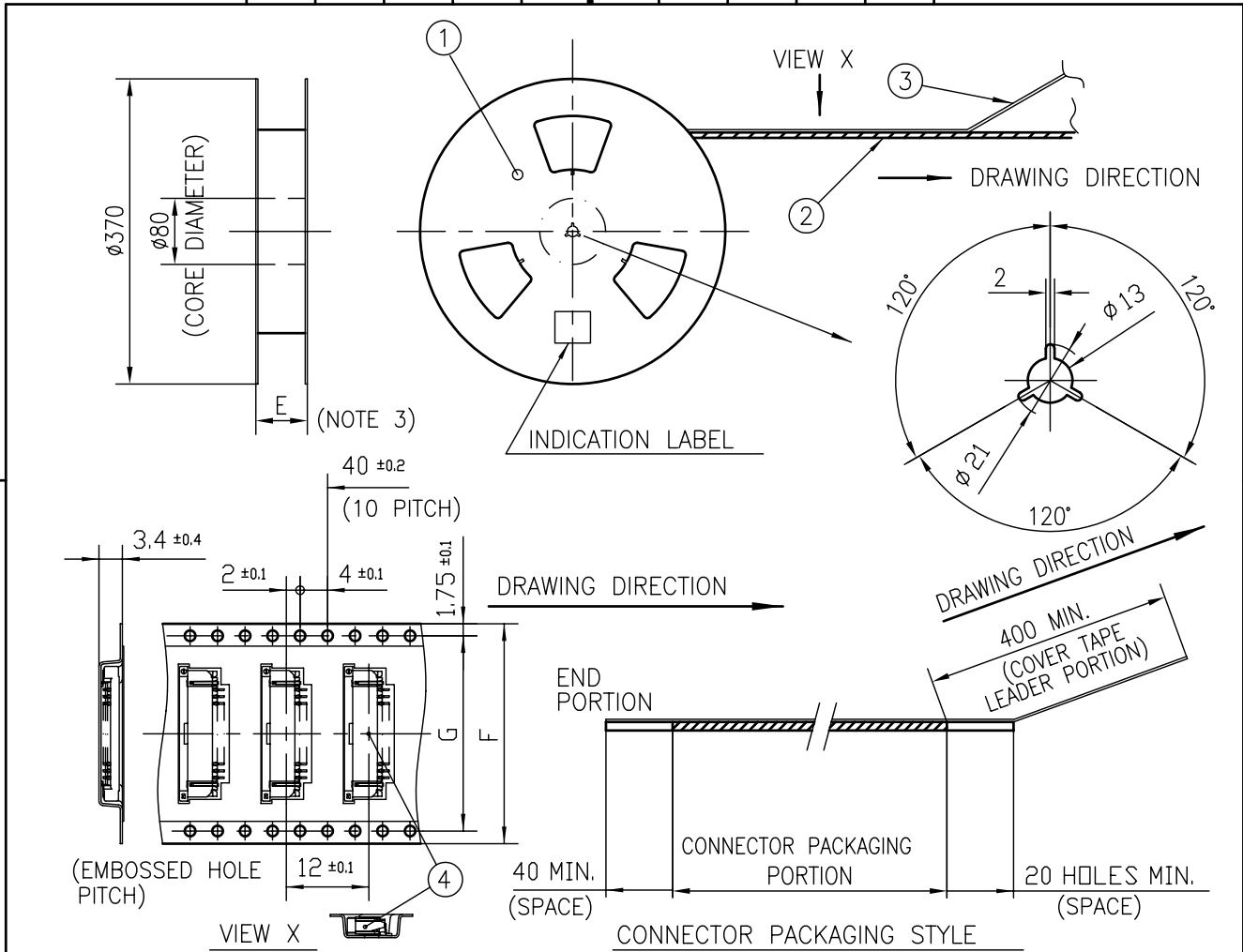
form: A4

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.




FCIconnect.com





PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE/GREY
2	PLASTIC (EMBOSS) TAPE	_____	PET	_____	COLOR:TRANSPARENCY
3	COVER	_____	POLYESTER	_____	COLOR:TRANSPARENCY
4	CONNECTOR	SFW__R-1ST__LF	SEE ATTACHED DWG.	2000	LOWER CONTACT TYPE

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC/FFC AND CYPES WITH AUTOMATIC MOUNTING (SMT).
2. SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSS) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.
4. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code		surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection		product family 58RF		CODE JP	
ltr ecn no dr date		tolerances unless otherwise specified		mm		title			
AA	J05-0055	H.T	05/02/04	±5		PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1STE1 LF)			
AB	J06-0398	H.T	06/09/26	linear		dwg no sheet 1 of 1 size			
AC	S08-0276	DGOH	08-08-22	±5'		JSA 95858 A4			
		dr H. TAKAKURA 06-09-26		scale		type Product Customer Drawing			
		enr H. TAKAKURA 06-09-26		FCJ		Rev. AC			
		chr DENNIS GOH 08-08-22							
		appd JOEY NG 08-08-22							
sheet index		revision sheet 1							

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com



PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE/GREY
2	PLASTIC (EMBOSS) TAPE	_____	PET	_____	COLOR:TRANSPARENCY
3	COVER	_____	POLYESTER	_____	COLOR:TRANSPARENCY
4	CONNECTOR	SFW__R-2ST__LF	SEE ATTACHED DWG.	2000	UPPER CONTACT TYPE

NOTES

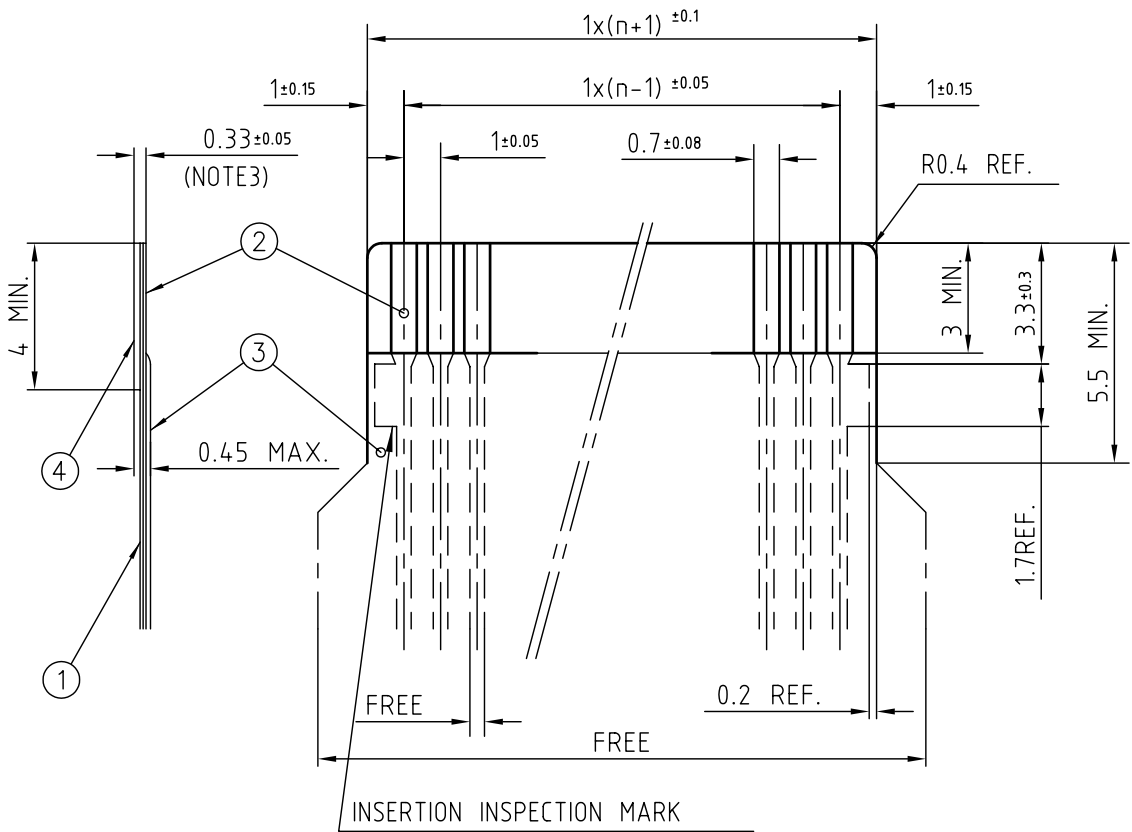
- THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
- SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSS) TAPE AND REEL.
- E DIMENSION IS PORTION OF THE CORE.
- A SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code		surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection		product family 58RF		CODE JP	
ltr ecn no dr date		tolerances unless otherwise specified		mm		title PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-2STE1 LF)			
AA J05-0055 H.T 05-02-04		angles linear ±5		scale		dwg no JSA 95859		sheet 1 of 1 size A4	
AB J06-0398 H.T 06-09-26		±5'		FCI logo		type Product Customer Drawing			
AC S08-0276 DGOH 08-08-22		dr H. TAKAKURA 06-09-26		enr H. TAKAKURA 06-09-26		chr DENNIS GOH 08-08-22		appd JOEY NG 08-08-22	
sheet index		revision AC		sheet 1		Rev. AC			

SC_SFW10 JSA95857 form: A4


RECOMMENDED CABLE (FPC)

n : NO. OF CONDUCTOR



PT. NO.	PARTS NAME	MATERIAL	THICKNESS (um)
1	BASE FILM	POLYIMIDE OR POLYESTER OR EQUAL	25
2	CONDUCTOR	COPPER FOIL(PLATING:SOLDER 1um MIN.)	35
3	OVERLAY	POLYIMIDE OR POLYESTER OR EQUAL	—
4	SUPPORTING TAPE	POLYESTER OR POLYIMIDE OR EQUAL	188

NOTES

1. NO BURR AT EACH PORTION.
2. NO PEELING IN COMMON USE.
3. TOTAL THICKNESS LIMIT OF EACH MATERIAL (INCLUDING ADHESIVE AGENT) IS SPECIFIED.
4. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code		surface 58 / tolerance ISO 1302		projection		product family 58RF		CODE JP	
ltr		ecn no		dr		date		title	
AA		J05-0055		H.T		05-02-04		RECOMMENDED CABLE	
AB		J06-0398		H.T		06-09-26		(Cat. No. SFW__R-1/2__)	
AC		S08-0276		DGOH		08-08-22		dwg no sheet 1 of 1 size	
				dr		H. TAKAKURA 06-09-26		JSA 91605	
				enr		H. TAKAKURA 06-09-26		A4	
				chr		DENNIS GOH 08-08-22		type Product Customer Drawing	
				appd		JOEY NG 08-08-22			
sheet index		revision sheet		AC		1		Rev. AC	

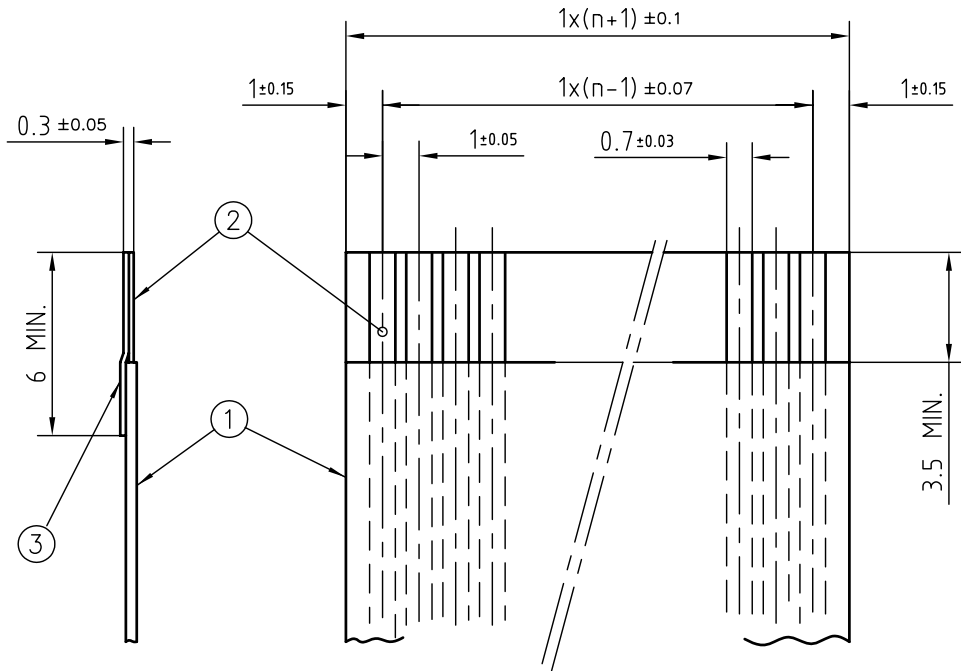
This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com


RECOMMENDED CABLE (FFC)

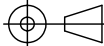

n : NO. OF CONDUCTOR



PT. NO.	PARTS NAME	MATERIAL	NOTE
1	INSULATOR	FLAME RESISTING POLYESTER OR EQUAL	_____
2	CONDUCTOR	COPPER FOIL	PLATING:TIN OR SOLDER 1um MIN.
3	SUPPORTING TAPE	FLAME RESISTING POLYESTER OR EQUAL	_____

NOTES

1. NO BURR AT EACH PORTION.
2. NO PEELING IN COMMON USE.
3. A  SYMBOL WILL BE NEXT TO ANY DIMENSION, VIEW, OR NOTE WHICH HAS BEEN MODIFIED WITH THE CURRENT DRAWING REVISION.

mat'l. code				surface 58 / tolerance ISO 1302 ISO 406 ISO 1101		projection 		product family 58RF		CODE JP	
ltr ecn no dr date				tolerances unless otherwise specified		mm		title			
AA J05-0055 H.T 05-02-04				angles linear		mm		RECOMMENDED CABLE			
AB J06-0398 H.T 06-09-26								(Cat. No. SFW__R-1/2__)			
AC S08-0276 DGOH 08-08-22						scale \times		dwg no sheet 1 of 1 size			
				dr H. TAKAKURA 06-09-26				JSA 91604			
				enr H. TAKAKURA 06-09-26				A4			
				chr DENNIS GOH 08-08-22				type Product Customer Drawing			
				appd JOEY NG 08-08-22							
sheet index		revision sheet		AC 1						Rev. AC	

This document is the property of and embodies CONFIDENTIAL and PROPRIETARY information of FCI. No part of the information shown on this document may be used in any way or disclosed to others without the written consent of FCI. Copyright FCI.



FCIconnect.com