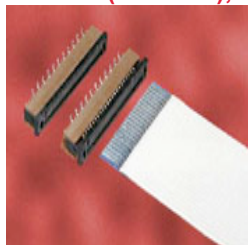


SFW5R-2STE1LF - FPC/FFC
: SFW-R series, 5 Pos, Upper
Side Contact, Side Entry
Surface Mount ZIF Connector,
1 mm (0.039 in.), Lead Free



www.fci.com

Specifications

General

Cable Insertion	ZIF
Cable Lock	No
Contact location	Upper
Number of contacts	5
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.

1

2

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 58 ✓ tolerance ISO 406 ISO 1101		projection 		product family 58RF		CODE JP	
ltr				ecn no		dr		date		tolerances unless otherwise specified	
A				J05-0055		H.T		'05/2/4		angles linear	
B				J06-0398		H.T		9/26/'06		linear	
C				J09-0358		M.Y		2009-10-5		linear	
D				J09-0380		M.Y		2009-10-27		linear	
										dr M. YAMASHITA 2009-10-27	
										enr M. YAMASHITA 2009-10-27	
										chr S. Waki 2009-10-27	
										appd J. C. Davidson 2009-10-27	
sheet index				revision sheet		D 1				dwg no JSA 96336	
										sheet 1 of 1 size A4	
										type Product Customer Drawing	
										Rev. D	

form: A4

1

2

PDM: Rev:D

STATUS: Released

Printed: Nov 01, 2009

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

CAT. NO.

SFW (n) R - 1 ST __ LF

SERIES NAME

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

PACKAGE STYLE

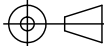
LEAD FREE

NOTES

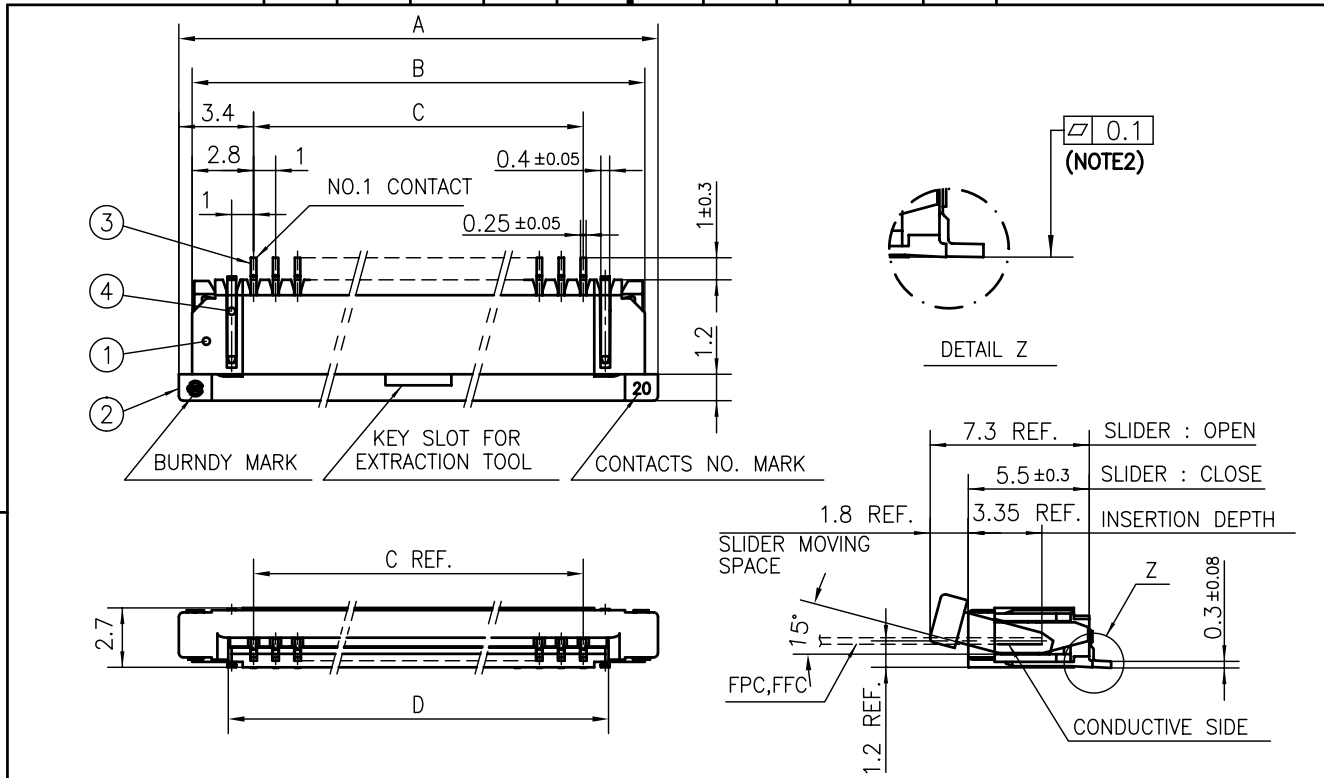
1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPE WITH AUTOMATIC MOUNTING (SMT).

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			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			
AB	J06-0398	H.T	06-09-26			mm	dwg no sheet 1 of 1 size JSA 95854 A4	
AC	S08-0276	DGOH	08-08-22			scale X		
				dr	H. TAKAKURA	06-09-26	type Product Customer Drawing	
				enr	H. TAKAKURA	06-09-26		
				chr	DENNIS GOH	08-08-22	Rev. AC	
				appd	JOEY NG	08-08-22		
sheet index	revision sheet	AC	1					

SC-SFW10 JSA95855 95856 95857 95858 95859 91605 91604 1



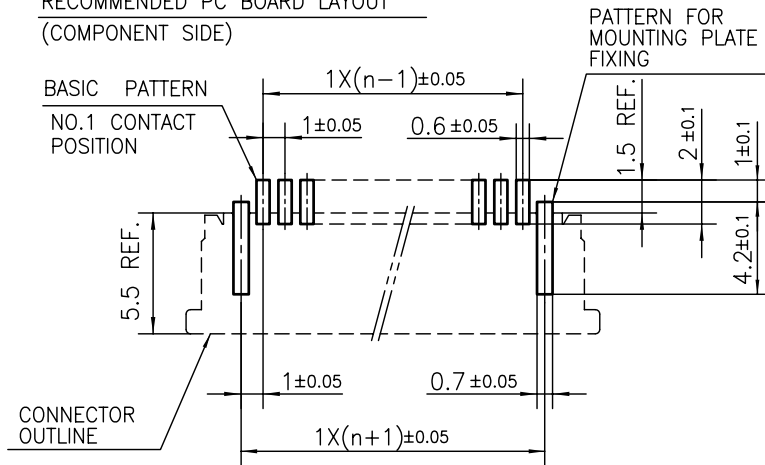
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BROWN
2	SLIDER	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

n : NO. OF CONTACTS

NOTES

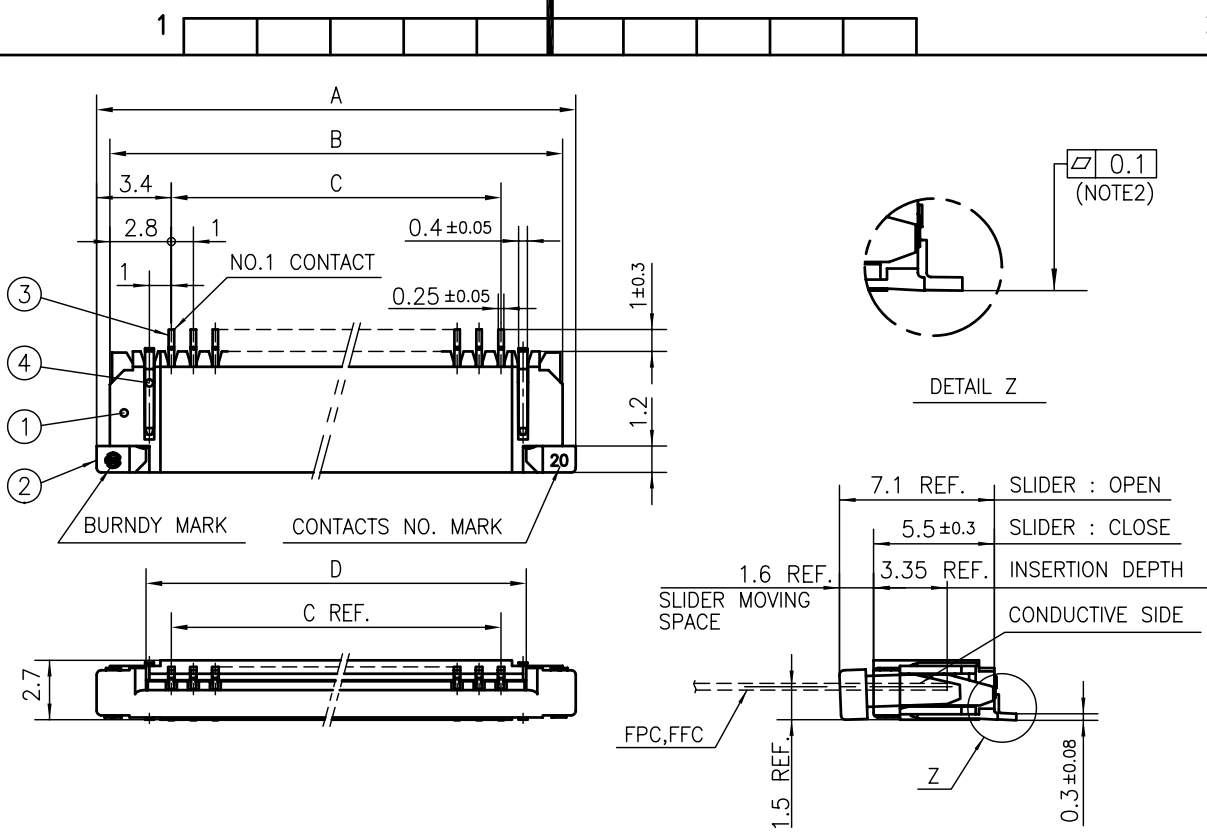
1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND CYPES WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS FOR CONTACT TERMINAL HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY 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	projection	product family 58RF	CODE JP
ltr	ecn no	dr	date	tolerances unless otherwise specified	ISO 406		title 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1ST__LF)	
AA	J04-0180	H.T	04-07-02	angles	ISO 1101	mm		
AB	J05-0055	H.T	05-02-04	linear	±0.2	scale	dwg no sheet 1 of 1 size	
AC	J05-0736	H.T	05-10-28					
AD	J06-0398	H.T	06-09-26	dr	H. TAKAKURA	06-09-26	JSA 95855	
AE	S08-0276	DGOH	08-08-22	enr	H. TAKAKURA	06-09-26		
				chr	DENNIS GOH	08-08-22	type Product Customer Drawing	
				appd	JOEY NG	08-08-22		
sheet index	revision	AE	1				Rev. AE	
	sheet							

SC_SFW10 JSA95854
form: A4



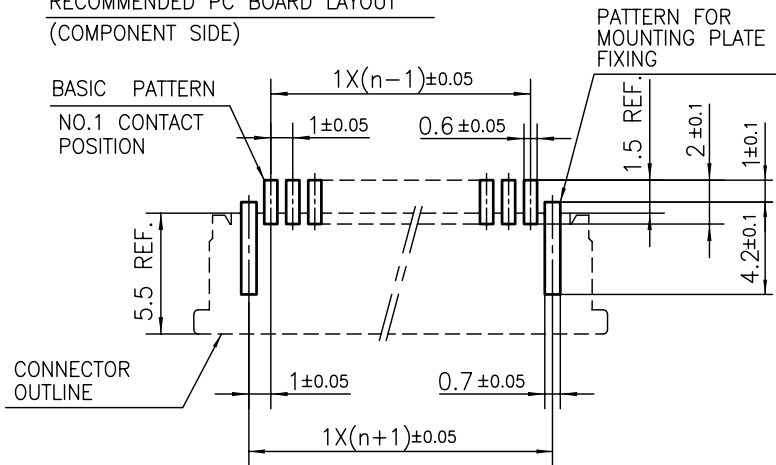
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BROWN
2	SLIDER	PHOSPHOR BRONZE	1	COLOR : BLACK
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

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	projection	product family 58RF	CODE JP
ltr	ecn no	dr	date	tolerances unless otherwise specified	ISO 406	mm	title 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-2ST__LF)	
AA	J04-0180	H.T	04-07-02	angles	ISO 1101			
AB	J05-0055	H.T	05-02-04	linear	±0.2	scale	dwg no sheet 1 of 1 size JSA 95856 A4	
AC	J05-0736	H.T	05-10-28					
AD	J06-0398	H.T	06-09-26	dr	H. TAKAKURA	FCI	type Product Customer Drawing	
AE	S08-0276	DGOH	08-08-22	enr	H. TAKAKURA			
				chr	DENNIS GOH			
				appd	JOEY NG			
sheet index	revision	AE						
	sheet	1						

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

CAT. NO.

SFW (n) R - 1 ST E1 LF

SERIES NAME

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

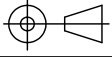
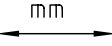
FOR AUTOMATIC MOUNTING (SMT)

TAPE PACKAGING

LEAD FREE

NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPELS 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/ISO 1302	tolerance ISO 406/ISO 1101	projection 	product family 58RF	CODE JP
ltr	ecn no	dr	date	tolerances unless otherwise specified			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			
AB	J06-0398	H.T	06-09-26			scale 	dwg no JSA 95857 sheet 1 of 1 size A4	
AC	S08-0276	DGOH	08-08-22					
				dr	H. TAKAKURA	06-09-26	type Product Customer Drawing	
				enr	H. TAKAKURA	06-09-26		
				chr	DENNIS GOH	08-08-22		
				appd	JOEY NG	08-08-22		
sheet index	revision	AC						Rev. AC

SC_SFW10 JSA95854 95858 95859
form: A4

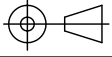


FCIconnect.com

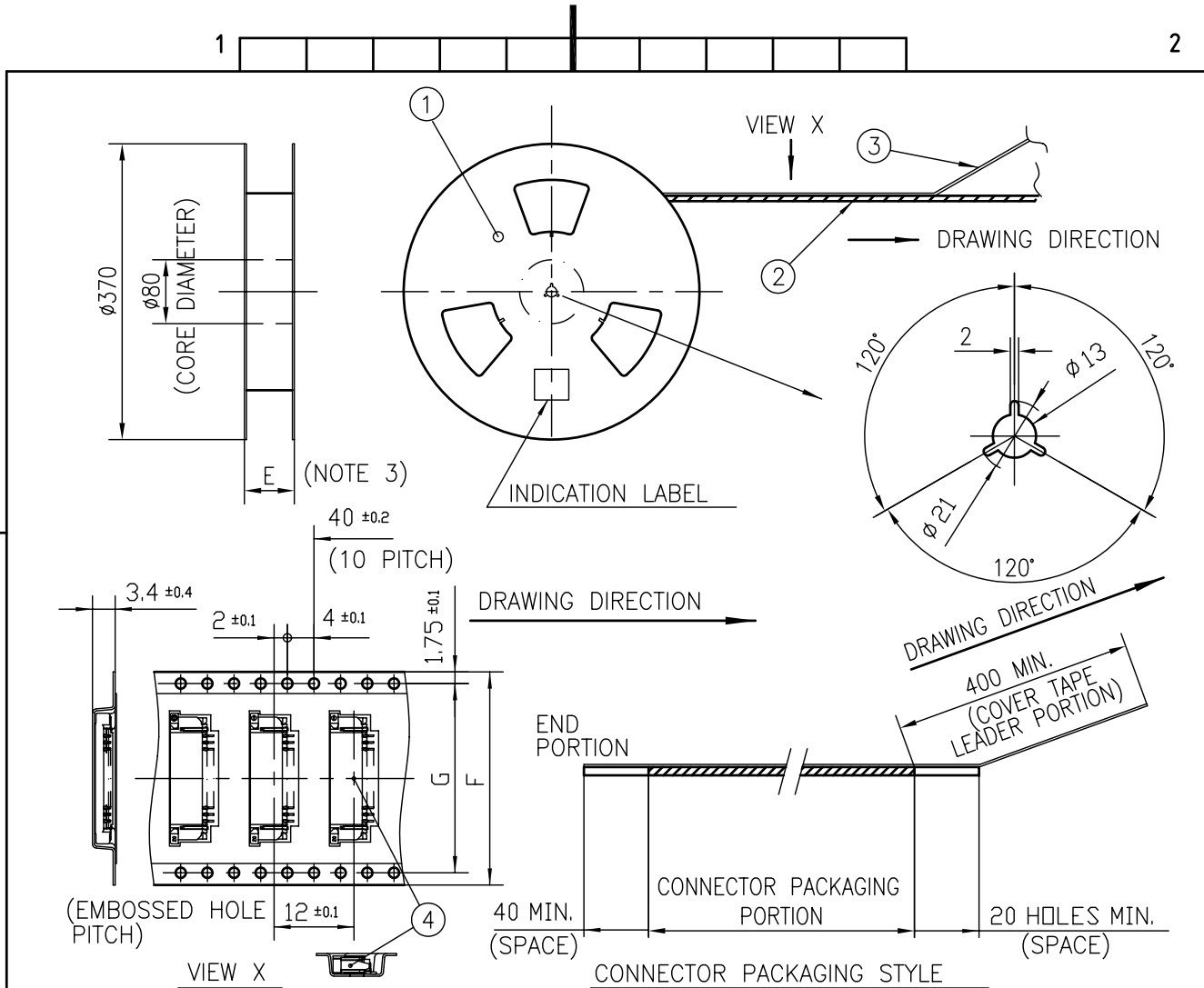
PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE/GREY
2	PLASTIC (EMBOSS) TAPE	_____	PET	_____	COLOR:TRANSPARENCY
3	COVER	_____	POLYESTER	_____	COLOR:TRANSPARENCY
4	CONNECTOR	SFW__R-1ST__LF	SEE ATTACHED DWG.	2000	LOWER CONTACT TYPE

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC/FFC AND COPEs 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 58 / ISO 406 1101		projection		product family 58RF		CODE JP	
ltr	ecn no	dr	date	tolerances unless otherwise specified				title		dwg no	
AA	J05-0055	H.T	05/02/04	angles	linear	mm		PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-1STE1 LF)		sheet 1 of 1	
AB	J06-0398	H.T	06/09/26							size A4	
AC	S08-0276	DGOH	08-08-22	±5°		scale 					
				dr	H. TAKAKURA	06-09-26			type Product Customer Drawing		Rev. AC
				enr	H. TAKAKURA	06-09-26					
				chr	DENNIS GOH	08-08-22					
				appd	JOEY NG	08-08-22					
sheet index		revision sheet 1		AC							

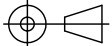
SC_SFW10 JSA95857 form: A4



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

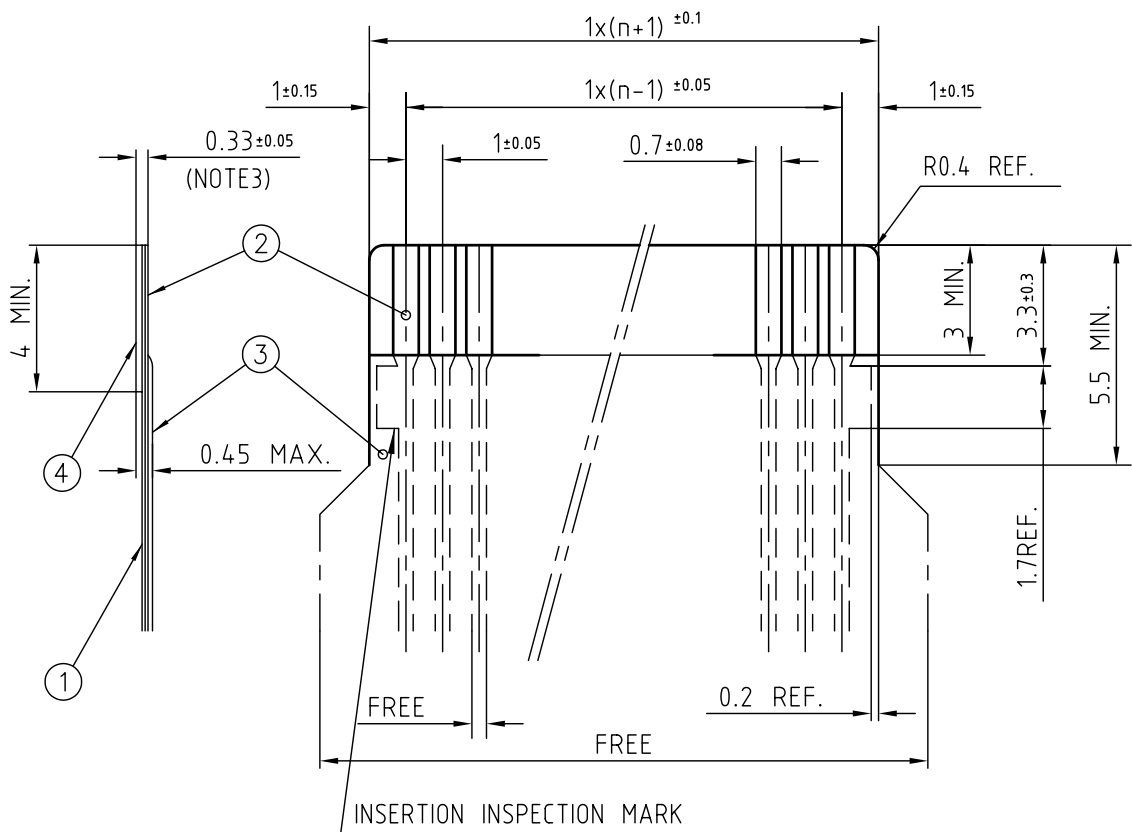
NOTES

- THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC/FFC AND CYPES 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		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	mm		
AB	J06-0398	H.T	06-09-26	±5°	scale		
AC	S08-0276	DGOH	08-08-22	dr H. TAKAKURA 06-09-26		dwg no	sheet 1 of 1
				enr H. TAKAKURA 06-09-26		JSA 95859	size A4
				chr DENNIS GOH 08-08-22		type Product Customer Drawing	
				appd JOEY NG 08-08-22			
sheet index	revision	AC					Rev. AC

RECOMMENDED CABLE (FPC)

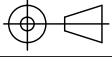
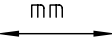
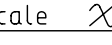
n : NO. OF CONDUCTOR



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

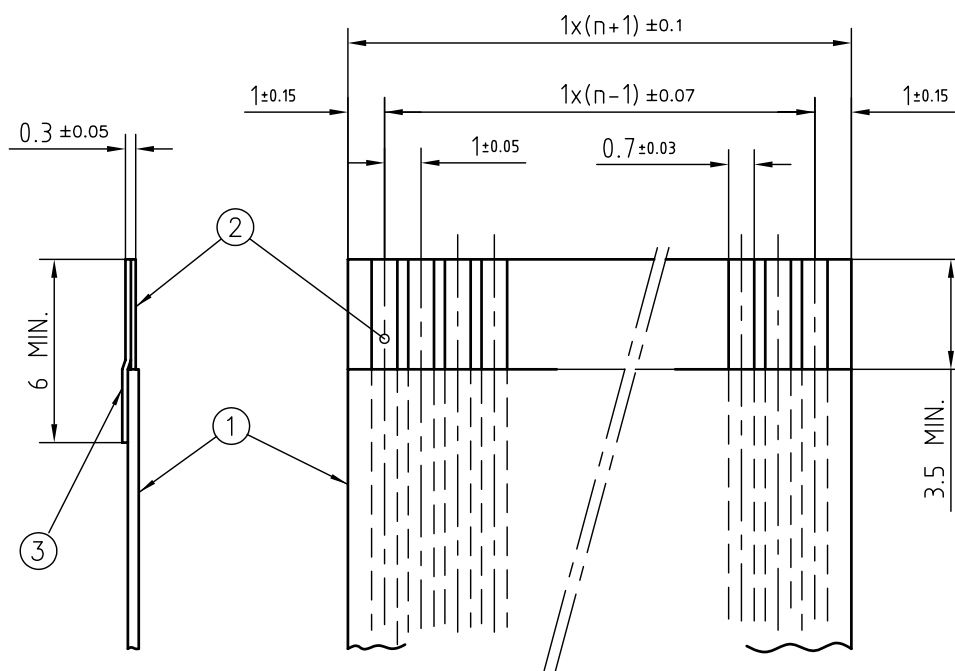
NOTES

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/ISO 1302		tolerance ISO 406 ISO 1101		projection 		product family 58RF		CODE JP		
ltr	ecn no	dr	date	tolerances unless otherwise specified						title RECOMMENDED CABLE (Cat. No. SFW__R-1/2__)				
AA	J05-0055	H.T	05-02-04	angles	linear									
AB	J06-0398	H.T	06-09-26					scale 		dwg no sheet 1 of 1 size JSA 91605 A4				
AC	S08-0276	DGOH	08-08-22											
				dr	H. TAKAKURA		06-09-26				type Product Customer Drawing			
				enr	H. TAKAKURA		06-09-26							
				chr	DENNIS GOH		08-08-22							
				appd	JOEY NG		08-08-22							
sheet index		revision sheet		AC									Rev. AC	

RECOMMENDED CABLE (FFC)

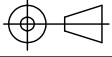
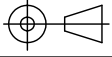
n : NO. OF CONDUCTOR



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/ISO 1302	tolerance ISO 406 ISO 1101	projection 	product family 58RF	CODE JP
ltr	ecn no	dr	date	tolerances unless otherwise specified			title RECOMMENDED CABLE (Cat. No. SFW__R-1/2__)	
AA	J05-0055	H.T	05-02-04	angles	linear			
AB	J06-0398	H.T	06-09-26			mm	dwg no sheet 1 of 1 size JSA 91604 A4	
AC	S08-0276	DGOH	08-08-22			scale 		
				dr	H. TAKAKURA	06-09-26	type Product Customer Drawing	
				enr	H. TAKAKURA	06-09-26		
				chr	DENNIS GOH	08-08-22		
				appd	JOEY NG	08-08-22		
sheet index	revision sheet	AC	1					Rev. AC