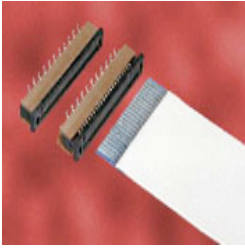


SFW4R-3STE1LF - FPC/FFC
: SFW-R series, 4 Pos, Down
Side Contact, Side Entry
Surface Mount ZIF Connector,
1 mm (0.039 in.), Lead Free,
with Cable Lock



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Specifications

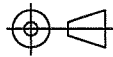
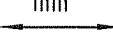

General	
Cable Insertion	ZIF
Cable Lock	Yes
Contact location	Lower
Number of contacts	4
Orientation	Right Angle
Product Series	SFW-R
Electrical	
Withstanding Voltage	500V AC for 1 minute
Current rating	1A AC/DC
Resistance (Contact)	30 milli ohms max.
Resistance (Insulation)	500 M-ohms min.
Voltage rating	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

List of "SFW__R-3/4STE1LF" customer document

DOCUMENT NO.	LIST
SC-STW11	SPEC.
JSA95860	CAT.NO.TABLE FOR 1mm SPACING SMT CONNECTOR (SFW__R-3/4ST__LF)
JSA95861	1mm SPACING SMT CONNECTOR (SFW__R-3ST__LF)
JSA95862	1mm SPACING SMT CONNECTOR (SFW__R-4ST__LF)
JSA95863	CAT.NO.TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-3/4STE1LF)
JSA95864	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-3STE1LF)
JSA95865	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (SFW__R-4STE1LF)
JSA93212	RECOMMENDED CABLE (FPC) (SFW__R-3/4ST__)
JSA93213 C	RECOMMENDED CABLE (FFC) (SFW__R-3/4ST__)
GS-20-130	HANDLING PROCEDURES

NOTE

1. A C 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 <input checked="" type="checkbox"/> ISO 406 <input checked="" type="checkbox"/> ISO 1101		projection 		product family 58RF		CODE JP	
ltr				tolerances unless otherwise specified		mm 		title			
A J05-0055 H.T 05-02-04				angles linear				1mm SPACING FPC CONNECTOR DOCUMENT LIST (Cat. No. : SFW__R-3/4STE1LF)			
B J06-0398 H.T 06-09-26						scale \times		dwg no sheet 1 of 1 size			
C S09-0180 DGOH 09-05-28								JSA 96338 A4			
D J09-0363 M.Y 2009-10-8				dr M.YAMAGUCHI 2009-10-27				type Product Customer Drawing			
E J09-0380 M.Y 2009-10-27				engr M.YAMAGUCHI 2009-10-27 chr S. Yamaguchi 2009-10-27 appd S. Yamaguchi 2009-10-27							
sheet index		revision sheet		E 1						Rev. E	

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-3/4ST__LF	9.8	8.6	3.0	3.92
5	SFW5R-3/4ST__LF	10.8	9.6	4.0	4.92
6	SFW6R-3/4ST__LF	11.8	10.6	5.0	5.92
7	SFW7R-3/4ST__LF	12.8	11.6	6.0	6.92
8	SFW8R-3/4ST__LF	13.8	12.6	7.0	7.92
9	SFW9R-3/4ST__LF	14.8	13.6	8.0	8.92
10	SFW10R-3/4ST__LF	15.8	14.6	9.0	9.92
11	SFW11R-3/4ST__LF	16.8	15.6	10.0	10.92
12	SFW12R-3/4ST__LF	17.8	16.6	11.0	11.92
13	SFW13R-3/4ST__LF	18.8	17.6	12.0	12.92
14	SFW14R-3/4ST__LF	19.8	18.6	13.0	13.92
15	SFW15R-3/4ST__LF	20.8	19.6	14.0	14.92
16	SFW16R-3/4ST__LF	21.8	20.6	15.0	15.92
17	SFW17R-3/4ST__LF	22.8	21.6	16.0	16.92
18	SFW18R-3/4ST__LF	23.8	22.6	17.0	17.92
19	SFW19R-3/4ST__LF	24.8	23.6	18.0	18.92
20	SFW20R-3/4ST__LF	25.8	24.6	19.0	19.92
21	SFW21R-3/4ST__LF	26.8	25.6	20.0	20.92
22	SFW22R-3/4ST__LF	27.8	26.6	21.0	21.92
23	SFW23R-3/4ST__LF	28.8	27.6	22.0	22.92
24	SFW24R-3/4ST__LF	29.8	28.6	23.0	23.92
25	SFW25R-3/4ST__LF	30.8	29.6	24.0	24.92
26	SFW26R-3/4ST__LF	31.8	30.6	25.0	25.92
27	SFW27R-3/4ST__LF	32.8	31.6	26.0	26.92
28	SFW28R-3/4ST__LF	33.8	32.6	27.0	27.92
29	SFW29R-3/4ST__LF	34.8	33.6	28.0	28.92
30	SFW30R-3/4ST__LF	35.8	34.6	29.0	29.92

CAT. NO. SFW (n) R - 3 ST ___ LF

SERIES NAME

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, WITH CABLE LOCK MECHANISM

CONTACT DIRECTION
3. LOWER CONTACT TYPE
4. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

PACKAGE STYLE

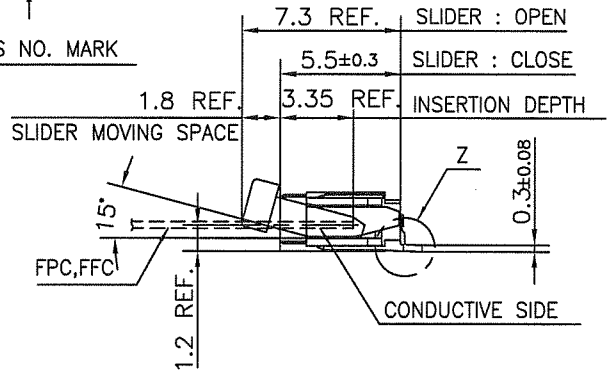
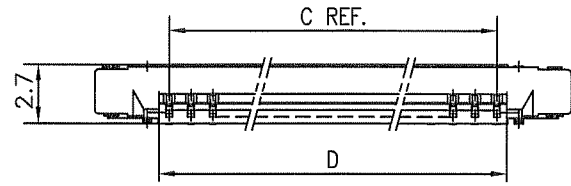
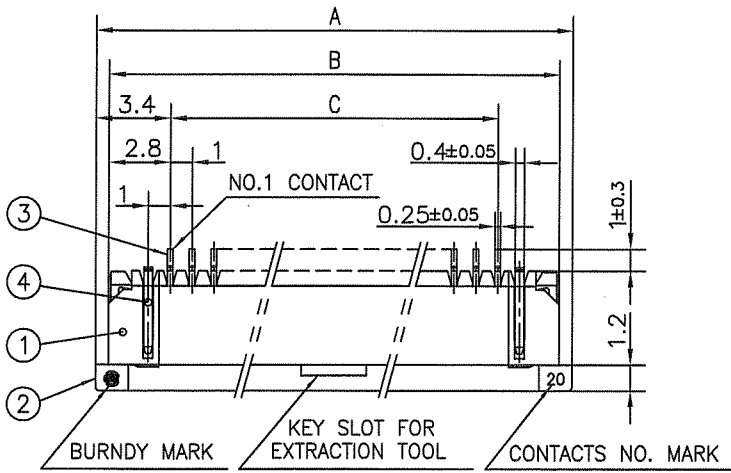
LEAD FREE

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. THIS PRODUCT IS THE CONNECTOR WITH CABLE LOCK MECHANISM.

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 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-3/4ST__LF)	
AA		J05-0055		H.T		2/4/'05		angles linear		mm		scale X	
AB		J06-0398		H.T		9/26/'06		dr		M.YAMASHITA 2009-10-8		sheet 1 of 1 size A4	
AC		J09-0363		M.Y		2009-10-8		enr		M.YAMASHITA 2009-10-8		JSA 95860	
								chr		S. Watabe 2009-10-8		type Product Customer Drawing	
								appd		J. Mueland 2009-10-8		Rev. AC	
sheet index		revision sheet		AC		1							

SC_SFW11 JSA95861 95862 95863 95864 95865 93212 93213 Form: A4

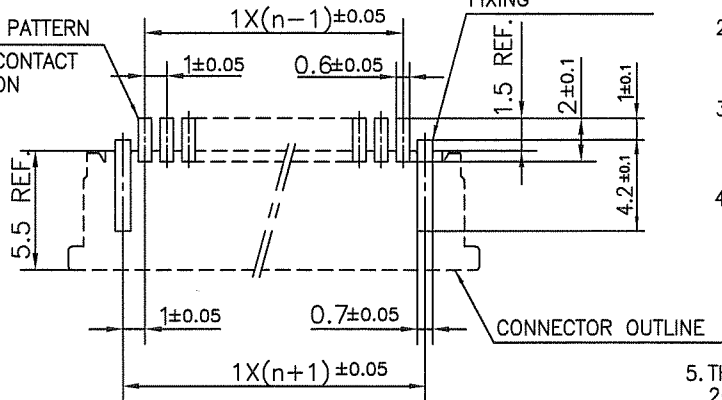


PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK
2	SLIDER		1	COLOR : BROWN
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

BASIC PATTERN NO.1 CONTACT POSITION



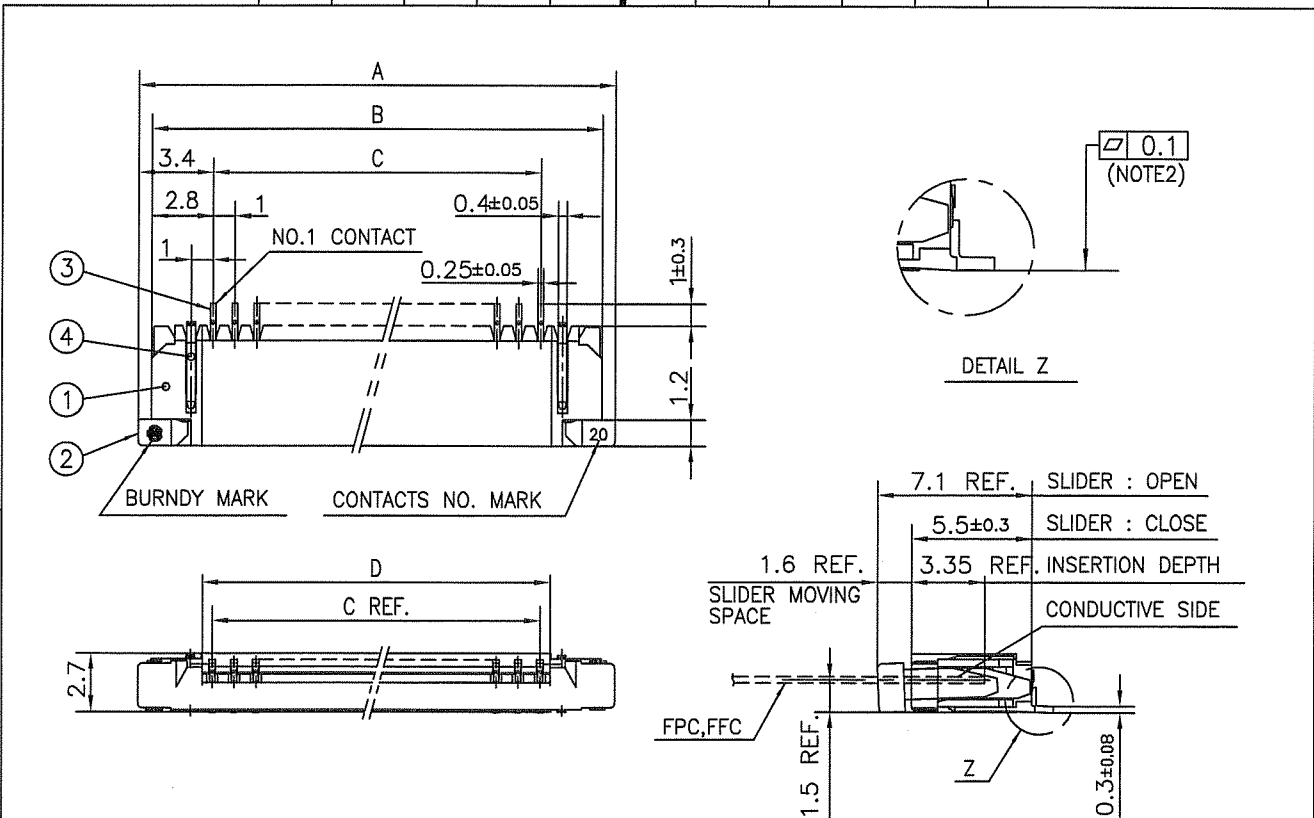
PATTERN FOR MOUNTING PLATE FIXING

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 WITH CABLE LOCK MECHANISM.
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.

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 J04-0180 H.T 7/2/'04				angles linear ±0.2		mm		1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-3ST__LF)			
AB J05-0055 H.T 2/4/'05								dwg no sheet 1 of 1 size			
AC J05-0736 H.T 10/28/'05						scale X		JSA 95861 A4			
AD J06-0398 H.T 9/26/'06				dr M.YAMASHITA 2009-10-8		FCJ		type Product Customer Drawing			
AE J09-0363 M.Y 2009-10-8				enr M.YAMASHITA 2009-10-8							
				chr S. Watanabe 2009-10-8							
				appd S. Chokawa 2009-10-8							
sheet index		revision AE		sheet 1						Rev. AE	

SC_SFW11 JSA95860 form: A4



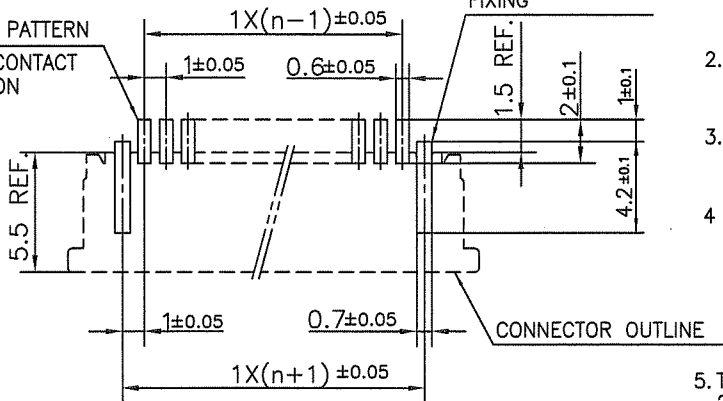
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK
2	SLIDER		1	COLOR : BROWN
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
4	MOUNTING PLATE		2	

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT
(COMPONENT SIDE)

BASIC PATTERN

NO.1 CONTACT
POSITION



NOTES

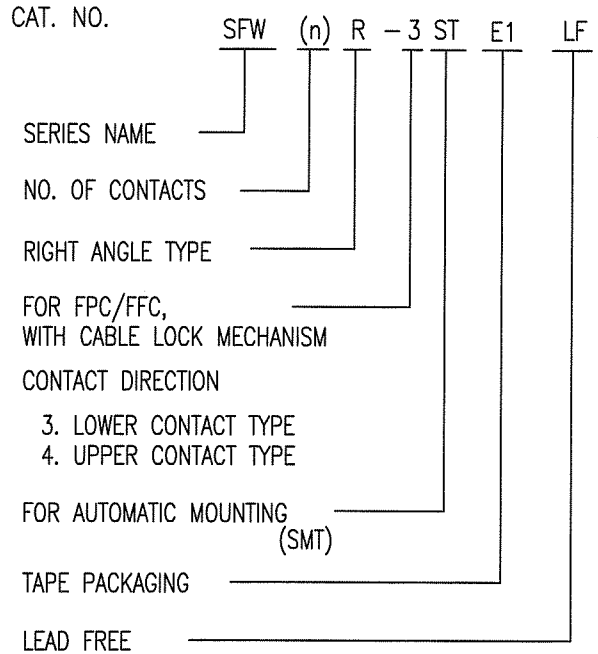
1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS FOR CONTACT TERMINAL HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS UPPER CONTACT TYPE CONNECTOR WITH CABLE LOCK MECHANISM.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES 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.

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 J04-0180 H.T 7/2/'04				angles linear ±0.2		mm		1mm SPACING SMT CONNECTOR			
AB J05-0055 H.T 2/4/'05								(Cat. No. SFW__R-4ST__LF)			
AC J05-0736 H.T 10/28/'05						scale X		dwg no sheet 1 of 1 size			
AD J06-0398 H.T 9/26/'06 dr M.YAMASITA 2007-10-8						FCJ		JSA 95862 A4			
AE J09-0363 M.Y 2009-10-8 engr M.YAMASITA 2007-10-8								type Product Customer Drawing			
sheet index		revision sheet		AE 1						Rev. AE	

SC_SFW11 JSA95860 form: A4

CAT. NO. & DIMENSIONS

NO. OF CONTACTS (n)	CAT. NO. (NOTE2)	DIMENSIONS (NOTE3)		
		E ± 5	F ± 0.3	G ± 0.1
4	SFW4R-3/4STE1 LF	20.4	16	—
5	SFW5R-3/4STE1 LF	28.4	24	—
6	SFW6R-3/4STE1 LF	28.4	24	—
7	SFW7R-3/4STE1 LF	28.4	24	—
8	SFW8R-3/4STE1 LF	28.4	24	—
9	SFW9R-3/4STE1 LF	28.4	24	—
10	SFW10R-3/4STE1 LF	28.4	24	—
11	SFW11R-3/4STE1 LF	28.4	24	—
12	SFW12R-3/4STE1 LF	28.4	24	—
13	SFW13R-3/4STE1 LF	36.4	32	28.4
14	SFW14R-3/4STE1 LF	36.4	32	28.4
15	SFW15R-3/4STE1 LF	36.4	32	28.4
16	SFW16R-3/4STE1 LF	36.4	32	28.4
17	SFW17R-3/4STE1 LF	48.4	44	40.4
18	SFW18R-3/4STE1 LF	48.4	44	40.4
19	SFW19R-3/4STE1 LF	48.4	44	40.4
20	SFW20R-3/4STE1 LF	48.4	44	40.4
21	SFW21R-3/4STE1 LF	48.4	44	40.4
22	SFW22R-3/4STE1 LF	48.4	44	40.4
23	SFW23R-3/4STE1 LF	48.4	44	40.4
24	SFW24R-3/4STE1 LF	48.4	44	40.4
25	SFW25R-3/4STE1 LF	48.4	44	40.4
26	SFW26R-3/4STE1 LF	48.4	44	40.4
27	SFW27R-3/4STE1 LF	48.4	44	40.4
28	SFW28R-3/4STE1 LF	60.4	56	52.4
29	SFW29R-3/4STE1 LF	60.4	56	52.4
30	SFW30R-3/4STE1 LF	60.4	56	52.4

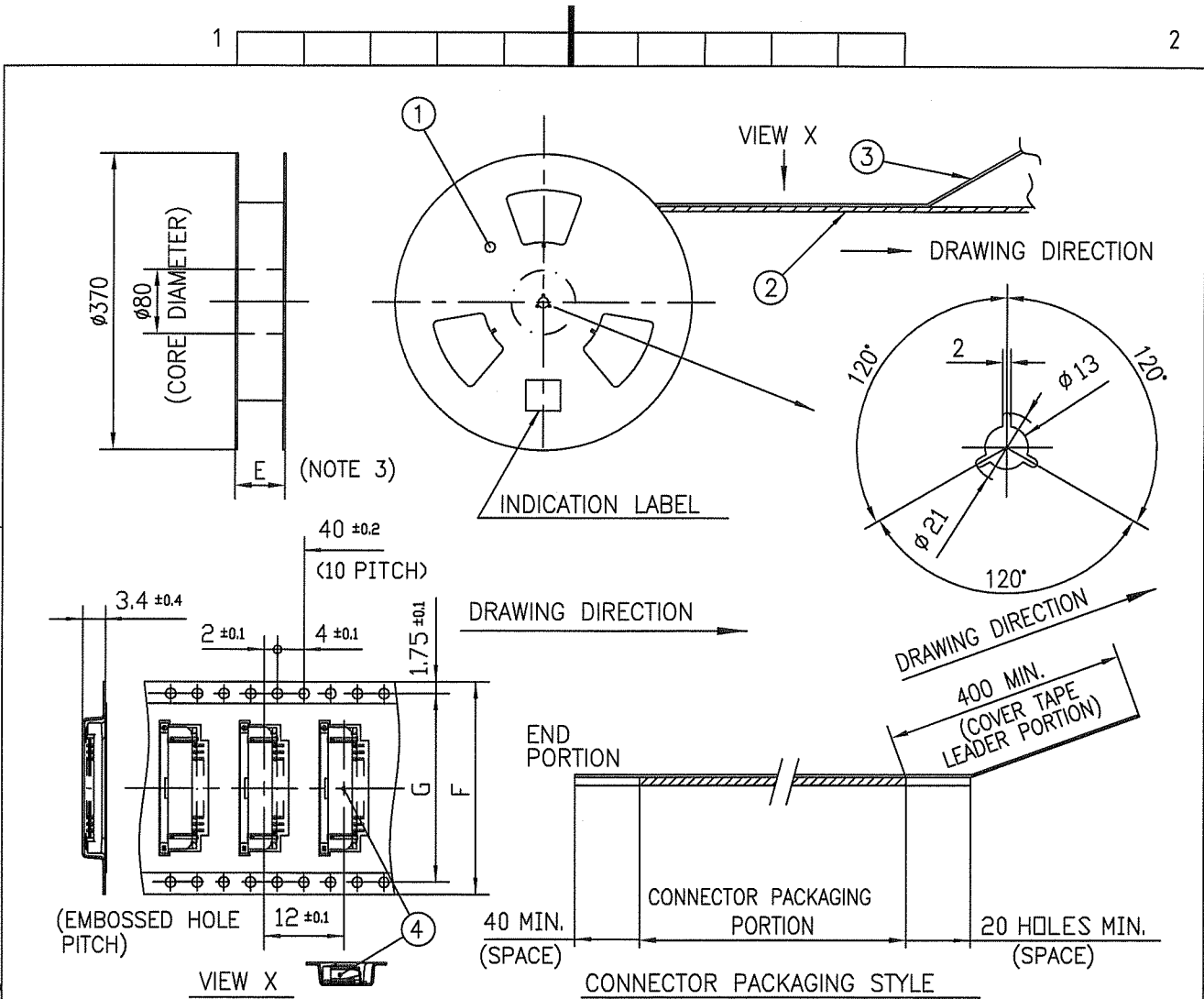


NOTES

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. THIS PRODUCT IS THE CONNECTOR WITH CABLE LOCK MECHANISM.

mat'l. code				surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection		product family 58RF		CODE JP	
litr ecn no dr date				tolerances unless otherwise specified		mm		title			
AA J05-0055 H.T 2/4/05				angles linear		scale X		CAT NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-3/4STE1 LF)			
AB J06-0398 H.T 9/26/06				dr M.YAMASHITA 2009-10-8		FCJ		dwg no sheet 1 of 1 size		A4	
AC J09-0363 M.Y 2009-10-8				enr M.YAMASHITA 2009-10-8		type Product Customer Drawing					
				chr S. Nishida 2009-10-8							
				appd J. Andam 2009-10-8							
sheet index		revision sheet 1		AC						Rev. AC	

SC_SFW11 JSA95860 95864 95865 form: A4



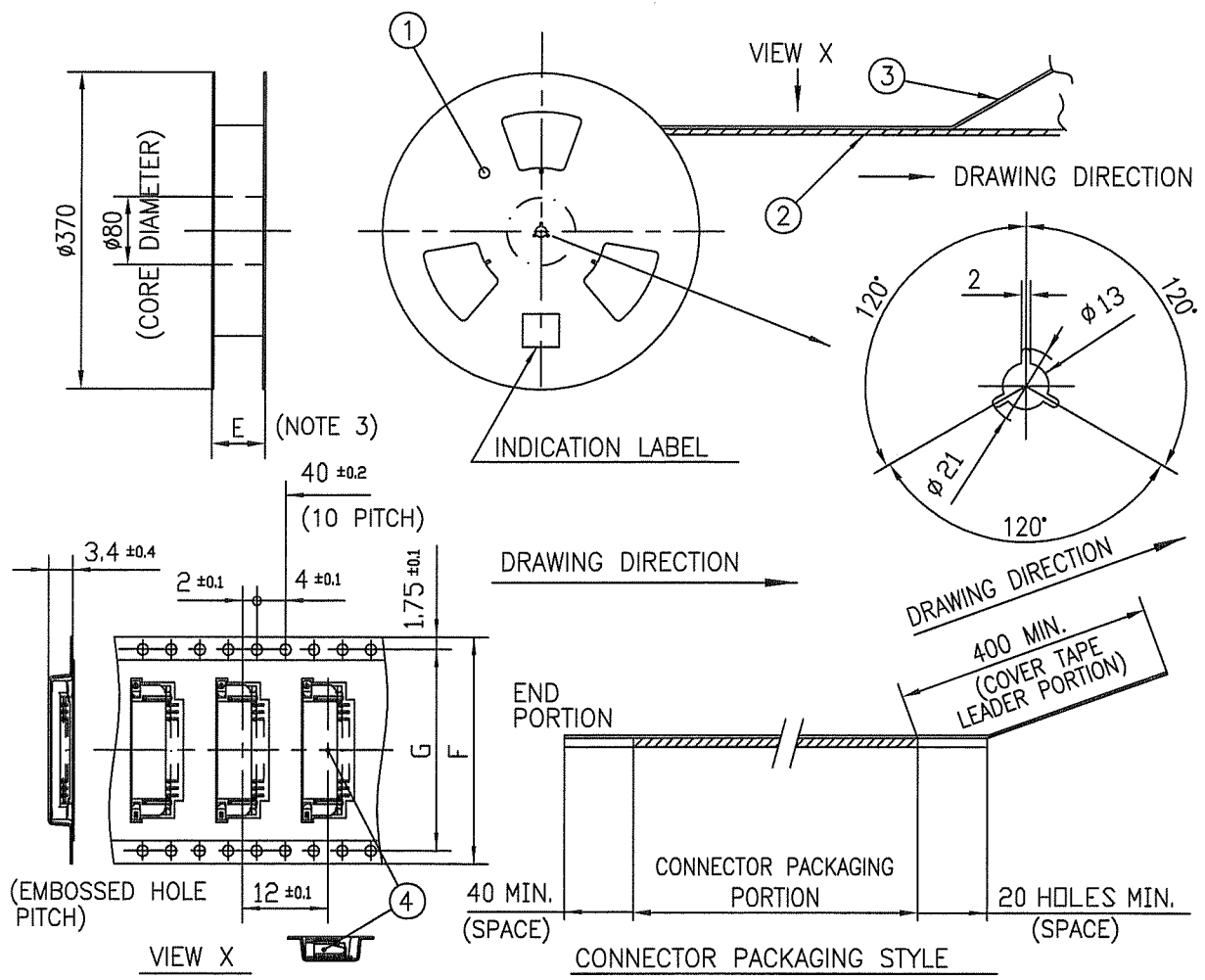
PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE
2	PLASTIC (EMBOSS) TAPE	_____	PET	_____	COLOR:TRANSPARENCY
3	COVER	_____	POLYESTER	_____	COLOR:TRANSPARENCY
4	CONNECTOR	SFW__R-3ST_LF	SEE ATTACHED DWG.	2000	LOWER CONTACT TYPE

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR WITH CABLE LOCK MECHANISM 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.

mat'l. code		surface ISO 1302		tolerance 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	2/4/'05	±5		mm		PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW__R-3STE1 LF)			
AB	J06-0398	H.T	9/26/'06	angles	linear	scale X		dwg no sheet 1 of 1 size			
AC	J09-0363	M.Y	2009-10-8	±5°		FCJ		JSA 95864 A4			
sheet index		revision sheet		AC 1				type Product Customer Drawing			
								Rev. AC			

SC_SFW11 JSA95863 form: A4



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

NOTES

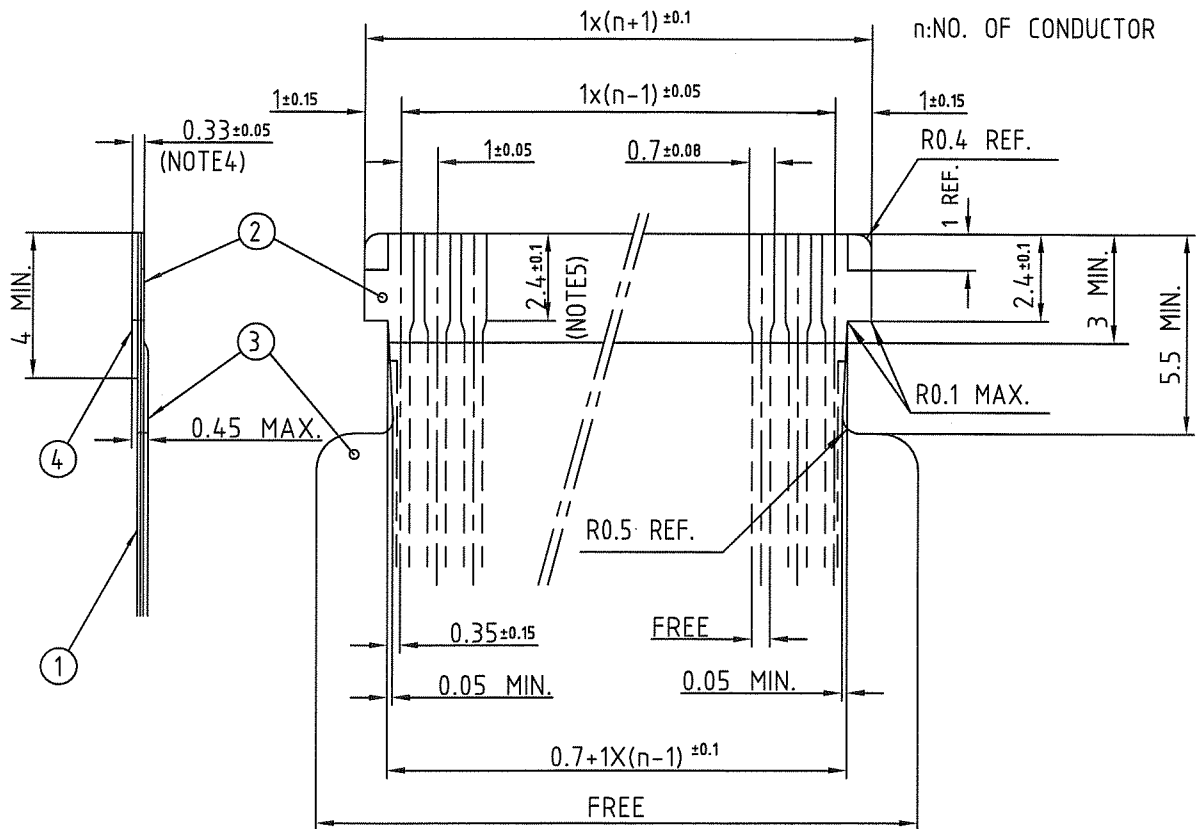
1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR WITH CABLE LOCK MECHANISM USED FOR FPC/FFC AND COPEs WITH AUTOMATIC MOUNTING (SMT).
2. SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSS) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.

mat'l. code		surface ISO 1302 ✓		tolerance 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	2/4/'05	±5		mm		PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (Cat. No. SFW_R-4STE1 LF)			
AB	J06-0398	H.T	9/26/'06	angles	linear	scale X		dwg no sheet 1 of 1 size			
AC	J09-0363	M.Y	2009-10-8	±5'		X		JSA 95865 A4			
sheet index		revision sheet	AC	dr	enr	chr	appd	type		Product Customer Drawing	
1		1		M.YAMASHITA	M.YAMASHITA	S. Kishida	S. Gudam	Product Customer Drawing		Rev. AC	

SC_SFW11 JSA95863 form: A4

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RECOMMENDED CABLE (FPC)



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. THIS DRAWING INDICATES THE FPC USED THE CONNECTOR WITH CABLE LOCK MECHANISM.
 2. NO BURR AT EACH PORTION.
 3. NO PEELING IN COMMON USE.
 4. TOTAL THICKNESS LIMIT OF EACH MATERIAL (INCLUDING ADHESIVE AGENT) IS SPECIFIED.
 5. THIS DIMENSION INDICATES THE RANGE FOR 0.7 ± 0.08 CONDUCTOR WIDTH.

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			
1 — — 9/10/'98				angles linear		mm		RECOMMENDED CABLE (Cat. No. SFW_R-3/4_)			
AA J05-0055 H.T 2/4/'05						scale X		dwg no sheet 1 of 1 size			
AB J06-0398 H.T 9/26/'06						FCJ		JSA 93212 A4			
AC J09-0363 M.Y 2009-10-8				dr MYAMASHITA 2009-10-8				type Product Customer Drawing			
				enrg MYAMASHITA 2009-10-8							
				chr S. W. 2009-10-8							
				appd S. W. 2009-10-8							
sheet index		revision AC								Rev. AC	
		sheet 1									

