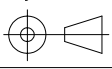
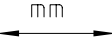


List of "HFW__R-1/2STAE1HLF" customer document

DOCUMENT NO.	LIST
10096547(sheet1)	DOCUMENT LIST
10096547(sheet2)	CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (HFW__R-1/2STA_HLF)
10096547(sheet3)	1mm SPACING SURFACE MOUNT FPC CONNECTOR (HFW__R-1STA_HLF)
10096547(sheet4)	1mm SPACING SURFACE MOUNT FPC CONNECTOR (HFW__R-2STA_HLF)
10096547(sheet5)	CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (HFW__R-1/2STAE1HLF)
10096547(sheet6)	1mm SPACING SMT CONNECTOR (HFW__R-1STAE1HLF)
10096547(sheet7)	1mm SPACING SMT CONNECTOR (HFW__R-2STAE1HLF)
10096547(sheet8)	RECOMMENDED CABLE (FPC) (HFW__R-1/2STA)
GS-12-598	PRODUCT SPEC.
BJM-HFWR101	HANDLING PROCEDURES

mat'l. code				surface 58 ☒ ISO 1302				tolerance ☒ ISO 406 ☒ ISO 1101				projection 				product family 58NF																						
ltr	ecn no	dr	date	tolerances unless otherwise specified												 scale $\propto$				title 1mm SPACING FPC CONNECTOR DOCUMENT LIST (Cat. No. : HFW__R-1/2STAE1HLF)																		
A	S09-0023	DGOH	09-01-21	angles				linear				dwg no																sheet 1 of 8				size						
				dr				H. TAKAKURA				06-10-23								10096547				A4														
				engr				DENNIS GOH				09-01-21																										
				chr				DENNIS GOH				09-01-21																										
				appd				JOEY NG				09-01-21																										
sheet index		revision sheet		A	A	A	A	A	A	A	A	A	A	A																					Rev. A			

CAT. NO. & DIMENSIONS

(NOTE3)	NO. OF CONTACTS (n)	CAT. NO.	DIMENSIONS (NOTE2)		
			A ± 0.2	B ± 0.2	C ± 0.1
	4	HFW4R-1/2STA__HLF	6.6	3	5.14
	5	HFW5R-1/2STA__HLF	7.6	4	6.14
	6	HFW6R-1/2STA__HLF	8.6	5	7.14
	7	HFW7R-1/2STA__HLF	9.6	6	8.14
	8	HFW8R-1/2STA__HLF	10.6	7	9.14
	9	HFW9R-1/2STA__HLF	11.6	8	10.14
	10	HFW10R-1/2STA__HLF	12.6	9	11.14
	11	HFW11R-1/2STA__HLF	13.6	10	12.14
	12	HFW12R-1/2STA__HLF	14.6	11	13.14
	13	HFW13R-1/2STA__HLF	15.6	12	14.14
	14	HFW14R-1/2STA__HLF	16.6	13	15.14
	15	HFW15R-1/2STA__HLF	17.6	14	16.14
	16	HFW16R-1/2STA__HLF	18.6	15	17.14
	17	HFW17R-1/2STA__HLF	19.6	16	18.14
	18	HFW18R-1/2STA__HLF	20.6	17	19.14
	19	HFW19R-1/2STA__HLF	21.6	18	20.14
	20	HFW20R-1/2STA__HLF	22.6	19	21.14
	21	HFW21R-1/2STA__HLF	23.6	20	22.14
	22	HFW22R-1/2STA__HLF	24.6	21	23.14
	23	HFW23R-1/2STA__HLF	25.6	22	24.14
	24	HFW24R-1/2STA__HLF	26.6	23	25.14
	25	HFW25R-1/2STA__HLF	27.6	24	26.14
	26	HFW26R-1/2STA__HLF	28.6	25	27.14
	27	HFW27R-1/2STA__HLF	29.6	26	28.14
*	28	HFW28R-1/2STA__HLF	30.6	27	29.14
*	29	HFW29R-1/2STA__HLF	31.6	28	30.14
	30	HFW30R-1/2STA__HLF	32.6	29	31.14

CAT. NO. HFW (n) R - 1 ST A __ HLF

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

GOLD PLATING

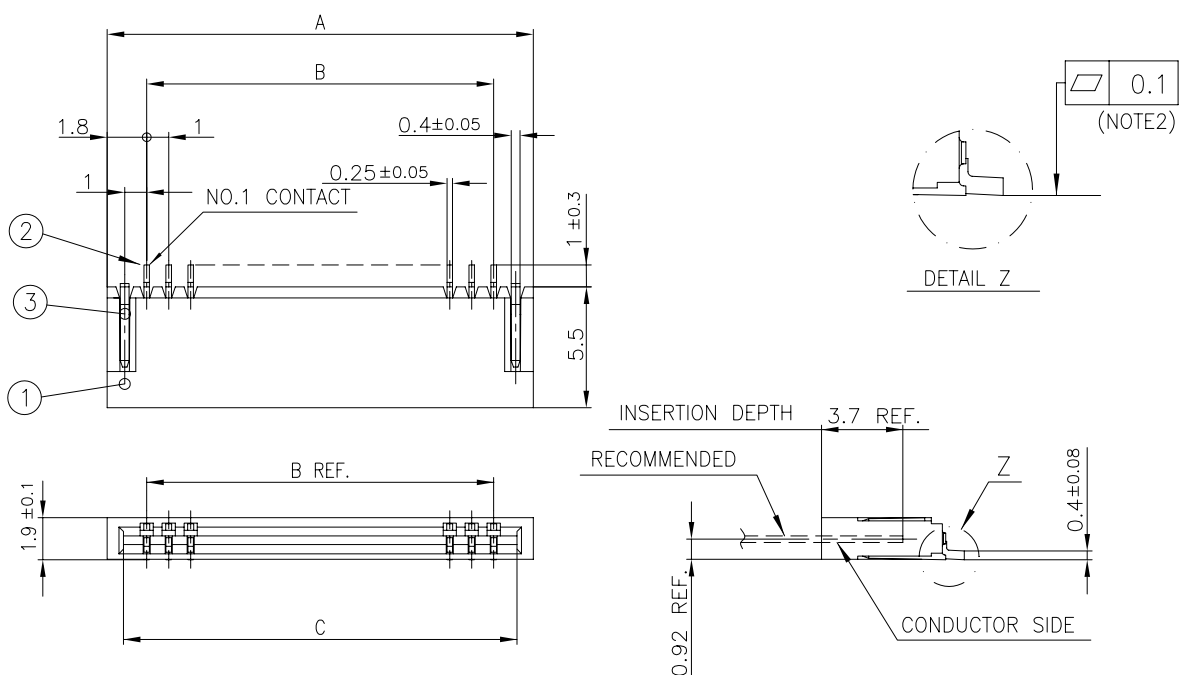
PACKAGE STYLE

HALOGEN AND LEAD FREE

NOTES

- THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC AND COPE WITH AUTOMATIC MOUNTING (SMT).
- SEE PART DRAWINGS FOR DIMENSIONS A~C.
- PLEASE CONSULT US IN CASE OF USING PARTS WITH * MARK.

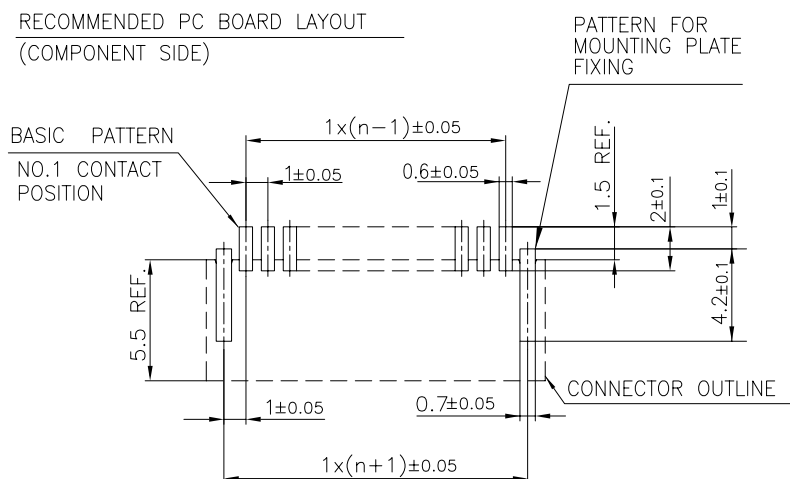
mat'l. code				surface 58 / ISO 1302		tolerance ISO 406 / ISO 1101		projection		product family 58NF				CODE JP			
ltr	ecn no	dr	date	tolerances unless otherwise specified						title CAT NO.TABLE FOR 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-1/2STA__HLF)							
A				angles	linear			mm									
								scale		dwg no sheet 2 of 8 size 10096547 A4							
				dr H. TAKAKURA 06-10-23						type Product Customer Drawing							
				engr DENNIS GOH 09-01-21													
				chr DENNIS GOH 09-01-21													
				appd JOEY NG 09-01-21													
sheet index		revision sheet														Rev. A	



PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR:BLACK (HALOGEN FREE)
2	CONTACT	PHOSPHOR BRONZE	n	PLATING:GOLD
3	MOUNTING PLATE		2	PLATING:TIN (LEAD FREE)

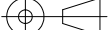
n : NO. OF CONTACTS

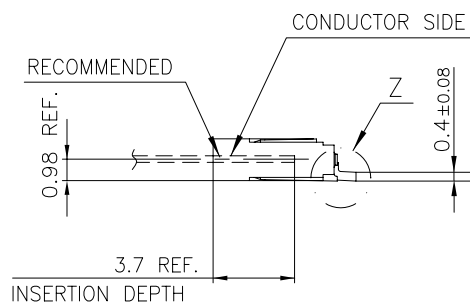
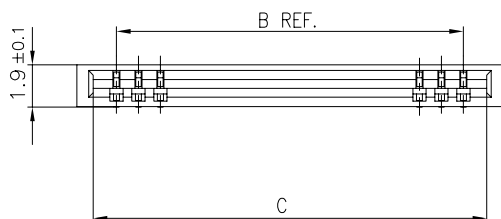
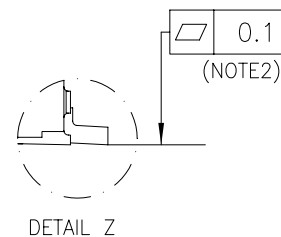
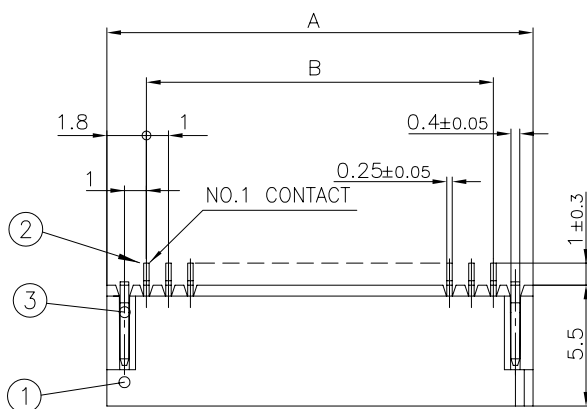
RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)



NOTES

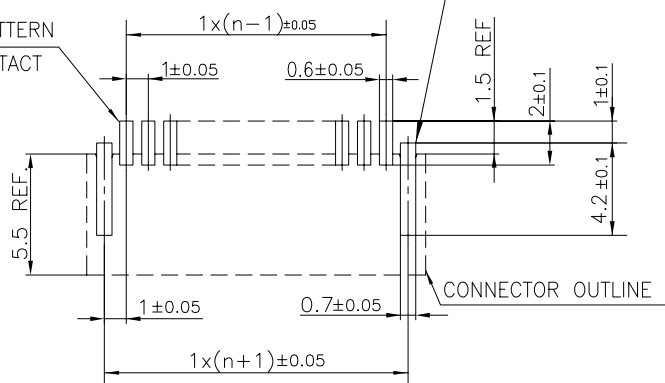
1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC AND COPS WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS OF CONTACT TERMINAL FOR HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER 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.

mat'l. code				surface 58 ISO 1302			tolerance ISO 406 ISO 1101			projection 			product family 58NF										
ltr	ecn no	dr	date	tolerances unless otherwise specified									title 1mm SPACING SURFACE MOUNT FPC CONNECTOR (Cat.No. HFW__R-1STA__HLF)										
A				angles			linear																
							±0.2			mm													
										scale $\propto$													
				dr	H. TAKAKURA			06-10-23						dwg no				sheet 3 of 8				size	
				engr	DENNIS GOH			09-01-21						10096547				A4					
				chr	DENNIS GOH			09-01-21															
				appd	JOEY NG			09-01-21															
sheet index		revision sheet																		Rev A			



PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR:BLACK (HALOGEN FREE)
2	CONTACT	PHOSPHOR BRONZE	n	PLATING:GOLD
3	MOUNTING PLATE		2	PLATING:TIN (LEAD FREE)

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT
(COMPONENT SIDE)BASIC PATTERN
NO.1 CONTACT
POSITIONPATTERN FOR
MOUNTING PLATE
FIXING

NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC AND COPE WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS OF CONTACT TERMINAL FOR 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.

mat'l. code				surface 58 			tolerance ISO 406 ISO 1101			projection 			product family 58NF						CODE JP			
ltr	ecn no	dr	date	tolerances unless otherwise specified									title 1mm SPACING SURFACE MOUNT FPC CONNECTOR (Cat.No. HFW__R-2STA__HLF)									
A				angles		linear		±0.2														
										scale 												
				dr	H. TAKAKURA			06-10-23						dwg no						sheet 4 of 8		size
				engr	DENNIS GOH			09-01-21						10096547						A4		
				chr	DENNIS GOH			09-01-21														
				appd	JOEY NG			09-01-21						type Product Customer Drawing								
sheet index		revision sheet																	Rev A			

CAT. NO. & DIMENSIONS

(NOTE4)	NO. OF CONTACTS (n)	CAT. NO. (NOTE2)	DIMENSIONS (NOTE3)		
			E ± 5	F ± 0.3	G ± 0.1
	4	HFW4R-1/2STAE1HLF	28.4	24	—
	5	HFW5R-1/2STAE1HLF	28.4	24	—
	6	HFW6R-1/2STAE1HLF	28.4	24	—
	7	HFW7R-1/2STAE1HLF	28.4	24	—
	8	HFW8R-1/2STAE1HLF	28.4	24	—
	9	HFW9R-1/2STAE1HLF	28.4	24	—
	10	HFW10R-1/2STAE1HLF	28.4	24	—
	11	HFW11R-1/2STAE1HLF	28.4	24	—
	12	HFW12R-1/2STAE1HLF	28.4	24	—
	13	HFW13R-1/2STAE1HLF	28.4	24	—
	14	HFW14R-1/2STAE1HLF	28.4	24	—
	15	HFW15R-1/2STAE1HLF	36.4	32	28.4
	16	HFW16R-1/2STAE1HLF	36.4	32	28.4
	17	HFW17R-1/2STAE1HLF	36.4	32	28.4
	18	HFW18R-1/2STAE1HLF	36.4	32	28.4
	19	HFW19R-1/2STAE1HLF	48.4	44	40.4
	20	HFW20R-1/2STAE1HLF	48.4	44	40.4
	21	HFW21R-1/2STAE1HLF	48.4	44	40.4
	22	HFW22R-1/2STAE1HLF	48.4	44	40.4
	23	HFW23R-1/2STAE1HLF	48.4	44	40.4
	24	HFW24R-1/2STAE1HLF	48.4	44	40.4
	25	HFW25R-1/2STAE1HLF	48.4	44	40.4
	26	HFW26R-1/2STAE1HLF	48.4	44	40.4
	27	HFW27R-1/2STAE1HLF	48.4	44	40.4
*	28	HFW28R-1/2STAE1HLF	48.4	44	40.4
*	29	HFW29R-1/2STAE1HLF	48.4	44	40.4
	30	HFW30R-1/2STAE1HLF	60.4	56	52.4

CAT. NO. HFW (n) R - 1 ST A E1 HLF

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

GOLD PLATING

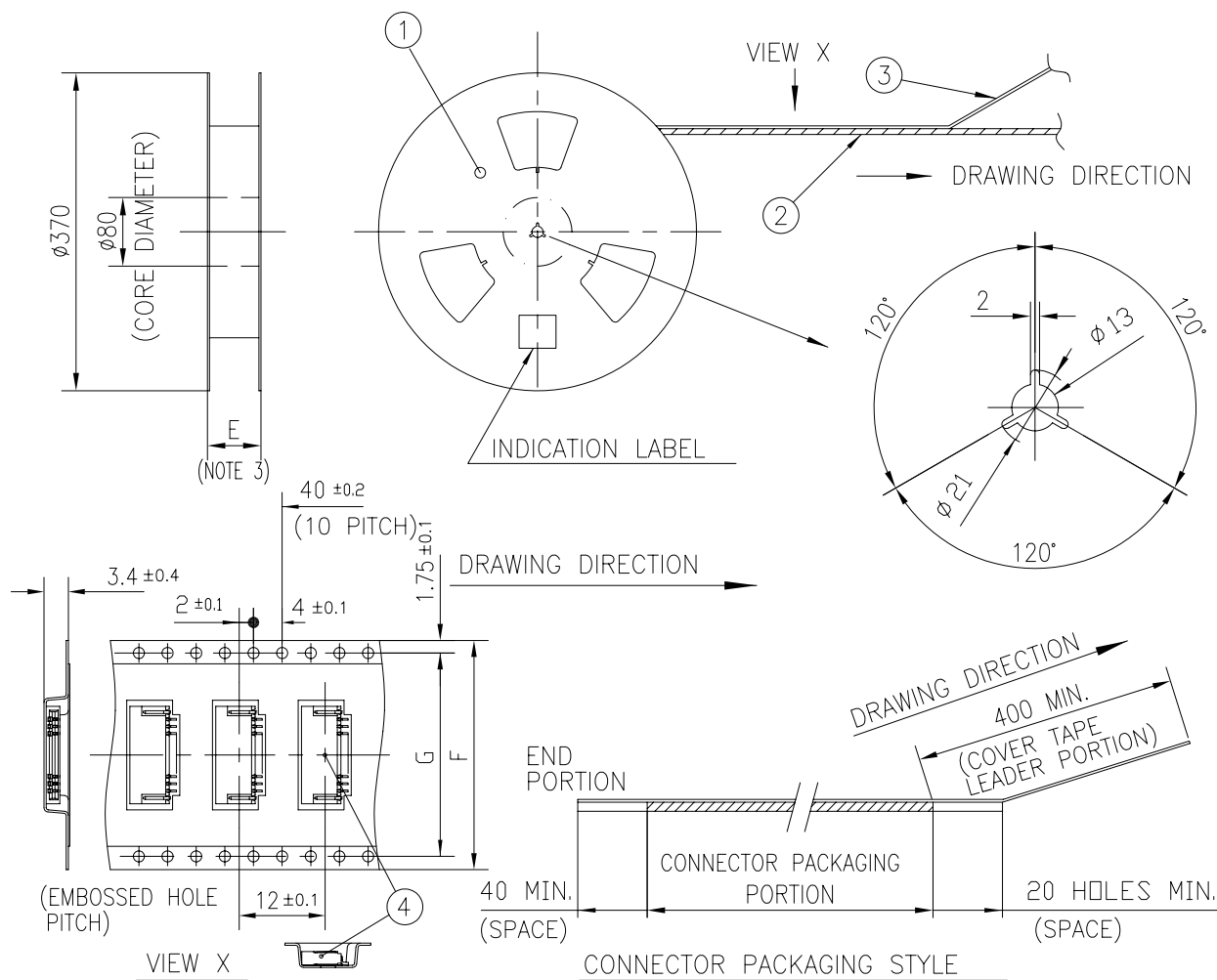
TAPE PACKAGING

HALOGEN AND LEAD FREE

NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC AND COPE WITH AUTOMATIC MOUNTING (SMT).
2. THIS CATALOG NO. INDICATES PLASTIC TAPE PACKAGED CONNECTOR.
3. SEE PART DRAWINGS FOR DIMENSIONS E~G.
4. PLEASE CONSULT US IN CASE OF USING PARTS WITH * MARK.

mat'l. code				surface 58 / tolerance ISO 1302 / ISO 406 / ISO 1101		projection		product family 58NF			
ltr	ecn no	dr	date	tolerances unless otherwise specified				title			
A				angles	linear	mm		CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONN (Cat.No. HFW__R-1/2STAE1HLF)			
						scale		dwg no sheet 5 of 8 size			
				dr	H. TAKAKURA	06-10-23		10096547 A4			
				engr	DENNIS GOH	09-01-21					
				chr	DENNIS GOH	09-01-21					
				appd	JOEY NG	09-01-21					
sheet index		revision sheet									
										Rev. A	

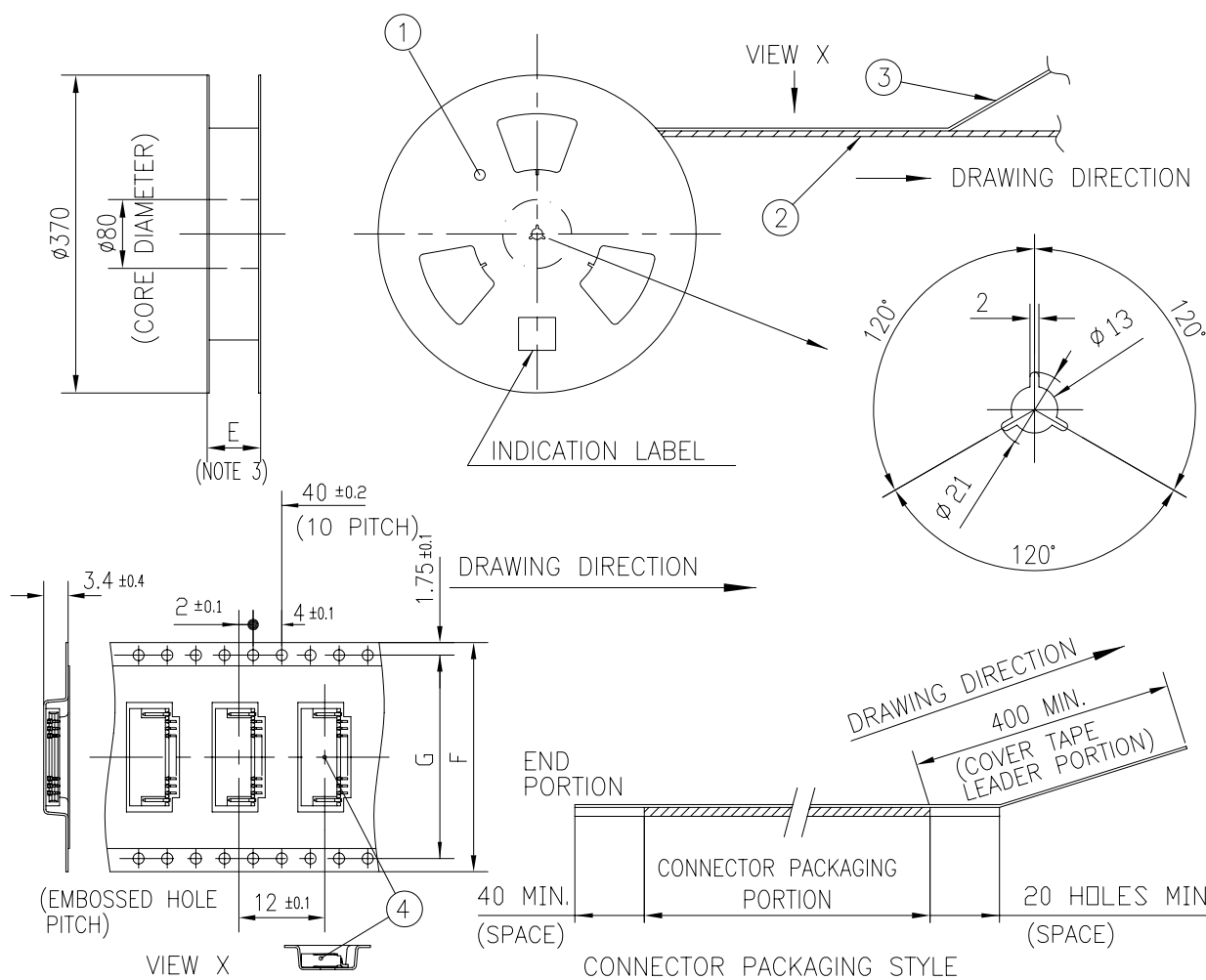


PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE
2	PLASTIC (EMBOSSSED) TAPE	_____	PET	—	COLOR:TRANSPARENCY
3	COVER	_____	POLYESTER	—	COLOR:TRANSPARENCY
4	CONNECTOR	HFW__R-1STA__HLF	SEE ATTACHED DWG.	2000	LOWER CONTACT TYPE

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE FPC 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 (EMBOSSSED) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.

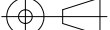
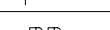
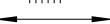
mat'l. code				surface 58	tolerance ISO 406	projection	product family 58NF	CODE JP
ltr	ecn no	dr	date	ISO 1302	ISO 1101		title 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-1STAE1HLF)	
A				tolerances unless otherwise specified		mm		
				angles linear	±5	scale		
				±5°			dwg no	sheet 6 of 8
				dr	H. TAKAKURA	06-10-23	10096547	size A4
				engr	DENNIS GOH	09-01-21	type Product Customer Drawing	
				chr	DENNIS GOH	09-01-21		
				appd	JOEY NG	09-01-21	Rev. A	
sheet index	revision sheet							



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	HFW__R-2STA__-HLF	SEE ATTACHED DWG.	2000	UPPER CONTACT TYPE

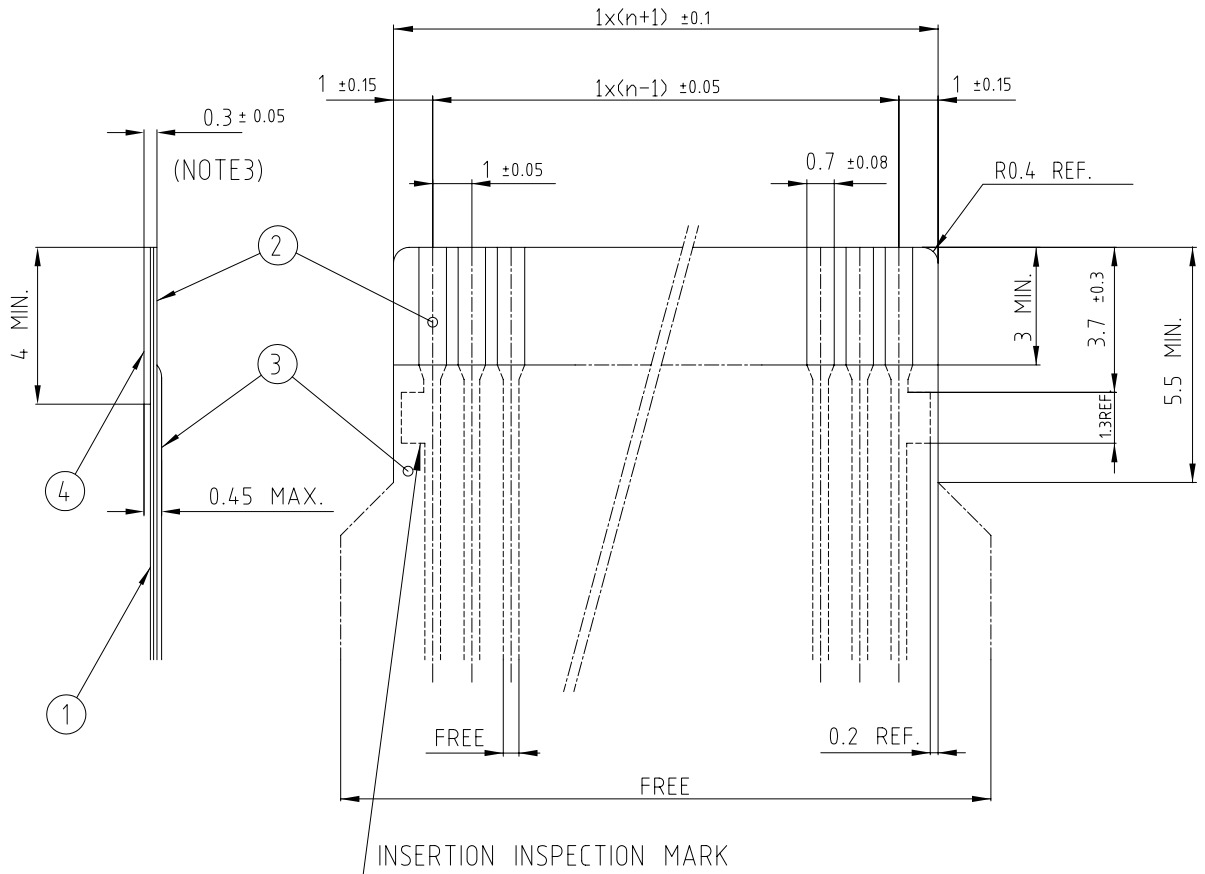
NOTES

- THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE FPC AND COPS 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.

mat'l. code				surface 58 ☒ ISO 1302			tolerance ISO 406 ISO 1101		projection 		product family 58NF										
ltr	ecn no	dr	date	tolerances unless otherwise specified							title										
A				angles		linear			mm 		1mm SPACING SMT CONNECTOR										
				±5°					scale 		(Cat.No. HFW__R-2STAE1HLF)										
				dr	H. TAKAKURA			06-10-23				dwg no				sheet 7 of 8				size	
				engr	DENNIS GOH			09-01-21				10096547				A4					
				chr	DENNIS GOH			09-01-21													
				appd	JOEY NG			09-01-21													
sheet index		revision sheet																	Rev A		

RECOMMENDED CABLE (FPC)

n : NO. OF CONDUCTORS



PT. NO.	DESCRIPTION	MATERIAL	THICKNESS (um)
1	BASE FILM	POLYIMIDE OR POLYESTER OR EQUIVALENT	25
2	CONDUCTOR	COPPER FOIL(PLATING : GOLD)	35
3	OVERLAY	POLYIMIDE OR POLYESTER OR EQUIVALENT	—
4	SUPPORTING TAPE	POLYESTER OR POLYIMIDE OR EQUIVALENT	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.

mat'l. code				surface 58/ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF			
ltr	ecn no	dr	date	tolerances unless otherwise specified						title			
A				angles	linear			mm		RECOMMENDED CABLE			
								scale		HFW__R-1/2STA__			
				dr	H. TAKAKURA	06-10-23			dwg no		sheet 8 of 8	size	
				engr	DENNIS GOH	09-01-21			10096547		A4		
				chr	DENNIS GOH	09-01-21							
				appd	JOEY NG	09-01-21							
sheet index	revision sheet									type Product Customer Drawing		Rev. A	