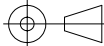


FCI CONFIDENTIAL

List of "HFW__R-1/2STE9LF" customer document

DOCUMENT NO.	LIST
10101162(SHEET1)	DOCUMENT LIST
10101162(SHEET2)	CAT.NO.TABLE FOR 1mm SPACING SMT CONNECTOR (HFW__R-1/2ST__LF)
10101162(SHEET3)	1mm SPACING SMT CONNECTOR (HFW__R-1ST_LF)
10101162(SHEET4)	1mm SPACING SMT CONNECTOR (HFW__R-2ST_LF)
10101162(SHEET5)	CAT.NO.TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (HFW__R-1/2STE9LF)
10101162(SHEET6)	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (HFW__R-1STE9LF)
10101162(SHEET7)	PLASTIC TAPE PACKAGED 1mm SPACING SMT CONNECTOR (HFW__R-2STE9LF)
10101162(SHEET8)	RECOMMENDED CABLE (FPC) (HFW__R-1/2ST__)
10101162(SHEET9)	RECOMMENDED CABLE (FFC) (HFW__R-1/2ST__)
SC-HFWR02	PRODUCT SPECIFICATION
BJM HFWR101	HANDLING PROCEDURES

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Copyright FCI.

mat'l. code				surface ISO 1302 ☒				tolerance ISO 406 ISO 1101				projection 				product family 58NF				CODE JP											
ltr		ecn no		dr		date		tolerances unless otherwise specified								title															
A		S09-0139		DGOH		09-05-06		angles				linear				mm				1mm SPACING SMT CONNECTOR DOCUMENT LIST (Cat. No. : HFW__R-1/2STE9LF)											
																scale $\propto$															
								dr				DENNIS GOH				09-05-06				dwg no				sheet 1 of 9				size			
								enr				DENNIS GOH				09-05-06				10101162				A4							
								chr				DENNIS GOH				09-05-06															
								appd				JOEY NG				09-05-06				type				Product Customer Drawing							
sheet index		revision sheet		A		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-1/2ST__LF	6.6	3	5.14
	5	HFW5R-1/2ST__LF	7.6	4	6.14
	6	HFW6R-1/2ST__LF	8.6	5	7.14
	7	HFW7R-1/2ST__LF	9.6	6	8.14
	8	HFW8R-1/2ST__LF	10.6	7	9.14
	9	HFW9R-1/2ST__LF	11.6	8	10.14
	10	HFW10R-1/2ST__LF	12.6	9	11.14
	11	HFW11R-1/2ST__LF	13.6	10	12.14
	12	HFW12R-1/2ST__LF	14.6	11	13.14
	13	HFW13R-1/2ST__LF	15.6	12	14.14
	14	HFW14R-1/2ST__LF	16.6	13	15.14
	15	HFW15R-1/2ST__LF	17.6	14	16.14
	16	HFW16R-1/2ST__LF	18.6	15	17.14
	17	HFW17R-1/2ST__LF	19.6	16	18.14
	18	HFW18R-1/2ST__LF	20.6	17	19.14
	19	HFW19R-1/2ST__LF	21.6	18	20.14
	20	HFW20R-1/2ST__LF	22.6	19	21.14
	21	HFW21R-1/2ST__LF	23.6	20	22.14
	22	HFW22R-1/2ST__LF	24.6	21	23.14
	23	HFW23R-1/2ST__LF	25.6	22	24.14
	24	HFW24R-1/2ST__LF	26.6	23	25.14
	25	HFW25R-1/2ST__LF	27.6	24	26.14
	26	HFW26R-1/2ST__LF	28.6	25	27.14
	27	HFW27R-1/2ST__LF	29.6	26	28.14
*	28	HFW28R-1/2ST__LF	30.6	27	29.14
*	29	HFW29R-1/2ST__LF	31.6	28	30.14
	30	HFW30R-1/2ST__LF	32.6	29	31.14

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

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

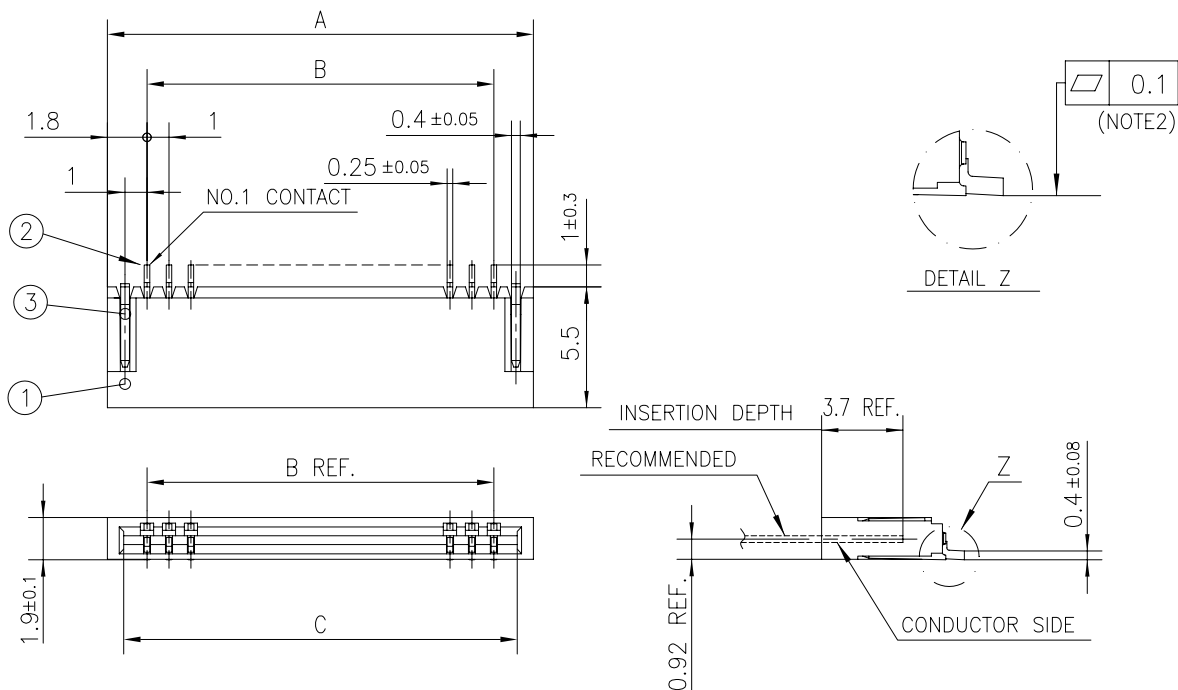
PACKAGE STYLE

LEAD FREE

NOTES

- THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC 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		angles linear		mm		title			
A								scale		CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (Cat. No. HFW__R-1/2ST__LF)			
				dr	DENNIS GOH	09-05-06			dwg no		sheet 2 of 9	size	
				engr	DENNIS GOH	09-05-06			10101162		A4		
				chr	DENNIS GOH	09-05-06							
				appd	JOEY NG	09-05-06							
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
2	CONTACT	PHOSPHOR BRONZE	n	PLATING:TIN
3	MOUNTING PLATE		2	(LEAD FREE)

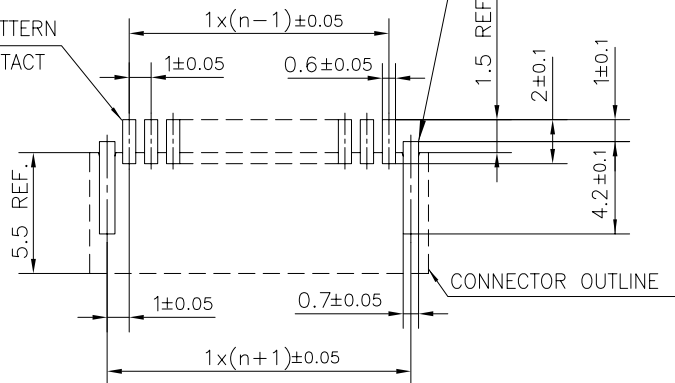
n : NO. OF CONTACTS

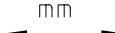
NOTES

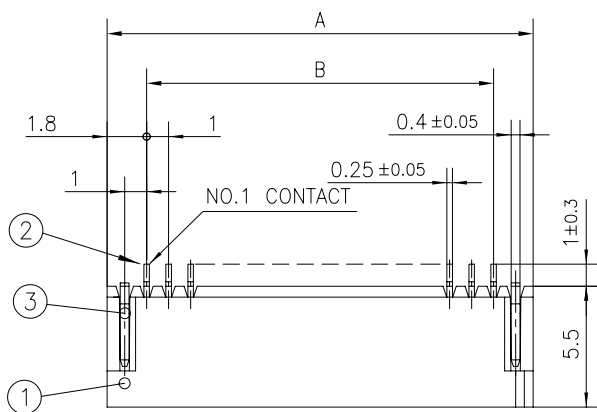
1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPS WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS OF CONTACT TERMINAL FOR HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND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

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

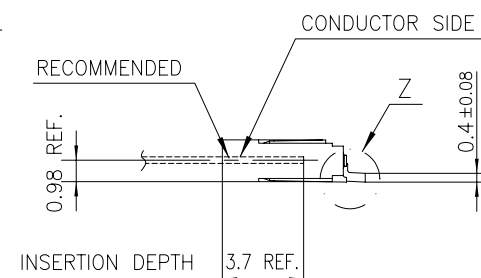
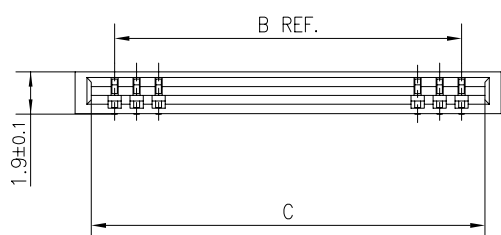
BASIC PATTERN
NO.1 CONTACT
POSITION



mat'l. code				surface 58 ISO 1302			tolerance ISO 406 ISO 1101			projection 			product family 58NF						CODE JP																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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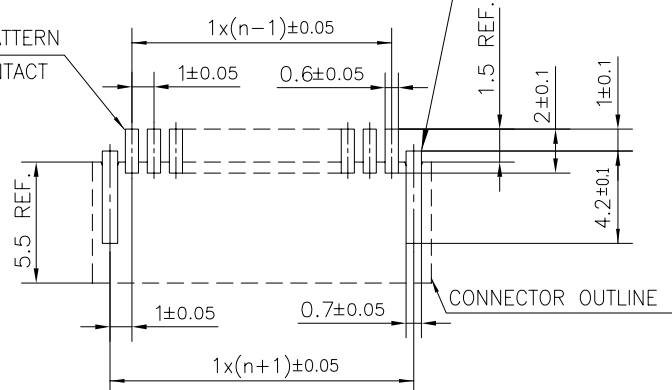


DETAIL Z



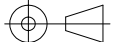
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR:BLACK
2	CONTACT	PHOSPHOR BRONZE	n	PLATING:TIN
3	MOUNTING PLATE		2	(LEAD FREE)

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT
(COMPONENT SIDE)BASIC PATTERN
NO.1 CONTACT
POSITION

NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPES 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 1302 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/FFC CONNECTOR (Cat. No. HFW__R-2ST__LF)							
A				angles	linear	±0.2										
							scale 		dwg no 10101162						sheet 4 of 9 size A4	
				dr	DENNIS GOH	09-05-06										
				engr	DENNIS GOH	09-05-06										
				chr	DENNIS GOH	09-05-06										
				appd	JOEY NG	09-05-06			type Product Customer Drawing							
sheet index	revision sheet															Rev. A

CAT. NO. & DIMENSIONS

(NOTE4)	NO. OF CONTACTS (n)	CAT. NO. (NOTE2)	DIMENSIONS (NOTE3)		
			E MAX.	F ± 0.3	G ± 0.1
	4	HFW4R-1/2STE9LF	30.4	24	—
	5	HFW5R-1/2STE9LF	30.4	24	—
	6	HFW6R-1/2STE9LF	30.4	24	—
	7	HFW7R-1/2STE9LF	30.4	24	—
	8	HFW8R-1/2STE9LF	30.4	24	—
	9	HFW9R-1/2STE9LF	30.4	24	—
	10	HFW10R-1/2STE9LF	30.4	24	—
	11	HFW11R-1/2STE9LF	30.4	24	—
	12	HFW12R-1/2STE5LF	30.4	24	—
	13	HFW13R-1/2STE9LF	30.4	24	—
	14	HFW14R-1/2STE9LF	30.4	24	—
	15	HFW15R-1/2STE9LF	38.4	32	28.4
	16	HFW16R-1/2STE9LF	38.4	32	28.4
	17	HFW17R-1/2STE9LF	38.4	32	28.4
	18	HFW18R-1/2STE9LF	38.4	32	28.4
	19	HFW19R-1/2STE9LF	50.4	44	40.4
	20	HFW20R-1/2STE9LF	50.4	44	40.4
	21	HFW21R-1/2STE9LF	50.4	44	40.4
	22	HFW22R-1/2STE9LF	50.4	44	40.4
	23	HFW23R-1/2STE9LF	50.4	44	40.4
	24	HFW24R-1/2STE9LF	50.4	44	40.4
	25	HFW25R-1/2STE9LF	50.4	44	40.4
	26	HFW26R-1/2STE9LF	50.4	44	40.4
	27	HFW27R-1/2STE9LF	50.4	44	40.4
*	28	HFW28R-1/2STE9LF	50.4	44	40.4
*	29	HFW29R-1/2STE9LF	50.4	44	40.4

CAT. NO.

HFW (n) R - 1 ST E9 LF

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

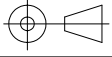
FOR AUTOMATIC MOUNTING (SMT)

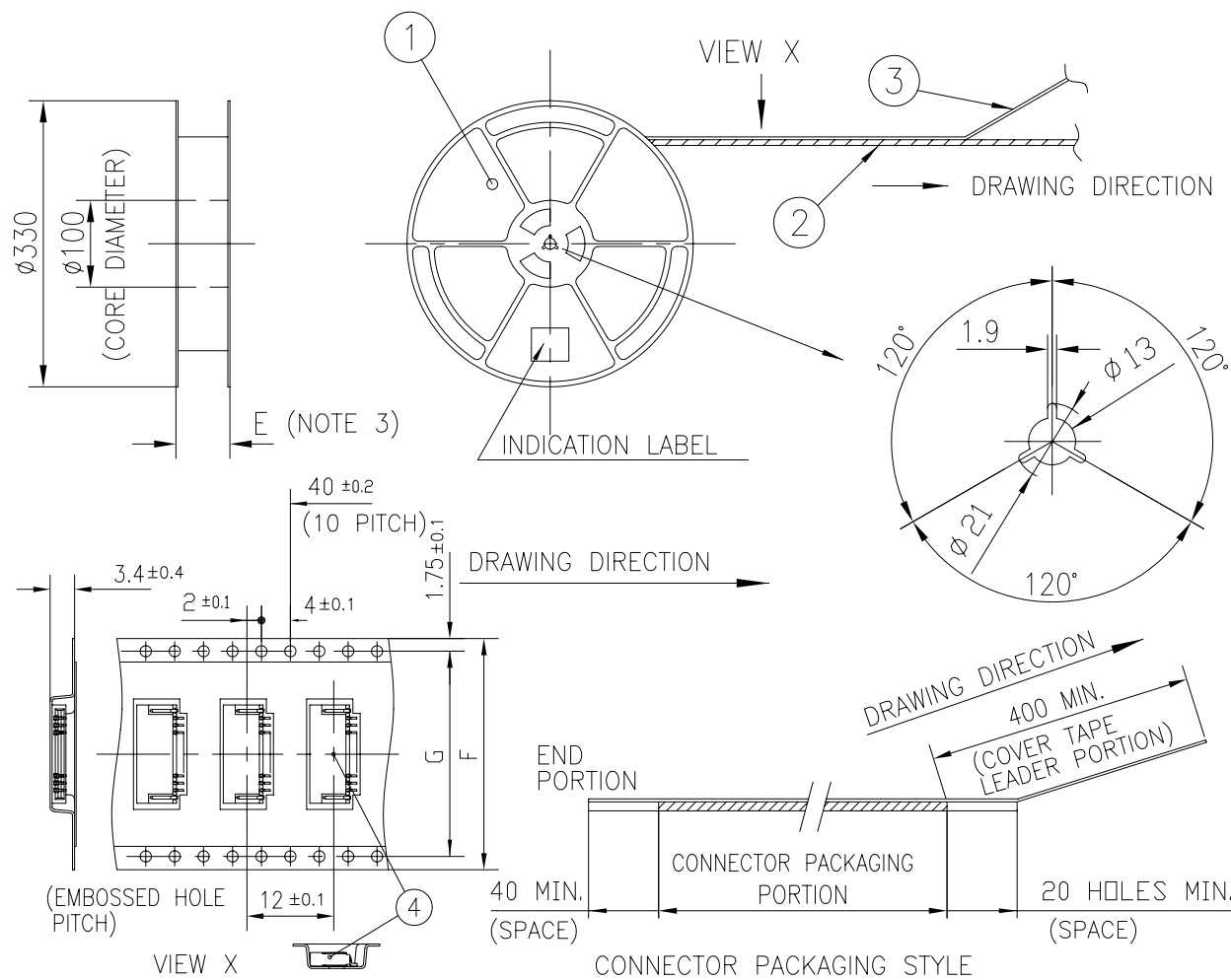
TAPE PACKAGING FOR E9 (500pcs PER REEL)

LEAD FREE

NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC 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/ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF		CODE JP		
ltr	ecn no	dr	date	tolerances unless otherwise specified				 mm		title CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONN. (Cat.No. HFW__R-1/2STE9LF)				
A				angles linear										
				dr	DENNIS GOH	09-05-06			dwg no		sheet 5 of 9		size A4	
				enr	DENNIS GOH	09-05-06			10101162					
				chr	DENNIS GOH	09-05-06			type		Product Customer Drawing			
				appd	JOEY NG	09-05-06								
sheet index		revision sheet										Rev. A		

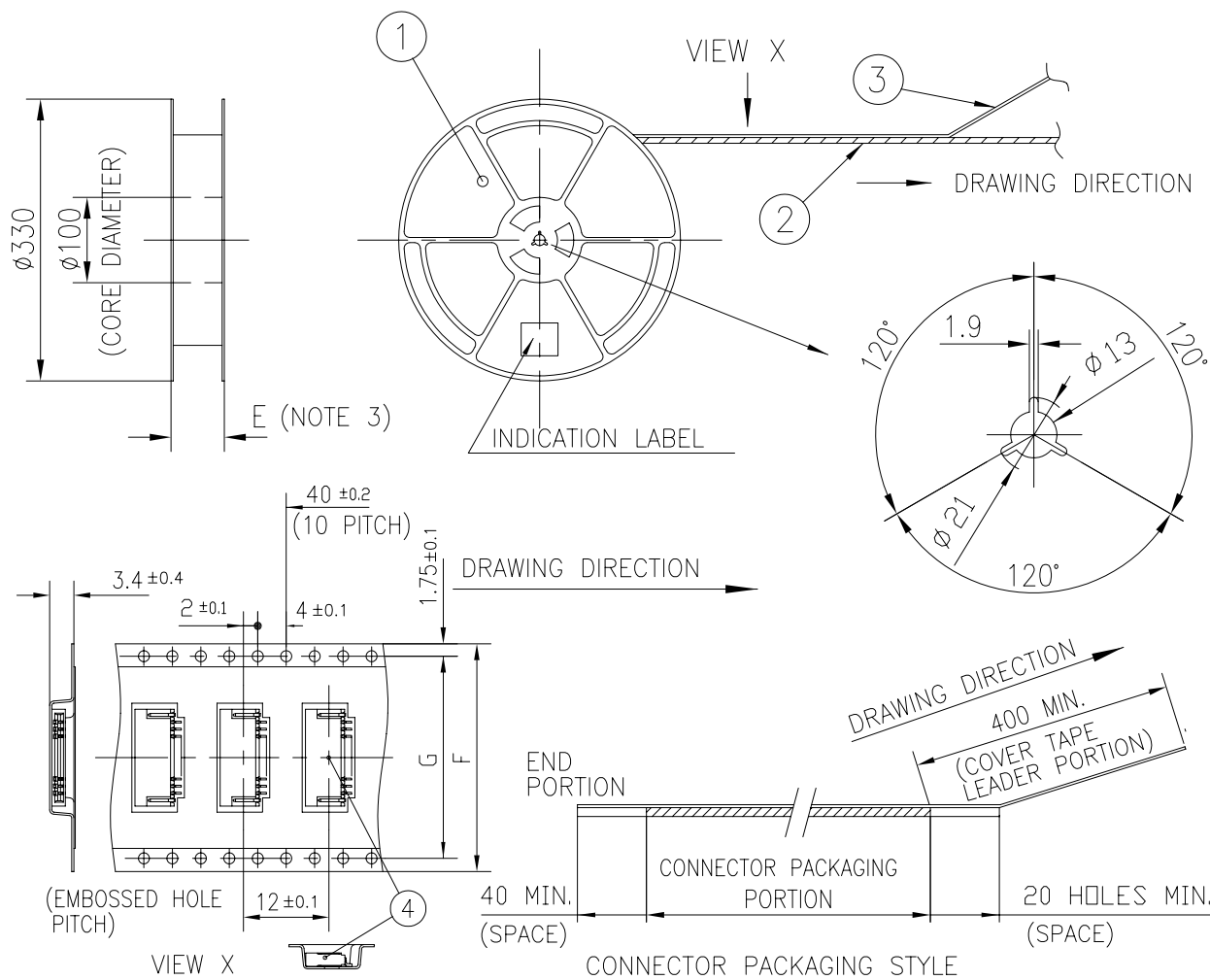


PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	POLYSTYRENE	1	COLOR:BLACK
2	PLASTIC (EMBOSSSED) TAPE	_____	PET	_____	COLOR: TRANSPARENCY (CLEAR)
3	COVER	_____	POLYESTER	_____	COLOR: TRANSPARENCY (CLEAR)
4	CONNECTOR	HFW__R-1ST__LF	SEE ATTACHED DWG.	500	LOWER CONTACT TYPE

NOTES

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

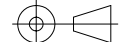
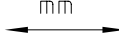
mat'l. code				surface 58	tolerance ISO 406	projection	product family 58NF	CODE JP
ltr	ecn no	dr	date	ISO 1302	ISO 1101	mm	title 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-1STE9LF)	
A				tolerances unless otherwise specified	±5	scale		
				angles	linear		dwg no	sheet 6 of 9
				±5°			10101162	size A4
				dr	DENNIS GOH	09-05-06	type Product Customer Drawing	
				enr	DENNIS GOH	09-05-06		
				chr	DENNIS GOH	09-05-06	Rev. A	
				appd	JOEY NG	09-05-06		
sheet index	revision sheet							



PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	POLYSTYRENE	1	COLOR: BLACK
2	PLASTIC (EMBOSSD) TAPE	_____	PET	_____	COLOR: TRANSPARENCY (CLEAR)
3	COVER	_____	POLYESTER	_____	COLOR: TRANSPARENCY (CLEAR)
4	CONNECTOR	HFW__R-2ST__LF	SEE ATTACHED DWG.	500	UPPER CONTACT TYPE

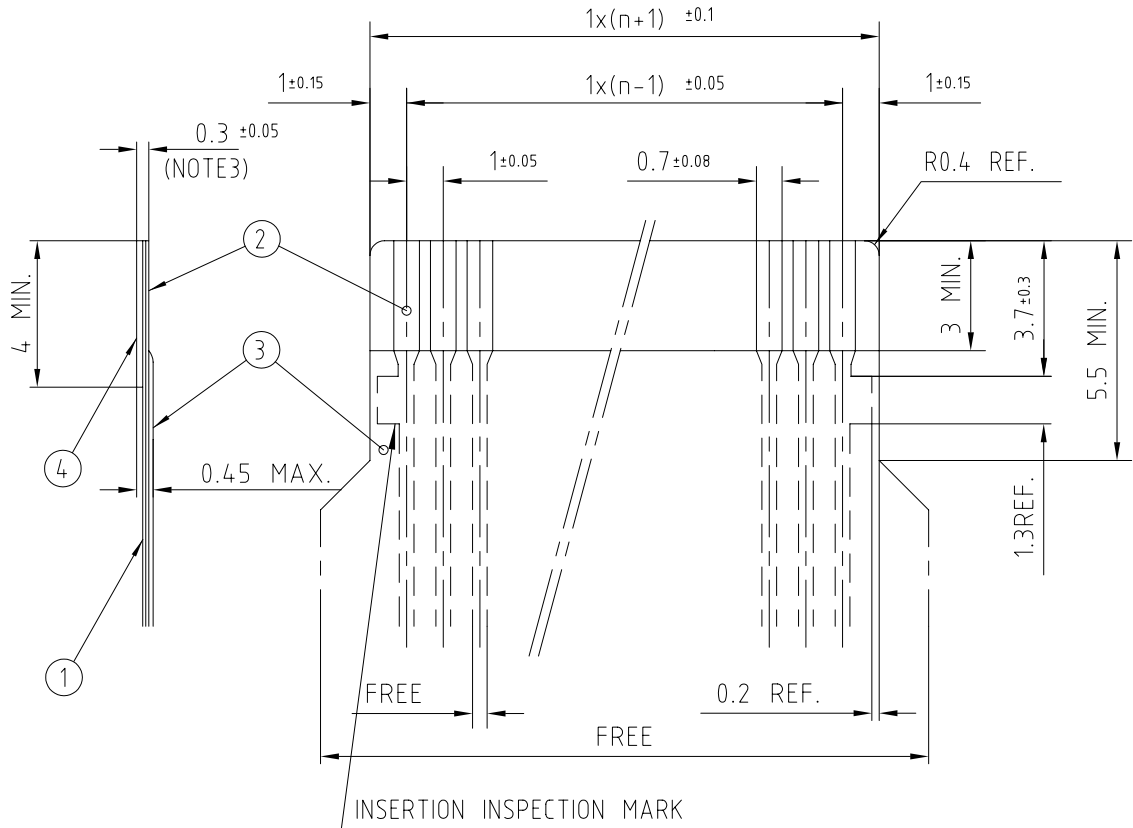
NOTES

- THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE 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 (EMBOSSD) 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					CODE JP		
ltr	ecn no	dr	date	tolerances unless otherwise specified									title 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-2STE9LF)							
A				angles		linear		±5												
				±5°																
				dr	DENNIS GOH		09-05-06					dwg no					sheet 7 of 9		size	
				engr	DENNIS GOH		09-05-06					10101162					A4			
				chr	DENNIS GOH		09-05-06													
				appd	JOEY NG		09-05-06													
sheet index		revision																Rev. A		
		sheet																		

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 : SOLDER 1um MIN.)	35
3	OVERLAY	POLYIMIDE OR POLYESTER OR EQUIVALENT	—
4	SUPPORTING TAPE	POLYESTER OR POLYIMIDE OR EQUIVALENT	188

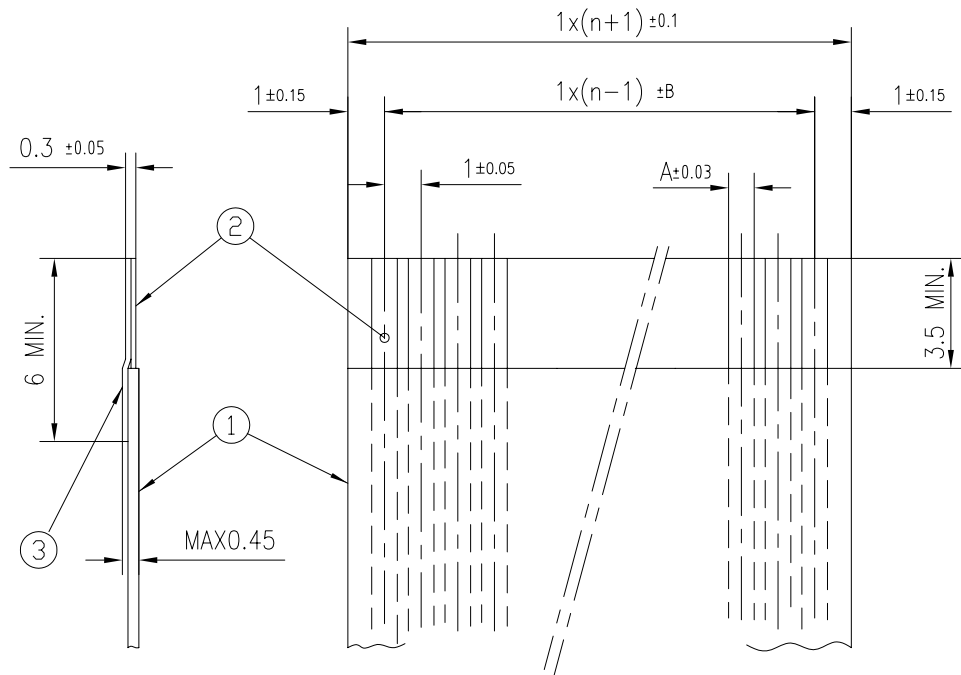
NOTES

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		CODE JP	
litr A				ecn no		dr		date		title		RECOMMENDED CABLE	
										(Cat. No. HFW__R-1/2__)			
				angles		linear		mm		scale		X	
				dr		DENNIS GOH		09-05-06		dwg no		sheet 8 of 9	
				enr		DENNIS GOH		09-05-06		10101162		A4	
				chr		DENNIS GOH		09-05-06		type		Product Customer Drawing	
				appd		JOEY NG		09-05-06					
sheet index		revision sheet										Rev. A	

RECOMMENDED CABLE (FFC)

n : NO. OF CONDUCTORS



(NOTE 3)	DIMENSION A	TOLERANCE B
1	0.7	0.1
2	0.6	0.07

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

NOTES

1. NO BURR AT EACH PORTION.
2. NO PEELING IN COMMON USE.
3. BOTH COMBINATION IS ALLOWED.

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				 mm		title			
A				angles	linear	RECOMMENDED CABLE (Cat. No. HFW__R-1/2__)							
				dr	DENNIS GOH	09-05-06			dwg no		sheet 9 of 9	size	
				enr	DENNIS GOH	09-05-06			10101162		A4		
				chr	DENNIS GOH	09-05-06							
				appd	JOEY NG	09-05-06							
sheet index		revision sheet										Rev. A	