

Amphenol
FCi

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C

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__HLF	6.6	3	5.14
	5	HFW5R-1/2ST__HLF	7.6	4	6.14
	6	HFW6R-1/2ST__HLF	8.6	5	7.14
	7	HFW7R-1/2ST__HLF	9.6	6	8.14
	8	HFW8R-1/2ST__HLF	10.6	7	9.14
	9	HFW9R-1/2ST__HLF	11.6	8	10.14
	10	HFW10R-1/2ST__HLF	12.6	9	11.14
	11	HFW11R-1/2ST__HLF	13.6	10	12.14
	12	HFW12R-1/2ST__HLF	14.6	11	13.14
	13	HFW13R-1/2ST__HLF	15.6	12	14.14
	14	HFW14R-1/2ST__HLF	16.6	13	15.14
	15	HFW15R-1/2ST__HLF	17.6	14	16.14
	16	HFW16R-1/2ST__HLF	18.6	15	17.14
	17	HFW17R-1/2ST__HLF	19.6	16	18.14
	18	HFW18R-1/2ST__HLF	20.6	17	19.14
	19	HFW19R-1/2ST__HLF	21.6	18	20.14
	20	HFW20R-1/2ST__HLF	22.6	19	21.14
	21	HFW21R-1/2ST__HLF	23.6	20	22.14
	22	HFW22R-1/2ST__HLF	24.6	21	23.14
	23	HFW23R-1/2ST__HLF	25.6	22	24.14
	24	HFW24R-1/2ST__HLF	26.6	23	25.14
	25	HFW25R-1/2ST__HLF	27.6	24	26.14
	26	HFW26R-1/2ST__HLF	28.6	25	27.14
	27	HFW27R-1/2ST__HLF	29.6	26	28.14
*	28	HFW28R-1/2ST__HLF	30.6	27	29.14
*	29	HFW29R-1/2ST__HLF	31.6	28	30.14
	30	HFW30R-1/2ST__HLF	32.6	29	31.14

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

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

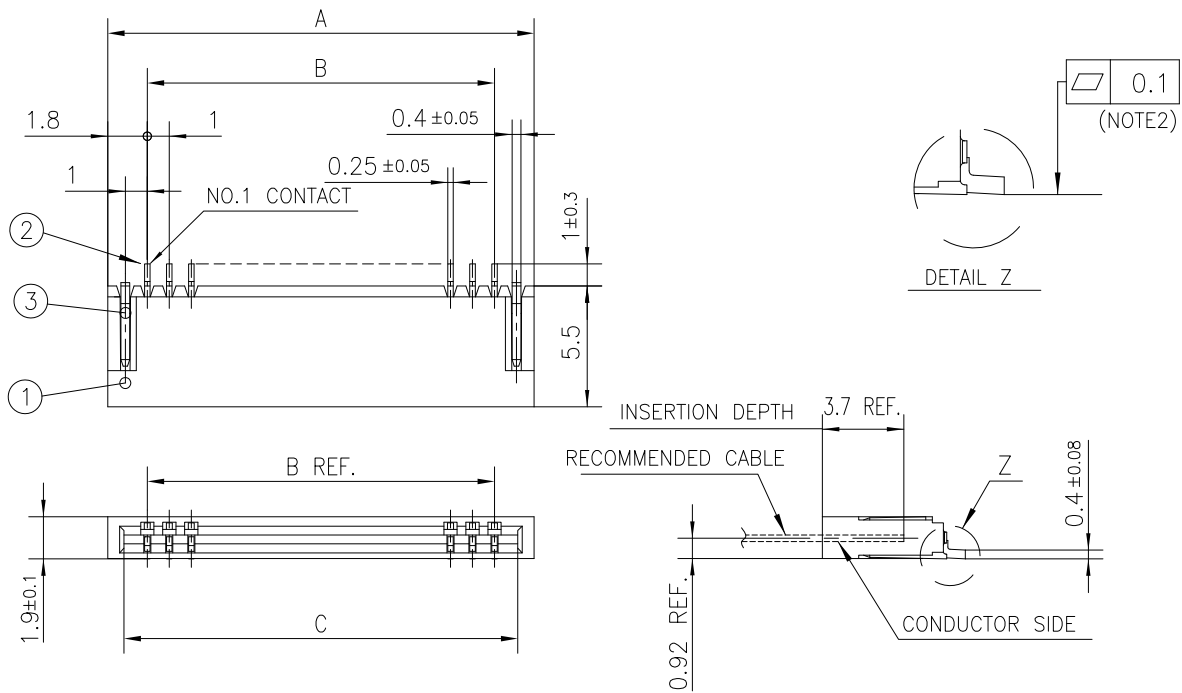
PACKAGE STYLE

HALOGEN and LEAD FREE

NOTES

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

mat'l. code				surface ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF									
ltr	ecn no	dr	date	tolerances unless otherwise specified						title									
B				angles		linear		MM		CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-1/2ST__HLF)									
								scale N/A		dwg no sheet 2 of 9 size									
				dr	S.WATANABE	2019-3-13		Amphenol FCI		10089213 A4									
				engr	S.WATANABE	2019-3-13													
				chr	S-H.THIO	2019-3-13													
				appd	Y.KAMEDA	2019-3-13				type Product Customer Drawing									
sheet index		revision sheet																	



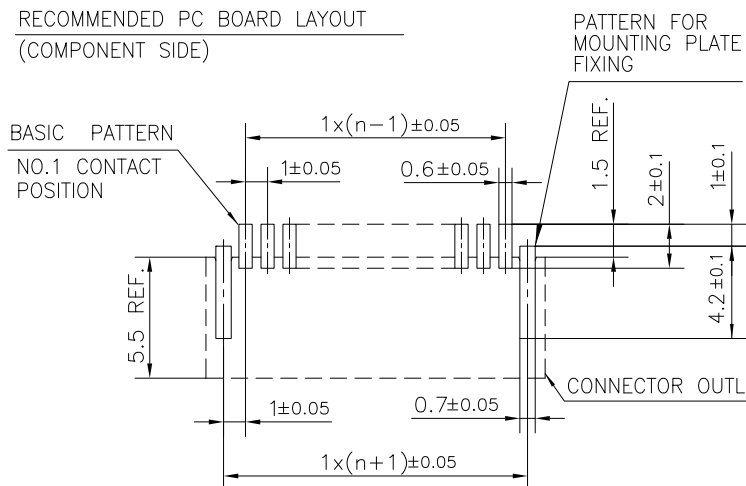
PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK (HALOGEN FREE)
2	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
3	MOUNTING PLATE		2	(LEAD FREE)

n : NO. OF CONTACTS

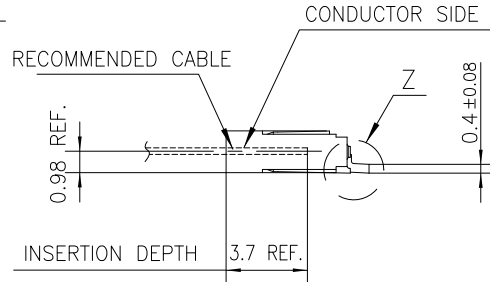
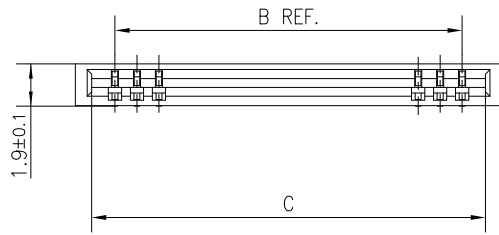
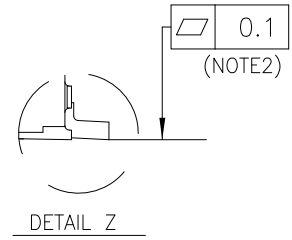
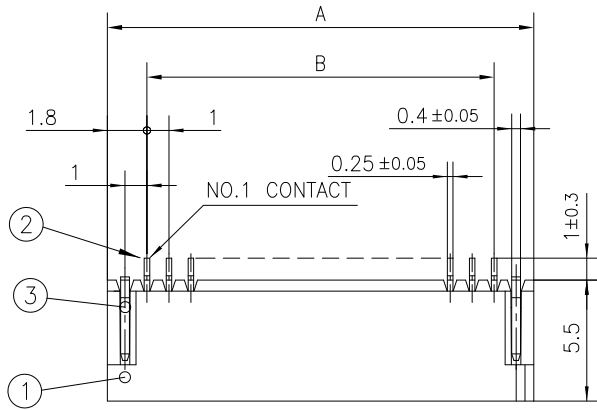
NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COTES 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)



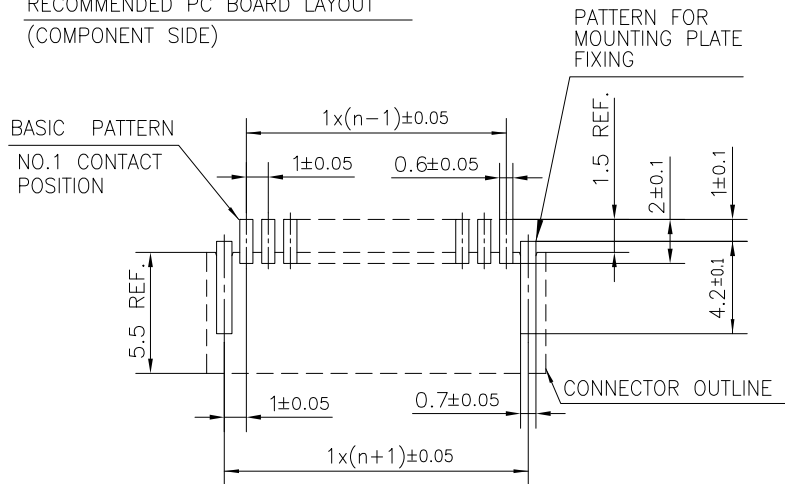
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PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK (HALOGEN FREE)
2	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
3	MOUNTING PLATE		2	(LEAD FREE)

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)



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 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 ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF																	
ltr				ecn no		dr		date		tolerances unless otherwise specified		angles		linear		MM		title									
B																		1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat.No. HFW__R-2ST__HLF)									
																		dwg no sheet 4 of 9 size									
																		10089213 A4									
																		type Product Customer Drawing									
sheet index				revision sheet																							

CAT. NO. & DIMENSIONS

(NOTE4)	NO. OF CONTACTS (n)	CAT. NO. (NOTE2)	DIMENSIONS (NOTE3)		
			E ± 5	F ± 0.3	G ± 0.1
	4	HFW4R-1/2STE1HLF	28.4	24	—
	5	HFW5R-1/2STE1HLF	28.4	24	—
	6	HFW6R-1/2STE1HLF	28.4	24	—
	7	HFW7R-1/2STE1HLF	28.4	24	—
	8	HFW8R-1/2STE1HLF	28.4	24	—
	9	HFW9R-1/2STE1HLF	28.4	24	—
	10	HFW10R-1/2STE1HLF	28.4	24	—
	11	HFW11R-1/2STE1HLF	28.4	24	—
	12	HFW12R-1/2STE1HLF	28.4	24	—
	13	HFW13R-1/2STE1HLF	28.4	24	—
	14	HFW14R-1/2STE1HLF	28.4	24	—
	15	HFW15R-1/2STE1HLF	36.4	32	28.4
	16	HFW16R-1/2STE1HLF	36.4	32	28.4
	17	HFW17R-1/2STE1HLF	36.4	32	28.4
	18	HFW18R-1/2STE1HLF	36.4	32	28.4
	19	HFW19R-1/2STE1HLF	48.4	44	40.4
	20	HFW20R-1/2STE1HLF	48.4	44	40.4
	21	HFW21R-1/2STE1HLF	48.4	44	40.4
	22	HFW22R-1/2STE1HLF	48.4	44	40.4
	23	HFW23R-1/2STE1HLF	48.4	44	40.4
	24	HFW24R-1/2STE1HLF	48.4	44	40.4
	25	HFW25R-1/2STE1HLF	48.4	44	40.4
	26	HFW26R-1/2STE1HLF	48.4	44	40.4
	27	HFW27R-1/2STE1HLF	48.4	44	40.4
*	28	HFW28R-1/2STE1HLF	48.4	44	40.4
*	29	HFW29R-1/2STE1HLF	48.4	44	40.4
	30	HFW30R-1/2STE1HLF	60.4	56	52.4

CAT. NO.

HFW (n) R - 1 ST E1 HLF

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

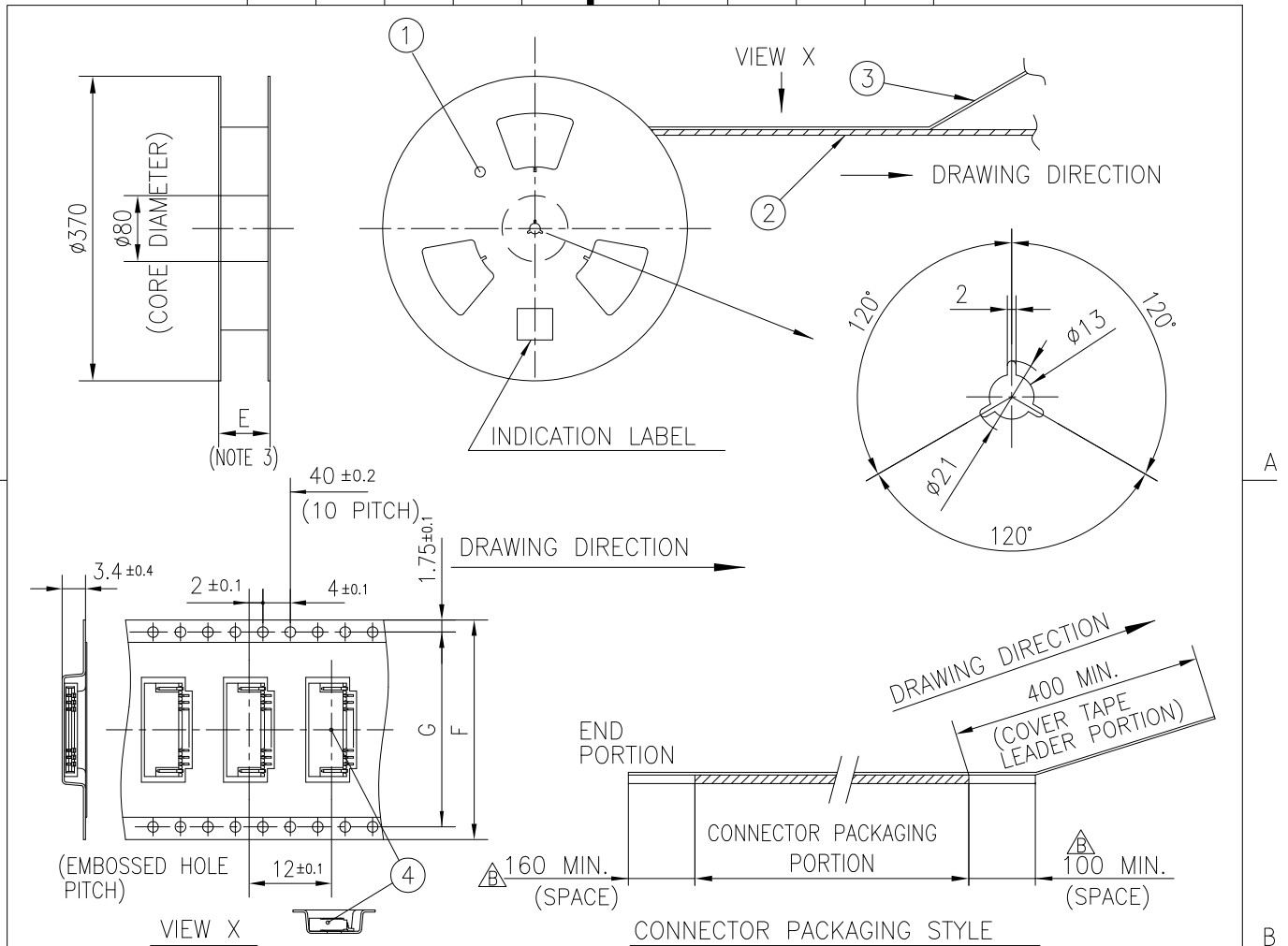
TAPE PACKAGING

HALOGEN and 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.

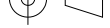
mat'l. code				surface ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF													
ltr ecn no dr date				tolerances unless otherwise specified						title													
B				angles linear				MM		CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONN. (Cat.No. HFW__R-1/2STE1HLF)													
				dr		S.WATANABE		2019-3-13		scale N/A		dwg no sheet 5 of 9 size											
				engr		S.WATANABE		2019-3-13		Amphenol FCI		10089213 A4											
				chr		S-H.THIO		2019-3-13															
				appd		Y.KAMEDA		2019-3-13				type Product Customer Drawing											
sheet index		revision sheet																					

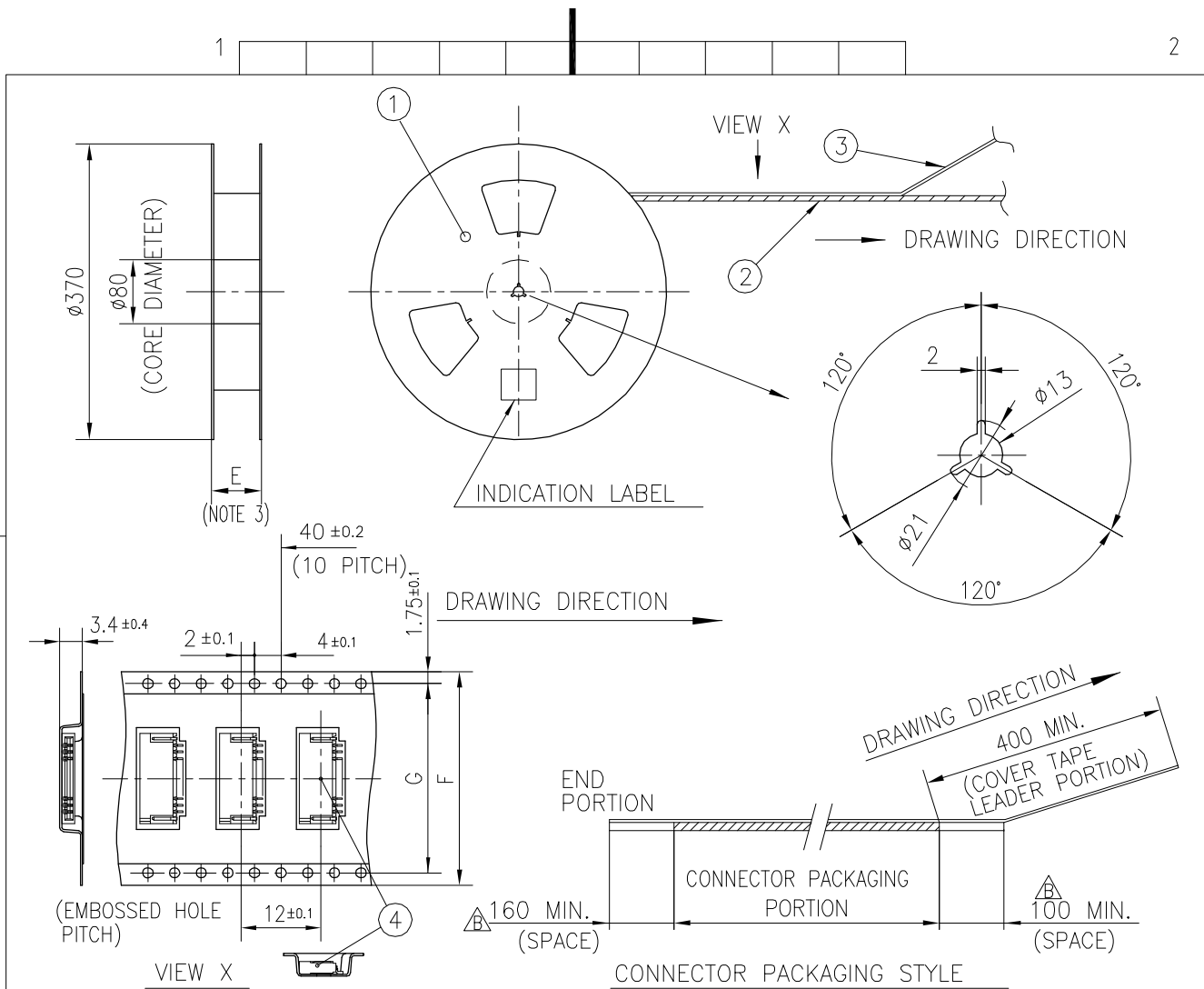


PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	—	CARDBOARD	1	COLOR:WHITE
2	PLASTIC (EMBOSSSED) TAPE	—	Δ PS or A-PET	—	COLOR:TRANSPARENCY
3	COVER	—	Δ POLYESTER,POLYETHYLENE	—	COLOR:TRANSPARENCY
4	CONNECTOR	HFW__R-1ST__HLF	SEE SHEET 3	2000	LOWER CONTACT TYPE

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE 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 (EMBOSSSED) 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 58NF										
ltr	ecn no	dr	date	tolerances unless		otherwise specified			title 1mm SPACING SMT CONNECTOR (Cat.No. HFW__R-1STE1HLF)											
B				angles	linear	±5	scale N/A													
				±5°																
				dr	S.WATANABE	2019-3-13			dwg no						sheet 6 of 9		size			
				engr	S.WATANABE	2019-3-13	10089213						A4							
				chr	S-H.THIO	2019-3-13														
				appd	Y.KAMEDA	2019-3-13	type						Product Customer Drawing							
sheet index		revision sheet																		



PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE
2	PLASTIC (EMBOSSD) TAPE	_____	△PS or A-PET	_____	COLOR:TRANSPARENCY
3	COVER	_____	△POLYESTER,POLYETHYLENE	_____	COLOR:TRANSPARENCY
4	CONNECTOR	HFW__R-2ST__HLF	SEE SHEET 4	2000	UPPER CONTACT TYPE

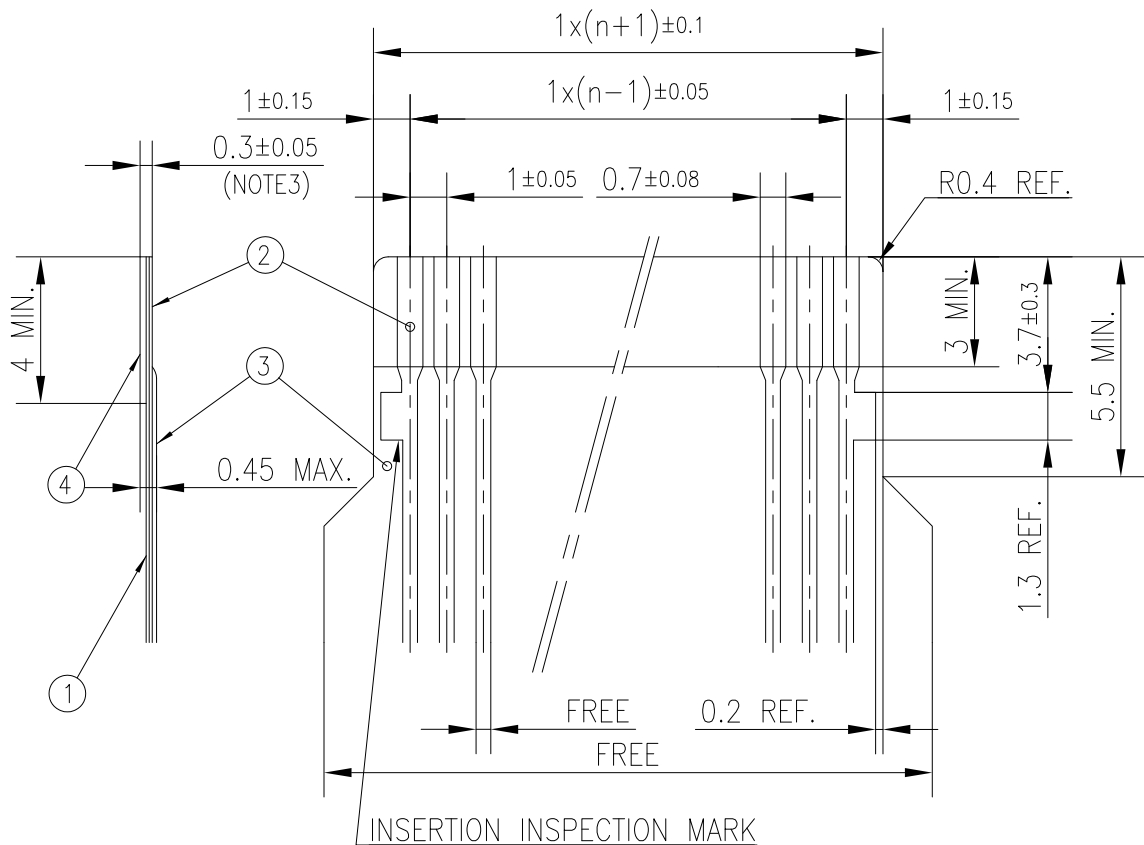
NOTES

- 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	tolerance	projection	product family			
—				ISO 1302	ISO 406 ISO 1101	⊕	58NF			
ltr	ecn no	dr	date	tolerances unless otherwise specified		MM	title			
B				angles	±5	MM	1mm SPACING SMT CONNECTOR			
				linear	±5	scale N/A	(Cat.No. HFW__R-2STE1HLF)			
				dr	S.WATANABE	2019-3-13	dwg no		sheet 7 of 9	size
				engr	S.WATANABE	2019-3-13	10089213		Δ4	
				chr	S-H.THIO	2019-3-13				
				appd	Y.KAMEDA	2019-3-13				
sheet index	revision sheet						type Product Customer Drawing			

RECOMMENDED CABLE (FPC)

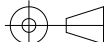
n : NO. OF CONDUCTORS



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

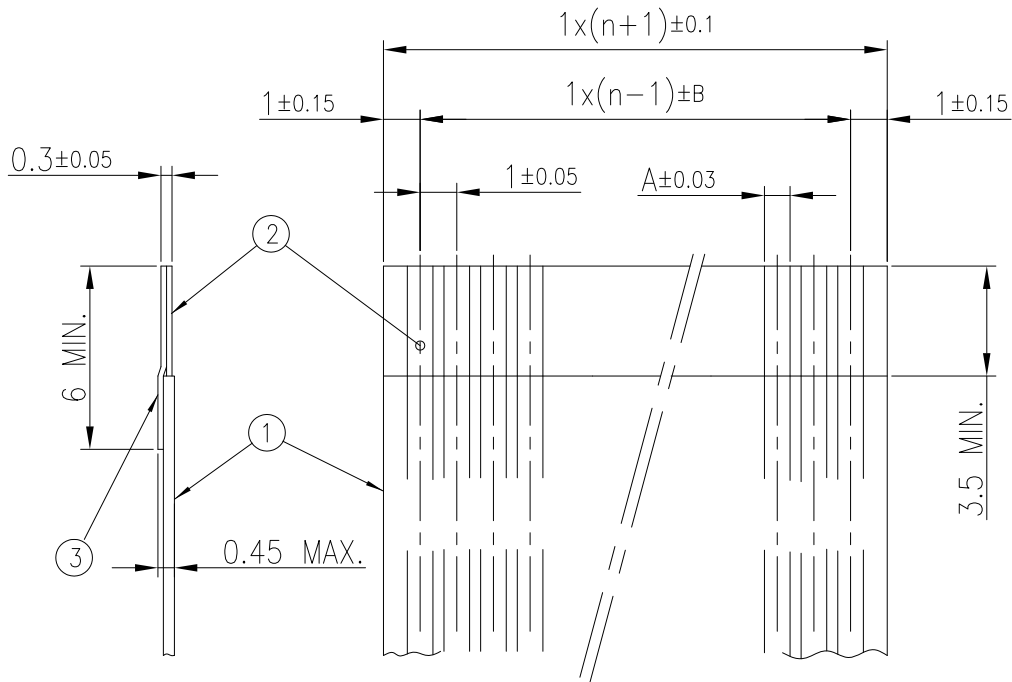
NOTES

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 ISO 1302 ✓			tolerance ISO 406 ISO 1101			projection 		product family 58NF										
ltr	ecn no		dr	date		tolerances unless		otherwise specified			 MM		title RECOMMENDED CABLE (Cat. No. HFW__R-1/2__)									
B						angles		linear														
										scale N/A		dwg no sheet 8 of 9 10089213 size A4										
						dr	S.WATANABE		2019-3-13													
						engr	S.WATANABE		2019-3-13													
						chr	S-H.THIO		2019-3-13													
						appd	Y.KAMEDA		2019-3-13				type Product Customer Drawing									
sheet index		revision sheet																				

RECOMMENDED CABLE (FFC)

n : NO. OF CONDUCTORS



(NOTE3)	DIMENSION A	TOLERANCE B
1	0.7	0.1
2	0.6	0.07

PT. NO.	DESCRIPTION	MATERIAL
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 ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF																	
ltr				ecn no		dr		date		tolerances unless otherwise specified		angles		linear		MM		title									
B																		RECOMMENDED CABLE									
																		(Cat. No. HFW__R-1/2ST__)									
																		scale N/A									
																		dwg no									
																		sheet 9 of 9									
																		10089213									
																		A4									
																		type Product Customer Drawing									
sheet index				revision																							
				sheet																							