

Amphenol
FCi

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(

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)

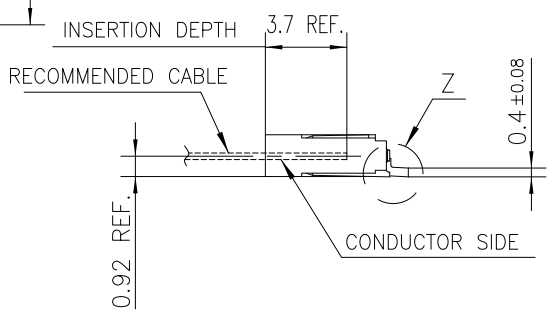
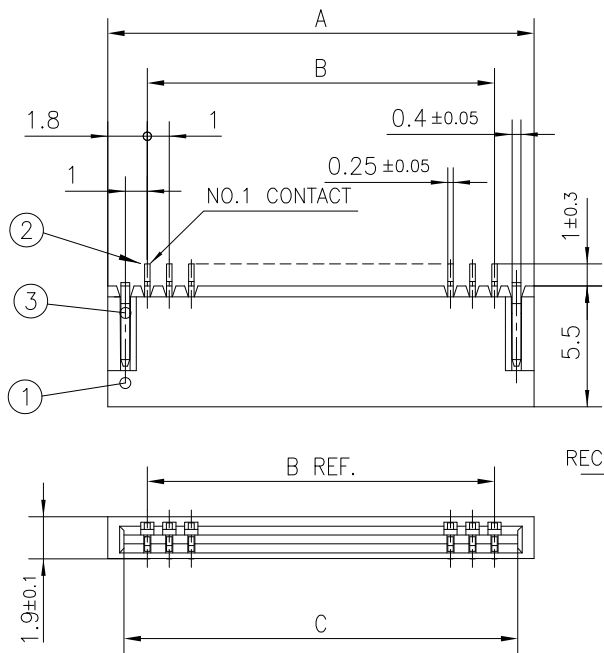
PACKAGE STYLE

HALOGEN and LEAD FREE

NOTES

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

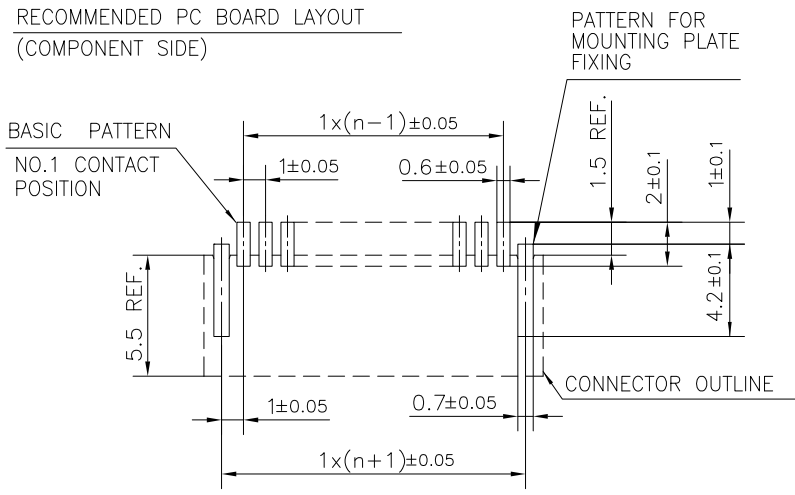


PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	PA6T RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK (HALOGEN FREE)
2	CONTACT	PHOSPHOR BRONZE	n	PLATING : TIN
3	MOUNTING PLATE		2	(LEAD FREE)

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

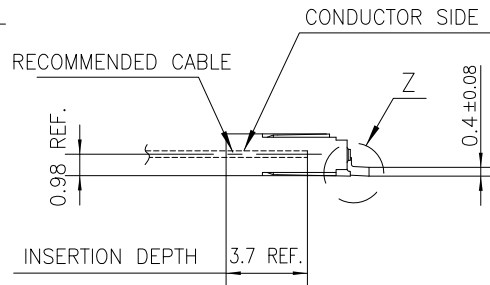
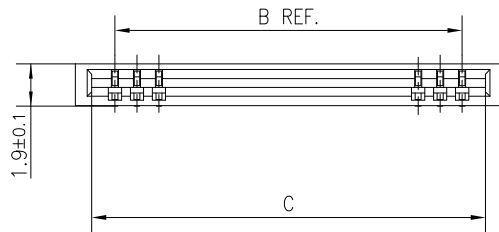
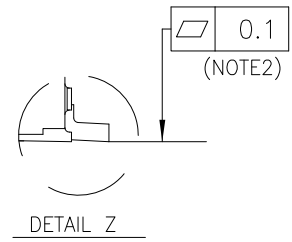
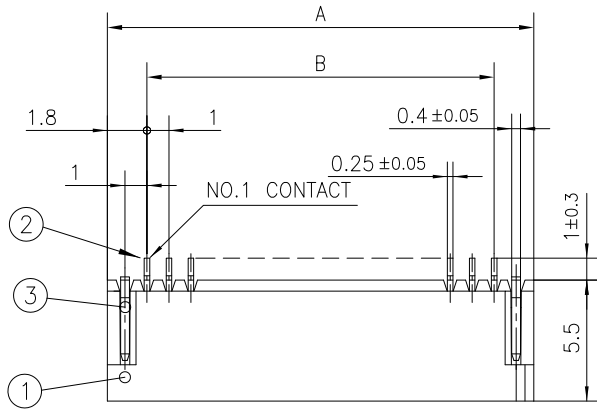
BASIC PATTERN NO.1 CONTACT POSITION



NOTES

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

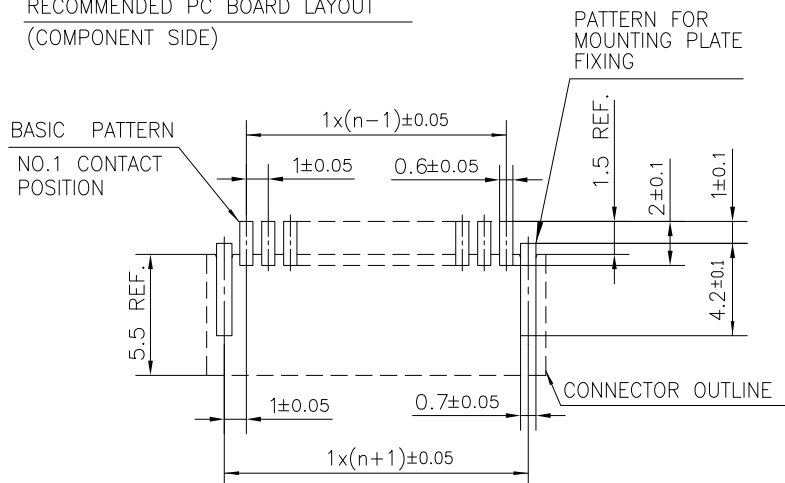
mat'l. code				surface ISO 1302		tolerance ISO 406 ISO 1101		projection		product family 58NF													
ltr	ecn no	dr	date	tolerances unless otherwise specified						 MM	title												
B				angles		linear ±0.2					1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat.No. HFW__R-1ST__HLF)												
				dr	S.WATANABE	2019-3-13			dwg no sheet 3 of 9 size														
				enr	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	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)

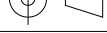


n : NO. OF CONTACTS

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					title 1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat.No. HFW__R-2ST__HLF)									
B				angles	linear		±0.2														
										scale N/A											
				dr	S.WATANABE		2019-3-13				dwg no					sheet 4 of 9			size		
				engr	S.WATANABE		2019-3-13				10089213					A4					
				chr	S-H.THIO		2019-3-13														
				appd	Y.KAMEDA		2019-3-13														
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)

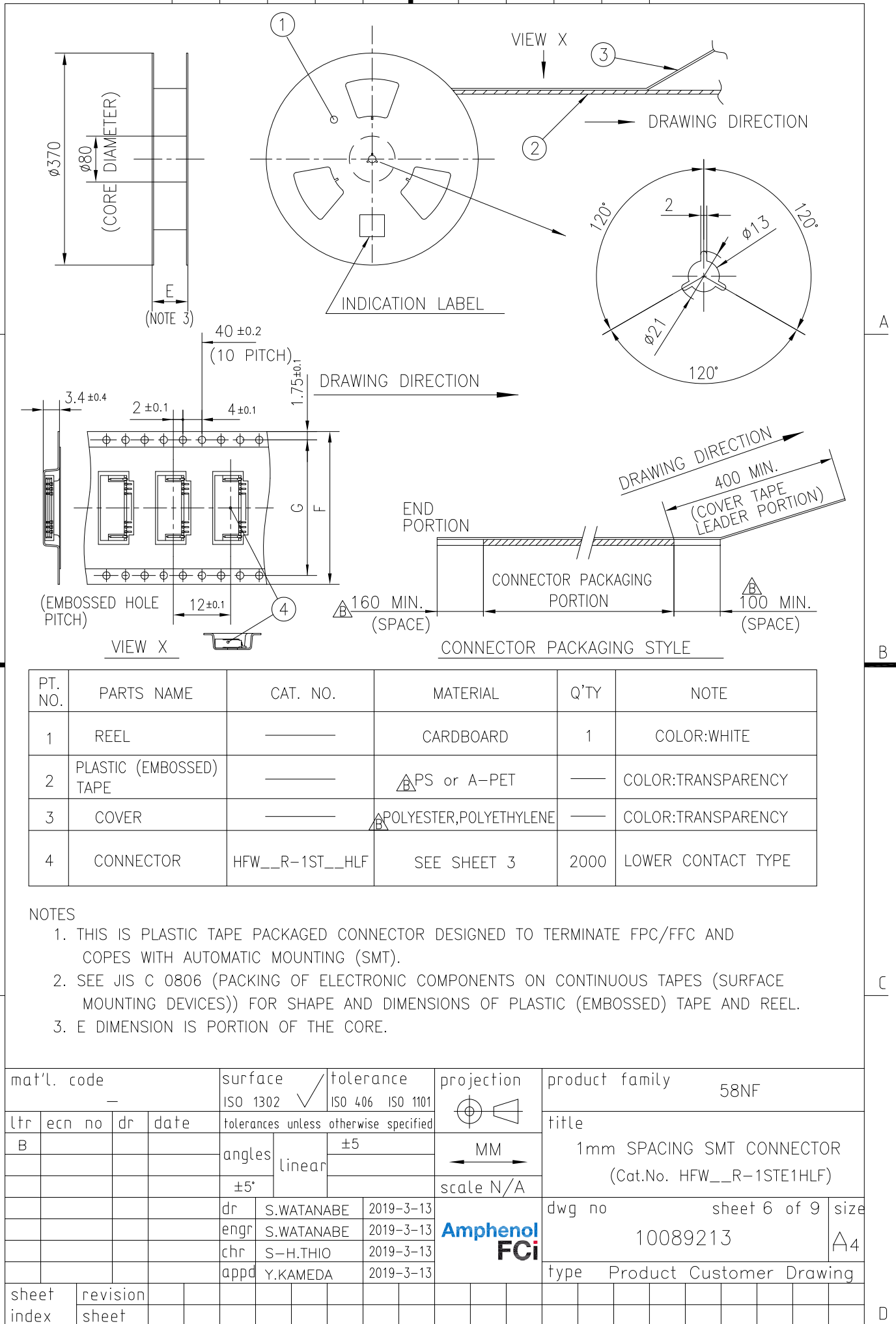
TAPE PACKAGING

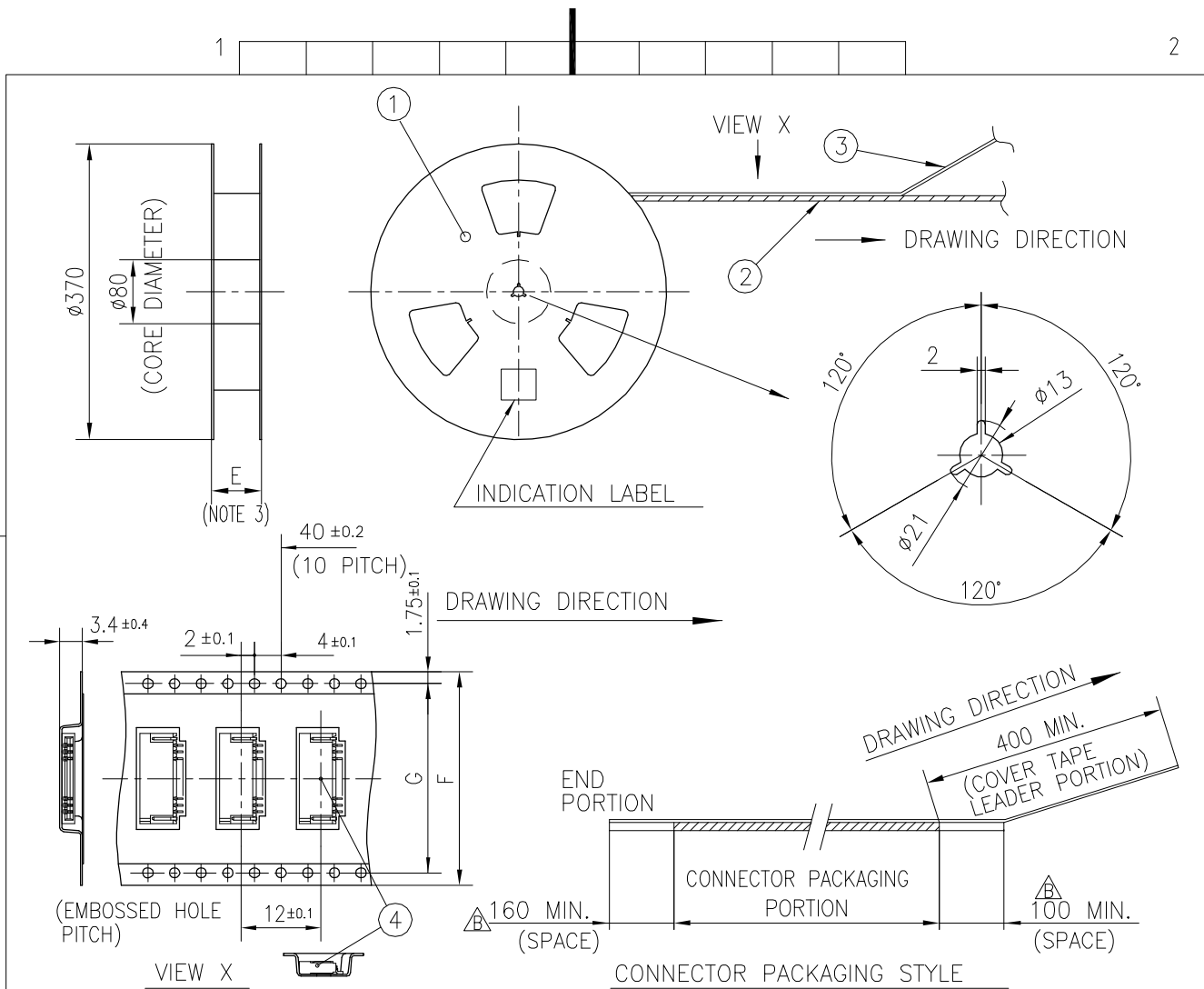
HALOGEN and LEAD FREE

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																					



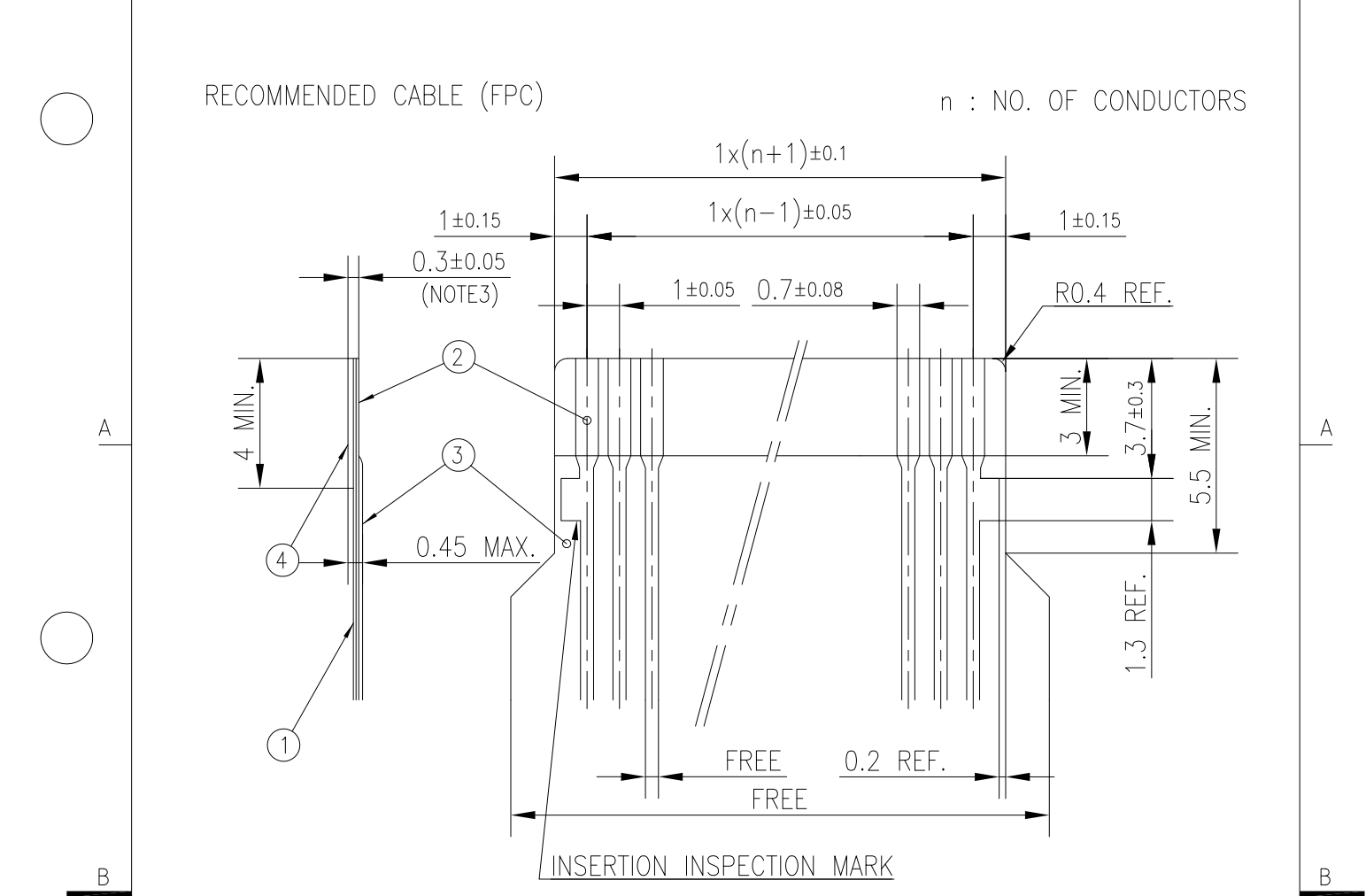


PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q'TY	NOTE
1	REEL	_____	CARDBOARD	1	COLOR:WHITE
2	PLASTIC (EMBOSSD) TAPE	_____	△PS or A-PET	—	COLOR:TRANSPARENCY
3	COVER	_____	△POLYESTER,POLYETHYLENE	—	COLOR:TRANSPARENCY
4	CONNECTOR	HFW__R-2ST__HLF	SEE SHEET 4	2000	UPPER CONTACT TYPE

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		↔	1mm SPACING SMT CONNECTOR			
				linear				(Cat.No. HFW__R-2STE1HLF)			
				±5°			scale N/A	dwg no			
				dr	S.WATANABE	2019-3-13	Amphenol FCi	sheet 7 of 9			
				engr	S.WATANABE	2019-3-13		10089213			
				chr	S-H.THIO	2019-3-13		A4			
				appd	Y.KAMEDA	2019-3-13		type Product Customer Drawing			
sheet index	revision										
	sheet										



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

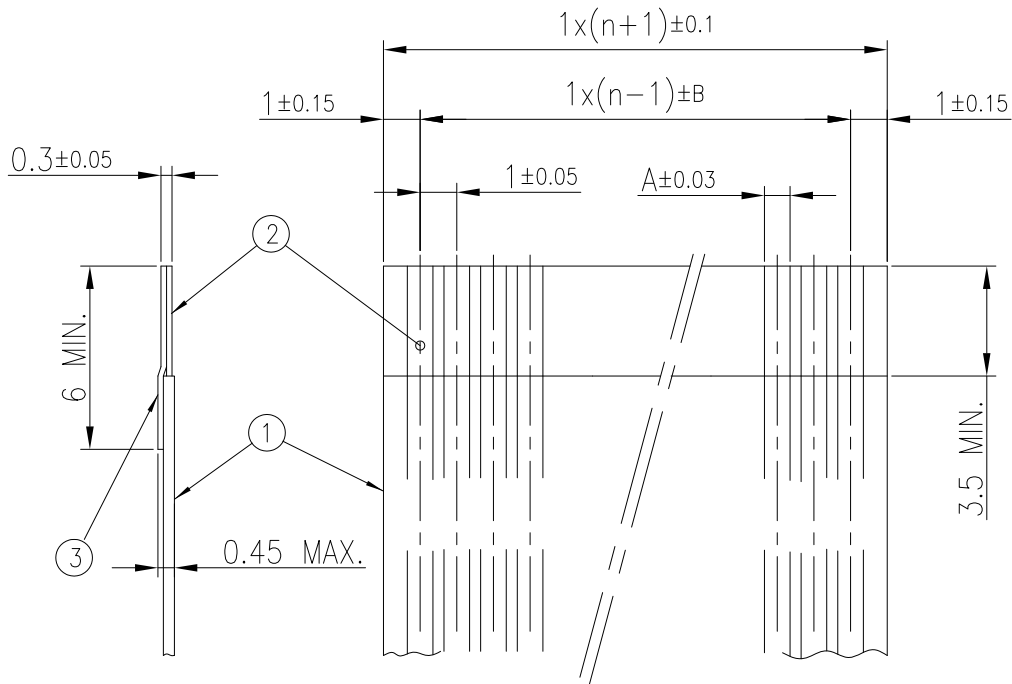
NOTES

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		tolerance		projection		product family																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																
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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						title RECOMMENDED CABLE (Cat. No. HFW__R-1/2ST__)									
B										angles linear															
														MM		dwg no sheet 9 of 9 size 10089213 A4									
														scale N/A											
										dr S.WATANABE 2019-3-13						type Product Customer Drawing									
										enr S.WATANABE 2019-3-13															
										chr S-H.THIO 2019-3-13															
										appd Y.KAMEDA 2019-3-13															
sheet index		revision sheet																							