

## Configuration of Customer Documents List

P/N	Documents	No.	Title
HLEM_R/S-1	Specification	SC-HLEM 01	
	Dwg.	JSA93270	1.25mm Spacing Connector for FPC/FFC (HLEM_R/S- )
		JSA93271	1.25mm Spacing Connector for FPC/FFC (HLEM_S-1 )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	
P/N	Documents	No.	Title
HLEM_R/S-2	Specification	SC-HLEM 01	
	Dwg.	JSC29055	1.25mm Spacing Connector for FPC/FFC (HLEM_R-2 )
		JSC29054	1.25mm Spacing Connector for FPC/FFC (HLEM_S-2 )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	
P/N	Documents	No.	Title
HLEM_R/S-1RLF (See Note ②③)	Specification	SC-HLEM 01	
	Dwg.	JSA94071	1.25mm Spacing Connector for FPC/FFC (HLEM_R-1RLF )
		JSA94072	1.25mm Spacing Connector for FPC/FFC (HLEM_S-1RLF )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	
P/N	Documents	No.	Title
HLEM_R/S-1RFLF (See Note ②③)	Specification	SC-HLEM 01	
	Dwg.	JSA94073	1.25mm Spacing Connector for FPC/FFC (HLEM_R-1RFLF )
		JSA94074	1.25mm Spacing Connector for FPC/FFC (HLEM_S-1RFLF )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	
P/N	Documents	No.	Title
HLEM_R/S-2RLF (See Note ②③)	Specification	SC-HLEM 01	
	Dwg.	JSA96132	1.25mm Spacing Connector for FPC/FFC (HLEM_R-2RLF )
		JSA96133	1.25mm Spacing Connector for FPC/FFC (HLEM_S-2RLF )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	
P/N	Documents	No.	Title
HLEM_R/S-2RFLF (See Note ②③)	Specification	SC-HLEM 01	
	Dwg.	JSA96134	1.25mm Spacing Connector for FPC/FFC (HLEM_R-2RFLF )
		JSA96135	1.25mm Spacing Connector for FPC/FFC (HLEM_S-2RFLF )
	Cable	JSA28789	Recommended cable and P.C. board (HLEM_R/S- )
	Manual	BJM-HLEM101	

## NOTES

1. THE HOUSING WILL WITHSTAND EXPOSURE TO 260 DEGREE PEAK TEMPERATURE FOR 10 SECONDS IN A WAVE SOLDER APPLICATION WITH A 1.57MM MINIMUM THICK CIRCUIT BOARD.
2. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
3. PART NUMBERS ENDING IN "LF" MEANS FOR NOTE② LEAD FREE IDENTIFICATION.  
HLEMxxR/S-1/2R(F)LF IS EQUIVALENT TO PREVIOUS P/N HLEMxxR/S-1/2R(F).

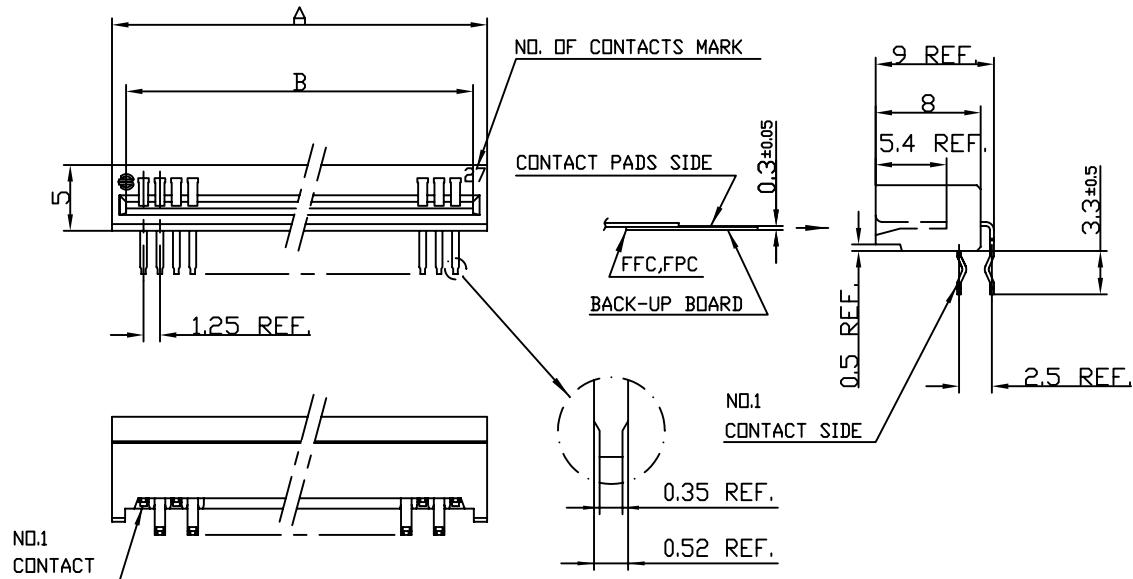
mat'l. code				surface	tolerance	projection	product family
ltr	ecn no	dr	date	ASME Y14.5		ASME Y14.5	specified
A	J04-0253	H.T	2004-08-03	angles	0°	±.3	mm
B	J05-0014	H.T	2005-01-13	angles	0°	±.10	
C	S05-0145	D.T	2005-06-15	0°±2°	0.005	0.00±.050	scale -
D	S05-0290	D.T	2005-10-14	dr	T.ono	2004-08-03	
E	S06-0252	P.C	2006-07-28	engr	H.Takakura	2004-08-03	
				chr	Patrick Chua	2006-07-28	
				appd	Joey Ng	2006-07-28	
sheet		revision	E				
index		sheet	1				

FCI

dwg no sheet 1 of 1 size  
JSA96023 A4

type Product Customer Drawing

TOLERANCES  
UNLESS OTHERWISE SPECIFIED :  $\pm 0.2$



MATERIAL : INSULATOR : PBT RESIN GLASS REINFORCED (UL94V-0)  
COLOR : BLACK

CONTACT : PHOSPHOR BRONZE (TIN PLATED ; THICKNESS: 1 micron)

NO. OF CONTACTS	CAT. NO.	DIMENSIONS		21	HLEM21R-1RLF	29.80	27.66
		A $\pm 0.3$	B $\pm 0.1$	22	HLEM22R-1RLF	31.05	28.91
3	HLEM 3R-1RLF	7.30	5.16	23	HLEM23R-1RLF	32.30	30.16
4	HLEM 4R-1RLF	8.55	6.41	24	HLEM24R-1RLF	33.55	31.41
5	HLEM 5R-1RLF	9.80	7.66	25	HLEM25R-1RLF	34.80	32.66
6	HLEM 6R-1RLF	11.05	8.91	26	HLEM26R-1RLF	36.05	33.91
7	HLEM 7R-1RLF	12.30	10.16	27	HLEM27R-1RLF	37.30	35.16
8	HLEM 8R-1RLF	13.55	11.41	28	HLEM28R-1RLF	38.55	36.41
9	HLEM 9R-1RLF	14.80	12.66	29	HLEM29R-1RLF	39.80	37.66
10	HLEM10R-1RLF	16.05	13.91	30	HLEM30R-1RLF	41.05	38.91
11	HLEM11R-1RLF	17.30	15.16	31	HLEM31R-1RLF	42.30	40.16
12	HLEM12R-1RLF	18.55	16.41	32	HLEM32R-1RLF	43.55	41.41
13	HLEM13R-1RLF	19.80	17.66	33	HLEM33R-1RLF	44.80	42.66
14	HLEM14R-1RLF	21.05	18.91	34	HLEM34R-1RLF	46.05	43.91
15	HLEM15R-1RLF	22.30	20.16	35	HLEM35R-1RLF	47.30	45.16
16	HLEM16R-1RLF	23.55	21.41	36	HLEM36R-1RLF	48.55	46.41
17	HLEM17R-1RLF	24.80	22.66	37	HLEM37R-1RLF	49.80	47.66
18	HLEM18R-1RLF	26.05	23.91	38	HLEM38R-1RLF	51.05	48.91
19	HLEM19R-1RLF	27.30	25.16	39	HLEM39R-1RLF	52.30	50.16
20	HLEM20R-1RLF	28.55	26.41	40	HLEM40R-1RLF	53.55	51.41

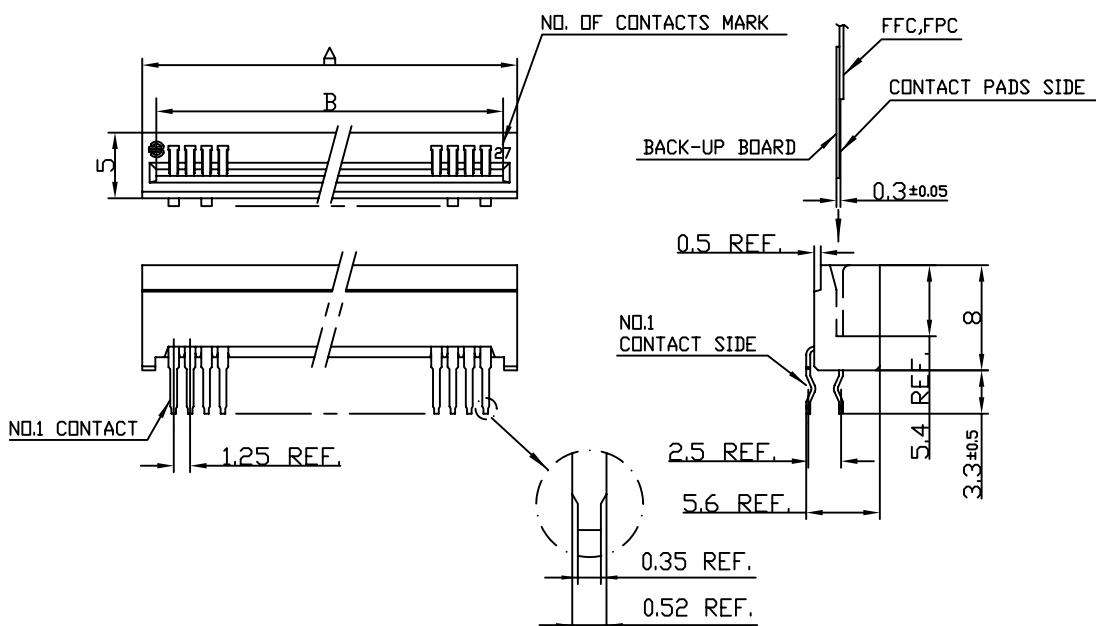
NOTES

1. THE HOUSING WILL WITHSTAND EXPOSURE TO 260 DEGREE PEAK TEMPERATURE FOR 10 SECONDS IN A WAVE SOLDER APPLICATION WITH A 1.57MM MINIMUM THICK CIRCUIT BOARD.
2. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
3. PART NUMBERS ENDING IN "LF" MEANS FOR NOTE 2 LEAD FREE IDENTIFICATION.  
HLEMxxR/S-1RLF IS EQUIVALENT TO PREVIOUS P/N HLEMxxR/S-1R.

Cat. No. HLEM\_R-1RLF (See Note 3)

mat'l. code				surface	tolerance	projection	product family
ltr	ecn no	dr	date	ISO 1302	✓	ISO 406	ISO 1101
AA	J04-0253	H.T	2004-08-03	angles	.0±.3	mm	title 1.25mm Spacing Connector for FPC/FFC
AB	S05-0145	D.T	2005-06-24	linear			
AC	S06-0252	P.C	2006-07-28	0°±2°		scale -	
		dr	M.Itsuka	1997-02-13			dwg no
		engn	S.Ito	1997-02-13			sheet 1 of 1
		chr	Patrick Chua	2006-07-28			size
		appd	Joey Ng	2006-07-28			A4
sheet	revision	AC					
index	sheet	1					

TOLERANCES  
UNLESS OTHERWISE SPECIFIED :  $\pm 0.2$



MATERIAL: INSULATOR : PBT RESIN GLASS REINFORCED (UL94V-0)

COLOR : BLACK

CONTACT : PHOSPHOR BRONZE (TIN PLATED ; THICKNESS: 1 micron)

NO. OF CONTACTS	(See Note 3) CAT. NO.	DIMENSIONS		21	HLEM21S-1RLF	29.80	27.66
		A $\pm 0.3$	B $\pm 0.1$	22	HLEM22S-1RLF	31.05	28.91
3	HLEM 3S-1RLF	7.30	5.16	23	HLEM23S-1RLF	32.30	30.16
4	HLEM 4S-1RLF	8.55	6.41	24	HLEM24S-1RLF	33.55	31.41
5	HLEM 5S-1RLF	9.80	7.66	25	HLEM25S-1RLF	34.80	32.66
6	HLEM 6S-1RLF	11.05	8.91	26	HLEM26S-1RLF	36.05	33.91
7	HLEM 7S-1RLF	12.30	10.16	27	HLEM27S-1RLF	37.30	35.16
8	HLEM 8S-1RLF	13.55	11.41	28	HLEM28S-1RLF	38.55	36.41
9	HLEM 9S-1RLF	14.80	12.66	29	HLEM29S-1RLF	39.80	37.66
10	HLEM10S-1RLF	16.05	13.91	30	HLEM30S-1RLF	41.05	38.91
11	HLEM11S-1RLF	17.30	15.16	31	HLEM31S-1RLF	42.30	40.16
12	HLEM12S-1RLF	18.55	16.41	32	HLEM32S-1RLF	43.55	41.41
13	HLEM13S-1RLF	19.80	17.66	33	HLEM33S-1RLF	44.80	42.66
14	HLEM14S-1RLF	21.05	18.91	34	HLEM34S-1RLF	46.05	43.91
15	HLEM15S-1RLF	22.30	20.16	35	HLEM35S-1RLF	47.30	45.16
16	HLEM16S-1RLF	23.55	21.41	36	HLEM36S-1RLF	48.55	46.41
17	HLEM17S-1RLF	24.80	22.66	37	HLEM37S-1RLF	49.80	47.66
18	HLEM18S-1RLF	26.05	23.91	38	HLEM38S-1RLF	51.05	48.91
19	HLEM19S-1RLF	27.30	25.16	39	HLEM39S-1RLF	52.30	50.16
20	HLEM20S-1RLF	28.55	26.41	40	HLEM40S-1RLF	53.55	51.41

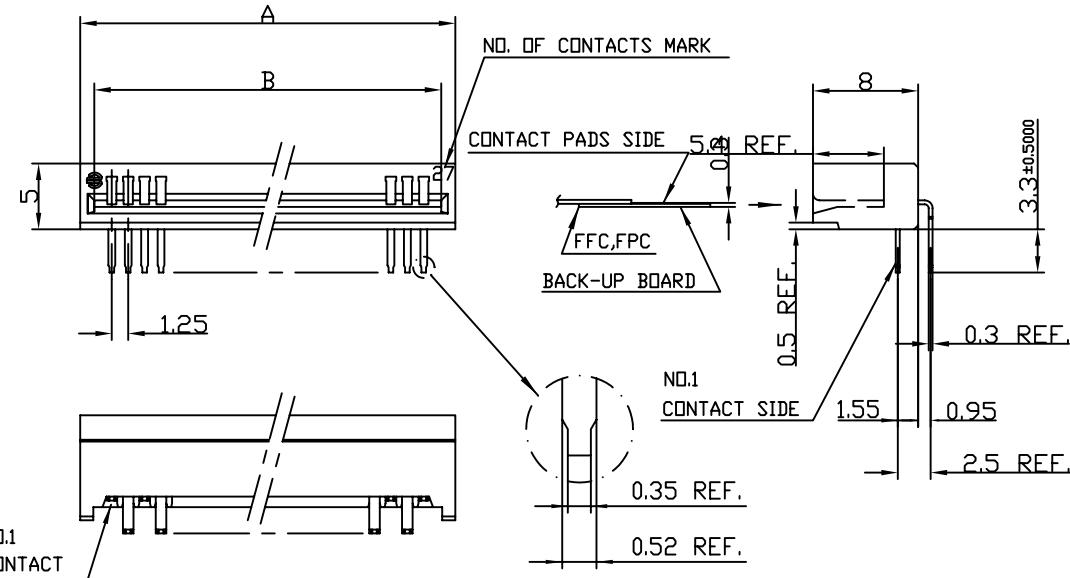
NOTES

1. THE HOUSING WILL WITHSTAND EXPOSURE TO 260 DEGREE PEAK TEMPERATURE FOR 10 SECONDS IN A WAVE SOLDER APPLICATION WITH A 1.57MM MINIMUM THICK CIRCUIT BOARD.
2. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
3. PART NUMBERS ENDING IN "LF" MEANS FOR NOTE 2 LEAD FREE IDENTIFICATION.  
HLEMxxR/S-1RLF IS EQUIVALENT TO PREVIOUS P/N HLEMxxR/S-1R.

HLEM\_S-1RLF (See Note 3)

mat'l. code				surface	tolerance	projection	product family
ltr	ecn no	dr	date	ISO 1302	✓	ISO 406	ISO 1101
AA	J04-0253	H.T	2004-08-03	angles	.0 $\pm$ .3	mm	title 1.25mm Spacing Connector for FPC/FFC
AB	S05-0145	D.T	2005-06-24	linear			
AC	S06-0252	P.C	2006-07-28	0 $\pm$ 2°		scale -	
		dr	M.Itsuka	1997-02-13			dwg no
		engn	S.Ito	1997-02-13			sheet 1 of 1
		chr	Patrick Chua	2006-07-28			size
		appd	Joey Ng	2006-07-28			A4
sheet	revision	AC					
index	sheet	1					

## TOLERANCES

UNLESS OTHERWISE SPECIFIED :  $\pm 0.2$ 

MATERIAL: INSULATOR : PBT RESIN GLASS REINFORCED (UL94V-0)

COLOR : BLACK

CONTACT : PHOSPHOR BRONZE (TIN PLATED); THICKNESS: 1 micron)

NO. OF CONTACTS	CAT. NO.	DIMENSIONS		21	HLEM21R-2R	29.80	27.66
		A $\pm 0.3$	B $\pm 0.1$	22	HLEM22R-2R	31.05	28.91
3	HLEM 3R-2R	7.30	5.16	23	HLEM23R-2R	32.30	30.16
4	HLEM 4R-2R	8.55	6.41	24	HLEM24R-2R	33.55	31.41
5	HLEM 5R-2R	9.80	7.66	25	HLEM25R-2R	34.80	32.66
6	HLEM 6R-2R	11.05	8.91	26	HLEM26R-2R	36.05	33.91
7	HLEM 7R-2R	12.30	10.16	27	HLEM27R-2R	37.30	35.16
8	HLEM 8R-2R	13.55	11.41	28	HLEM28R-2R	38.55	36.41
9	HLEM 9R-2R	14.80	12.66	29	HLEM29R-2R	39.80	37.66
10	HLEM 10R-2R	16.05	13.91	30	HLEM30R-2R	41.05	38.91
11	HLEM 11R-2R	17.30	15.16	31	HLEM31R-2R	42.30	40.16
12	HLEM 12R-2R	18.55	16.41	32	HLEM32R-2R	43.55	41.41
13	HLEM 13R-2R	19.80	17.66	33	HLEM33R-2R	44.80	42.66
14	HLEM 14R-2R	21.05	18.91	34	HLEM34R-2R	46.05	43.91
15	HLEM 15R-2R	22.30	20.16	35	HLEM35R-2R	47.30	45.16
16	HLEM 16R-2R	23.55	21.41	36	HLEM36R-2R	48.55	46.41
17	HLEM 17R-2R	24.80	22.66	37	HLEM37R-2R	49.80	47.66
18	HLEM 18R-2R	26.05	23.91	38	HLEM38R-2R	51.05	48.91
19	HLEM 19R-2R	27.30	25.16	39	HLEM39R-2R	52.30	50.16
20	HLEM 20R-2R	28.55	26.41	40	HLEM40R-2R	53.55	51.41

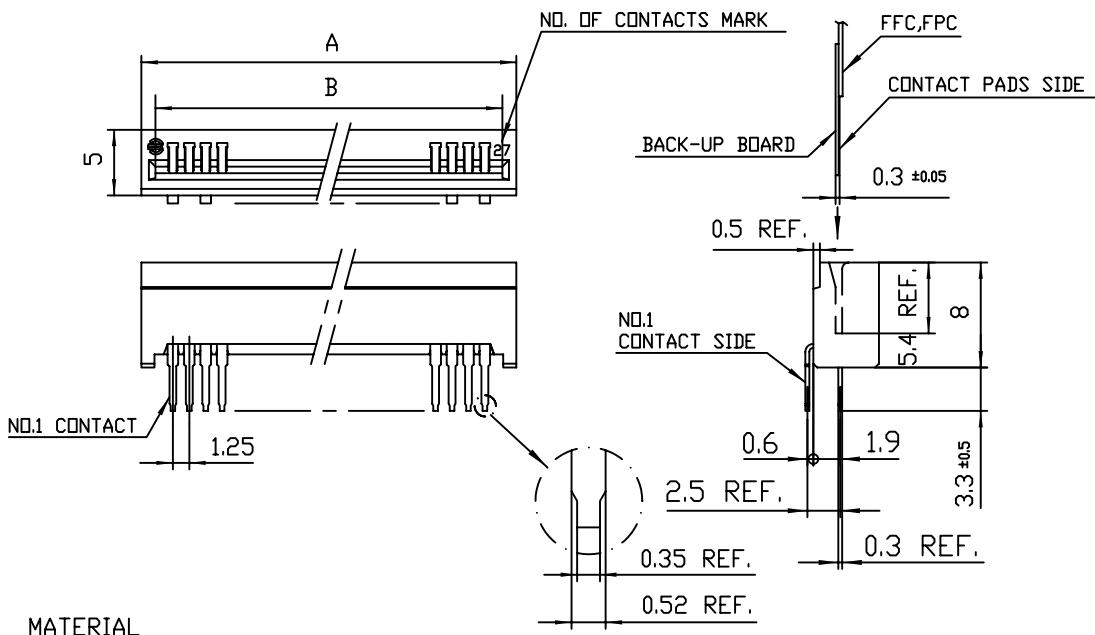
## NOTES

1. THE HOUSING WILL WITHSTAND EXPOSURE TO 260 DEGREE PEAK TEMPERATURE FOR 10 SECONDS IN A WAVE SOLDER APPLICATION WITH A 1.75MM MINIMUM THICK CIRCUIT BOARD.
2. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
3. PART NUMBERS ENDING IN "LF" MEANS FOR NOTES 2 LEAD FREE IDENTIFICATION. HLEMxxR-2RLF IS EQUIVALENT TO PREVIOUS P/N HLEMxxR-2R.

(Cat. No. HLEM\_R-2R) (See Note 3)

mat'l. code				surface	tolerance	projection	product family
ltr	ecn no	dr	date	ISO 1302	✓	ISO 406	ISO 1101
A	J04-0439	H.T	2004-12-06	angles			
B	S05-0176	D.T	2005-06-24		linear		
C	S06-0252	P.C	2006-07-28			mm	scale -
				dr	H.Takakura	2004-12-06	
				engr	H.Takakura	2004-12-06	
				chr	Patrick Chua	2006-07-28	
				appd	Joey Ng	2006-07-28	
sheet		revision	C				
index		sheet	1				

## TOLERANCES

UNLESS OTHERWISE SPECIFIED :  $\pm 0.2$ 

INSULATOR : PBT RESIN GLASS REINFORCED (UL94V-0)

COLOR : BLACK

CONTACT : PHOSPHOR BRONZE :TIN PLATED(LEAD FREE)

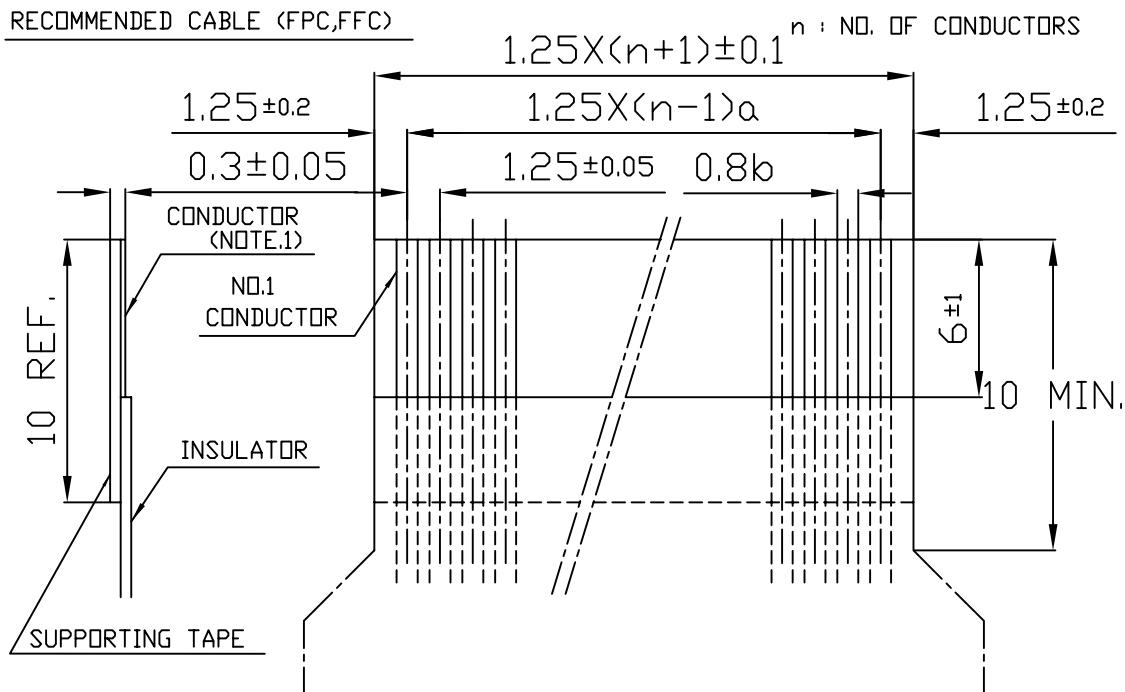
B

FCIconnect.com

NO. OF CONTACTS	CAT. NO.	DIMENSIONS		21	HLEM21S-2R	29.80	27.66
		A $\pm 0.3$	B $\pm 0.1$	22	HLEM22S-2R	31.05	28.91
3	HLEM 3S-2R	7.30	5.16	23	HLEM23S-2R	32.30	30.16
4	HLEM 4S-2R	8.55	6.41	24	HLEM24S-2R	33.55	31.41
5	HLEM 5S-2R	9.80	7.66	25	HLEM25S-2R	34.80	32.66
6	HLEM 6S-2R	11.05	8.91	26	HLEM26S-2R	36.05	33.91
7	HLEM 7S-2R	12.30	10.16	27	HLEM27S-2R	37.30	35.16
8	HLEM 8S-2R	13.55	11.41	28	HLEM28S-2R	38.55	36.41
9	HLEM 9S-2R	14.80	12.66	29	HLEM29S-2R	39.80	37.66
10	HLEM 10S-2R	16.05	13.91	30	HLEM30S-2R	41.05	38.91
11	HLEM 11S-2R	17.30	15.16	31	HLEM31S-2R	42.30	40.16
12	HLEM 12S-2R	18.55	16.41	32	HLEM32S-2R	43.55	41.41
13	HLEM 13S-2R	19.80	17.66	33	HLEM33S-2R	44.80	42.66
14	HLEM 14S-2R	21.05	18.91	34	HLEM34S-2R	46.05	43.91
15	HLEM 15S-2R	22.30	20.16	35	HLEM35S-2R	47.30	45.16
16	HLEM 16S-2R	23.55	21.41	36	HLEM36S-2R	48.55	46.41
17	HLEM 17S-2R	24.80	22.66	37	HLEM37S-2R	49.80	47.66
18	HLEM 18S-2R	26.05	23.91	38	HLEM38S-2R	51.05	48.91
19	HLEM 19S-2R	27.30	25.16	39	HLEM39S-2R	52.30	50.16
20	HLEM 20S-2R	28.55	26.41	40	HLEM40S-2R	53.55	51.41

(Cat. No. HLEM\_S-2R)

mat'l. code				surface	tolerance	projection	product family	
				ISO 1302	✓ ISO 406	ISO 1101	58KF	
ltr	ecn no	dr	date	tolerances unless otherwise specified			title	
A	J04-0439	H.T	2004-12-06	angles	linear			
B	S05-0176	D.T	2005-06-24				1.25mm Spacing Connector for FPC/FFC	
C	S06-0252	P.C	2006-07-28					
				dr				dwg no
				engn				
				chr	Patrick Chua	2006-07-28	sheet 1 of 1	
				appd	Joey Ng	2006-07-28		
sheet		revision	C				size	
index		sheet	1					



## NOTE

1. FINISH : SOLDER OR TIN PLATED. (1um MIN.)
2. NO BURR AT EACH POSITION.
3. NO PEELING IN COMMON USE.

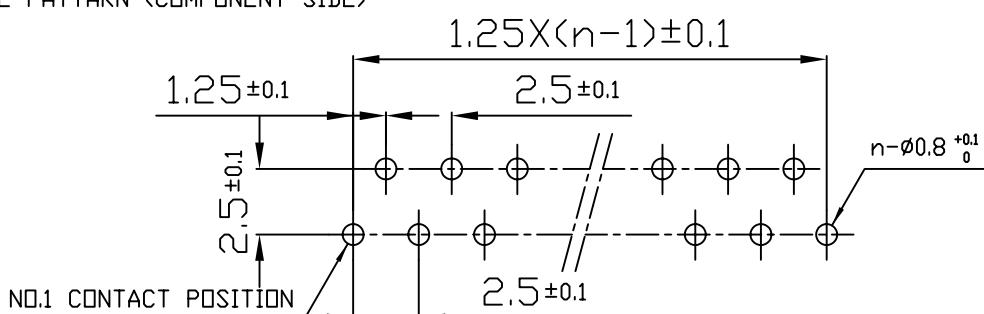
TYPE	TOLERANCES	
	$\alpha$	$b$
FPC	±0.05	±0.1
FFC	±0.1	±0.03

## RECOMMENDED P.C. BOARD

n : NO. OF CONTACTS

THICKNESS : t0.9 - 2

HOLE PATTARN (COMPONENT SIDE)



Cat. No. hLEM\_R/S---

mat'l. code				surface	tolerance	projection	product family
ltr	ecn no	dr	date	ISO 1302	✓	ISO 406	ISO 1101
AA	J04-0253	H.T	2004-08-03	angles		.0±.3	
AB	S06-0252	P.C	2006-07-28	linear			
				0°±2°			scale -
		dr					mm
		engn					
		chr	Patrick Chua		2006-07-28		
		appd	Joey Ng		2006-07-28		
sheet	revision	AB					
index	sheet	1					

