



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/FPC (HLEM_R/S-)

Cable JSA93271 1.25mm Spacing Connector for FPC/FPC (HLEM_S-1)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

BJM-HLEM101

P/N Documents No. Title

HLEM_R/S-2 Specification SC-HLEM 01

Dwg. JSC29055 1.25mm Spacing Connector for FPC/FPC (HLEM_R-2)

Cable JSC29054 1.25mm Spacing Connector for FPC/FPC (HLEM_S-2)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

BJM-HLEM101

P/N Documents No. Title

HLEM_R/S-1RLF Specification SC-HLEM 01

Dwg. JSA94071 1.25mm Spacing Connector for FPC/FPC (HLEM_R-1RLF)

Cable JSA94072 1.25mm Spacing Connector for FPC/FPC (HLEM_S-1RLF)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

BJM-HLEM101

P/N Documents No. Title

HLEM_R/S-1RFLF Specification SC-HLEM 01

Dwg. JSA94073 1.25mm Spacing Connector for FPC/FPC (HLEM_R-1RFLF)

Cable JSA94074 1.25mm Spacing Connector for FPC/FPC (HLEM_S-1RFLF)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

BJM-HLEM101

P/N Documents No. Title

HLEM_R/S-2RLF Specification SC-HLEM 01

Dwg. JSA96132 1.25mm Spacing Connector for FPC/FPC (HLEM_R-2RLF)

Cable JSA96133 1.25mm Spacing Connector for FPC/FPC (HLEM_S-2RLF)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

BJM-HLEM101

P/N Documents No. Title

HLEM_R/S-2RFLF Specification SC-HLEM 01

Dwg. JSA96134 1.25mm Spacing Connector for FPC/FPC (HLEM_R-2RFLF)

Cable JSA96135 1.25mm Spacing Connector for FPC/FPC (HLEM_S-2RFLF)

Manual JSA28789 Recommended cable and P.C. board (HLEM_R/S-)

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 NOTE 2 LEAD FREE IDENTIFICATION. HLEMxR/S-1/2R(F)LF IS EQUIVALENT TO PREVIOUS P/N HLEMxR/S-1/2R(F).

mat'l. code				Surface		Tolerance		projection		product family	
ltr	ecm no	dr	date	ASME Y14.5	ASME Y14.5	ASME Y14.5	ASME Y14.5	ASME Y14.5	ASME Y14.5	ASME Y14.5	ASME Y14.5
A	J04-0253	H.T	2004-08-03	angle	0.1	0.1	0.1	0.1	0.1	0.1	0.1
B	J05-0014	H.T	2005-01-13	angle	0.1	0.1	0.1	0.1	0.1	0.1	0.1
C	S05-0145	D.T	2005-06-15	0±2°	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050
D	S05-0290	D.T	2005-10-14	dr	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050
E	S06-0252	P.C	2006-07-28	dr	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050	0.001±0.050
				chr	Patrick Chu	2006-07-28	chr	Patrick Chu	2006-07-28	chr	Patrick Chu
				qppd	Joey Ng	2006-07-28	qppd	Joey Ng	2006-07-28	qppd	Joey Ng
sheet revision				E							
index sheet				1							

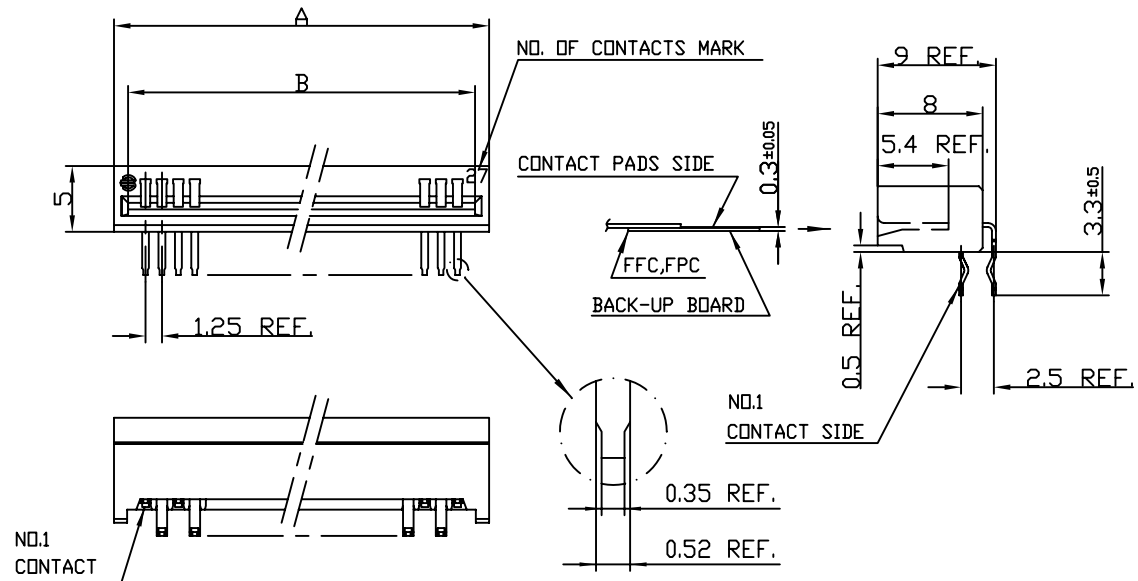


1.25mm Spacing Connector
(Customer documents list)

dwg no JSA96023 sheet 1 of 1 size A4

type Product Customer Drawing

TOLERANCES
UNLESS OTHERWISE SPECIFIED : ± 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					
		A ± 0.3	B ± 0.1				
3	HLEM 3R-1RLF	7.30	5.16	21	HLEM21R-1RLF	29.80	27.66
4	HLEM 4R-1RLF	8.55	6.41	22	HLEM22R-1RLF	31.05	28.91
5	HLEM 5R-1RLF	9.80	7.66	23	HLEM23R-1RLF	32.30	30.16
6	HLEM 6R-1RLF	11.05	8.91	24	HLEM24R-1RLF	33.55	31.41
7	HLEM 7R-1RLF	12.30	10.16	25	HLEM25R-1RLF	34.80	32.66
8	HLEM 8R-1RLF	13.55	11.41	26	HLEM26R-1RLF	36.05	33.91
9	HLEM 9R-1RLF	14.80	12.66	27	HLEM27R-1RLF	37.30	35.16
10	HLEM10R-1RLF	16.05	13.91	28	HLEM28R-1RLF	38.55	36.41
11	HLEM11R-1RLF	17.30	15.16	29	HLEM29R-1RLF	39.80	37.66
12	HLEM12R-1RLF	18.55	16.41	30	HLEM30R-1RLF	41.05	38.91
13	HLEM13R-1RLF	19.80	17.66	31	HLEM31R-1RLF	42.30	40.16
14	HLEM14R-1RLF	21.05	18.91	32	HLEM32R-1RLF	43.55	41.41
15	HLEM15R-1RLF	22.30	20.16	33	HLEM33R-1RLF	44.80	42.66
16	HLEM16R-1RLF	23.55	21.41	34	HLEM34R-1RLF	46.05	43.91
17	HLEM17R-1RLF	24.80	22.66	35	HLEM35R-1RLF	47.30	45.16
18	HLEM18R-1RLF	26.05	23.91	36	HLEM36R-1RLF	48.55	46.41
19	HLEM19R-1RLF	27.30	25.16	37	HLEM37R-1RLF	49.80	47.66
20	HLEM20R-1RLF	28.55	26.41	38	HLEM38R-1RLF	51.05	48.91
				39	HLEM39R-1RLF	52.30	50.16
				40	HLEM40R-1RLF	53.55	51.41

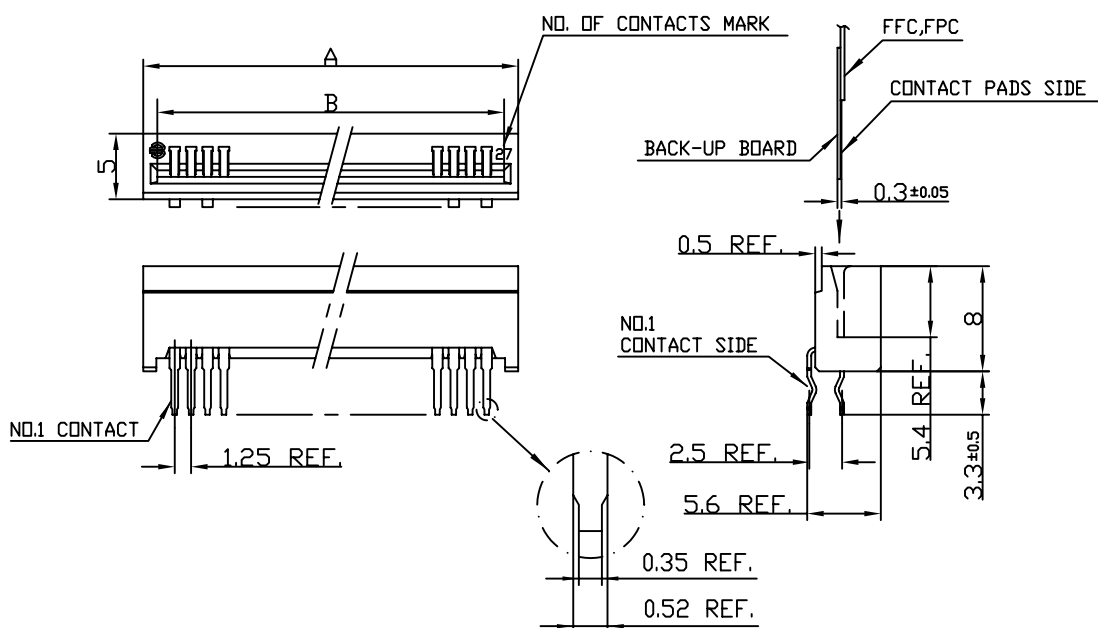
NOTES

- 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.
- THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008.
- 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 <input checked="" type="checkbox"/> ISO 1302		tolerance <input checked="" type="checkbox"/> ISO 406		projection <input checked="" type="checkbox"/> ISO 1101		product family			
										58KF			
ltr	ecn no	dr	date	tolerances unless otherwise specified		mm		mm		title			
AA	J04-0253	H.T	2004-08-03			.0±.3				1.25mm Spacing Connector for FPC/FFC			
AB	S05-0145	D.T	2005-06-24	angles		linear							
AC	S06-0252	P.C	2006-07-28	0°±2°									
				dr	M.Itsuka	1997-02-13			dwg no		sheet 1 of 1		size
				enr	S.Ito	1997-02-13			JSA 94071				A4
				chr	Patrick Chua	2006-07-28			type		Product Customer Drawing		
				app	Joey Ng	2006-07-28							
sheet index	revision	AC	1										

TOLERANCES
UNLESS OTHERWISE SPECIFIED : ± 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					
		A ± 0.3	B ± 0.1				
3	HLEM 3S-1RLF	7.30	5.16	21	HLEM21S-1RLF	29.80	27.66
4	HLEM 4S-1RLF	8.55	6.41	22	HLEM22S-1RLF	31.05	28.91
5	HLEM 5S-1RLF	9.80	7.66	23	HLEM23S-1RLF	32.30	30.16
6	HLEM 6S-1RLF	11.05	8.91	24	HLEM24S-1RLF	33.55	31.41
7	HLEM 7S-1RLF	12.30	10.16	25	HLEM25S-1RLF	34.80	32.66
8	HLEM 8S-1RLF	13.55	11.41	26	HLEM26S-1RLF	36.05	33.91
9	HLEM 9S-1RLF	14.80	12.66	27	HLEM27S-1RLF	37.30	35.16
10	HLEM10S-1RLF	16.05	13.91	28	HLEM28S-1RLF	38.55	36.41
11	HLEM 11S-1RLF	17.30	15.16	29	HLEM29S-1RLF	39.80	37.66
12	HLEM12S-1RLF	18.55	16.41	30	HLEM30S-1RLF	41.05	38.91
13	HLEM13S-1RLF	19.80	17.66	31	HLEM31S-1RLF	42.30	40.16
14	HLEM14S-1RLF	21.05	18.91	32	HLEM32S-1RLF	43.55	41.41
15	HLEM15S-1RLF	22.30	20.16	33	HLEM33S-1RLF	44.80	42.66
16	HLEM16S-1RLF	23.55	21.41	34	HLEM34S-1RLF	46.05	43.91
17	HLEM17S-1RLF	24.80	22.66	35	HLEM35S-1RLF	47.30	45.16
18	HLEM18S-1RLF	26.05	23.91	36	HLEM36S-1RLF	48.55	46.41
19	HLEM19S-1RLF	27.30	25.16	37	HLEM37S-1RLF	49.80	47.66
20	HLEM20S-1RLF	28.55	26.41	38	HLEM38S-1RLF	51.05	48.91
				39	HLEM39S-1RLF	52.30	50.16
				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 <input checked="" type="checkbox"/> ISO 1302		tolerance <input checked="" type="checkbox"/> ISO 406		projection <input checked="" type="checkbox"/> 101		product family				
										58KF				
ltr	ecn no	dr	date	tolerances unless otherwise specified		mm		mm		title				
AA	J04-0253	H.T	2004-08-03			.0±.3				1.25mm Spacing Connector for FPC/FFC				
AB	S05-0145	D.T	2005-06-24	angles		linear								
AC	S06-0252	P.C	2006-07-28	0°±2°										
				dr	M.Itsuka	1997-02-13		FCI		dwg no		sheet 1 of 1	size	
				engr	S.Ito	1997-02-13				JSA 94072		A4		
				chr	Patrick Chua	2006-07-28				type		Product Customer Drawing		
				appd	Joey Ng	2006-07-28								
sheet index		revision		AC										
		sheet		1										

Technical drawing of a 10-pin connector assembly, showing dimensions and labels:

- Top View:**
 - Overall width: A
 - Internal width: B
 - Pin pitch: 1.25
 - Pin height: 5
 - Labels: "NO. OF CONTACTS MARK", "CONTACT PADS SIDE", "FFC, FPC", "BACK-UP BOARD"
- Side View:**
 - Pin height: 3.3 ± 0.5000
 - Pin width: 8
 - Pin spacing: 0.3 REF.
 - Pin length: 2.5 REF.
 - Pin thickness: 0.95
 - Pin width: 1.55
 - Pin length: 0.5 REF.
 - Pin width: 0.5 REF.
 - Pin length: 0.35 REF.
 - Pin width: 0.52 REF.
- Detail View:**
 - Label: "NO.1 CONTACT SIDE"
- Bottom View:**
 - Label: "NO.1 CONTACT"

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

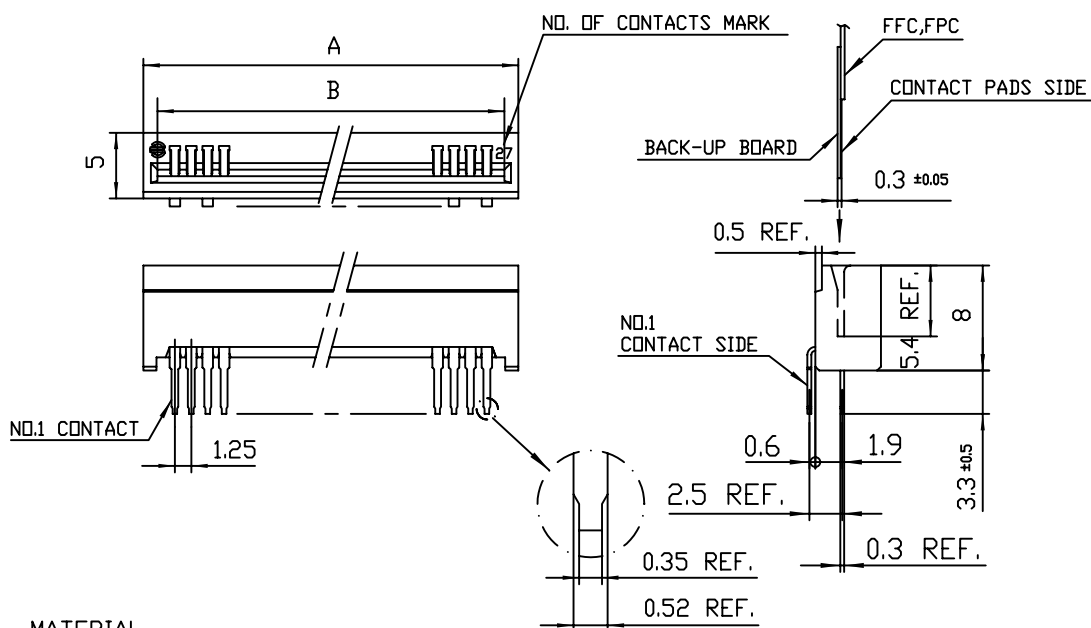
NO. OF CONTACTS	CAT. NO.	DIMENSIONS		21	HLEM21R-2R	29.80	27.66
		A ± 0.3	B ± 0.1	22	HLEM22R-2R	31.05	28.91
3	HLEM 3R-2R	7.30	5.16	23	HLEM23R-2R	32.30	30.16
4	HLEM 4R-2R	8.55	6.41	24	HLEM24R-2R	33.55	31.41
5	HLEM 5R-2R	9.80	7.66	25	HLEM25R-2R	34.80	32.66
6	HLEM 6R-2R	11.05	8.91	26	HLEM26R-2R	36.05	33.91
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

1. THE HOUSING WILL WITHSTAND EXPOSURE TO 260 DEGREE PEAK TEMPERATURE FOR 10 SECONDS IN A WAVE SOLDERAPPLICATION 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)

[illegible]

TOLERANCES
UNLESS OTHERWISE SPECIFIED : ± 0.2



MATERIAL

INSULATOR : PBT RESIN GLASS REINFORCED (UL94V-0)

COLOR : BLACK

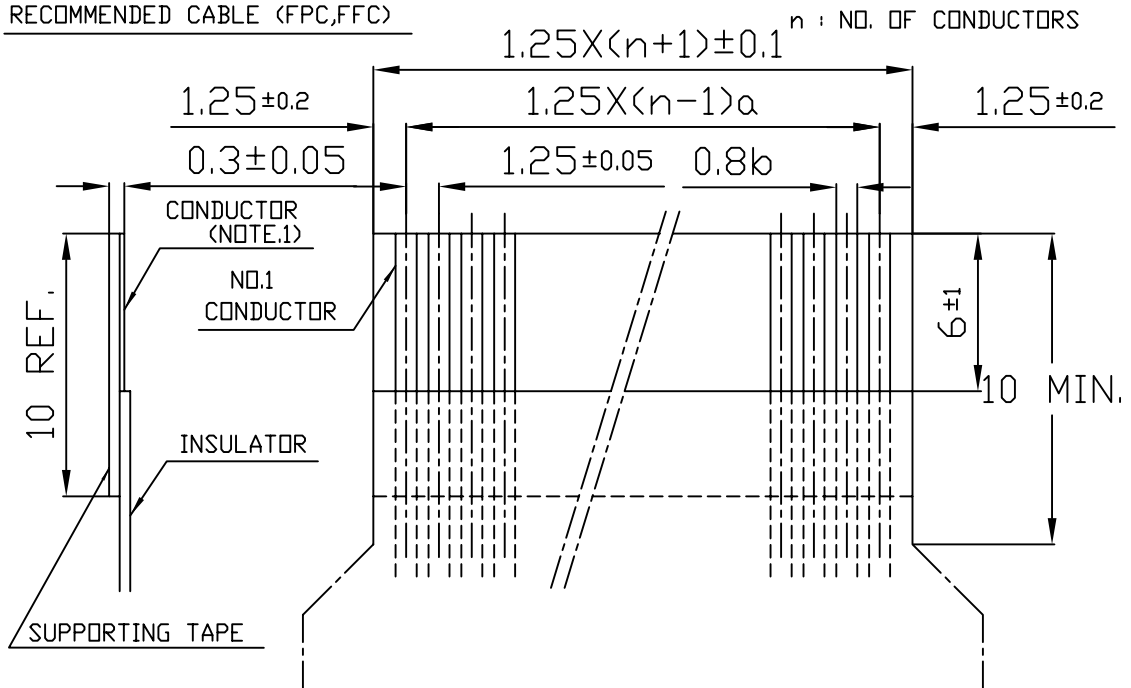
CONTACT : PHOSPHOR BRONZE :TIN PLATED(LEAD FREE)

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

(Cat. No. HLEM_ _S-2R)

mat'l. code				surface <input checked="" type="checkbox"/> ISO 1302 <input type="checkbox"/> tolerance <input checked="" type="checkbox"/> ISO 406 <input type="checkbox"/> ISO 1101		projection		product family				
								58KF				
ltr	ecn no	dr	date	tolerances unless otherwise specified		mm		title				
A	J04-0439	H.T	2004-12-06	angles				1.25mm Spacing Connector				
B	S05-0176	D.T	2005-06-24	linear				for FPC/FFC				
C	S06-0252	P.C	2006-07-28			scale -						
				dr					dwg no		sheet 1 of 1	size
				engr					JSA 96133		A4	
				chr	Patrick Chua 2006-07-28				type		Product Customer Drawing	
				appd	Joey Ng 2006-07-28							
sheet index	revision	C	1									

RECOMMENDED CABLE (FPC,FFC)



NOTE

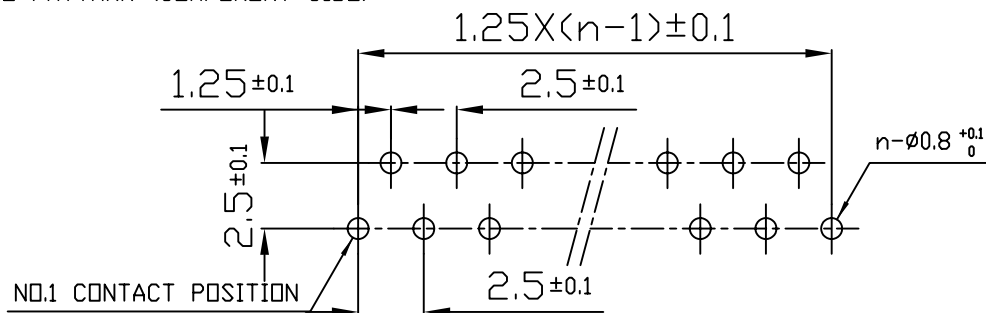
1. FINISH : SOLDER OR TIN PLATED. (1um MIN.)
2. NO BURR AT EACH POSITION.
3. NO PEELING IN COMMON USE.

TYPE	TOLERANCES	
	a	b
FPC	± 0.05	± 0.1
FFC	± 0.1	± 0.03

RECOMMENDED P.C. BOARD

THICKNESS : $\pm 0.9 - 2$
HOLE PATTERN (COMPONENT SIDE)

n : NO. OF CONTACTS



Cat. No. hLEM_R/S----

mat'l. code				surface ISO 1302	tolerance ISO 406	projection ISO 1101	product family 58EX			
ltr	ecn no	dr	date	tolerances	unless otherwise specified		title			
AA	J04-0253	H.T	2004-08-03	angles	.0 \pm .3	mm	RECOMMENDED CABLE AND P.C. BOARD			
AB	S06-0252	P.C	2006-07-28	linear		scale -				
				0' \pm 2'			dwg no	sheet 1 of 1	size	
				dr			JSA 28789		A4	
				engr			type Product Customer Drawing			
				chr	Patrick Chua	2006-07-28				
				appd	Joey Ng	2006-07-28				
sheet index	revision	AB								
	sheet	1								