

PDM: Rev:A

STATUS: Released

Printed: May 24, 2011

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#### CAT. NO. & DIMENSIONS

NO. OF	0.17	DII	MENSIO	NS (NO	TE2)
CONTACTS (n)	CAT. NO.	A ± 0.2	B ± 0.2	C ± 0.1	D ± 0.1
4	SFV4R-1/2STHLF	7.5	5.9	1.5	2.7
5	SFV5R-1/2STHLF	8.0	6.4	2.0	3.2
6	SFV6R-1/2STHLF	8.5	6.9	2.5	3.7
7	SFV7R-1/2STHLF	9.0	7.4	3.0	4.2
8	SFV8R-1/2STHLF	9.5	7.9	3.5	4.7
9	SFV9R-1/2STHLF	10.0	8.4	4.0	5.2
10	SFV10R-1/2STHLF	10.5	8.9	4.5	5.7
11	SFV11R-1/2STHLF	11.0	9.4	5.0	6.2
12	SFV12R-1/2STHLF	11.5	9.9	5.5	6.7
13	SFV13R-1/2STHLF	12.0	10.4	6.0	7.2
14	SFV14R-1/2STHLF	12.5	10.9	6.5	7.7
15	SFV15R-1/2STHLF	13.0	11.4	7.0	8.2
16	SFV16R-1/2STHLF	13.5	11.9	7.5	8.7
17	SFV17R-1/2STHLF	14.0	12.4	8.0	9.2
18	SFV18R-1/2STHLF	14.5	12.9	8.5	9.7
19	SFV19R-1/2STHLF	15.0	13.4	9.0	10.2
20	SFV20R-1/2STHLF	15.5	13.9	9.5	10.7
21	SFV21R-1/2STHLF	16.0	14.4	10.0	11.2
22	SFV22R-1/2STHLF	16.5	14.9	10.5	11.7
23	SFV23R-1/2STHLF	17.0	15.4	11.0	12.2
24	SFV24R-1/2STHLF	17.5	15.9	11.5	12.7
25	SFV25R-1/2STHLF	18.0	16.4	12.0	13.2
26	SFV26R-1/2STHLF	18.5	16.9	12.5	13.7
27	SFV27R-1/2STHLF	19.0	17.4	13.0	14.2
28	SFV28R-1/2STHLF	19.5	17.9	13.5	14.7
29	SFV29R-1/2STHLF	20.0	18.4	14.0	15.2
30	SFV30R-1/2STHLF	20.5	18.9	14.5	15.7
31	SFV31R-1/2STHLF	21.0	19.4	15.0	16.2
32	SFV32R-1/2STHLF	21.5	19.9	15.5	16.7
33	SFV33R-1/2STHLF	22.0	20.4	16.0	17.2
34	SFV34R-1/2STHLF	22.5	20.9	16.5	17.7
35	SFV35R-1/2STHLF	23.0	21.4	17.0	18.2

CAT. NO. SFV (n) R = 1 ST == HLF SERIES NAME 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 USED FOR FPC AND COPES WITH AUTOMATIC MOUNTING (SMT).
- 2. SEE PART DRAWINGS FOR DIMENSIONS A~D.

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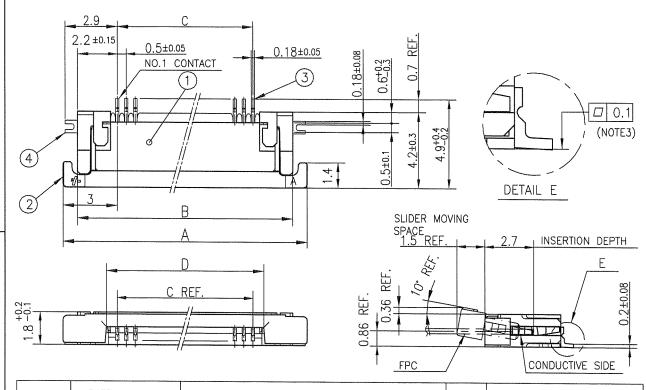
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PT. NO. PARTS NAME MATERIAL Q'TY NOTE 13~35pin: LCP RESIN GLASS REINFORCED (UL94V-0) HOUSING 1 COLOR: BLACK (HALOGEN FREE) 4~12pin: POLYAMIDE RESIN GLASS REINFORCED (UL94V-0) PPS RESIN GLASS REINFORCED (UL94V-0) 2 SLIDER COLOR: BLACK (HALOGEN FREE) CONTACT PLATING: THIN TIN PHOSPHOR BRONZE 4. MOUNTING PLATE 2 PLATING: LEAD FREE

n: NO. OF CONTACTS PATTERN FOR MOUNTING PLATE FIXING RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)  $6.2+0.5x(n-1)\pm0.05$ NOTES  $0.5x(n-1)\pm0.05$ 5±0.05 3±0.05  $1\pm0.05$ 1.THIS PRODUCT IS THE CONNECTOR USED FOR FPC 3.1±0.05  $0.5 \pm 0.03$ AND COPES WITH AUTOMATIC MOUNTING (SMT). 2.THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR. 3.FLATNESS OF CONTACT TERMINAL AND MOUNTING PLATE MUST BE WITHIN TOLERANCE IN E PORTION DETAILED 4±0.05 REF. .6±0.05 DRAWING. 4.THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES 0.4  $0.3 \pm 0.05$ O. AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN 0.7±0.05 GS-22-008. 1.4±0.05 5.THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C BASIC PATTERN CONNECTOR OUTLINE 2.65±0.05 PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW NO.1 CONTACT POSITION SOLDERING OVEN. surface tolerance ISO 406 ISO 1101 mat'l. code projection product family CODE 58EF ISO 1302 JP <del>(</del><del>(</del>) folerances s unless otherwise specified ltr ecn no dr date title CONNECTOR USED FOR FPC ±0.2  $\mathsf{m}\mathsf{m}$ angles WITH 0.5 mm CONTACT SPACING linear (Cat No. : SFV\_\_R-1ST\_\_HLF) scale sheet 3 of 9 size d٢ dwg no 2011-5-23

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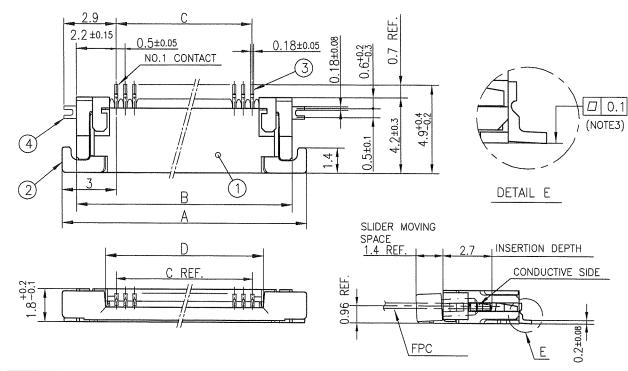
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PT. NO.	PARTS NAME	MATERIAL	Q'TY	NOTE
1	HOUSING	13~35pin : LCP RESIN GLASS REINFORCED (UL94V-0) 4~12pin : POLYAMIDE RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK (HALOGEN FREE)
2	SLIDER	PPS RESIN GLASS REINFORCED (UL94V-0)	1	COLOR : BLACK (HALOGEN FREE)
3	CONTACT	PHOSPHOR BRONZE	n	PLATING : THIN TIN
4	MOUNTING PLATE	FROSFRON BRONZE	2	PLATING : LEAD FREE

n: NO. OF CONTACTS RECOMMENDED PC BOARD LAYOUT PATTERN FOR MOUNTING PLATE FIXING (COMPONENT SIDE)  $6.2+0.5x(n-1)\pm0.05$  $0.5x(n-1)\pm0.05$ NOTES 5±0.05 띪 3±0.05 1.THIS PRODUCT IS THE CONNECTOR USED FOR FPC 3.1±0.05 0.5±0.03 AND COPES WITH AUTOMATIC MOUNTING (SMT). 2.THIS PRODUCT IS UPPER CONTACT TYPE CONNECTOR. 3.FLATNESS OF CONTACT TERMINAL AND MOUNTING PLATE MUST BE WITHIN TOLERANCE IN E PORTION DETAILED 1.4±0.05 REF.  $0.6 \pm 0.05$ DRAWING. 4.THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES 4.0 0.3±0.05 AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN 0.7±0.05 5.THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C 1.4±0.05 BASIC PATTERN CONNECTOR PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW 2.65±0.05 NO.1 CONTACT POSITION OUTLINE SOLDERING OVEN.

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## CAT. NO. & DIMENSIONS

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NO. OF	CAT NO	DIMENS	SIONS (NO	TE3)
CONTACTS (n)	CAT. NO.	F MAX.	G ± 0.3	H ± 0.1
4	SFV4R-1/2STE5HLF	22.4	16	
5	SFV5R-1/2STE5HLF	22.4	16	
6	SFV6R-1/2STE5HLF	22.4	16	
7	SFV7R-1/2STE5HLF	30.4	24	
8	SFV8R-1/2STE5HLF	30.4	24	
9	SFV9R-1/2STE5HLF	30.4	24	
10	SFV10R-1/2STE5HLF	30.4	24	
11	SFV11R-1/2STE5HLF	30.4	24	
12	SFV12R-1/2STE5HLF	30.4	24	
13	SFV13R-1/2STE5HLF	30.4	24	
14	SFV14R-1/2STE5HLF	30.4	24	
15	SFV15R-1/2STE5HLF	30.4	24	
16	SFV16R-1/2STE5HLF	30.4	24	
17	SFV17R-1/2STE5HLF	30.4	24	
18	SFV18R-1/2STE5HLF	30.4	24	
19	SFV19R-1/2STE5HLF	30.4	24	
20	SFV20R-1/2STE5HLF	30.4	24	
21	SFV21R-1/2STE5HLF	30.4	24	
22	SFV22R-1/2STE5HLF	30.4	24	
23	SFV23R-1/2STE5HLF	38.4	32	28.4
24	SFV24R-1/2STE5HLF	38.4	32	28.4
25	SFV25R-1/2STE5HLF	38.4	32	28.4
26	SFV26R-1/2STE5HLF	38.4	32	28.4
27	SFV27R-1/2STE5HLF	38.4	32	28.4
28	SFV28R-1/2STE5HLF	38.4	32	28.4
29	SFV29R-1/2STE5HLF	38.4	32	28.4
30	SFV30R-1/2STE5HLF	38.4	32	28.4
31	SFV31R-1/2STE5HLF	50.4	44	40.4
32	SFV32R-1/2STE5HLF	50.4	44	40.4
33	SFV33R-1/2STE5HLF	50.4	44	40.4
34	SFV34R-1/2STE5HLF	50.4	44	40.4
35	SFV35R-1/2STE5HLF	50.4	44	40.4

CAT. NO. SFV (n) R = 1 STE5 HLF SERIES NAME 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 E5 (2500pcs PER REEL) LEAD AND HALOGEN FREE -

#### NOTES

- 1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC AND COPES WITH AUTOMATIC MOUNTING (SMT).
- 2. THIS CATALOG NO. INDICATES PLASTIC TAPE PACKAGED CONNECTOR.
- 3. SEE PART DRAWINGS FOR DIMENSIONS F~H.

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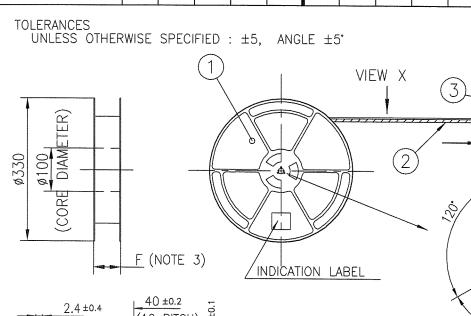
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DRAWING DIRECTION

1.9



(10 PITCH) #5/ 120°  $2 \pm 0.1$ 4±0.1 DRAWING DIRECTION DRAWING DIRECTION (COVER TAPE LEADER PORTION) END PORTION I 9 CONNECTOR PACKAGING 40 MIN. **PORTION** 20 HOLES MIN. (EMBOSSED HOLE (SPACE) 12±0.1 (SPACE) PITCH)

PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q <b>'</b> TY	NOTE
1	REEL		POLYSTYRENE	1	COLOR : BLACK or WHITE
2	PLASTIC (EMBOSS) TAPE		A-PET		COLOR : TRANSPARENCY
3	COVER		POLYESTER		COLOR : TRANSPARENCY
4	CONNECTOR	SFVR-1STHLF	SEE ATTACHED DWG.	2500	LOWER CONTACT TYPE

CONNECTOR PACKAGING STYLE

#### NOTES

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В

- 1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC 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 (EMBOSS) TAPE AND REEL.
- 3. F DIMENSION IS PORTION OF THE CORE.

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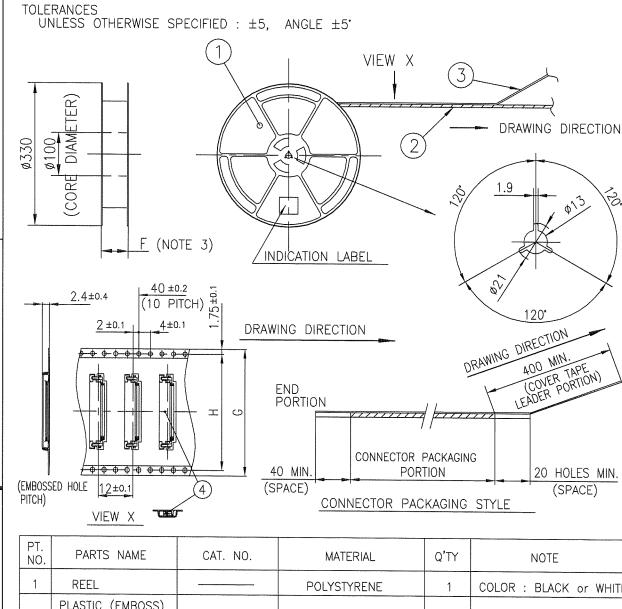
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PT. NO.	PARTS NAME	CAT. NO.	MATERIAL	Q <b>'</b> TY	NOTE
1	REEL		POLYSTYRENE	1	COLOR : BLACK or WHITE
2	PLASTIC (EMBOSS) TAPE		A-PET		COLOR : TRANSPARENCY
3	COVER		POLYESTER		COLOR : TRANSPARENCY
4	CONNECTOR	SFVR-2STHLF	SEE ATTACHED DWG.	2500	UPPER CONTACT TYPE

NOTES

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- 1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC 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 (EMBOSS) TAPE AND REEL.
- 3. F DIMENSION IS PORTION OF THE CORE.

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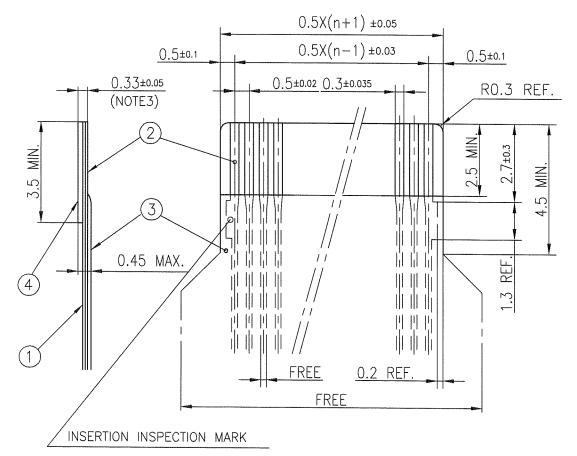


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PT. NO.	PARTS NAME	MATERIAL	THICKNESS	(um)
1	BASE FILM	POLYIMIDE OR POLYESTER OR EQUAL	25	
2	CONDUCTOR	COPPER FOIL(PLATING : Tin or SOLDER 1um MIN.)	35	
3	OVERLAY	POLYIMIDE OR POLYESTER OR EQUAL		
4	SUPPORTING TAPE	POLYESTER OR POLYIMIDE OR EQUAL	188	

### 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.

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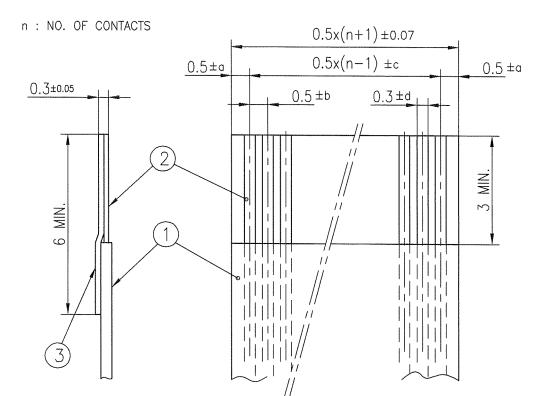
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KIND OF FFC	DIMENSIONAL TOLERANCE							
(NOTE3)	a	b	С	d				
1	±0.07	±0.04	±0.05	±0.02				
2	±0.1	±0.03	±0.03	±0.025				

PT. NO.	PARTS NAME	MATERIAL	NOTE				
1	INSULATOR	FLAME RESISTING POLYESTER OR EQUAL					
2	CONDUCTOR	COPPER FOIL:THICKNESS 35 OR 50um	PLATING : TIN OR SOLDER 1um MIN.				
3	SUPPORTING TAPE	FLAME RESISTING POLYESTER OR EQUAL					

# NOTES

- 1. NO BURR AT EACH PORTION.
- 2. NO PEELING IN COMMON USE.
- 3. EITHER KIND1 OR KIND2 OF FFC CAN ACCEPT DIMENSIONAL TOLERANCE a,b,c AND d.

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