

List of "SFV\_\_R-1/2STAE1HLF" customer document

| DOCUMENT NO.    | LIST                                                                                        |
|-----------------|---------------------------------------------------------------------------------------------|
| SC-SFV08        | SPEC.                                                                                       |
| 10117077 Sheet2 | CAT.NO.TABLE FOR 0.5mm CONTACT SPACING CONNECTOR (SFV__R-1/2STA_HLF)                        |
| 10117077 Sheet3 | CONNECTOR USED FOR FPC/FFC WITH 0.5mm CONTACT SPACING (SFV__R-1STA_HLF)                     |
| 10117077 Sheet4 | CONNECTOR USED FOR FPC/FFC WITH 0.5mm CONTACT SPACING (SFV__R-2STA_HLF)                     |
| 10117077 Sheet5 | CAT.NO.TABLE FOR PLASTIC TAPE PACKAGED 0.5mm CONTACT SPACING CONNECTOR (SFV__R-1/2STAE1HLF) |
| 10117077 Sheet6 | PLASTIC TAPE PACKAGED 0.5mm CONTACT SPACING CONNECTOR (SFV__R-1STAE1HLF)                    |
| 10117077 Sheet7 | PLASTIC TAPE PACKAGED 0.5mm CONTACT SPACING CONNECTOR (SFV__R-2STAE1HLF)                    |
| 10117077 Sheet8 | RECOMMENDED CABLE (FPC) (SFV__R-1/2STA__HLF)                                                |
| 10117077 Sheet9 | RECOMMENDED CABLE (FFC) (SFV__R-1/2STA__HLF)                                                |
| BJM-SFV101      | HANDLING PROCEDURES                                                                         |

|                          |  |                |  |            |  |   |  |                                       |  |   |  |            |  |   |  |                                                                                 |  |   |  |              |  |   |  |      |  |   |  |      |  |
|--------------------------|--|----------------|--|------------|--|---|--|---------------------------------------|--|---|--|------------|--|---|--|---------------------------------------------------------------------------------|--|---|--|--------------|--|---|--|------|--|---|--|------|--|
| mat'l. code              |  |                |  | surface    |  |   |  | tolerances unless otherwise specified |  |   |  | projection |  |   |  | product family                                                                  |  |   |  | CODE JP      |  |   |  |      |  |   |  |      |  |
|                          |  |                |  | ISO 1302 ✓ |  |   |  | ISO 406<br>ISO 1101                   |  |   |  |            |  |   |  | 58EF                                                                            |  |   |  |              |  |   |  |      |  |   |  |      |  |
| ltr ecn no dr date       |  |                |  | tolerances |  |   |  | angles                                |  |   |  | linear     |  |   |  | title                                                                           |  |   |  |              |  |   |  |      |  |   |  |      |  |
| A J11-0017 S.W 2011-1-20 |  |                |  |            |  |   |  |                                       |  |   |  |            |  |   |  | 0.5mm SPACING FPC CONNECTOR<br>DOCUMENT LIST<br>(Cat. No. : SFV__R-1/2STAE1HLF) |  |   |  |              |  |   |  |      |  |   |  |      |  |
|                          |  |                |  |            |  |   |  |                                       |  |   |  | mm         |  |   |  |                                                                                 |  |   |  |              |  |   |  |      |  |   |  |      |  |
|                          |  |                |  |            |  |   |  |                                       |  |   |  |            |  |   |  | scale X                                                                         |  |   |  |              |  |   |  |      |  |   |  |      |  |
|                          |  |                |  | dr         |  |   |  | S. Hatake                             |  |   |  | 2011-1-20  |  |   |  | dwg no                                                                          |  |   |  | sheet 1 of 9 |  |   |  | size |  |   |  |      |  |
|                          |  |                |  | engr       |  |   |  | S. Hatake                             |  |   |  | 2011-1-20  |  |   |  | FCI                                                                             |  |   |  | 10117077     |  |   |  | A4   |  |   |  |      |  |
|                          |  |                |  | chr        |  |   |  | S. Hatake                             |  |   |  | 2011-1-20  |  |   |  |                                                                                 |  |   |  |              |  |   |  |      |  |   |  |      |  |
|                          |  |                |  | appd       |  |   |  | M. Hatake                             |  |   |  | 2011-1-20  |  |   |  |                                                                                 |  |   |  |              |  |   |  |      |  |   |  |      |  |
| sheet index              |  | revision sheet |  | A          |  | A |  | A                                     |  | A |  | A          |  | A |  | A                                                                               |  | A |  | A            |  | A |  | A    |  | A |  | Rev. |  |
|                          |  |                |  | 1          |  | 2 |  | 3                                     |  | 4 |  | 5          |  | 6 |  | 7                                                                               |  | 8 |  | 9            |  |   |  |      |  |   |  | A    |  |

## CAT. NO. &amp; DIMENSIONS

| NO. OF CONTACTS (n) | CAT. NO.           | DIMENSIONS (NOTE2) |         |         |         |
|---------------------|--------------------|--------------------|---------|---------|---------|
|                     |                    | A ± 0.2            | B ± 0.2 | C ± 0.1 | D ± 0.1 |
| 4                   | SFV4R-1/2STA__HLF  | 7.5                | 5.9     | 1.5     | 2.7     |
| 5                   | SFV5R-1/2STA__HLF  | 8.0                | 6.4     | 2.0     | 3.2     |
| 6                   | SFV6R-1/2STA__HLF  | 8.5                | 6.9     | 2.5     | 3.7     |
| 7                   | SFV7R-1/2STA__HLF  | 9.0                | 7.4     | 3.0     | 4.2     |
| 8                   | SFV8R-1/2STA__HLF  | 9.5                | 7.9     | 3.5     | 4.7     |
| 9                   | SFV9R-1/2STA__HLF  | 10.0               | 8.4     | 4.0     | 5.2     |
| 10                  | SFV10R-1/2STA__HLF | 10.5               | 8.9     | 4.5     | 5.7     |
| 11                  | SFV11R-1/2STA__HLF | 11.0               | 9.4     | 5.0     | 6.2     |
| 12                  | SFV12R-1/2STA__HLF | 11.5               | 9.9     | 5.5     | 6.7     |
| 13                  | SFV13R-1/2STA__HLF | 12.0               | 10.4    | 6.0     | 7.2     |
| 14                  | SFV14R-1/2STA__HLF | 12.5               | 10.9    | 6.5     | 7.7     |
| 15                  | SFV15R-1/2STA__HLF | 13.0               | 11.4    | 7.0     | 8.2     |
| 16                  | SFV16R-1/2STA__HLF | 13.5               | 11.9    | 7.5     | 8.7     |
| 17                  | SFV17R-1/2STA__HLF | 14.0               | 12.4    | 8.0     | 9.2     |
| 18                  | SFV18R-1/2STA__HLF | 14.5               | 12.9    | 8.5     | 9.7     |
| 19                  | SFV19R-1/2STA__HLF | 15.0               | 13.4    | 9.0     | 10.2    |
| 20                  | SFV20R-1/2STA__HLF | 15.5               | 13.9    | 9.5     | 10.7    |
| 21                  | SFV21R-1/2STA__HLF | 16.0               | 14.4    | 10.0    | 11.2    |
| 22                  | SFV22R-1/2STA__HLF | 16.5               | 14.9    | 10.5    | 11.7    |
| 23                  | SFV23R-1/2STA__HLF | 17.0               | 15.4    | 11.0    | 12.2    |
| 24                  | SFV24R-1/2STA__HLF | 17.5               | 15.9    | 11.5    | 12.7    |
| 25                  | SFV25R-1/2STA__HLF | 18.0               | 16.4    | 12.0    | 13.2    |
| 26                  | SFV26R-1/2STA__HLF | 18.5               | 16.9    | 12.5    | 13.7    |
| 27                  | SFV27R-1/2STA__HLF | 19.0               | 17.4    | 13.0    | 14.2    |
| 28                  | SFV28R-1/2STA__HLF | 19.5               | 17.9    | 13.5    | 14.7    |
| 29                  | SFV29R-1/2STA__HLF | 20.0               | 18.4    | 14.0    | 15.2    |
| 30                  | SFV30R-1/2STA__HLF | 20.5               | 18.9    | 14.5    | 15.7    |
| 31                  | SFV31R-1/2STA__HLF | 21.0               | 19.4    | 15.0    | 16.2    |
| 32                  | SFV32R-1/2STA__HLF | 21.5               | 19.9    | 15.5    | 16.7    |
| 33                  | SFV33R-1/2STA__HLF | 22.0               | 20.4    | 16.0    | 17.2    |
| 34                  | SFV34R-1/2STA__HLF | 22.5               | 20.9    | 16.5    | 17.7    |
| 35                  | SFV35R-1/2STA__HLF | 23.0               | 21.4    | 17.0    | 18.2    |

CAT. NO.

SFV (n) R - 1 ST A \_ \_ \_ 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)

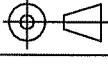
PLATING VARIATION  
A : SELECTIVE GOLD PLATING

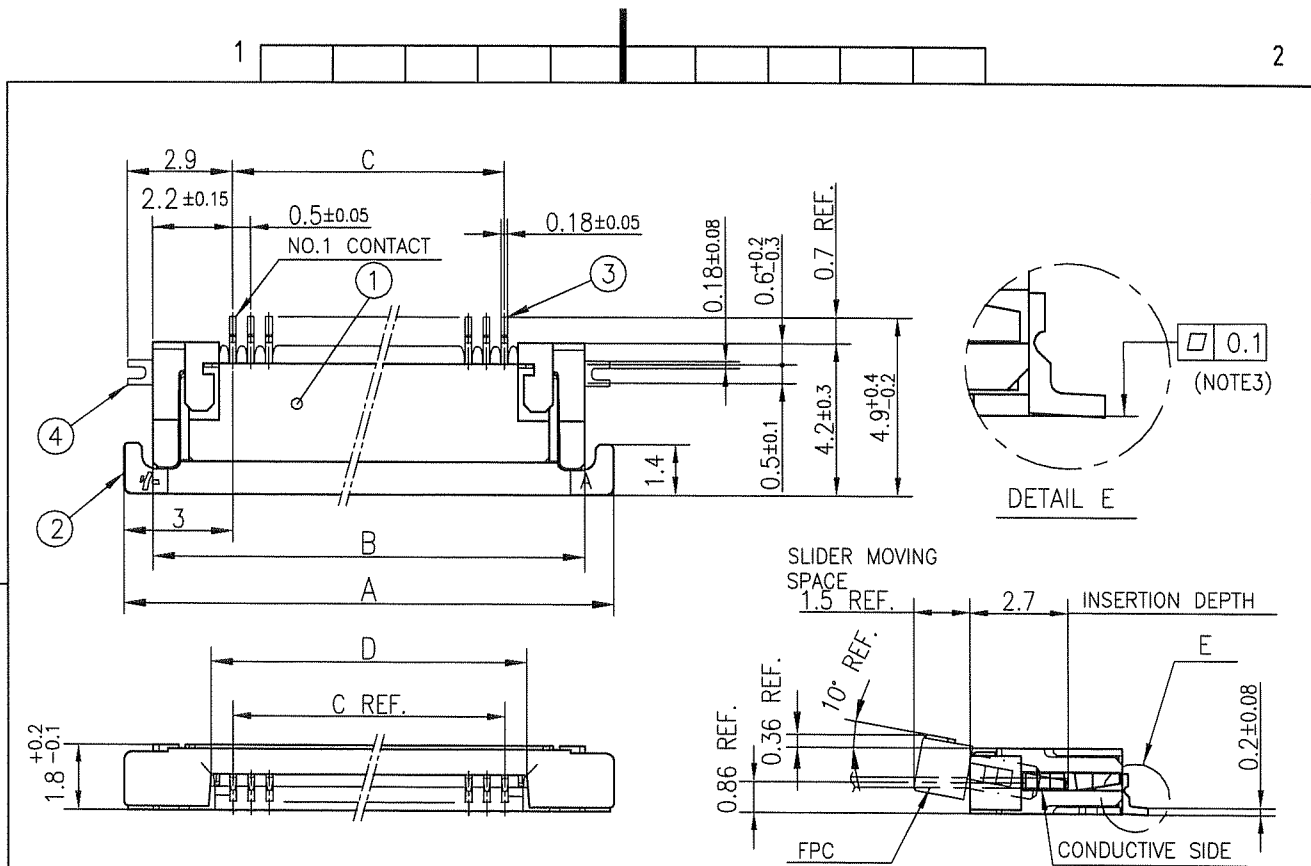
PACKAGE STYLE

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.

|             |        |    |      |                                                                             |        |                                  |      |                                                                                                   |  |                                                                                              |  |         |  |
|-------------|--------|----|------|-----------------------------------------------------------------------------|--------|----------------------------------|------|---------------------------------------------------------------------------------------------------|--|----------------------------------------------------------------------------------------------|--|---------|--|
| mat'l. code |        |    |      | surface<br>ISO 1302 <input checked="" type="checkbox"/> ISO 406<br>ISO 1101 |        | tolerance<br>ISO 406<br>ISO 1101 |      | projection<br> |  | product family 58EF                                                                          |  | CODE JP |  |
| ltr         | ecn no | dr | date | tolerances unless otherwise specified                                       |        | mm                               |      | scale $\times$                                                                                    |  | title<br>CAT. NO. TABLE FOR 0.5 mm CONTACT SPACING CONNECTOR (Cat. No. : SFV__R-1/2STA__HLF) |  |         |  |
| A           |        |    |      | angles                                                                      | linear |                                  |      |                                                                                                   |  | dwg no sheet 2 of 9 size                                                                     |  |         |  |
|             |        |    |      |                                                                             |        |                                  |      |                                                                                                   |  | 10117077 A4                                                                                  |  |         |  |
|             |        |    |      | dr                                                                          | engr   | chr                              | appd | FCI                                                                                               |  | type Product Customer Drawing                                                                |  |         |  |
|             |        |    |      |                                                                             |        |                                  |      |                                                                                                   |  | Rev. A                                                                                       |  |         |  |

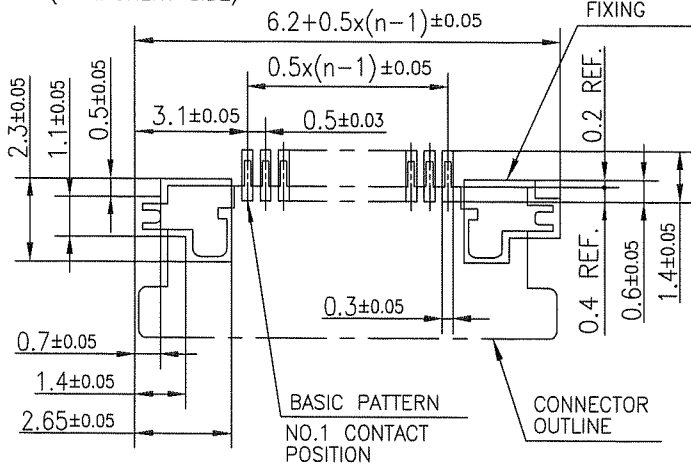


| PT. NO. | PARTS NAME     | MATERIAL                                             | Q'TY | NOTE                                                   |
|---------|----------------|------------------------------------------------------|------|--------------------------------------------------------|
| 1 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

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)

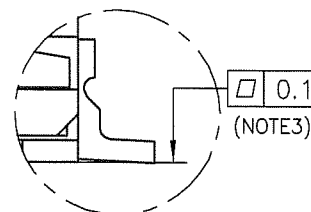
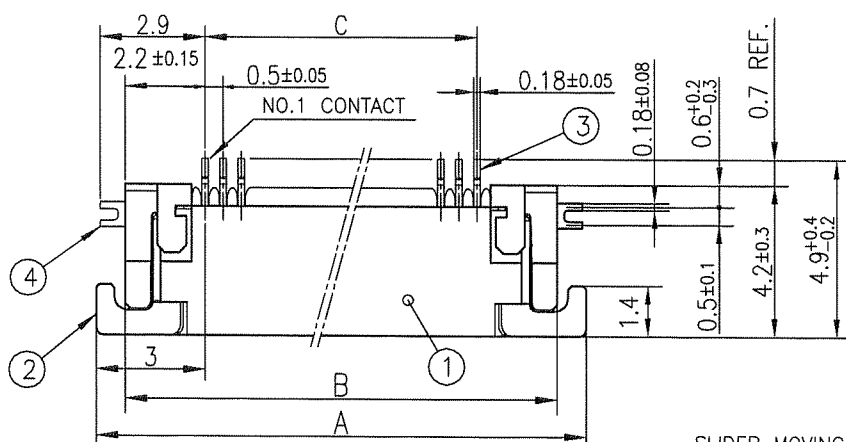
PATTERN FOR  
MOUNTING PLATE  
FIXING



NOTES

- 1.THIS PRODUCT IS THE CONNECTOR USED FOR FPC AND COTES 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 DRAWING.
- 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<br>ISO 1302 ✓<br>tolerances unless otherwise specified |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>mm |  | product family<br>58EF                                                                         |  | CODE<br>JP |  |
| ltr         |  |                |  | ecn no                                                         |  | dr                               |  | date             |  | title<br>CONNECTOR USED FOR FPC<br>WITH 0.5 mm CONTACT SPACING<br>(Cat No. : SFV__R-1STA__HLF) |  |            |  |
| A           |  |                |  |                                                                |  |                                  |  |                  |  | dwg no<br>10117077                                                                             |  |            |  |
|             |  |                |  | angles                                                         |  | linear                           |  | scale            |  | sheet 3 of 9                                                                                   |  |            |  |
|             |  |                |  |                                                                |  |                                  |  | FCCI             |  | size<br>A4                                                                                     |  |            |  |
|             |  |                |  | dr                                                             |  | S. W. H. L. 2011-1-20            |  |                  |  | type Product Customer Drawing                                                                  |  |            |  |
|             |  |                |  | enr                                                            |  | S. W. H. L. 2011-1-20            |  |                  |  | Rev. A                                                                                         |  |            |  |
|             |  |                |  | chr                                                            |  | Y. S. M. 2011-1-20               |  |                  |  |                                                                                                |  |            |  |
|             |  |                |  | appd                                                           |  | M. L. 2011-1-20                  |  |                  |  |                                                                                                |  |            |  |
| sheet index |  | revision sheet |  |                                                                |  |                                  |  |                  |  |                                                                                                |  |            |  |



DETAIL E

SLIDER MOVING

SPACE

1.4 REF.

INSERTION DEPTH

CONDUCTIVE SIDE

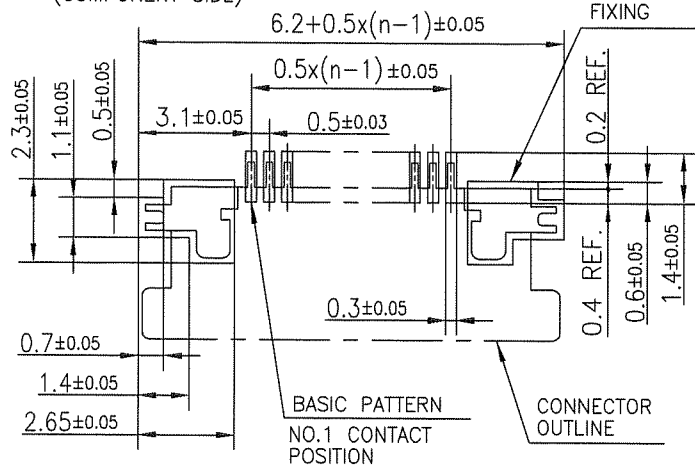
FPC

E

0.2±0.08

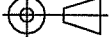
| PT. NO. | PARTS NAME     | MATERIAL                                             | Q'TY | NOTE                                                   |
|---------|----------------|------------------------------------------------------|------|--------------------------------------------------------|
| 1 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

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT  
(COMPONENT SIDE)PATTERN FOR  
MOUNTING PLATE  
FIXING

## NOTES

1. THIS PRODUCT IS THE CONNECTOR USED FOR FPC AND COPS 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 DRAWING.
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  |  | tolerance |  | projection                                                                          |  | product family                |  |  |  | CODE |  |
|             |  |  |  | ISO 1302 |  | ISO 406   |  |  |  | 58EF                          |  |  |  | JP   |  |
|             |  |  |  | ISO 1101 |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
| ltr         |  |  |  | ecn no   |  | dr        |  | date                                                                                |  | title                         |  |  |  |      |  |
| A           |  |  |  |          |  |           |  |                                                                                     |  | CONNECTOR USED FOR FPC        |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  | WITH 0.5 mm CONTACT SPACING   |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  | (Cat. No. : SFV__R-2STA__HLF) |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
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|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  |          |  |           |  |                                                                                     |  |                               |  |  |  |      |  |
|             |  |  |  | </       |  |           |  |                                                                                     |  |                               |  |  |  |      |  |

## CAT. NO. &amp; DIMENSIONS

| NO. OF CONTACTS (n) | CAT. NO.           | DIMENSIONS (NOTE3) |         |         |
|---------------------|--------------------|--------------------|---------|---------|
|                     |                    | F ± 5              | G ± 0.3 | H ± 0.1 |
| 4                   | SFV4R-1/2STAE1HLF  | 20.4               | 16      | —       |
| 5                   | SFV5R-1/2STAE1HLF  | 20.4               | 16      | —       |
| 6                   | SFV6R-1/2STAE1HLF  | 20.4               | 16      | —       |
| 7                   | SFV7R-1/2STAE1HLF  | 28.4               | 24      | —       |
| 8                   | SFV8R-1/2STAE1HLF  | 28.4               | 24      | —       |
| 9                   | SFV9R-1/2STAE1HLF  | 28.4               | 24      | —       |
| 10                  | SFV10R-1/2STAE1HLF | 28.4               | 24      | —       |
| 11                  | SFV11R-1/2STAE1HLF | 28.4               | 24      | —       |
| 12                  | SFV12R-1/2STAE1HLF | 28.4               | 24      | —       |
| 13                  | SFV13R-1/2STAE1HLF | 28.4               | 24      | —       |
| 14                  | SFV14R-1/2STAE1HLF | 28.4               | 24      | —       |
| 15                  | SFV15R-1/2STAE1HLF | 28.4               | 24      | —       |
| 16                  | SFV16R-1/2STAE1HLF | 28.4               | 24      | —       |
| 17                  | SFV17R-1/2STAE1HLF | 28.4               | 24      | —       |
| 18                  | SFV18R-1/2STAE1HLF | 28.4               | 24      | —       |
| 19                  | SFV19R-1/2STAE1HLF | 28.4               | 24      | —       |
| 20                  | SFV20R-1/2STAE1HLF | 28.4               | 24      | —       |
| 21                  | SFV21R-1/2STAE1HLF | 28.4               | 24      | —       |
| 22                  | SFV22R-1/2STAE1HLF | 28.4               | 24      | —       |
| 23                  | SFV23R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 24                  | SFV24R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 25                  | SFV25R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 26                  | SFV26R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 27                  | SFV27R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 28                  | SFV28R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 29                  | SFV29R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 30                  | SFV30R-1/2STAE1HLF | 36.4               | 32      | 28.4    |
| 31                  | SFV31R-1/2STAE1HLF | 48.4               | 44      | 40.4    |
| 32                  | SFV32R-1/2STAE1HLF | 48.4               | 44      | 40.4    |
| 33                  | SFV33R-1/2STAE1HLF | 48.4               | 44      | 40.4    |
| 34                  | SFV34R-1/2STAE1HLF | 48.4               | 44      | 40.4    |
| 35                  | SFV35R-1/2STAE1HLF | 48.4               | 44      | 40.4    |

CAT. NO. SFV (n) R - 1 ST A E1 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)

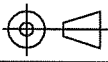
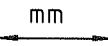
PLATING VARIATION  
A : SELECTIVE GOLD PLATING

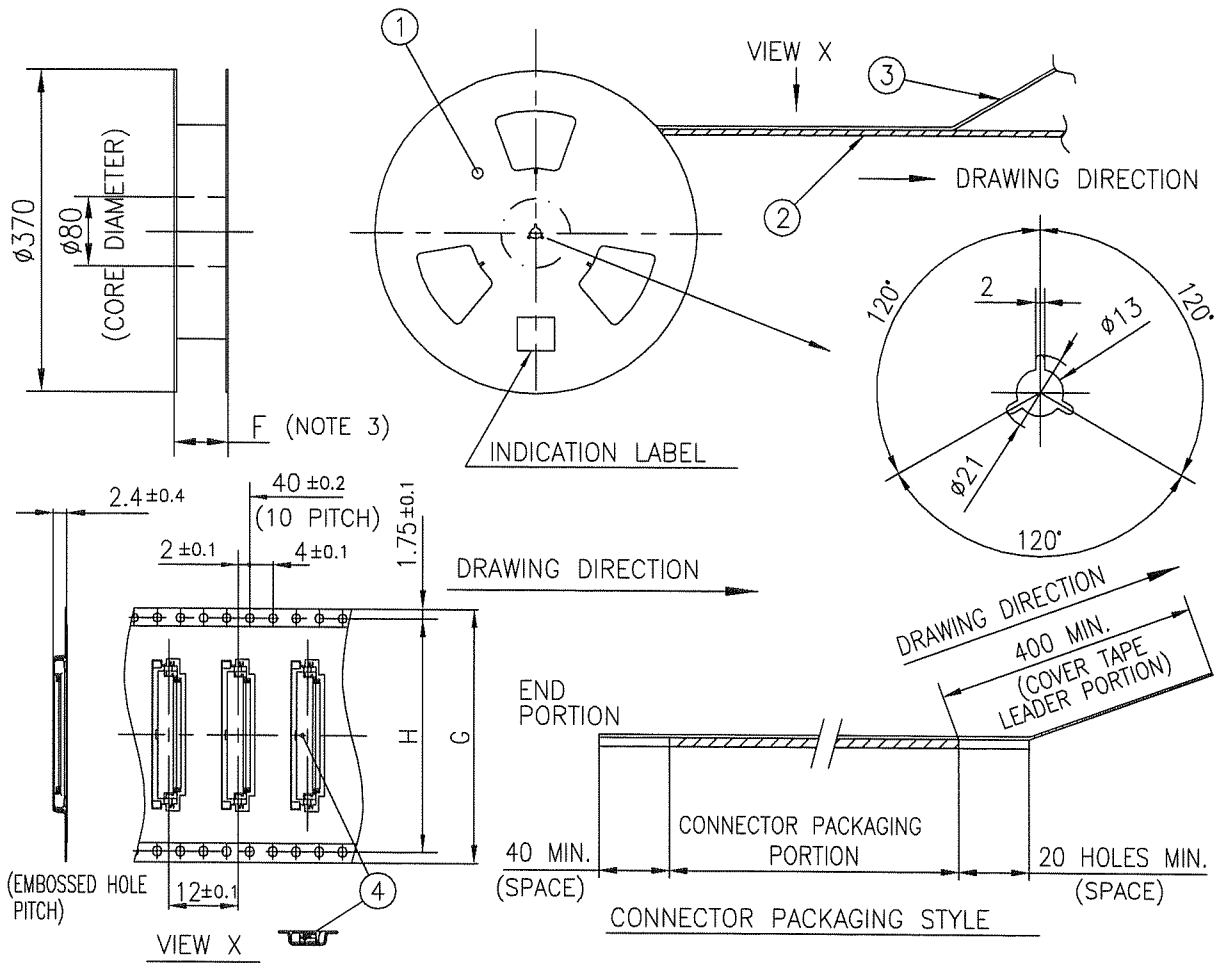
TAPE PACKAGING

HALOGEN and LEAD FREE

## NOTES

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

|             |                |    |      |                                                                                                                     |                       |                                                                                                |  |                                                                                                                          |  |              |                  |
|-------------|----------------|----|------|---------------------------------------------------------------------------------------------------------------------|-----------------------|------------------------------------------------------------------------------------------------|--|--------------------------------------------------------------------------------------------------------------------------|--|--------------|------------------|
| mat'l. code |                |    |      | surface ISO 1302 <input checked="" type="checkbox"/> tolerance ISO 406 <input checked="" type="checkbox"/> ISO 1101 |                       | projection  |  | product family 58EF                                                                                                      |  | CODE JP      |                  |
| ltr         | ecn no         | dr | date | tolerances unless otherwise specified                                                                               |                       | mm          |  | title<br>CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED<br>0.5 mm CONTACT SPACING CONNECTOR<br>(Cat. No. : SFV__R-1/2STAE1HLF) |  |              |                  |
| A           |                |    |      | angles                                                                                                              | linear                | scale $\times$                                                                                 |  | dwg no                                                                                                                   |  | sheet 5 of 9 | size             |
|             |                |    |      | dr                                                                                                                  | S. W. H. L. 2011-1-20 |             |  | 10117077                                                                                                                 |  |              | A4               |
|             |                |    |      | enr                                                                                                                 | S. W. H. L. 2011-1-20 |                                                                                                |  | type                                                                                                                     |  | Product      | Customer Drawing |
|             |                |    |      | chr                                                                                                                 | Y. Z. M. L. 2011-1-20 |                                                                                                |  |                                                                                                                          |  |              |                  |
|             |                |    |      | appd                                                                                                                | M. L. M. 2011-1-20    |                                                                                                |  |                                                                                                                          |  |              |                  |
| sheet index | revision sheet |    |      |                                                                                                                     |                       |                                                                                                |  |                                                                                                                          |  |              | Rev. A           |

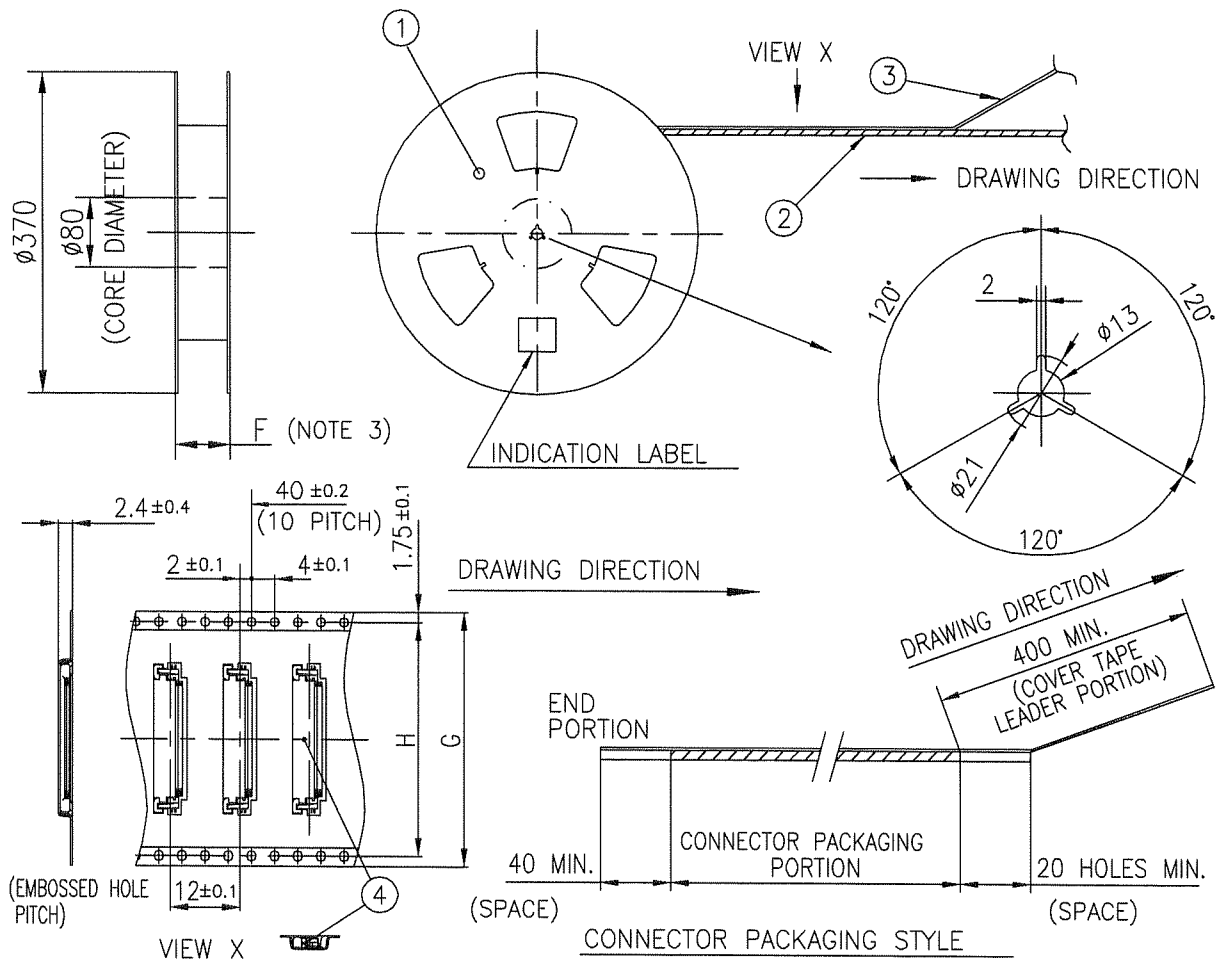


| PT. NO. | PARTS NAME            | CAT. NO.         | MATERIAL          | Q'TY  | NOTE                 |
|---------|-----------------------|------------------|-------------------|-------|----------------------|
| 1       | REEL                  | _____            | CARDBOARD         | 1     | COLOR : WHITE        |
| 2       | PLASTIC (EMBOSS) TAPE | _____            | A-PET             | _____ | COLOR : TRANSPARENCY |
| 3       | COVER                 | _____            | POLYESTER         | _____ | COLOR : TRANSPARENCY |
| 4       | CONNECTOR             | SFV__R-1STA__HLF | SEE ATTACHED DWG. | 3000  | LOWER CONTACT TYPE   |

NOTES

- THIS IS PLASTIC TAPE PACKAGED CONNECTOR USED FOR FPC AND COPES WITH AUTOMATIC MOUNTING (SMT).
- SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSS) TAPE AND REEL.
- F DIMENSION IS PORTION OF THE CORE.

|                |  |                |  |                                                |  |            |  |                                  |  |         |  |
|----------------|--|----------------|--|------------------------------------------------|--|------------|--|----------------------------------|--|---------|--|
| mat'l. code    |  |                |  | surface 58 / tolerance ISO 1302 406 / ISO 1101 |  | projection |  | product family 58EF              |  | CODE JP |  |
| ltr            |  |                |  | tolerances unless otherwise specified          |  | mm         |  | title                            |  |         |  |
| ecn no dr date |  |                |  | linear                                         |  | scale X    |  | PLASTIC TAPE PACKAGED            |  |         |  |
| A              |  |                |  | angles ±5'                                     |  | mm         |  | 0.5 mm CONTACT SPACING CONNECTOR |  |         |  |
|                |  |                |  |                                                |  |            |  | (Cat. No. : SFV__R-1STAE1HLF)    |  |         |  |
|                |  |                |  | dr                                             |  | F          |  | dwg no                           |  |         |  |
|                |  |                |  | enr                                            |  | 10117077   |  | sheet 6 of 9                     |  |         |  |
|                |  |                |  | chr                                            |  | size       |  | A4                               |  |         |  |
|                |  |                |  | appd                                           |  | type       |  | Product Customer Drawing         |  |         |  |
| sheet index    |  | revision sheet |  |                                                |  |            |  |                                  |  | Rev. A  |  |



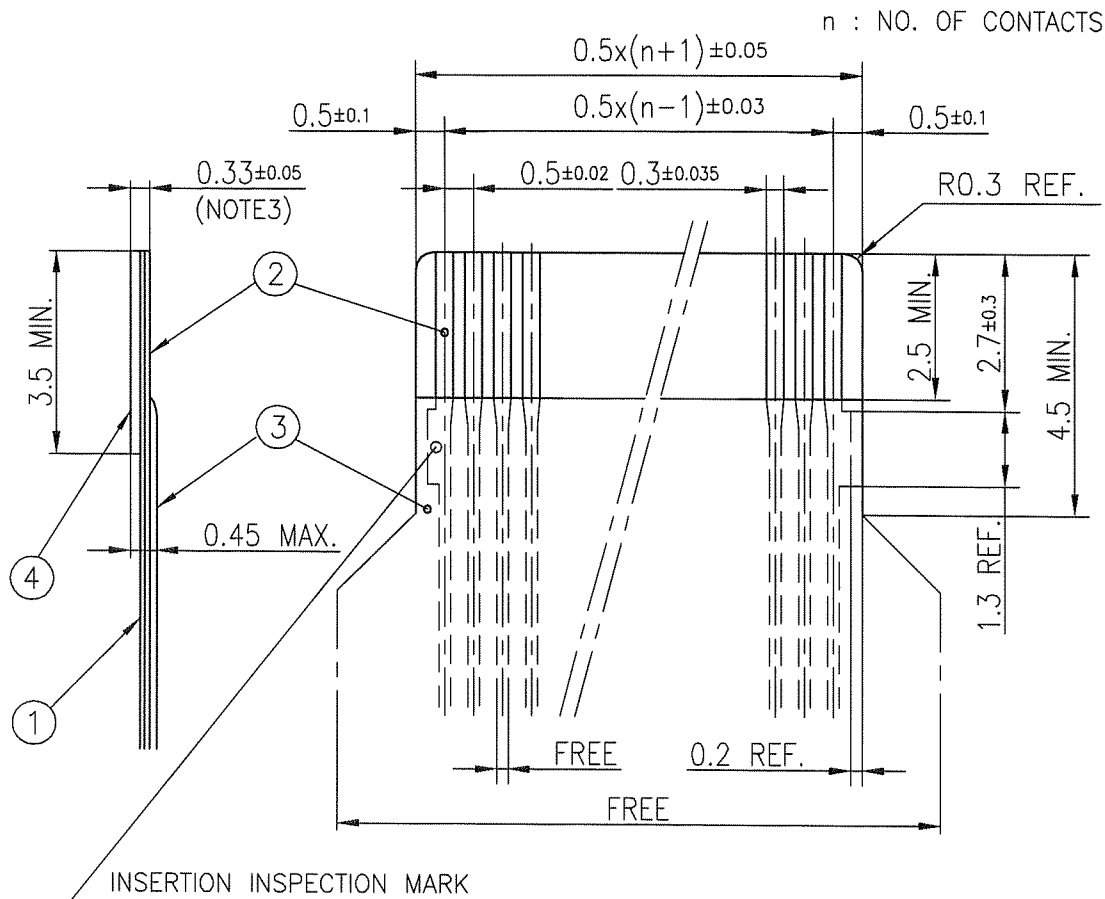
| PT. NO. | PARTS NAME            | CAT. NO.        | MATERIAL          | Q'TY  | NOTE                 |
|---------|-----------------------|-----------------|-------------------|-------|----------------------|
| 1       | REEL                  | _____           | CARDBOARD         | 1     | COLOR : WHITE        |
| 2       | PLASTIC (EMBOSS) TAPE | _____           | A-PET             | _____ | COLOR : TRANSPARENCY |
| 3       | COVER                 | _____           | POLYESTER         | _____ | COLOR : TRANSPARENCY |
| 4       | CONNECTOR             | SFV__R-2STA_HLF | SEE ATTACHED DWG. | 3000  | UPPER CONTACT TYPE   |

#### NOTES

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

|             |        |                |      |                                                                                                                                                                                             |             |            |  |                                                                                                     |          |         |              |
|-------------|--------|----------------|------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------|------------|--|-----------------------------------------------------------------------------------------------------|----------|---------|--------------|
| mat'l. code |        |                |      | surface <input checked="" type="checkbox"/> ISO 1302 <input checked="" type="checkbox"/> tolerance <input checked="" type="checkbox"/> ISO 406 <input checked="" type="checkbox"/> ISO 1101 |             | projection |  | product family 58EF                                                                                 |          | CODE JP |              |
| ltr         | ecn no | dr             | date | tolerances unless otherwise specified                                                                                                                                                       |             |            |  | title<br>PLASTIC TAPE PACKAGED<br>0.5 mm CONTACT SPACING CONNECTOR<br>(Cat. No. : SFV__R-2STAELHLF) |          |         |              |
| A           |        |                |      | angles                                                                                                                                                                                      | linear      | mm         |  |                                                                                                     |          |         |              |
|             |        |                |      | ±5°                                                                                                                                                                                         |             | scale X    |  |                                                                                                     |          |         |              |
|             |        |                |      | dr                                                                                                                                                                                          | S. Watanabe | 2011-1-20  |  |                                                                                                     | dwg no   |         | sheet 7 of 9 |
|             |        |                |      | enr                                                                                                                                                                                         | S. Watanabe | 2011-1-20  |  |                                                                                                     | 10117077 |         | size         |
|             |        |                |      | chr                                                                                                                                                                                         | V. Tanaka   | 2011-1-20  |  |                                                                                                     |          |         | A4           |
|             |        |                |      | appd                                                                                                                                                                                        | M. Kim      | Jan 24/11  |  |                                                                                                     |          |         |              |
| sheet index |        | revision sheet |      |                                                                                                                                                                                             |             |            |  | type Product Customer Drawing                                                                       |          | Rev. A  |              |

# RECOMMENDED CABLE (FPC)



| PT. NO. | PARTS NAME      | MATERIAL                        | THICKNESS (°m) |
|---------|-----------------|---------------------------------|----------------|
| 1       | BASE FILM       | POLYIMIDE OR POLYESTER OR EQUAL | 25             |
| 2       | CONDUCTOR       | COPPER FOIL(PLATING : GOLD )    | 35             |
| 3       | OVERLAY         | POLYIMIDE OR POLYESTER OR EQUAL | —              |
| 4       | SUPPORTING TAPE | POLYESTER OR POLYIMIDE OR EQUAL | 188            |

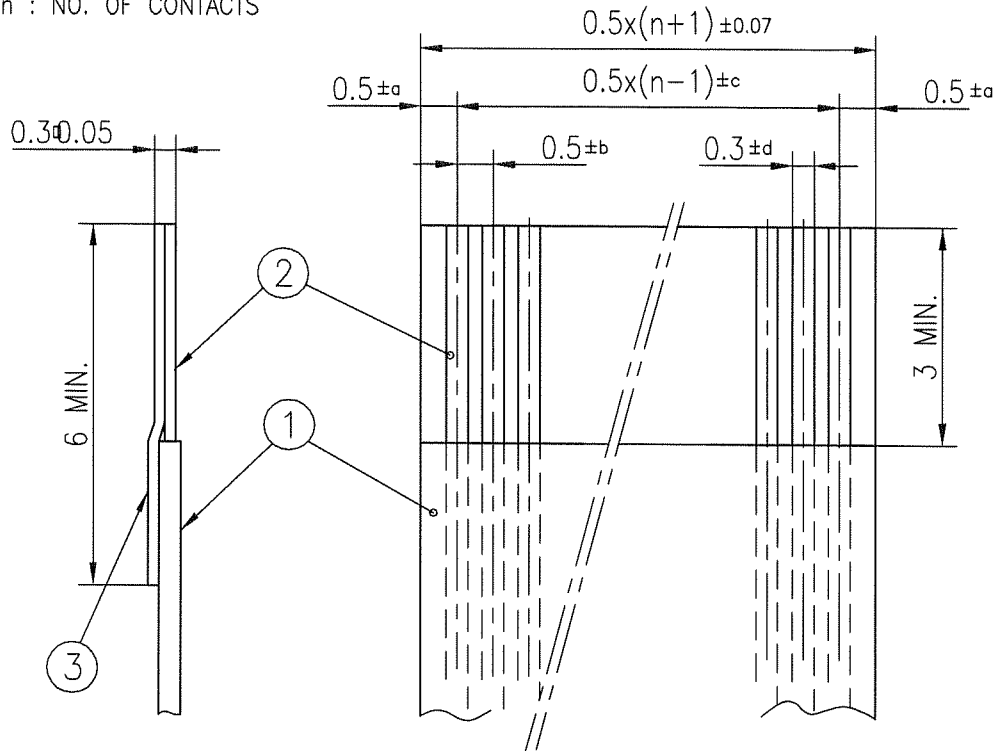
## NOTES

1. NO BURR AT EACH PORTION.
2. NO PEELING IN COMMON USE.
3. TOTAL THICKNESS LIMIT OF EACH MATERIAL (INCLUDING ADHESIVE AGENT) IS SPECIFIED.

|             |        |                |      |                                                                             |  |                                  |  |                |  |                                                      |  |              |  |
|-------------|--------|----------------|------|-----------------------------------------------------------------------------|--|----------------------------------|--|----------------|--|------------------------------------------------------|--|--------------|--|
| mat'l. code |        |                |      | surface<br>ISO 1302 <input checked="" type="checkbox"/> ISO 406<br>ISO 1101 |  | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br> |  | product family 58EF                                  |  | CODE JP      |  |
| ltr         | ecn no | dr             | date | tolerances unless otherwise specified                                       |  |                                  |  |                |  | title                                                |  |              |  |
| A           |        |                |      | angles                                                                      |  | linear                           |  | mm             |  | RECOMMENDED CABLE<br>(Cat. No. : SFV__R-1/2STA__HLF) |  |              |  |
|             |        |                |      |                                                                             |  |                                  |  | scale X        |  | dwg no                                               |  | sheet 8 of 9 |  |
|             |        |                |      | dr                                                                          |  | B. Kishida                       |  | 2011-1-20      |  | 10117077                                             |  | size A4      |  |
|             |        |                |      | engr                                                                        |  | B. Kishida                       |  | 2011-1-20      |  |                                                      |  |              |  |
|             |        |                |      | chr                                                                         |  | Y. Kamada                        |  | 2011-1-20      |  |                                                      |  |              |  |
|             |        |                |      | appd                                                                        |  | M. G. Iwano                      |  | 2011-1-20      |  |                                                      |  |              |  |
| sheet index |        | revision sheet |      |                                                                             |  |                                  |  |                |  | type Product Customer Drawing                        |  | Rev. A       |  |

# RECOMMENDED CABLE (FFC)

n : NO. OF CONTACTS



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

| PT. NO. | PARTS NAME      | MATERIAL                           |
|---------|-----------------|------------------------------------|
| 1       | INSULATOR       | FLAME RESISTING POLYESTER OR EQUAL |
| 2       | CONDUCTOR       | COPPER FOIL (PLATING : GOLD)       |
| 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.

|             |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  |                                 |  |                          |        |
|-------------|----------------|----|------|-----------------------------------------------------------------------------------------------------------------------------------------------|--|-------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------|--|---------------------------------|--|--------------------------|--------|
| mat'l. code |                |    |      | surface <input checked="" type="checkbox"/> ISO 1302 <input checked="" type="checkbox"/> ISO 406 <input checked="" type="checkbox"/> ISO 1101 |  | tolerance <input checked="" type="checkbox"/> ISO 1302 <input checked="" type="checkbox"/> ISO 406 <input checked="" type="checkbox"/> ISO 1101 |  | projection     |  | product family 58EF             |  | CODE JP                  |        |
| ltr         | ecn no         | dr | date | tolerances unless otherwise specified                                                                                                         |  | angles linear                                                                                                                                   |  | mm             |  | title                           |  |                          |        |
| A           |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  | RECOMMENDED CABLE               |  |                          |        |
|             |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  | (Cat. No. : SFV__R-1/2STA__HLF) |  |                          |        |
|             |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  | scale $\times$ |  | dwg no                          |  | sheet 9 of 9             |        |
|             |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  | 10117077                        |  | size A4                  |        |
|             |                |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  | type                            |  | Product Customer Drawing |        |
| sheet index | revision sheet |    |      |                                                                                                                                               |  |                                                                                                                                                 |  |                |  |                                 |  |                          | Rev. A |