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List of "HFW\_\_R-1/2STE1LF" customer document

| DOCUMENT NO. | LIST   |
|--------------|--|
| SC-HFWR02    | SPEC.  |
| JSA95923     | CAT.NO.TABLE FOR 1mm SPACING SMT CONNECTOR (HFW__R-1/2ST_LF)                   |
| JSA95924     | 1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (HFW__R-1ST_LF)                    |
| JSA95925     | 1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (HFW__R-2ST_LF)                    |
| JSA95926     | CAT.NO.TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONN.(HFW__R-1/2STE1LF) |
| JSA95927     | 1mm SPACING SMT CONNECTOR (HFW__R-1STE1LF)                                     |
| JSA95928     | 1mm SPACING SMT CONNECTOR (HFW__R-2STE1LF)                                     |
| JSA93573     | RECOMMENDED CABLE (FPC) (HFW__R-1/2___)  |
| JSA93574     | RECOMMENDED CABLE (FFC) (HFW__R-1/2___)  |
| BJM-HFWR101  | HANDLING PROCEDURES  |

|             |                |     |          |  |                   |                            |  |            |  |   |  |                          |  |
|-------------|----------------|-----|----------|--|-------------------|----------------------------|--|------------|--|---|--|--------------------------|--|
| mat'l. code |                |     |          | surface <sup>58</sup> ISO 1302 <input checked="" type="checkbox"/> |                   | tolerance ISO 406 ISO 1101 |  | projection |  | product family 58NF   |  | CODE JP                  |  |
| ltr         | ecn no         | dr  | date     | tolerances unless otherwise specified                              |                   |                            |  | mm         |  | title<br>1mm SPACING FPC/FFC CONNECTOR DOCUMENT LIST<br>(Cat. No. : HFW__R-1/2STE1LF) |  |                          |  |
| A           | J05-0056       | H.T | '05/2/4  | angles   | linear            | scale $\propto$            |  |            |  |   |  |                          |  |
| B           | J06-0413       | H.T | 10/4/'06 |  |                   |                            |  |            |  | dwg no  |  | sheet 1 of 1 size        |  |
|             |                |     |          | dr   | <i>H. Hoshino</i> | 10/24/06                   |  |            |  | JSA 96335   |  | A4                       |  |
|             |                |     |          | enrg   | <i>H. Hoshino</i> | 10/20/06                   |  |            |  | type  |  | Product Customer Drawing |  |
|             |                |     |          | chr  | <i>J. Gino</i>    | 10/22/06                   |  |            |  |   |  |                          |  |
| sheet index | revision sheet | B   | 1        | appd   | <i>S. Hoshino</i> | 10/12/06                   |  |            |  |   |  | Rev. B                   |  |

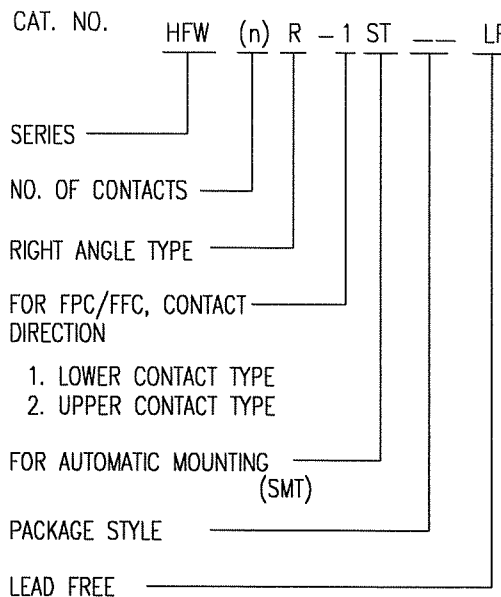
form: A4

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CAT. NO. & DIMENSIONS

| (NOTE3) | NO. OF CONTACTS (n) | CAT. NO.         | DIMENSIONS (NOTE2) |         |         |
|---------|---------------------|------------------|--------------------|---------|---------|
|         |                     |                  | A ± 0.2            | B ± 0.2 | C ± 0.1 |
|         | 4                   | HFW4R-1/2ST__LF  | 6.6                | 3       | 5.14    |
|         | 5                   | HFW5R-1/2ST__LF  | 7.6                | 4       | 6.14    |
|         | 6                   | HFW6R-1/2ST__LF  | 8.6                | 5       | 7.14    |
|         | 7                   | HFW7R-1/2ST__LF  | 9.6                | 6       | 8.14    |
|         | 8                   | HFW8R-1/2ST__LF  | 10.6               | 7       | 9.14    |
|         | 9                   | HFW9R-1/2ST__LF  | 11.6               | 8       | 10.14   |
|         | 10                  | HFW10R-1/2ST__LF | 12.6               | 9       | 11.14   |
|         | 11                  | HFW11R-1/2ST__LF | 13.6               | 10      | 12.14   |
|         | 12                  | HFW12R-1/2ST__LF | 14.6               | 11      | 13.14   |
|         | 13                  | HFW13R-1/2ST__LF | 15.6               | 12      | 14.14   |
|         | 14                  | HFW14R-1/2ST__LF | 16.6               | 13      | 15.14   |
|         | 15                  | HFW15R-1/2ST__LF | 17.6               | 14      | 16.14   |
|         | 16                  | HFW16R-1/2ST__LF | 18.6               | 15      | 17.14   |
|         | 17                  | HFW17R-1/2ST__LF | 19.6               | 16      | 18.14   |
|         | 18                  | HFW18R-1/2ST__LF | 20.6               | 17      | 19.14   |
|         | 19                  | HFW19R-1/2ST__LF | 21.6               | 18      | 20.14   |
|         | 20                  | HFW20R-1/2ST__LF | 22.6               | 19      | 21.14   |
|         | 21                  | HFW21R-1/2ST__LF | 23.6               | 20      | 22.14   |
|         | 22                  | HFW22R-1/2ST__LF | 24.6               | 21      | 23.14   |
|         | 23                  | HFW23R-1/2ST__LF | 25.6               | 22      | 24.14   |
|         | 24                  | HFW24R-1/2ST__LF | 26.6               | 23      | 25.14   |
|         | 25                  | HFW25R-1/2ST__LF | 27.6               | 24      | 26.14   |
|         | 26                  | HFW26R-1/2ST__LF | 28.6               | 25      | 27.14   |
|         | 27                  | HFW27R-1/2ST__LF | 29.6               | 26      | 28.14   |
| *       | 28                  | HFW28R-1/2ST__LF | 30.6               | 27      | 29.14   |
| *       | 29                  | HFW29R-1/2ST__LF | 31.6               | 28      | 30.14   |
|         | 30                  | HFW30R-1/2ST__LF | 32.6               | 29      | 31.14   |



NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPE WITH AUTOMATIC MOUNTING (SMT).
2. SEE PART DRAWINGS FOR DIMENSIONS A~C.
3. PLEASE CONSULT US IN CASE OF USING PARTS WITH \* MARK.

|             |                |      |          |   |            |  |         |
|-------------|----------------|------|----------|---|------------|--|---------|
| mat'l. code |                |      |          | surface <sup>58</sup> / tolerance ISO 1302 ✓ / ISO 406 / ISO 1101 | projection | product family 58NF  | CODE JP |
| ltr         | ecn no         | dr   | date     | tolerances, unless otherwise specified                            |            | title  |         |
| A           | J04-0027       | H.T  | 4/6/'04  | angles  | linear     | CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (Cat. No. HFW__R-1/2ST__LF) |         |
| B           | J05-0056       | H.T  | 2/4/'05  |   |            | mm   |         |
| C           | J06-0413       | H.T  | 10/4/'06 |   |            | scale X  |         |
|             |                | dr   |          |   |            | dwg no sheet 1 of 1 size   |         |
|             |                | enrg |          |   |            | JSA 95923 A4   |         |
|             |                | chr  |          |   |            | type Product Customer Drawing  |         |
|             |                | appd |          |   |            |  |         |
| sheet index | revision sheet | C    | 1        |   |            |  | Rev. C  |

SC-HFWR02 JSA95924 95925 95926 95927 95928 93573 93574, 1



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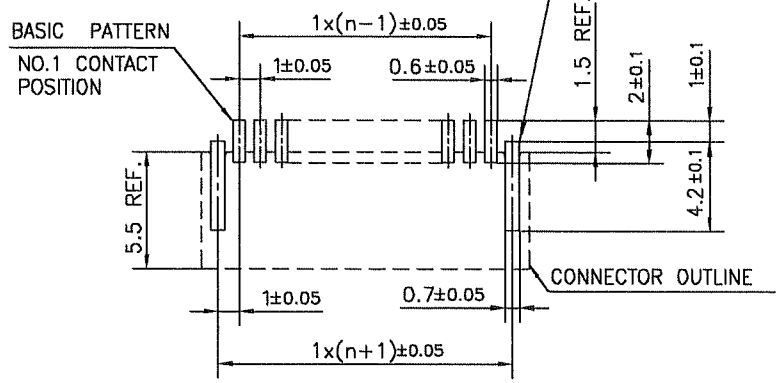


| PT. NO. | PARTS NAME     | MATERIAL                              | Q'TY | NOTE        |
|---------|----------------|---------------------------------------|------|-------------|
| 1       | HOUSING        | PA6T RESIN GLASS REINFORCED (UL94V-0) | 1    | COLOR:BLACK |
| 2       | CONTACT        | PHOSPHOR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

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

BASIC PATTERN NO.1 CONTACT POSITION



NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS OF CONTACT TERMINAL FOR HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS LOWER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
5. THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW SOLDERING OVEN.

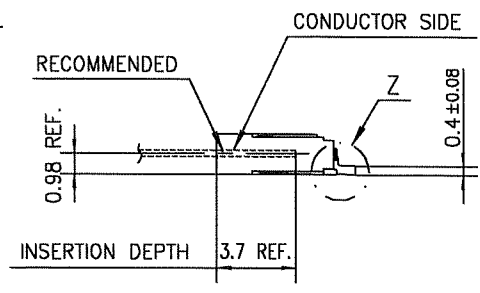
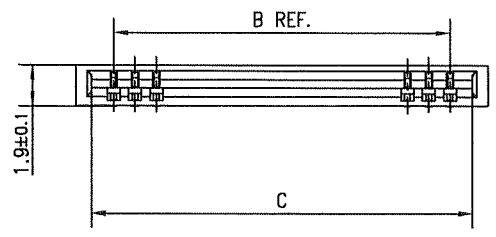
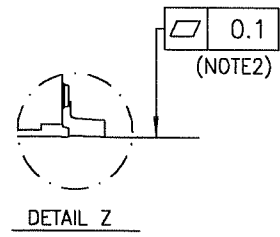
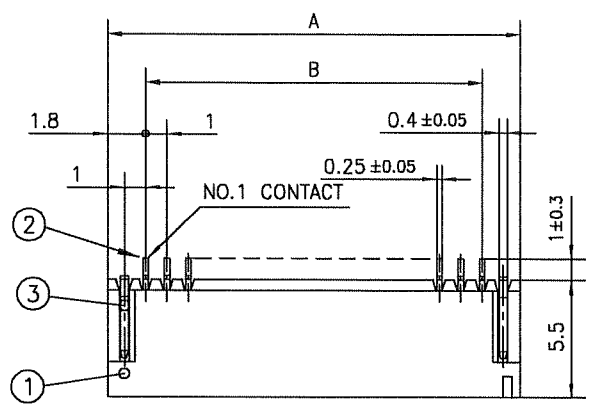
|             |                |     |          |                                       |                              |            |  |         |
|-------------|----------------|-----|----------|---------------------------------------|------------------------------|------------|--|---------|
| mat'l. code |                |     |          | surface 58 / ISO 1302                 | tolerance ISO 406 / ISO 1101 | projection | product family 58NF  | CODE JP |
| ltr         | ecn no         | dr  | date     | tolerances unless otherwise specified |                              | mm         | title  |         |
| A           | J04-0027       | H.T | 4/6/04   | angles                                | linear ±0.2                  |            | 1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat.No. HFW__R-1ST__LF) |         |
| B           | J05-0056       | H.T | 2/4/05   |                                       |                              | scale      | dwg no sheet 1 of 1 size   |         |
| C           | J05-0732       | H.T | 10/28/05 |                                       |                              |            | JSA 95924 A4   |         |
| D           | J06-0413       | H.T | 10/4/06  | dr                                    | 10/14/06                     |            | type Product Customer Drawing  |         |
|             |                |     |          | enrg                                  | 10/14/06                     |            |  |         |
|             |                |     |          | chr                                   | 10/14/06                     |            |  |         |
|             |                |     |          | appd                                  | 10/14/06                     |            |  |         |
| sheet index | revision sheet | D 1 |          |                                       |                              |            |  | Rev. D  |

SC-HFWR02 JSA95923 form: A4



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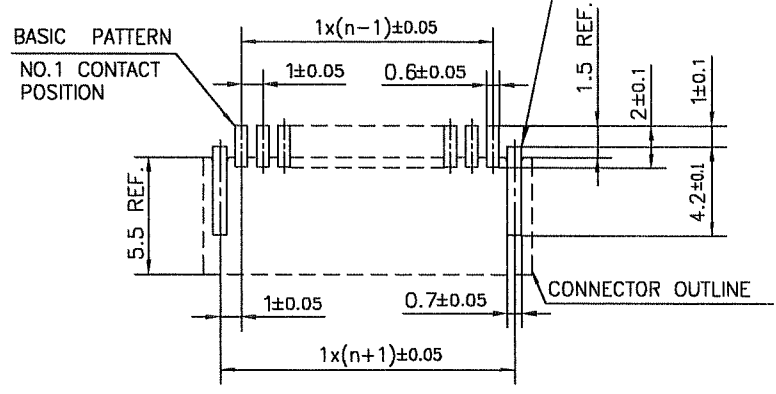


| PT. NO. | PARTS NAME     | MATERIAL                              | Q'TY | NOTE        |
|---------|----------------|---------------------------------------|------|-------------|
| 1       | HOUSING        | PA6T RESIN GLASS REINFORCED (UL94V-0) | 1    | COLOR:BLACK |
| 2       | CONTACT        | PHOSPHOR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

n : NO. OF CONTACTS

RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

BASIC PATTERN



NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
2. FLATNESS OF CONTACT TERMINAL FOR HOUSING MUST BE WITHIN TOLERANCE IN Z PORTION DETAILED DRAWING.
3. THIS PRODUCT IS UPPER CONTACT TYPE CONNECTOR.
4. THIS PRODUCT MEETS EUROPEAN UNION DIRECTIVES AND OTHER COUNTRY REGULATIONS AS DESCRIBED IN GS-22-008
5. THE HOUSING WILL WITHSTAND EXPOSURE TO 260°C PEAK TEMPERATURE FOR 10 SECONDS IN A REFLOW SOLDERING OVEN.

|             |                |     |           |                                       |                    |         |          |                               |   |         |
|-------------|----------------|-----|-----------|---------------------------------------|--------------------|---------|----------|-------------------------------|---|---------|
| mat'l. code |                |     |           | surface 58                            | tolerance ISO 1302 | ISO 406 | ISO 1101 | projection                    | product family 58NF   | CODE JP |
| ltr         | ecn no         | dr  | date      | tolerances unless otherwise specified |                    |         | mm       | mm                            | title<br>1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat. No. HFWR_R-2ST_LF) |         |
| A           | J04-0027       | H.T | 4/6/'04   | angles                                | linear             | ±0.2    |          |                               |   |         |
| B           | J05-0056       | H.T | 2/4/'05   |                                       |                    |         | scale    | dwg no JSA 95925              | sheet 1 of 1  | size A4 |
| C           | J05-0732       | H.T | 10/28/'05 |                                       |                    |         |          |                               |   |         |
| D           | J06-0413       | H.T | 10/4/'06  | dr                                    |                    |         |          | type Product Customer Drawing |   |         |
|             |                |     |           | enrg                                  |                    |         |          |                               |   |         |
|             |                |     |           | chr                                   |                    |         |          |                               |   |         |
|             |                |     |           | appd                                  |                    |         |          |                               |   |         |
| sheet index | revision sheet | D   | 1         |                                       |                    |         |          |                               |   | Rev. D  |

SC-HFWR02 JSA95923 form: A4



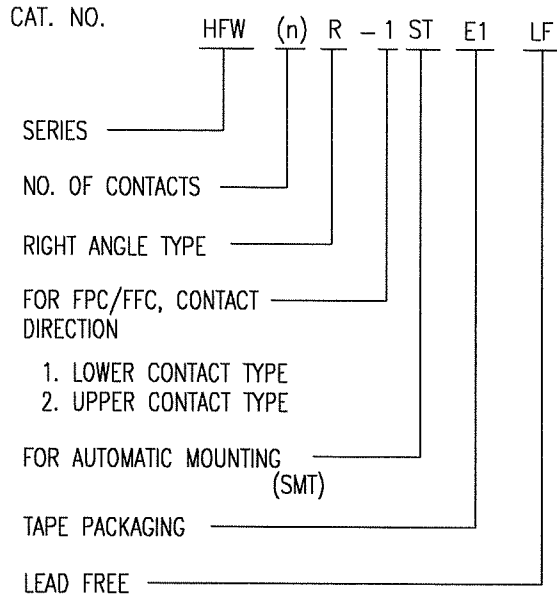
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CAT. NO. & DIMENSIONS

| (NOTE4) | NO. OF CONTACTS (n) | CAT. NO. (NOTE2) | DIMENSIONS (NOTE3) |         |         |
|---------|---------------------|------------------|--------------------|---------|---------|
|         |                     |                  | E ± 5              | F ± 0.3 | G ± 0.1 |
|         | 4                   | HFW4R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 5                   | HFW5R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 6                   | HFW6R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 7                   | HFW7R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 8                   | HFW8R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 9                   | HFW9R-1/2STE1LF  | 28.4               | 24      | —       |
|         | 10                  | HFW10R-1/2STE1LF | 28.4               | 24      | —       |
|         | 11                  | HFW11R-1/2STE1LF | 28.4               | 24      | —       |
|         | 12                  | HFW12R-1/2STE1LF | 28.4               | 24      | —       |
|         | 13                  | HFW13R-1/2STE1LF | 28.4               | 24      | —       |
|         | 14                  | HFW14R-1/2STE1LF | 28.4               | 24      | —       |
|         | 15                  | HFW15R-1/2STE1LF | 36.4               | 32      | 28.4    |
|         | 16                  | HFW16R-1/2STE1LF | 36.4               | 32      | 28.4    |
|         | 17                  | HFW17R-1/2STE1LF | 36.4               | 32      | 28.4    |
|         | 18                  | HFW18R-1/2STE1LF | 36.4               | 32      | 28.4    |
|         | 19                  | HFW19R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 20                  | HFW20R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 21                  | HFW21R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 22                  | HFW22R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 23                  | HFW23R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 24                  | HFW24R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 25                  | HFW25R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 26                  | HFW26R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 27                  | HFW27R-1/2STE1LF | 48.4               | 44      | 40.4    |
| *       | 28                  | HFW28R-1/2STE1LF | 48.4               | 44      | 40.4    |
| *       | 29                  | HFW29R-1/2STE1LF | 48.4               | 44      | 40.4    |
|         | 30                  | HFW30R-1/2STE1LF | 60.4               | 56      | 52.4    |

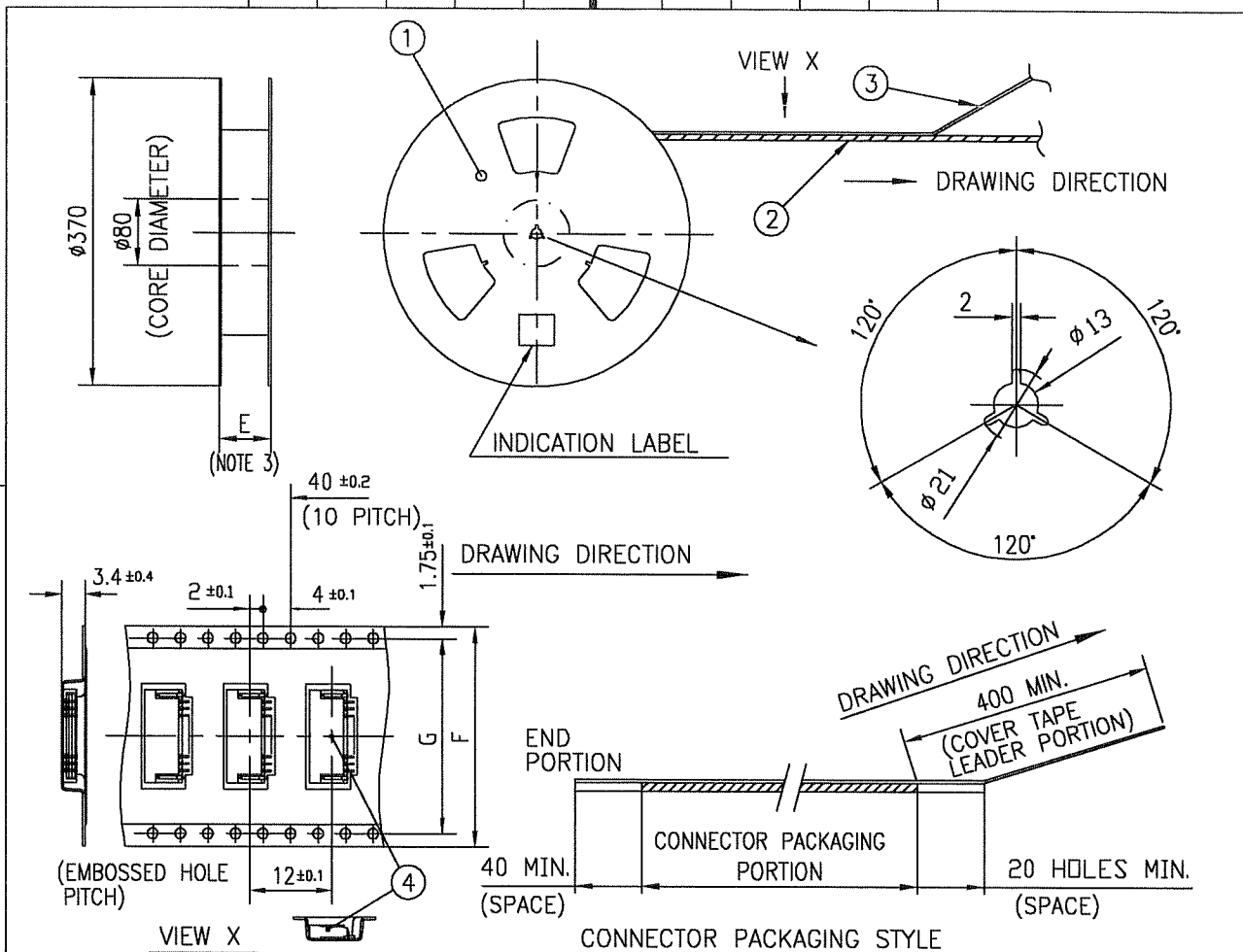


NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPE WITH AUTOMATIC MOUNTING (SMT).
2. THIS CATALOG NO. INDICATES PLASTIC TAPE PACKAGED CONNECTOR.
3. SEE PART DRAWINGS FOR DIMENSIONS E~G.
4. PLEASE CONSULT US IN CASE OF USING PARTS WITH \* MARK.

|             |  |            |  |                         |  |                              |  |            |  |                                       |  |   |  |
|-------------|--|------------|--|-------------------------|--|------------------------------|--|------------|--|---------------------------------------|--|---|--|
| mat'l. code |  |            |  | surface 58 / ISO 1302 ✓ |  | tolerance ISO 406 / ISO 1101 |  | projection |  | product family 58NF                   |  | CODE JP   |  |
| ltr         |  |            |  | ecn no                  |  | dr                           |  | date       |  | tolerances unless otherwise specified |  | title   |  |
| A           |  |            |  | J04-0027                |  | H.T                          |  | 4/6/04     |  | angles                                |  | CAT. NO. TABLE FOR PLASTIC TAPE PACKAGED 1mm SPACING SMT CONN. (Cat.No. HFW__R-1/2STE1LF) |  |
| B           |  |            |  | J05-0056                |  | H.T                          |  | 2/4/05     |  | linear                                |  | mm  |  |
| C           |  |            |  | J06-0413                |  | H.T                          |  | 10/4/06    |  | scale X                               |  | dwg no  |  |
|             |  |            |  |                         |  |                              |  |            |  | sheet 1 of 1                          |  | size  |  |
|             |  |            |  |                         |  |                              |  |            |  | JSA 95926                             |  | A4  |  |
|             |  |            |  |                         |  |                              |  |            |  | type                                  |  | Product Customer Drawing  |  |
| sheet index |  | revision C |  | sheet 1                 |  |                              |  |            |  |                                       |  | Rev. C  |  |





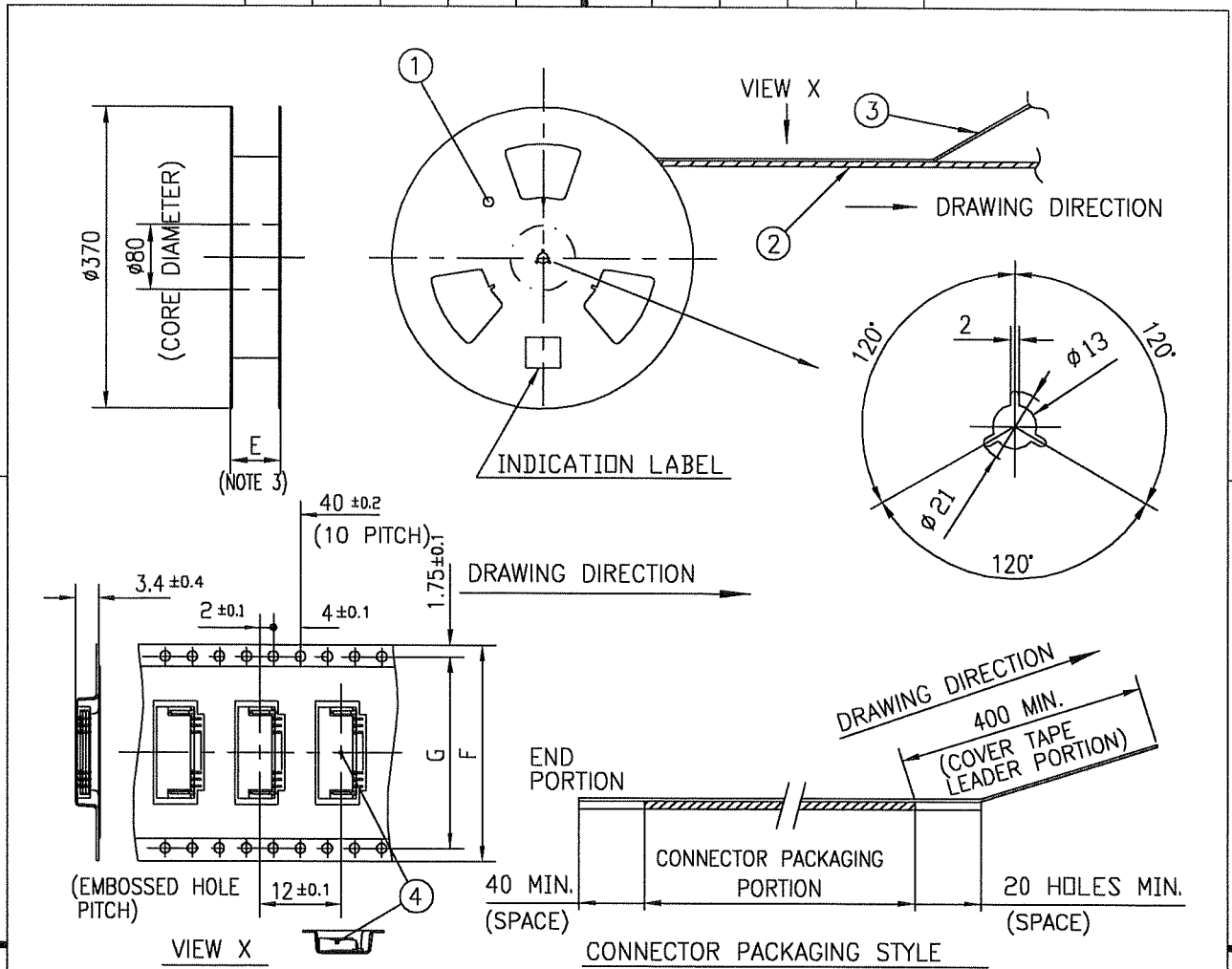
| PT. NO. | PARTS NAME             | CAT. NO.       | MATERIAL          | Q'TY | NOTE               |
|---------|------------------------|----------------|-------------------|------|--------------------|
| 1       | REEL                   | —              | CARDBOARD         | 1    | COLOR:WHITE        |
| 2       | PLASTIC (EMBOSSD) TAPE | —              | PET               | —    | COLOR:TRANSPARENCY |
| 3       | COVER                  | —              | POLYESTER         | —    | COLOR:TRANSPARENCY |
| 4       | CONNECTOR              | HFW__R-1ST__LF | SEE ATTACHED DWG. | 2000 | LOWER CONTACT TYPE |

NOTES

1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE FPC/FFC 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 (EMBOSSD) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.

|             |                |  |          |                                       |                               |         |
|-------------|----------------|--|----------|---------------------------------------|-------------------------------|---------|
| mat'l. code |                | surface 58 / tolerance ISO 1302 ✓ / ISO 406 / ISO 1101 |          | projection                            | product family 58NF           | CODE JP |
| ltr         | ecn no         | dr   | date     | tolerances unless otherwise specified | title                         |         |
| A           | J04-0027       | H.T  | 4/6/'04  | angles linear ±5                      | 1mm SPACING SMT CONNECTOR     |         |
| B           | J05-0056       | H.T  | 2/4/'05  | ±5'                                   | (Cat.No. HFW__R-1STE1LF)      |         |
| C           | J06-0413       | H.T  | 10/4/'06 | mm                                    | scale X                       |         |
|             |                |  |          | dr                                    | dwg no sheet 1 of 1 size      |         |
|             |                |  |          | enr                                   | JSA 95927 A4                  |         |
|             |                |  |          | chr                                   | type Product Customer Drawing |         |
|             |                |  |          | appd                                  |                               |         |
| sheet index | revision sheet | C  | 1        | Rev. C                                |                               |         |

SC-HFWR02 JSA95926 form: A4



| PT. NO. | PARTS NAME             | CAT. NO.        | MATERIAL          | Q'TY | NOTE               |
|---------|------------------------|-----------------|-------------------|------|--------------------|
| 1       | REEL                   | ---             | CARDBOARD         | 1    | COLOR:WHITE        |
| 2       | PLASTIC (EMBOSSD) TAPE | ---             | PET               | ---  | COLOR:TRANSPARENCY |
| 3       | COVER                  | ---             | POLYESTER         | ---  | COLOR:TRANSPARENCY |
| 4       | CONNECTOR              | HFW__R-2ST__-LF | SEE ATTACHED DWG. | 2000 | UPPER CONTACT TYPE |

NOTES

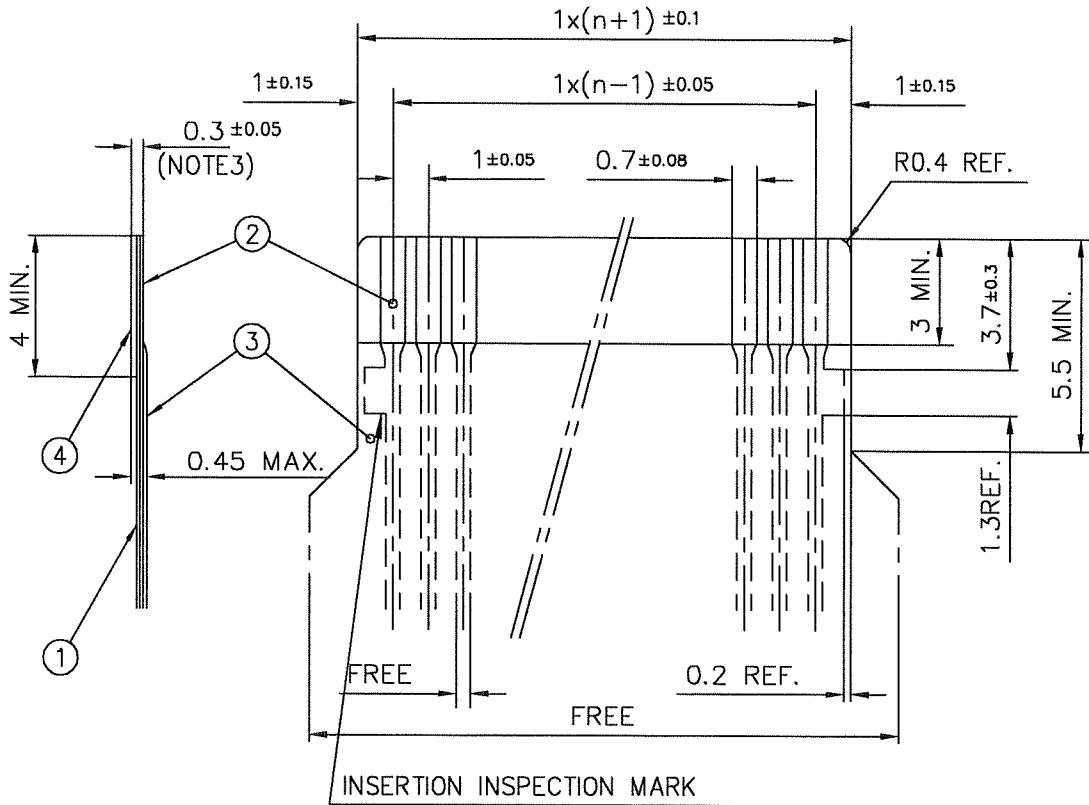
1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPES WITH AUTOMATIC MOUNTING (SMT).
2. SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSSD) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.

|             |  |                         |  |                              |  |            |  |                                       |  |                               |  |
|-------------|--|-------------------------|--|------------------------------|--|------------|--|---------------------------------------|--|-------------------------------|--|
| mat'l. code |  | surface 58 / ISO 1302 ✓ |  | tolerance ISO 406 / ISO 1101 |  | projection |  | product family 58NF                   |  | CODE JP                       |  |
| ltr         |  | ecn no                  |  | dr                           |  | date       |  | tolerances unless otherwise specified |  | title                         |  |
| A           |  | J04-0027                |  | H.T                          |  | 4/6/'04    |  | ±5                                    |  | 1mm SPACING SMT CONNECTOR     |  |
| B           |  | J05-0056                |  | H.T                          |  | 2/4/'05    |  | mm                                    |  | (Cat.No. HFW__R-2STE1LF)      |  |
| C           |  | J06-0413                |  | H.T                          |  | 10/4/'06   |  | scale X                               |  | dwg no                        |  |
|             |  |                         |  |                              |  |            |  | FCJ                                   |  | sheet 1 of 1                  |  |
|             |  |                         |  |                              |  |            |  |                                       |  | JSA 95928                     |  |
|             |  |                         |  |                              |  |            |  |                                       |  | size A4                       |  |
|             |  |                         |  |                              |  |            |  |                                       |  | type Product Customer Drawing |  |
| sheet index |  | revision sheet          |  | C                            |  | 1          |  |                                       |  | Rev. C                        |  |

SC-HFWR02 JSA95926 form: A4

RECOMMENDED CABLE (FPC)

n : NO. OF CONDUCTORS



| PT. NO. | DESCRIPTION     | MATERIAL  | THICKNESS ( $\mu\text{m}$ ) |
|---------|-----------------|---|-----------------------------|
| 1       | BASE FILM       | POLYIMIDE OR POLYESTER OR EQUIVALENT              | 25                          |
| 2       | CONDUCTOR       | COPPER FOIL(PLATING : SOLDER $1\mu\text{m}$ MIN.) | 35                          |
| 3       | OVERLAY         | POLYIMIDE OR POLYESTER OR EQUIVALENT              | —                           |
| 4       | SUPPORTING TAPE | POLYESTER OR POLYIMIDE OR EQUIVALENT              | 188                         |

NOTES

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

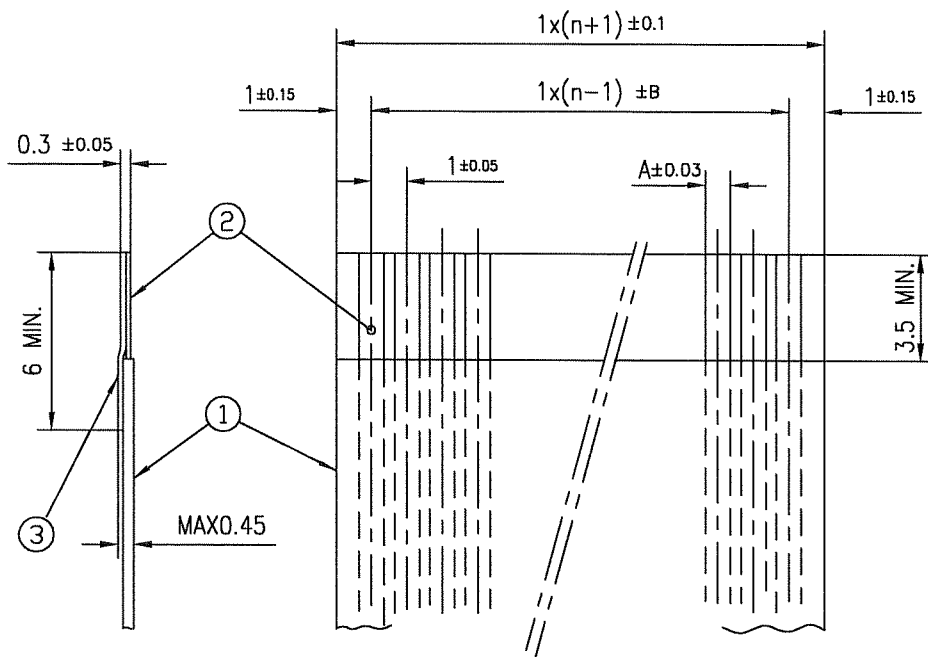
|             |                |     |          |  |  |            |  |  |  |                          |  |        |
|-------------|----------------|-----|----------|--|--|------------|--|--|--|--------------------------|--|--------|
| mat'l. code |                |     |          | surface 58 / tolerance ISO 1302 ✓ ISO 406 ISO 1101 |  | projection |  | product family 58NF                          |  | CODE JP                  |  |        |
| ltr         | ecn no         | dr  | date     | tolerances unless otherwise specified              |  |            |  | title  |  |                          |  |        |
| A           | J06-0413       | H.T | 10/4/'06 | angles linear                                      |  |            |  | RECOMMENDED CABLE<br>(Cat. No. HFW__R-1/2__) |  |                          |  |        |
|             |                |     |          | mm   |  |            |  | scale $\times$                               |  |                          |  |        |
|             |                |     |          | dr <i>H. Saito</i> 10/14/'06                       |  |            |  | dwg no                                       |  | sheet 1 of 1             |  | size   |
|             |                |     |          | enr <i>H. Saito</i> 10/15/'06                      |  |            |  | JSA 93573                                    |  |                          |  | A4     |
|             |                |     |          | chr <i>J.B.</i> 10/12/'06                          |  |            |  | type   |  | Product Customer Drawing |  |        |
|             |                |     |          | app <i>S. Mieda</i> 10/12/'06                      |  |            |  |  |  |                          |  |        |
| sheet index | revision sheet | A   | 1        |  |  |            |  |  |  |                          |  | Rev. A |

form: A4



RECOMMENDED CABLE (FFC)

n : NO. OF CONDUCTORS



| (NOTE 3) | DIMENSION A | TOLERANCE B |
|----------|-------------|-------------|
| 1        | 0.7         | 0.1         |
| 2        | 0.6         | 0.07        |

| PT. NO. | DESCRIPTION     | MATERIAL                                | NOTE                               |
|---------|-----------------|---|------------------------------------|
| 1       | INSULATOR       | FLAME RESISTING POLYESTER OR EQUIVALENT | _____                              |
| 2       | CONDUCTOR       | COPPER FOIL                             | PLATING: TIN OR SOLDER<br>1μm MIN. |
| 3       | SUPPORTING TAPE | FLAME RESISTING POLYESTER OR EQUIVALENT | _____                              |

NOTES

1. NO BURR AT EACH PORTION.
2. NO PEELING IN COMMON USE.
3. BOTH COMBINATION IS ALLOWED.

|             |                |     |         |                                       |                              |            |                               |         |
|-------------|----------------|-----|---------|---------------------------------------|------------------------------|------------|-------------------------------|---------|
| mat'l. code |                |     |         | surface 58 / ISO 1302                 | tolerance ISO 406 / ISO 1101 | projection | product family 58NF           | CODE JP |
| ltr         | ecn no         | dr  | date    | tolerances unless otherwise specified |                              | mm         | title                         |         |
| 1           | ---            | T.M | 4/30/02 | angles                                | linear                       |            | RECOMMENDED CABLE             |         |
| A           | J06-0413       | H.T | 10/4/06 |                                       |                              | scale X    | (Cat. No. HFW__R-1/2__)       |         |
|             |                |     |         | dr                                    | <i>[Signature]</i> 10/10/06  |            | sheet 1 of 1 size             |         |
|             |                |     |         | enrg                                  | <i>[Signature]</i> 10/10/06  |            | JSA 93574 A4                  |         |
|             |                |     |         | chr                                   | <i>[Signature]</i> 10/10/06  |            | type Product Customer Drawing |         |
|             |                |     |         | appd                                  | <i>[Signature]</i> 10/10/06  |            |                               |         |
| sheet index | revision sheet | A   | 1       |                                       |                              |            |                               | Rev. A  |