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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 58<br>ISO 1302                 |        | tolerance<br>ISO 406<br>ISO 1101 |  | projection<br>  |  | product family 58NF                                                                   |  | CODE<br>JP |    |
| ltr         | ecn no   | dr             | date     | tolerances, unless otherwise specified |        |                                  |  |                 |  |                                                                                       |  |            |    |
| A           | J05-0056 | H.T            | '05/2/4  |                                        |        |                                  |  |                 |  |                                                                                       |  |            |    |
| B           | J06-0413 | H.T            | 10/4/'06 | angles                                 | linear |                                  |  | mm              |  | title<br>1mm SPACING FPC/FFC CONNECTOR DOCUMENT LIST<br>(Cat. No. : HFW__R-1/2STE1LF) |  |            |    |
|             |          |                |          |                                        |        |                                  |  | scale $\propto$ |  | dwg no sheet 1 of 1 size                                                              |  |            |    |
|             |          |                |          | dr                                     |        | 10/31/06                         |  |                 |  | JSA 96335                                                                             |  |            | A4 |
|             |          |                |          | enr                                    |        | 10/31/06                         |  |                 |  |                                                                                       |  |            |    |
|             |          |                |          | chr                                    |        | 10/31/06                         |  |                 |  |                                                                                       |  |            |    |
|             |          |                |          | appd                                   |        | 10/31/06                         |  |                 |  |                                                                                       |  |            |    |
| sheet index |          | revision sheet |          | B                                      | 1      |                                  |  |                 |  |                                                                                       |  | Rev. B     |    |

form: A4

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## CAT. NO. &amp; 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   |

CAT. NO. HFW (n) R - 1 ST \_\_ LF

SERIES HFW

NO. OF CONTACTS (n)

RIGHT ANGLE TYPE R

FOR FPC/FFC, CONTACT DIRECTION - 1

1. LOWER CONTACT TYPE

2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT) ST

PACKAGE STYLE \_\_

LEAD FREE LF

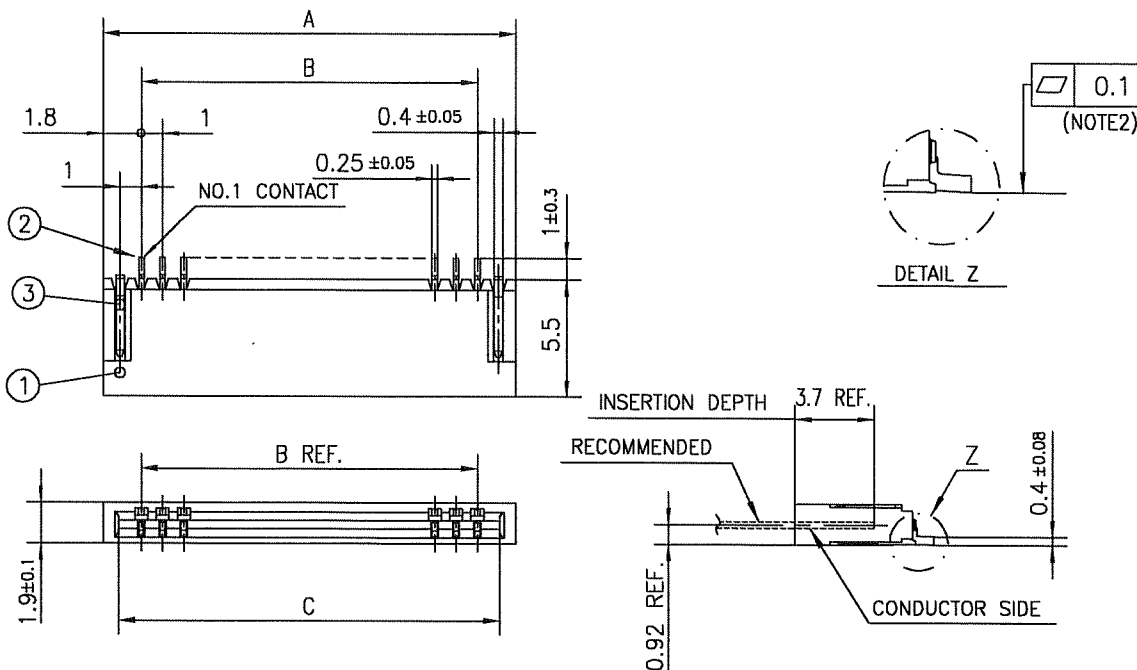
## NOTES

- THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COPE WITH AUTOMATIC MOUNTING (SMT).
- SEE PART DRAWINGS FOR DIMENSIONS A~C.
- 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 |          |                              |     | mm         |           | title                                                                    |                          |         |
| A           | J04-0027 | H.T | 4/6/04  | angles linear                          |          |                              |     | mm         |           | CAT. NO. TABLE FOR 1mm SPACING SMT CONNECTOR (Cat. No. HFW__R-1/2ST__LF) |                          |         |
| B           | J05-0056 | H.T | 2/4/05  |                                        |          |                              |     | scale X    |           |                                                                          |                          |         |
| C           | J06-0413 | H.T | 10/4/06 |                                        |          |                              |     |            |           |                                                                          |                          |         |
|             |          |     |         | dr                                     | 10/14/06 |                              | FCI |            | dwg no    |                                                                          | sheet 1 of 1             | size    |
|             |          |     |         | enr                                    | 10/14/06 |                              |     |            | JSA 95923 |                                                                          |                          | A4      |
|             |          |     |         | chr                                    | 10/12/06 |                              |     |            | type      |                                                                          | Product Customer Drawing |         |
|             |          |     |         | appd                                   | 10/12/06 |                              |     |            |           |                                                                          |                          |         |
| sheet index | revision | C   |         |                                        |          |                              |     |            |           |                                                                          |                          | Rev. C  |
|             | sheet    | 1   |         |                                        |          |                              |     |            |           |                                                                          |                          |         |

SC-HFWR02 JSA95924 95925 95926 95927 95928 93573 93574

form: A4



| 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

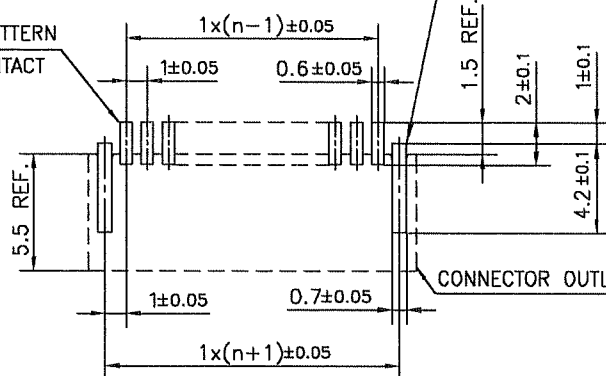
#### NOTES

1. THIS PRODUCT IS THE CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND COTES 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.

#### RECOMMENDED PC BOARD LAYOUT (COMPONENT SIDE)

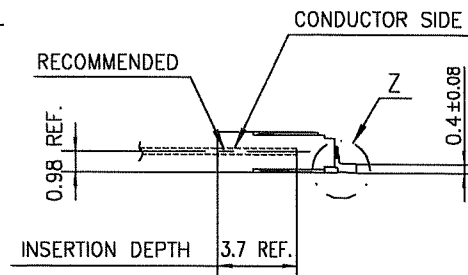
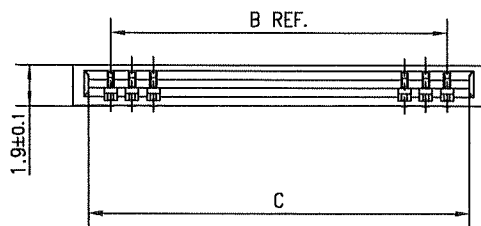
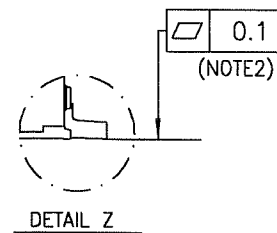
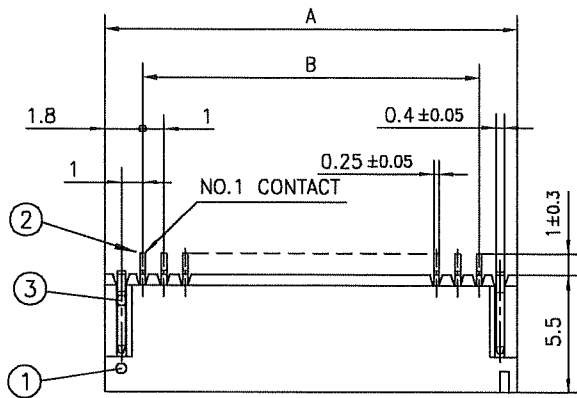
##### BASIC PATTERN

NO.1 CONTACT POSITION



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

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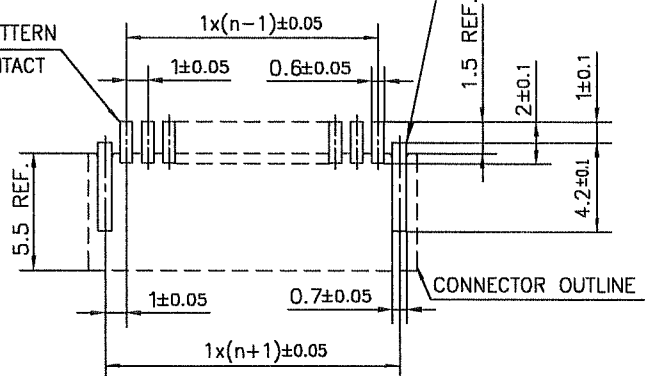


| PT. NO. | PARTS NAME     | MATERIAL                              | Q'TY | NOTE        |
|---------|----------------|---------------------------------------|------|-------------|
| 1       | HOUSING        | PA6T RESIN GLASS REINFORCED (UL94V-0) | 1    | COLOR:BLACK |
| 2       | CONTACT        | PHOSPHOR 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 COPE 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         |  | title                                                                 |  |         |        |
| A           | J04-0027 | H.T | 4/6/'04   | angles                                                 | linear   | mm         |  | 1mm SPACING SURFACE MOUNT FPC/FFC CONNECTOR (Cat. No. HFW__R-2ST__LF) |  |         |        |
| B           | J05-0056 | H.T | 2/4/'05   |                                                        |          | scale X    |  | dwg no sheet 1 of 1 size                                              |  |         |        |
| C           | J05-0732 | H.T | 10/28/'05 |                                                        |          |            |  | JSA 95925 A4                                                          |  |         |        |
| D           | J06-0413 | H.T | 10/4/'06  | dr                                                     | 12/14/06 |            |  | type Product Customer Drawing                                         |  |         |        |
|             |          |     |           | enr                                                    | 10/10/06 |            |  |                                                                       |  |         |        |
|             |          |     |           | chr                                                    | 10/12/06 |            |  |                                                                       |  |         |        |
|             |          |     |           | appd                                                   | 10/12/06 |            |  |                                                                       |  |         |        |
| sheet index | revision | D   |           |                                                        |          |            |  |                                                                       |  |         | Rev. D |
|             | sheet    | 1   |           |                                                        |          |            |  |                                                                       |  |         |        |

SC-HFWR02 JSA95923  
form: A4

## CAT. NO. &amp; 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    |

CAT. NO.

HFW (n) R - 1 ST E1 LF

SERIES

NO. OF CONTACTS

RIGHT ANGLE TYPE

FOR FPC/FFC, CONTACT DIRECTION

1. LOWER CONTACT TYPE
2. UPPER CONTACT TYPE

FOR AUTOMATIC MOUNTING (SMT)

TAPE PACKAGING

LEAD FREE

## 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.

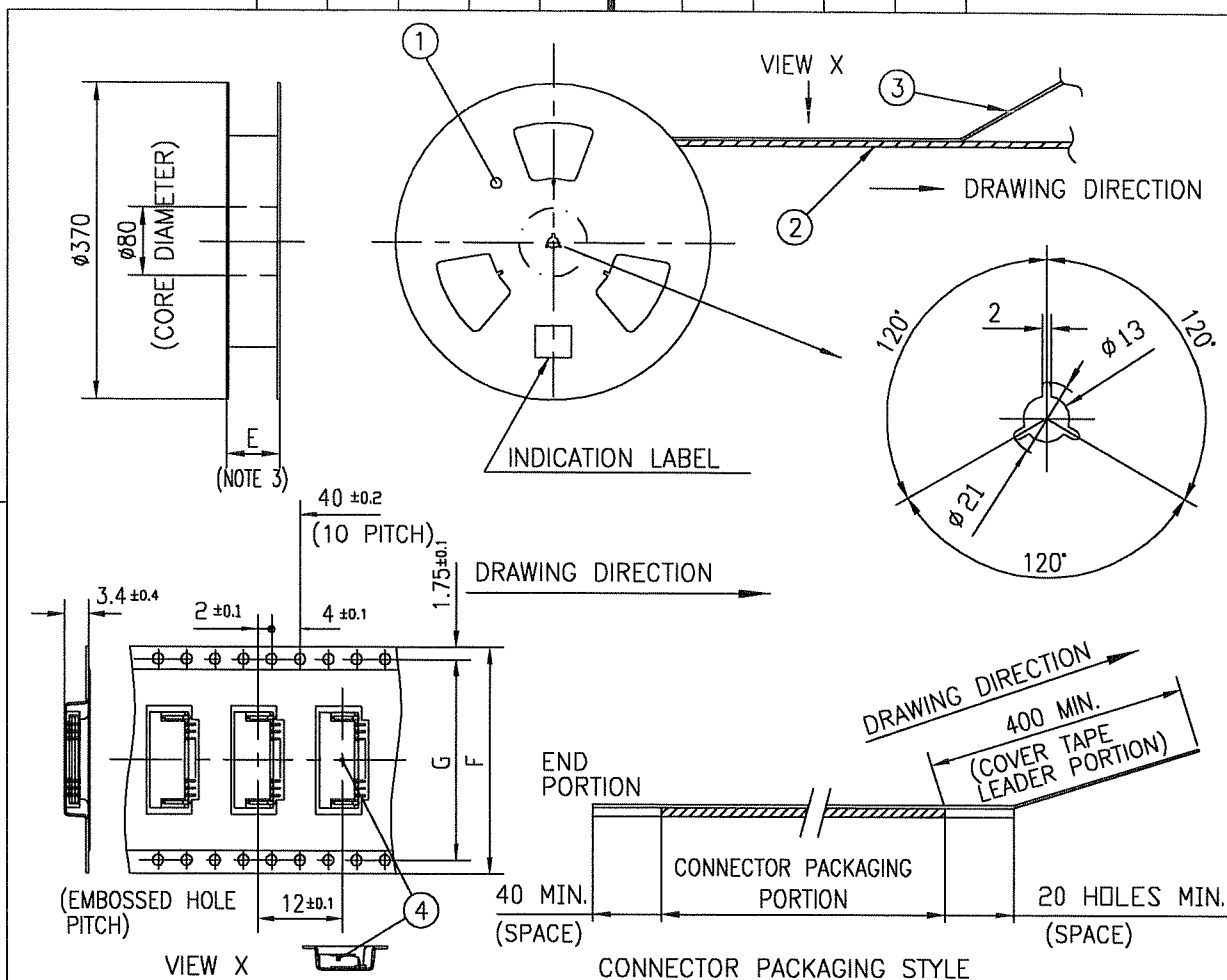
|             |          |     |         |                                        |          |                            |     |            |           |                                                                                           |                          |         |        |
|-------------|----------|-----|---------|----------------------------------------|----------|----------------------------|-----|------------|-----------|-------------------------------------------------------------------------------------------|--------------------------|---------|--------|
| 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 |          |                            |     | mm         |           | title                                                                                     |                          |         |        |
| A           | J04-0027 | H.T | 4/6/04  | angles linear                          |          |                            |     | mm         |           | 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  |                                        |          |                            |     |            |           |                                                                                           |                          |         |        |
| C           | J06-0413 | H.T | 10/4/06 |                                        |          |                            |     | scale X    |           |                                                                                           |                          |         |        |
|             |          |     |         | dr                                     | 10/4/06  |                            | FCI |            | dwg no    |                                                                                           | sheet 1 of 1             |         | size   |
|             |          |     |         | enrg                                   | 10/4/06  |                            |     |            | JSA 95926 |                                                                                           |                          |         | A4     |
|             |          |     |         | chr                                    | 10/12/06 |                            |     |            | type      |                                                                                           | Product Customer Drawing |         |        |
|             |          |     |         | appd                                   | 10/12/06 |                            |     |            |           |                                                                                           |                          |         |        |
| sheet index | revision | C   |         |                                        |          |                            |     |            |           |                                                                                           |                          |         | Rev. c |
|             | sheet    | 1   |         |                                        |          |                            |     |            |           |                                                                                           |                          |         |        |

SC-HFWR02 JSA95923 95927 95928 form: A4

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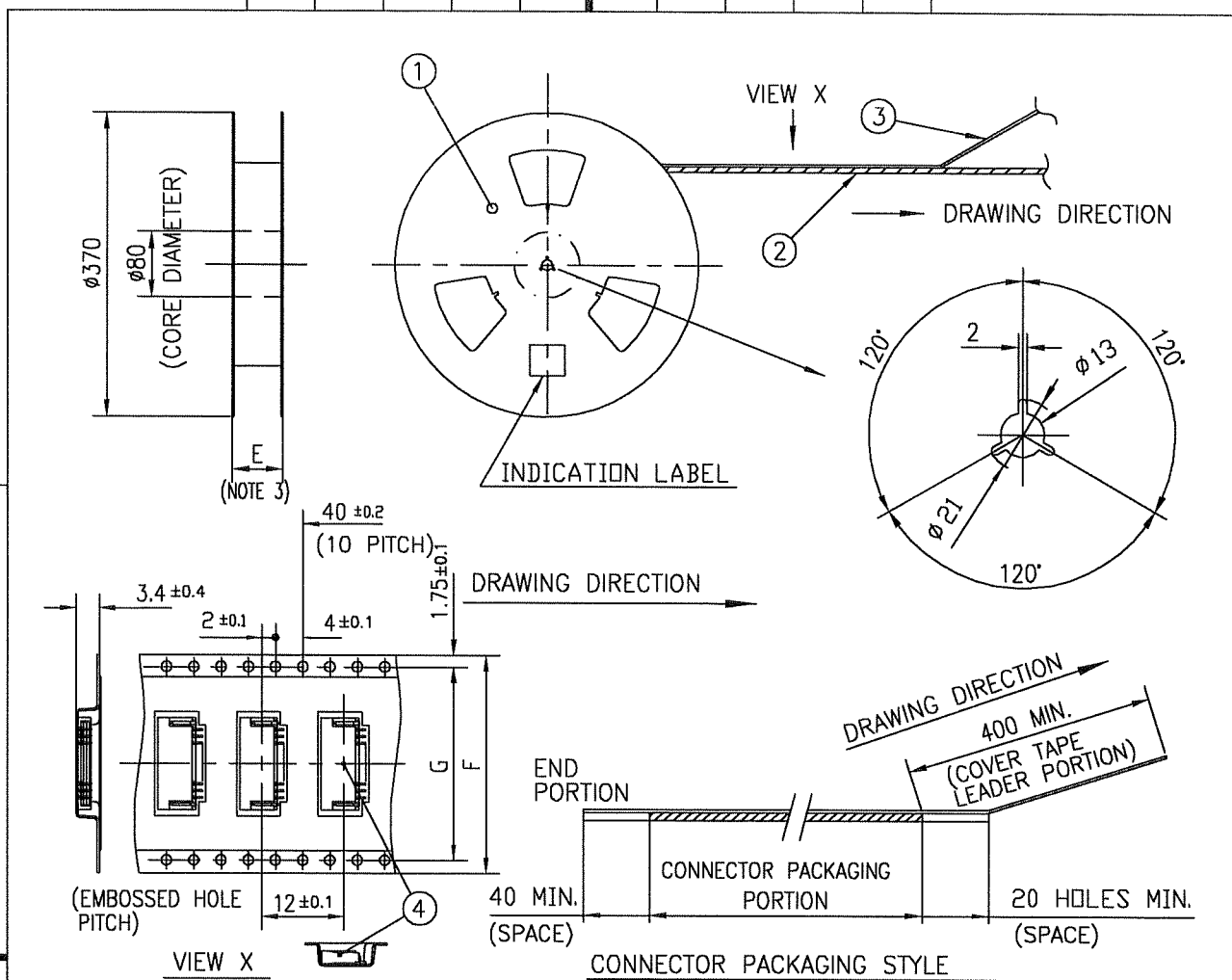
| PT. NO. | PARTS NAME               | CAT. NO.       | MATERIAL          | Q'TY | NOTE               |
|---------|--------------------------|----------------|-------------------|------|--------------------|
| 1       | REEL                     | —              | CARDBOARD         | 1    | COLOR:WHITE        |
| 2       | PLASTIC (EMBOSSSED) 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 CYPES 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 (EMBOSSSED) TAPE AND REEL.
3. E DIMENSION IS PORTION OF THE CORE.

|             |          |            |          |                                       |  |                            |  |            |  |                           |  |              |  |
|-------------|----------|------------|----------|---------------------------------------|--|----------------------------|--|------------|--|---------------------------|--|--------------|--|
| mat'l. code |          |            |          | surface 58/ tolerance ISO 1302 ✓      |  | tolerance ISO 406 ISO 1101 |  | projection |  | product family 58NF       |  | CODE JP      |  |
| ltr         | ecn no   | dr         | date     | tolerances unless otherwise specified |  | mm                         |  | mm         |  | title                     |  |              |  |
| A           | J04-0027 | H.T        | 4/6/'04  | angles linear                         |  | ±5                         |  | mm         |  | 1mm SPACING SMT CONNECTOR |  |              |  |
| B           | J05-0056 | H.T        | 2/4/'05  | ±5'                                   |  |                            |  | scale X    |  | (Cat.No. HFW__R-1STE1LF)  |  |              |  |
| C           | J06-0413 | H.T        | 10/4/'06 |                                       |  |                            |  |            |  |                           |  |              |  |
|             |          |            |          | dr                                    |  | 10/16/06                   |  | FCJ        |  | dwg no                    |  | sheet 1 of 1 |  |
|             |          |            |          | enr                                   |  | 10/16/06                   |  |            |  | JSA 95927                 |  | A4           |  |
|             |          |            |          | chr                                   |  | 10/12/06                   |  |            |  |                           |  |              |  |
|             |          |            |          | appd                                  |  | 10/12/06                   |  |            |  |                           |  |              |  |
| sheet index |          | revision C |          | sheet 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

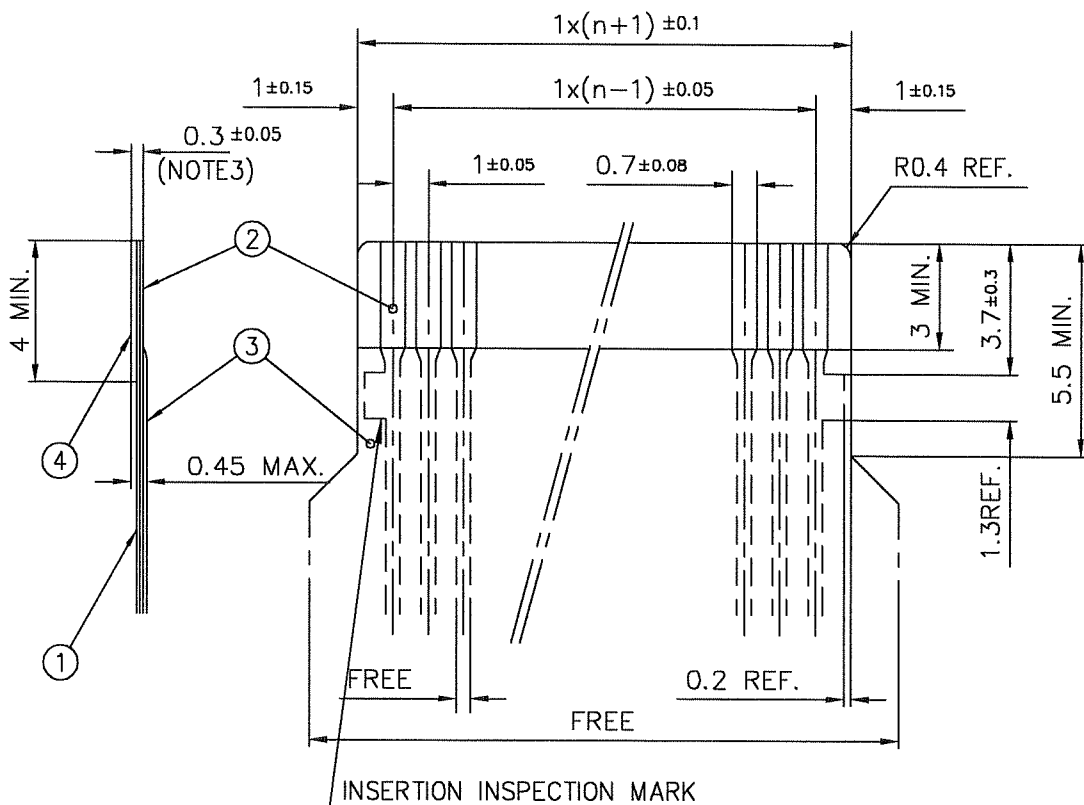
1. THIS IS PLASTIC TAPE PACKAGED CONNECTOR DESIGNED TO TERMINATE FPC/FFC AND CYPES WITH AUTOMATIC MOUNTING (SMT).
2. SEE JIS C 0806 (PACKING OF ELECTRONIC COMPONENTS ON CONTINUOUS TAPES (SURFACE MOUNTING DEVICES)) FOR SHAPE AND DIMENSIONS OF PLASTIC (EMBOSSD) TAPE AND REEL.
3. E DIMENSION IS PORTION 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 |  |                            |  | mm         |  | 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'                                   |  |                            |  | scale X    |  | (Cat.No. HFW__R-2STE1LF)      |  |         |  |
| C           | J06-0413 | H.T        | 10/4/'06 | dr                                    |  |                            |  | 10/14/06   |  | dwg no sheet 1 of 1 size      |  |         |  |
|             |          |            |          | enr                                   |  |                            |  | 10/12/06   |  | JSA 95928 A4                  |  |         |  |
|             |          |            |          | chr                                   |  |                            |  | 10/12/06   |  | type Product Customer Drawing |  |         |  |
|             |          |            |          | appd                                  |  |                            |  | 10/12/06   |  |                               |  |         |  |
| sheet index |          | revision C |          | sheet 1                               |  |                            |  |            |  |                               |  | Rev. C  |  |

SC-HFWR02 JSA95926  
form: A4

# RECOMMENDED CABLE (FPC)

n : NO. OF CONDUCTORS



| PT. NO. | DESCRIPTION     | MATERIAL                               | THICKNESS (μm) |
|---------|-----------------|----------------------------------------|----------------|
| 1       | BASE FILM       | POLYIMIDE OR POLYESTER OR EQUIVALENT   | 25             |
| 2       | CONDUCTOR       | COPPER FOIL(PLATING : SOLDER 1μm 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                  |  | mm         |  | title                                        |  |         |  |
| A           | J06-0413       | H.T | 10/4/06 |                                                        |  | scale X    |  | RECOMMENDED CABLE<br>(Cat. No. HFW__R-1/2__) |  |         |  |
|             |                |     |         | angles linear                                          |  |            |  | dwg no sheet 1 of 1 size                     |  |         |  |
|             |                |     |         | dr                                                     |  | FCJ        |  | JSA 93573 A4                                 |  |         |  |
|             |                |     |         | enr                                                    |  |            |  | type Product Customer Drawing                |  |         |  |
|             |                |     |         | chr                                                    |  |            |  |                                              |  |         |  |
|             |                |     |         | appd                                                   |  |            |  |                                              |  |         |  |
| sheet index | revision sheet | A   | 1       |                                                        |  |            |  | Rev. A                                       |  |         |  |

form: A4

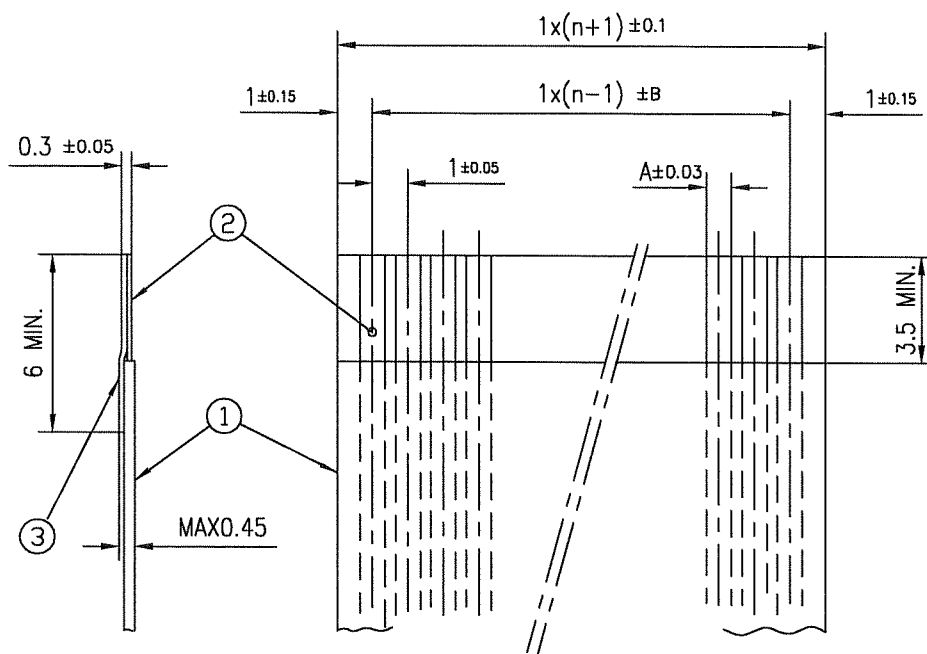
1

2



# 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                         |  |                            |  | mm         |  | RECOMMENDED CABLE       |  |              |  |
| A           | J06-0413 | H.T            | 10/4/'06 |                                       |  |                            |  | scale X    |  | (Cat. No. HFW__R-1/2__) |  |              |  |
|             |          |                |          | dr                                    |  | 10/12/06                   |  | FCI        |  | dwg no                  |  | sheet 1 of 1 |  |
|             |          |                |          | enr                                   |  | 10/14/06                   |  |            |  | JSA 93574               |  | size A4      |  |
|             |          |                |          | chr                                   |  | 10/12/06                   |  |            |  |                         |  |              |  |
|             |          |                |          | appd                                  |  | 10/12/06                   |  |            |  |                         |  |              |  |
| sheet index |          | revision sheet |          | A                                     |  | 1                          |  |            |  |                         |  | Rev. A       |  |

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