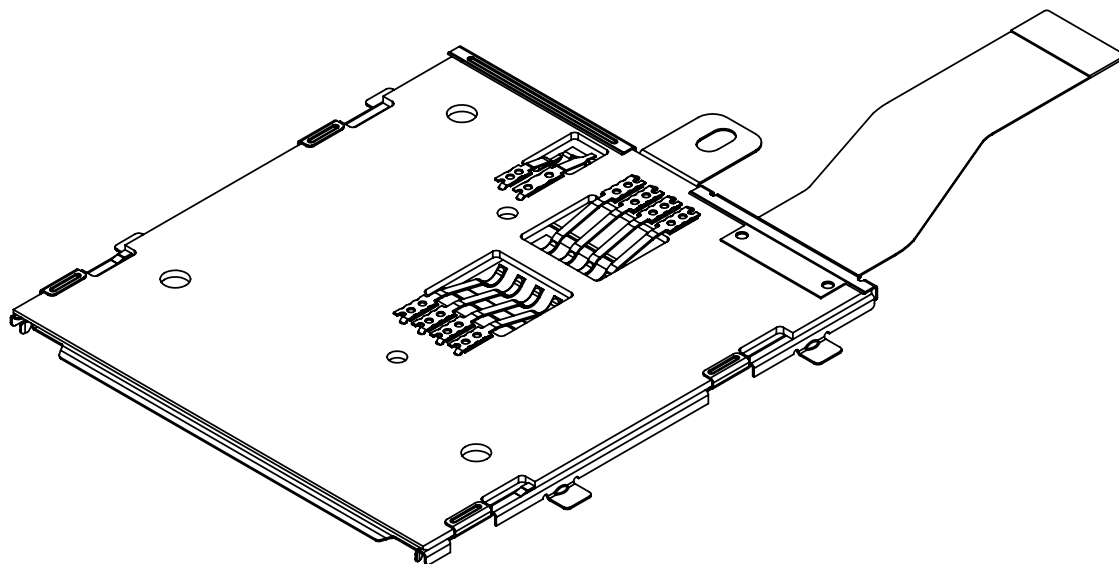




| PRODUCT NO.    | FPC                 | PACKAGING       | COMPONENTS  | LEAD FREE | PCB COLOR |
|----------------|---------------------|-----------------|-------------|-----------|-----------|
| 10010556-002LF | 10010559-002LF      | 10017475-02-002 | ELEC. PARTS | YES       | BLUE      |
| 10010556-003LF | 10105325-001        | 10017475-02-009 | N/A         | YES       | BLACK     |
| 10010556-004LF | 10056226-002LF(FFC) | 10017475-02-004 | N/A         | YES       | BLUE      |
| 10010556-006LF | 10058983-001LF      | 10017475-02-003 | N/A         | YES       | BLACK     |
| 10010556-005LF | 10056226-003LF(FFC) | 10017475-02-004 | N/A         | YES       | BLUE      |
| 10010556-007LF | 10081578-001        | 10017475-02-006 | N/A         | YES       | BLACK     |
| 10010556-008LF | 10056226-004LF(FFC) | 10017475-02-003 | N/A         | YES       | BLUE      |
| 10010556-009LF | 10083983-001(FFC)   | 10017475-02-008 | N/A         | YES       | BLUE      |
| 10010556-010LF | 10056226-005LF(FFC) | 340391-202      | N/A         | YES       | GREEN     |
| 10010556-011LF | 10087561-001        | 10017475-02-007 | N/A         | YES       | BLUE      |
| 10010556-012LF | 10087561-002        | 10017475-02-007 | N/A         | YES       | BLUE      |
| 10010556-013LF | 10088568-001        | 10017475-02-006 | N/A         | YES       | BLACK     |
| 10010556-014LF | 10087561-004        | 10017475-02-004 | N/A         | YES       | BLUE      |
| 10010556-015LF | 10099689-001(FFC)   | 10017475-02-006 | N/A         | YES       | BLACK     |
| 10010556-016LF | 10056226-006LF(FFC) | 340391-202      | N/A         | YES       | GREEN     |
| 10010556-017LF | 10056226-007LF(FFC) | 340391-202      | N/A         | YES       | GREEN     |
| 10010556-018LF | 10107293-001(FFC)   | 10017475-02-004 | N/A         | YES       | GREEN     |

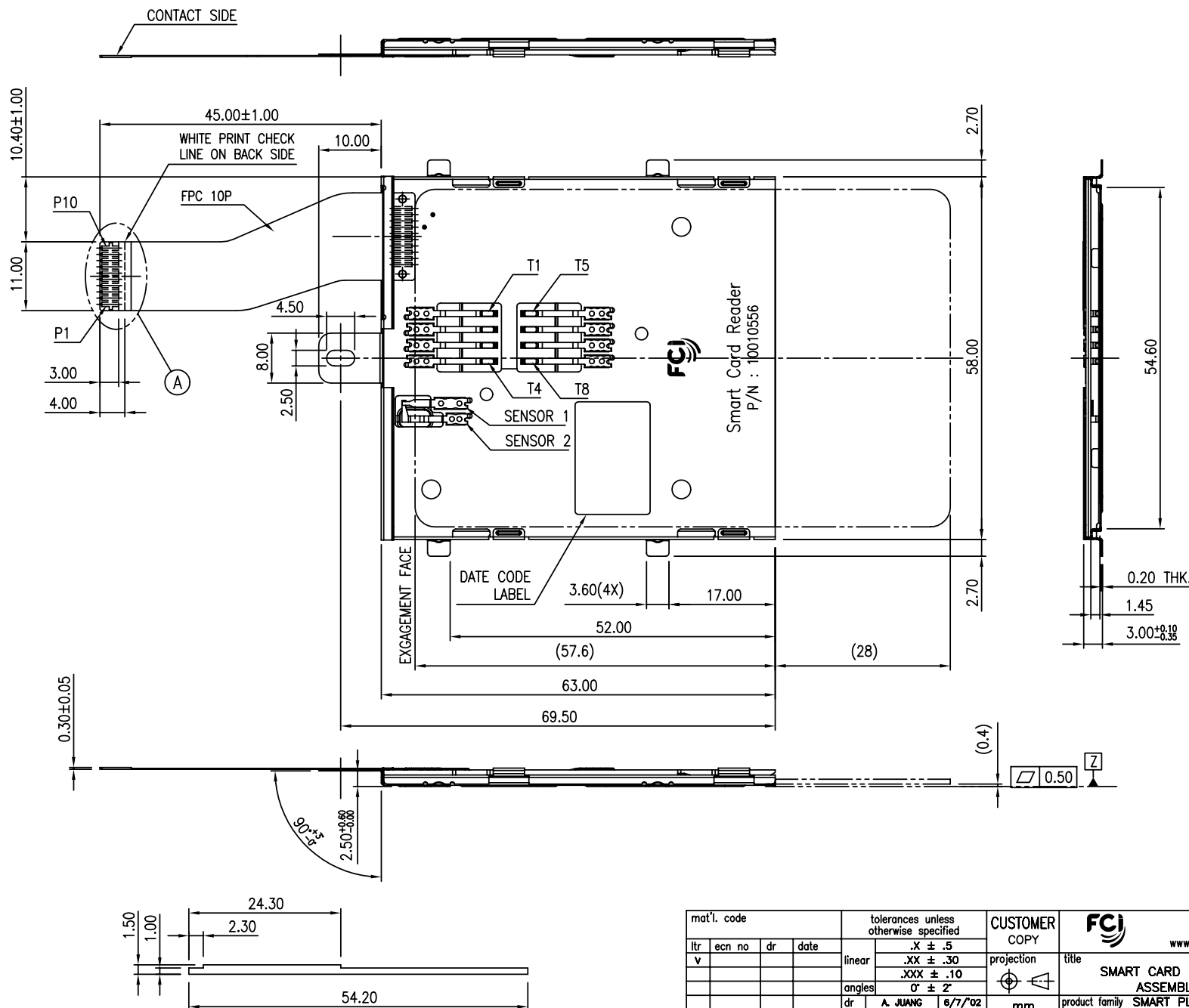


NOTE :

1. SMART CARD READER FOR LOWER PROFILE HEIGHT OF 3.0 mm.
2. TOTAL CIRCUIT RESISTANCE PER ONE LOOP SHALL NOT EXCEED 100 MILLIOHMS.
3. MATERIALS :  
CONTACTS : COPPER ALLOY, GOLD OVER NICKEL ON CONTACT AREA.  
TOP PCB : FR4.  
COVER : STAINLESS STEEL.
4. ENVIRONMENT :  
STORAGE TEMPERATURE : FROM -40°C TO 100°C.  
OPERATION TEMPERATURE : FROM -40°C TO 85°C.

| mat'l. code |                |    |          | tolerances unless otherwise specified |                  | CUSTOMER COPY |  | FCI |  | www.fciconnect.com |  |
|-------------|----------------|----|----------|---------------------------------------|------------------|---------------|--|-----|--|--------------------|--|
| ltr         | ecn no         | dr | date     |                                       | .X ± 0.5         |               |  |     |  |                    |  |
| R           | N08-0136       | SH | 07/07/08 | linear                                | .XX ± 0.30       | projection    |  |     |  |                    |  |
| S           | N08-0212       | SH | 10/06/08 |                                       | .XXX ± 0.10      |               |  |     |  |                    |  |
| T           | N09-0224       | SH | 7/15/09  | angles                                | 0° ± 2°          |               |  |     |  |                    |  |
| U           | N09-0306       | SH | 10/13/09 | dr                                    | A.JUANG 6/7'02   | MM            |  |     |  |                    |  |
| V           | N10-0058       | SH | 3/3/10   | enr                                   | A.JUANG 6/7'02   | scale         |  |     |  |                    |  |
|             |                |    |          | chr                                   | A.JUANG 6/7'02   |               |  |     |  |                    |  |
|             |                |    |          | appd                                  | JENN.TSAO 6/7'02 | NONE          |  |     |  |                    |  |
| sheet index | revision sheet |    |          |                                       |                  |               |  |     |  |                    |  |

PRODUCT NO.  
10010556-002LF



| SMART CARD | TERMINAL | FPC | FUNC.  |
|------------|----------|-----|--------|
| C4         | T4       | P1  | RFU    |
| C3         | T3       | P2  | Clock  |
| C2         | T2       | P3  | Reset  |
| C1         | T1       | P4  | Vcc    |
| SENSOR 1   | SENSOR 1 | P5  | SENSOR |
| SENSOR 2   | SENSOR 2 | P6  | SENSOR |
| C5         | T5       | P7  | Gnd    |
| C6         | T6       | P8  | Vpp    |
| C7         | T7       | P9  | I/O    |
| C8         | T8       | P10 | RFU    |

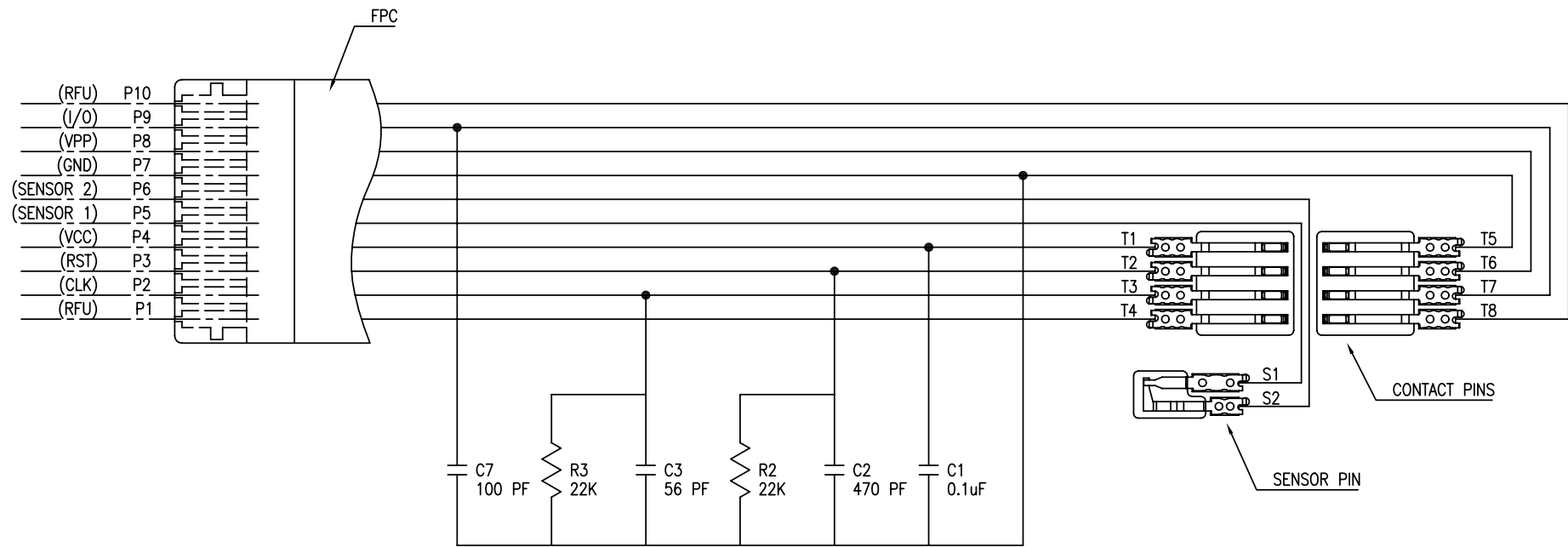
|             |                |    |      |                                       |                   |            |       |                            |  |                |  |                    |  |
|-------------|----------------|----|------|---------------------------------------|-------------------|------------|-------|----------------------------|--|----------------|--|--------------------|--|
| mat'l. code |                |    |      | tolerances unless otherwise specified |                   |            |       | CUSTOMER COPY              |  | FCI            |  | www.fciconnect.com |  |
| ltr         | ecr no         | dr | date | linear                                | .X ± .5           | projection | title | SMART CARD READER ASSEMBLY |  | product family |  | SMART PLUS         |  |
| v           |                |    |      | angles                                | .XX ± .30         | 0° ± 2°    | mm    | size                       |  | dwg no         |  | code               |  |
|             |                |    |      | dr                                    | A. JUANG 6/7/'02  | scale      | NONE  | A3                         |  | 10010556       |  | sheet 2 of 18      |  |
|             |                |    |      | enr                                   | A. JUANG 6/7/'02  |            |       |                            |  |                |  |                    |  |
|             |                |    |      | chr                                   | A. JUANG 6/7/'02  |            |       |                            |  |                |  |                    |  |
|             |                |    |      | appd                                  | JENN TSAO 6/7/'02 |            |       |                            |  |                |  |                    |  |
| sheet index | revision sheet |    |      |                                       |                   |            |       |                            |  |                |  |                    |  |

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PRODUCT NO.  
10010556-002LF



|             |                |    |      |                                       |            |         |  |                       |            |     |       |                                  |      |      |    |          |
|-------------|----------------|----|------|---------------------------------------|------------|---------|--|-----------------------|------------|-----|-------|----------------------------------|------|------|----|----------|
| mat'l. code |                |    |      | tolerances unless otherwise specified |            |         |  | CUSTOMER COPY         |            | FCI |       | www.fciconnect.com               |      |      |    |          |
| ltr         | ecn no         | dr | date | linear                                | .X ± .5    |         |  |                       | projection |     | title | SMART CARD READER                |      |      |    |          |
| v           |                |    |      |                                       | .XX ± .30  |         |  |                       |            |     |       | ELEC. PASSIVE COMPONENTS CIRCUIT |      |      |    |          |
|             |                |    |      |                                       | .XXX ± .10 |         |  |                       |            |     |       | product family SMART PLUS        |      |      |    |          |
|             |                |    |      | angles                                | 0° ± 2°    |         |  |                       | mm         |     | size  | dwg no                           | code |      |    |          |
|             |                |    |      | dr                                    | A. JUANG   | 6/7/'02 |  | scale                 |            |     |       |                                  |      | NONE | A3 | 10010556 |
|             |                |    |      | enrg                                  | A. JUANG   | 6/7/'02 |  |                       |            |     |       |                                  |      |      |    |          |
|             |                |    |      | chr                                   | A. JUANG   | 6/7/'02 |  |                       |            |     |       |                                  |      |      |    |          |
|             |                |    |      | appd                                  | JENN TSAO  | 6/7/'02 |  |                       |            |     |       |                                  |      |      |    |          |
| sheet index | revision sheet |    |      |                                       |            |         |  |                       |            |     |       |                                  |      |      |    |          |
| PDM: Rev:V  |                |    |      | STATUS: Released                      |            |         |  | Printed: Mar 12, 2010 |            |     |       | 6                                |      |      |    |          |
|             |                |    |      |                                       |            |         |  | 22926                 |            |     |       |                                  |      |      |    |          |

1

2

3

4

PART NUMBER  
0010556-003LF

FINGER TAPE  
(COLOR BLUE)

FFC

CHECKING LINE (BLACK)

11.00

4.0

SMART CARD  
ENGAGEMENT FACE

1.45

53.60±1.00

5.3

33.50

1.30

2.20

58.50

64.50

72.45 REF.  
(SMART CARD LENGTH)

1.30

2.20

(13.3)  
(REF.)

53.98 REF.  
(SMART CARD WIDTH)

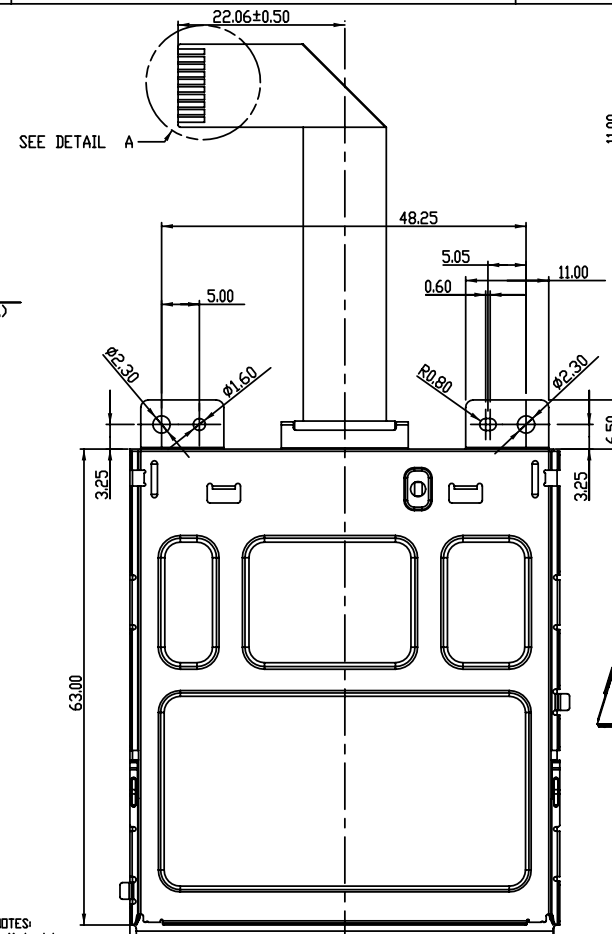
56.90

POLYESTER FILM  
COLOR:BLACK  
(THICKNESS:0.10mm)

3.0  
(REF.)

3.1  
(REF.)

(0.76)  
(SMART CARD  
THICKNESS)



#### NOTES:

##### 1. Material:

1a. METAL SHELL: STAINLESS STEEL, T=0.20mm.

1b. GUIDE BLOCK: THERMOPLASTIC, UL94V-0.

1c. PCB: FR-4, T=0.80mm, UL94V-0.

1d. FLAT CABLE: POLYESTER, UL20624, NO PRINTING, PLATING SPEC AS BELOW:

CONTACT SIDE PLATING: Au 1-3 uin.

SOLDER SIDE PLATING: Pure Tin 50uin Min.

1e. TERMINAL: PHOSPHOR BRONZE, PLATING SPEC AS BELOW:

UNDERPLATING: Ni 100 uin Min.

CONTACT PLATING: Au 30 uin Min.

SOLDER TAIL: Pure TIN 75 uin Min.

2. LEAD FREE AND ROHS COMPLIANT PRODUCT.

3. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD.

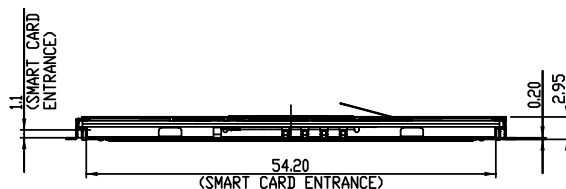
4. REFERENCE SPECIFICATION:

PRODUCT SPEC: GS-12-231.

PACKING SPEC: GS-14-829.

|         |            |                        |
|---------|------------|------------------------|
| 10      | SENSOR 2   |                        |
| 9       | SENSOR 1   |                        |
| 8       | RFU8       | C 8                    |
| 7       | RFU4       | C 4                    |
| 6       | I/O        | C 7                    |
| 5       | CLOCK      | C 3                    |
| 4       | VPP        | C 6                    |
| 3       | RESET      | C 2                    |
| 2       | GND        | C 5                    |
| 1       | VCC        | C 1                    |
| PIN NO. | ASSIGNMENT | DEFINED BY<br>ISO 7816 |

PPID LABEL  
TYPE W



| rev | ecn no   | dr    | date     |
|-----|----------|-------|----------|
| 1   | PRE      | BENNY | 08/21/09 |
| 2   | PRE      | BENNY | 08/25/09 |
| U   | N09-0306 | SH    | 10/13/09 |
| V   | -        | -     | -        |
| -   | -        | -     | -        |
| -   | -        | -     | -        |
| -   | -        | -     | -        |

|                    |             |          |                                       |                |          |                    |            |                |
|--------------------|-------------|----------|---------------------------------------|----------------|----------|--------------------|------------|----------------|
| www.fciconnect.com |             |          | surface<br>x                          | tolerance<br>x | std<br>x | projection<br>x    | MM         |                |
|                    |             |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |          |                    |            |                |
| Dr                 | BENNY CHEN  | 08/21/09 | ANGULAR                               | LINEAR         | 0.X      | ±0.25              | size<br>A4 | Scale<br>0.500 |
| Eng                | BENNY CHEN  | 08/21/09 |                                       |                | 0.XX     | ±0.15              |            |                |
| Chr                | PAUL WANG   | 08/24/09 | 0°                                    | ±X°            | 0.XXX    | ±X                 | ECN        | *              |
| Appr               | JOSAPH HSIA | 08/24/09 | Product family                        |                |          |                    | Spec ref   | *              |
|                    |             |          | title                                 |                |          | ASSEMBLY           |            |                |
|                    |             |          |                                       |                |          | SMART CARD READER  |            |                |
|                    |             |          | catalog no                            |                |          | * CUSTOMER DRAWING | sheet 4 of |                |
|                    |             |          | dwg no                                |                |          | 10010556           | Rev.<br>V  |                |

REV F - 2006-04-17

1

2

3 PDM: Rev:V

STATUS: Released

4 Printed: Mar 12, 2010



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D

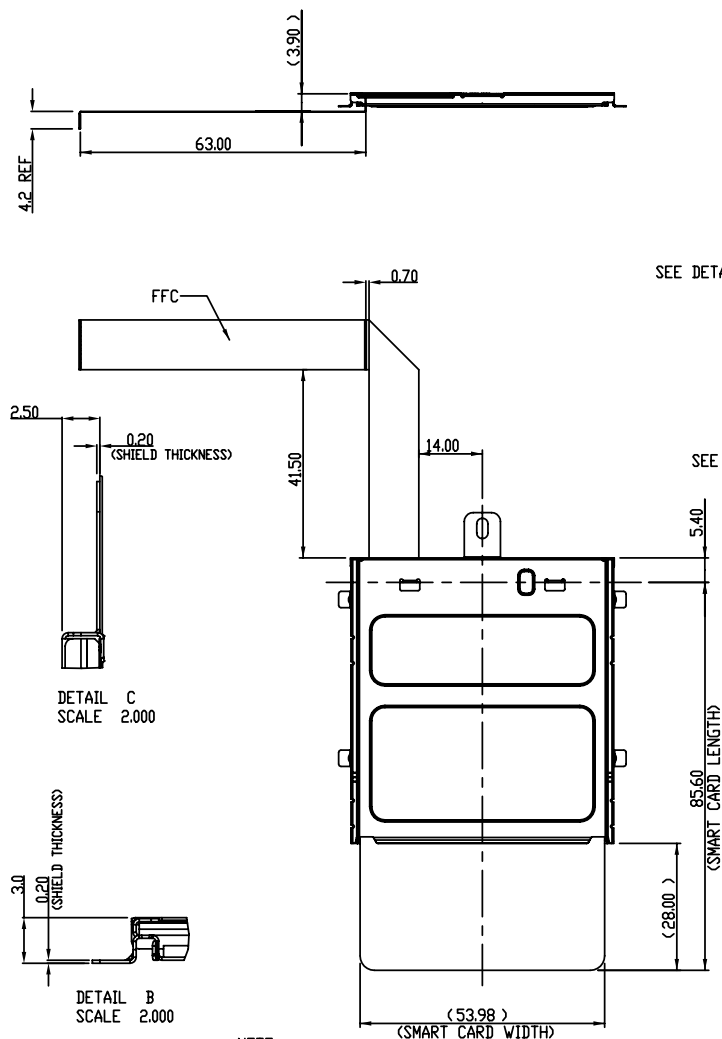
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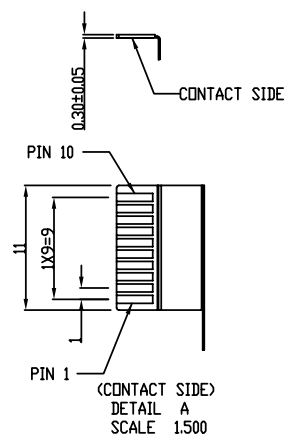


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PRODUCT NO  
10010556-004LF

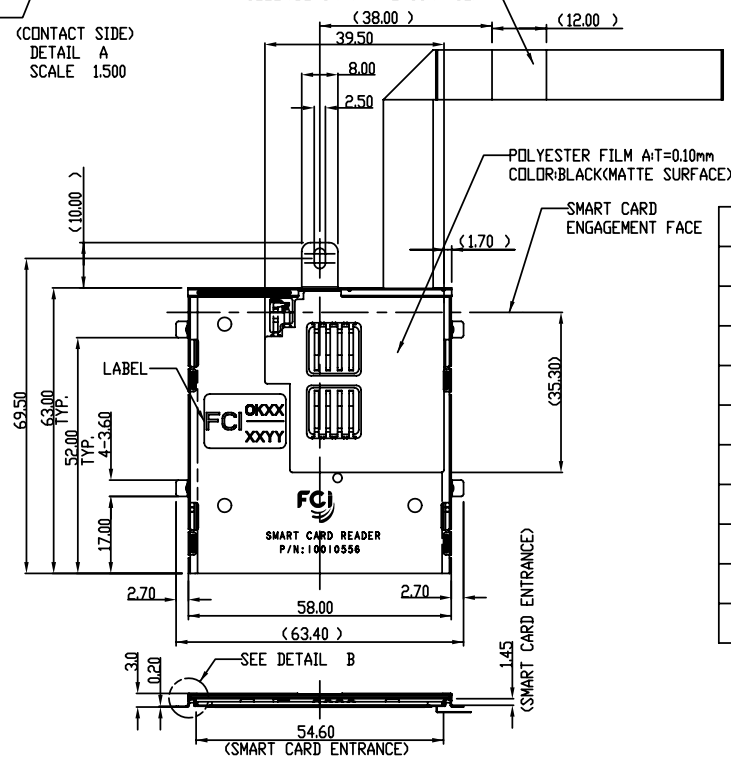


- NOTE:
1. Material:  
METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
FLEXIBLE FLAT CABLE: TOTAL LENGTH=124±2mm  
PLATING SPEC AS BELOW:  
CONTACT SURFACE: TIN PLATING.  
SOLDER TAIL: TIN PLATING.
  2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD
  3. REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS 12-231  
PACKING SPEC. GS 14-829



POLYESTER FILM B/T=0.10mm  
COLOR: BLACK (MATTE SURFACE)

SCALE 0.400



| PIN NO. | ASSIGNMENT |
|---------|------------|
| 10      | RFU        |
| 9       | I/O        |
| 8       | Vpp        |
| 7       | GND        |
| 6       | Sensor 2   |
| 5       | Sensor 1   |
| 4       | Vcc        |
| 3       | Reset      |
| 2       | Clock      |
| 1       | RFU        |

| TOLERANCE UNLESS OTHERWISE SPECIFIED |                                      |
|--------------------------------------|--------------------------------------|
| LINEAR                               | X.X=±0.5<br>X.XX=±0.3<br>X.XXX=±0.10 |
| ANGLE                                | ±0°30'                               |

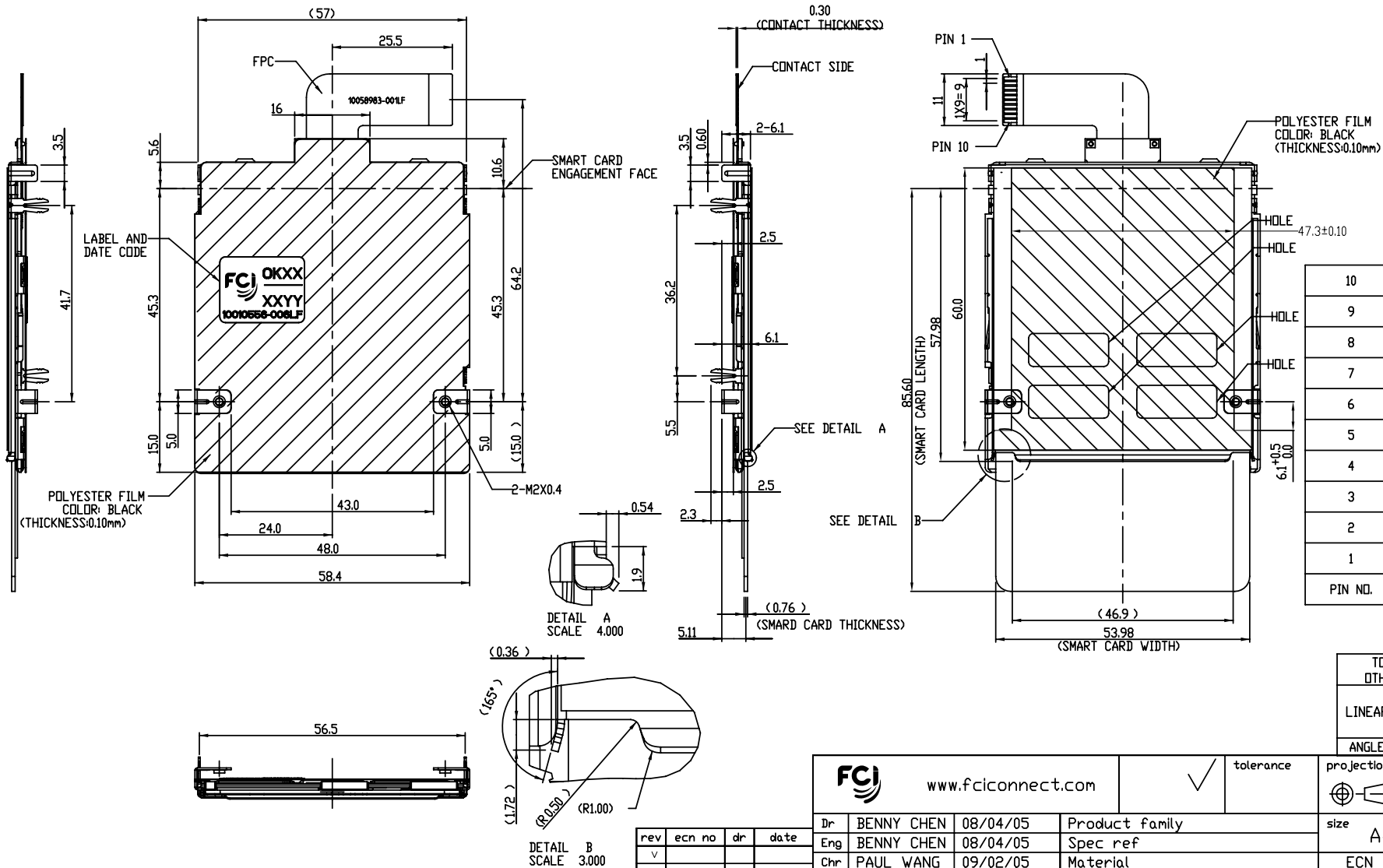
|                                                                       |        |    |      |                                                                                       |             |            |                           |                                                                                                     |                                                                                             |                  |       |            |     |
|-----------------------------------------------------------------------|--------|----|------|---------------------------------------------------------------------------------------|-------------|------------|---------------------------|-----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------|------------------|-------|------------|-----|
| Mark with<br>10010556-004LF<br>REV.<br>In area indicated<br>by X..... |        |    |      | Material                                                                              |             | Spec ref   |                           |                                                                                                     |                                                                                             |                  |       |            |     |
|                                                                       |        |    |      | Mat code                                                                              |             | ✓          | tolerance                 | projection<br> | MM<br> |                  |       |            |     |
|                                                                       |        |    |      | Heattreat                                                                             |             |            |                           |                                                                                                     |                                                                                             |                  |       |            |     |
|                                                                       |        |    |      | Plating/Finish                                                                        |             |            |                           |                                                                                                     |                                                                                             |                  |       |            |     |
| rev                                                                   | ecn no | dr | date | Dr                                                                                    | BENNY CHEN  | 07/06/05   |                           |                                                                                                     | size                                                                                        | A4               | Scale | 0.500      |     |
| V                                                                     |        |    |      | Eng                                                                                   | BENNY CHEN  | 07/06/05   | Product family            |                                                                                                     |                                                                                             |                  |       |            |     |
|                                                                       |        |    |      | Chr                                                                                   | Paul Wang   | 08/11/05   | Model Name 10010556-004LF |                                                                                                     | ECN                                                                                         |                  |       |            |     |
|                                                                       |        |    |      | Appr                                                                                  | Joseph Hsia | 08/11/05   | Model Revision            |                                                                                                     | REL Level                                                                                   |                  |       |            |     |
|                                                                       |        |    |      |  |             | title      |                           | ASSEMBLY                                                                                            |                                                                                             | dwg no           |       | 10010556   | Rev |
|                                                                       |        |    |      |                                                                                       |             |            |                           | SMART CARD READER                                                                                   |                                                                                             |                  |       |            | V   |
|                                                                       |        |    |      | Pro/E file                                                                            |             | catalog no |                           |                                                                                                     |                                                                                             | CUSTOMER DRAWING |       | sheet 5 of |     |

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PRODUCT NO  
10010556-006LF



| rev | ecn no | dr | date |
|-----|--------|----|------|
| V   |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |
|     |        |    |      |

|                        |             |          |                               |                 |             |
|------------------------|-------------|----------|-------------------------------|-----------------|-------------|
| FCI www.fciconnect.com |             |          | tolerance                     | projection      | MM          |
| Dr                     | BENNY CHEN  | 08/04/05 | Product family                |                 | size A4     |
| Eng                    | BENNY CHEN  | 08/04/05 | Spec ref                      |                 | Scale 1.000 |
| Chr                    | PAUL WANG   | 09/02/05 | Material                      |                 | ECN         |
| Appr                   | JOSEPH HSIA | 09/02/05 |                               |                 |             |
| title                  |             |          | SMART CARD READER (FPC CABLE) | dwg no 10010556 | Rev. V      |
|                        |             |          | ASSEMBLY                      |                 |             |
| catalog no             |             |          | CUSTOMER DRAWING              | sheet 6 of      |             |

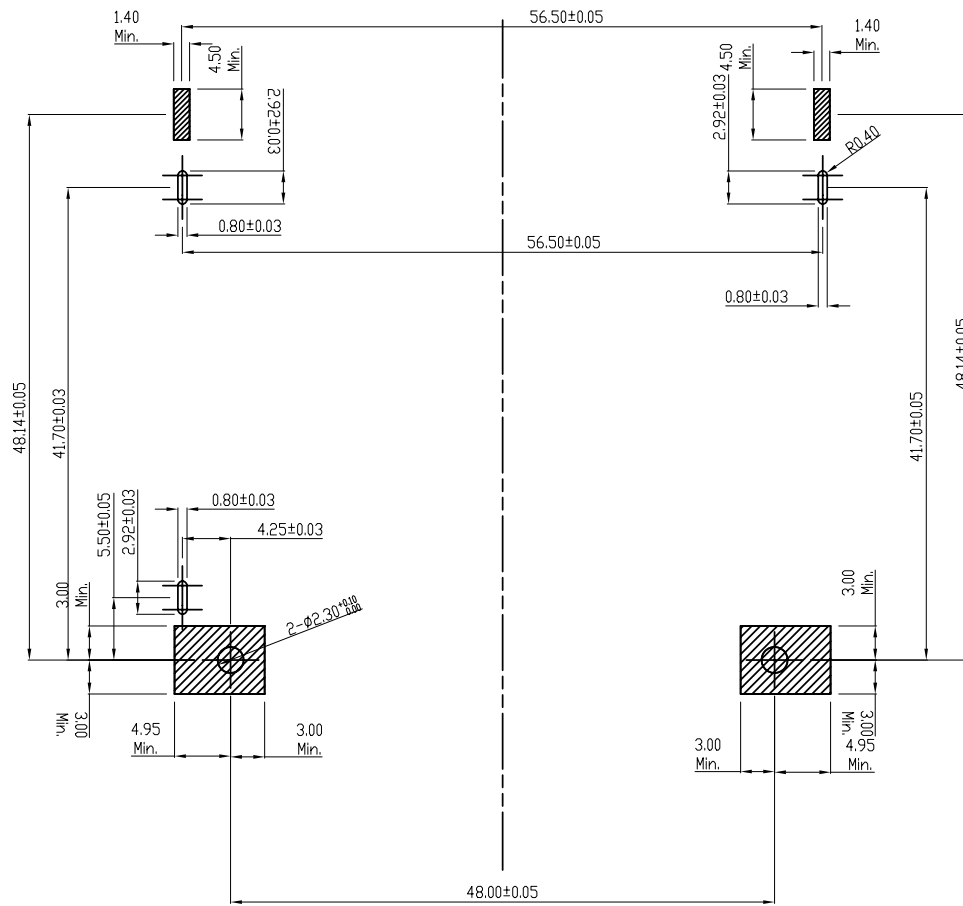
| PIN NO. | ASSIGNMENT |
|---------|------------|
| 10      | SENSOR 2   |
| 9       | SENSOR 1   |
| 8       | RFU        |
| 7       | I/O        |
| 6       | Vpp        |
| 5       | Gnd        |
| 4       | RFU        |
| 3       | Clock      |
| 2       | Reset      |
| 1       | Vcc        |

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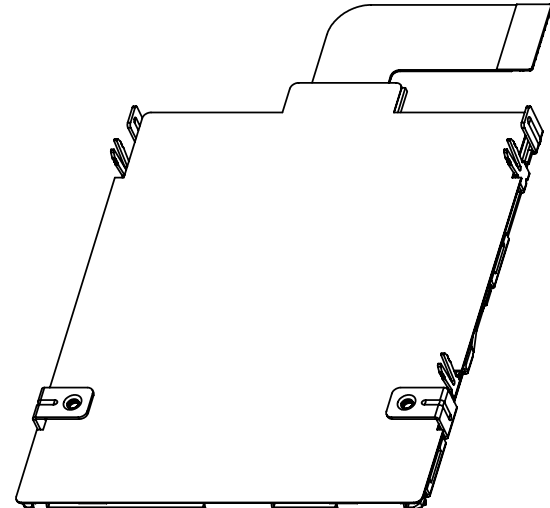


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PRODUCT NO  
10010556-006LF



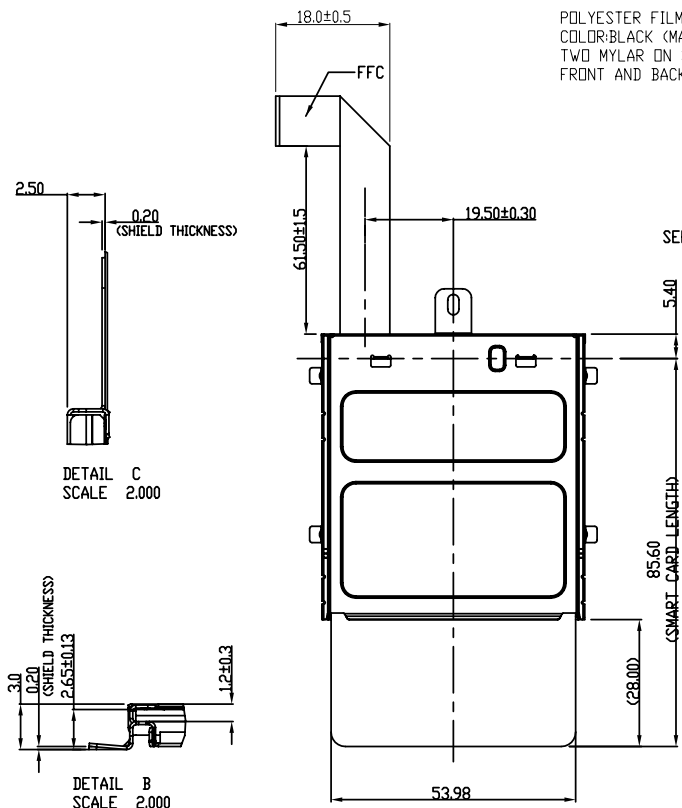
RECOMMENDED PCB LAYOUT  
(PCB THICKNESS: 1.2 mm)  
(MOUNTING SIDE)



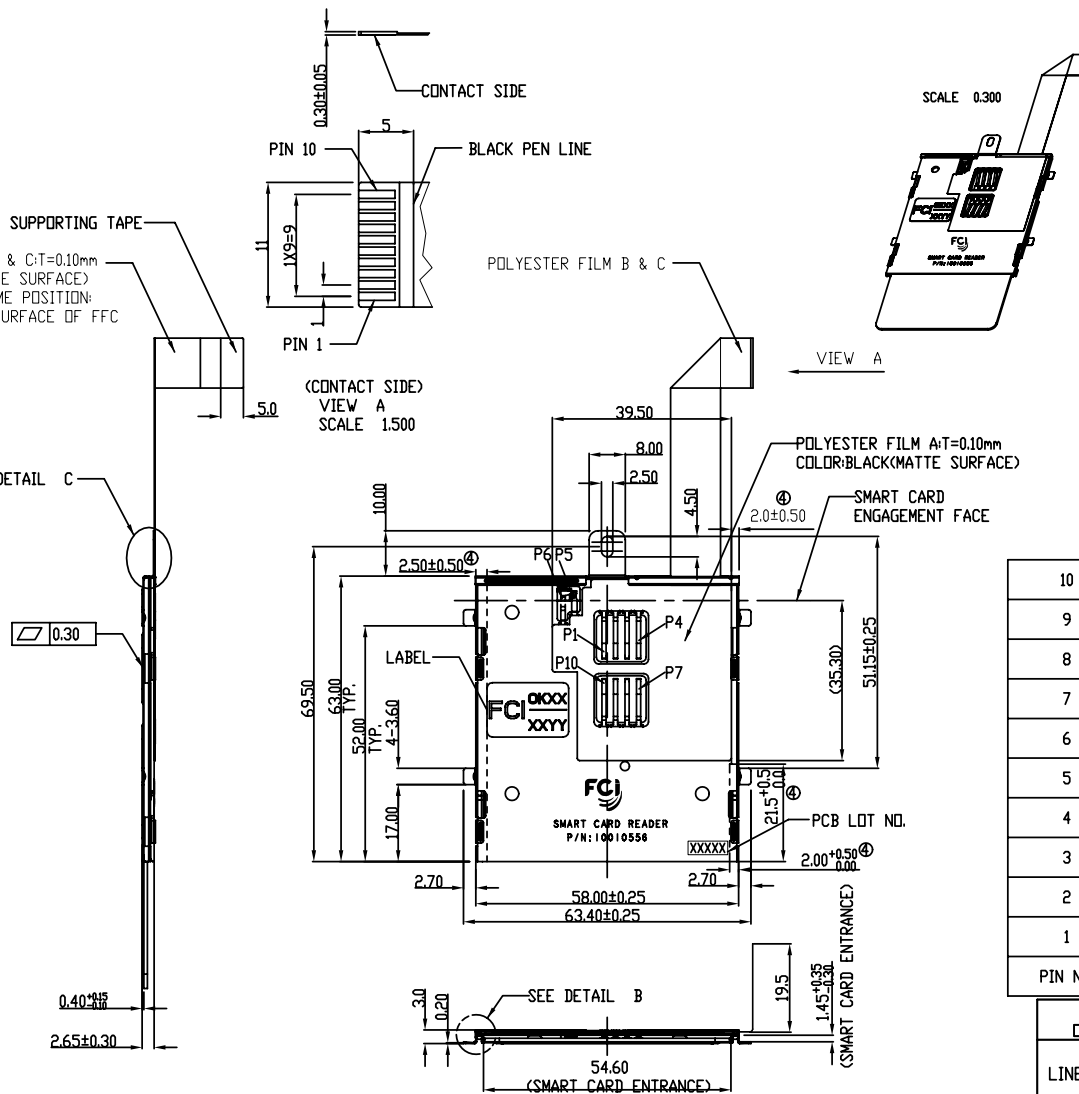
NOTE:  
1. MATERIAL:  
METAL SHELL: STAINLESS STEEL, T=0.40mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
FLEX CIRCUIT CABLE (FPC):  
PLATING SPEC AS BELOW:  
CONTACT SURFACE: GOLD FLASH PLATING.  
SOLDER TAIL: PURE TIN PLATING.  
2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD  
3. REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS-12-231  
PACKING SPEC. GS-14-829

|                                                                                       |             |                    |                               |                                                                                       |  |           |        |                                                                                       |          |                                                                                       |           |  |
|---------------------------------------------------------------------------------------|-------------|--------------------|-------------------------------|---------------------------------------------------------------------------------------|--|-----------|--------|---------------------------------------------------------------------------------------|----------|---------------------------------------------------------------------------------------|-----------|--|
|  |             | www.fciconnect.com |                               |  |  | tolerance |        |  |          |  |           |  |
| Dr                                                                                    | BENNY CHEN  | 08/04/05           | Product family                |                                                                                       |  | size      |        | A4                                                                                    |          | Scale<br>1.000                                                                        |           |  |
| Eng                                                                                   | BENNY CHEN  | 08/04/05           | Spec ref                      |                                                                                       |  |           |        |                                                                                       |          |                                                                                       |           |  |
| Chr                                                                                   | PAUL WANG   | 09/02/05           | Material                      |                                                                                       |  |           |        | ECN                                                                                   |          |                                                                                       |           |  |
| Appr                                                                                  | JOSEPH HSIA | 09/02/05           |                               |                                                                                       |  |           |        |                                                                                       |          |                                                                                       |           |  |
| title                                                                                 |             |                    | SMART CARD READER (FPC CABLE) |                                                                                       |  |           | dwg no |                                                                                       | 10010556 |                                                                                       | Rev.<br>V |  |
|                                                                                       |             |                    | ASSEMBLY                      |                                                                                       |  |           |        |                                                                                       |          |                                                                                       |           |  |
| catalog no                                                                            |             |                    |                               |                                                                                       |  |           |        |                                                                                       |          | sheet 7 of                                                                            |           |  |

PRODUCT NO  
10010556-005LF



- NOTE:  
1. Material:  
METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
FLEXIBLE FLAT CABLE: TOTAL LENGTH=103.5±2mm  
PLATING SPEC AS BELOW:  
CONTACT SURFACE: TIN PLATING.  
SOLDER TAIL: TIN PLATING.  
2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD  
3. REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS 12-231  
PACKING SPEC. GS 14-829  
④ THE AREA IS PROHIBITED TO PASTE THE MYLAR AND LABEL.



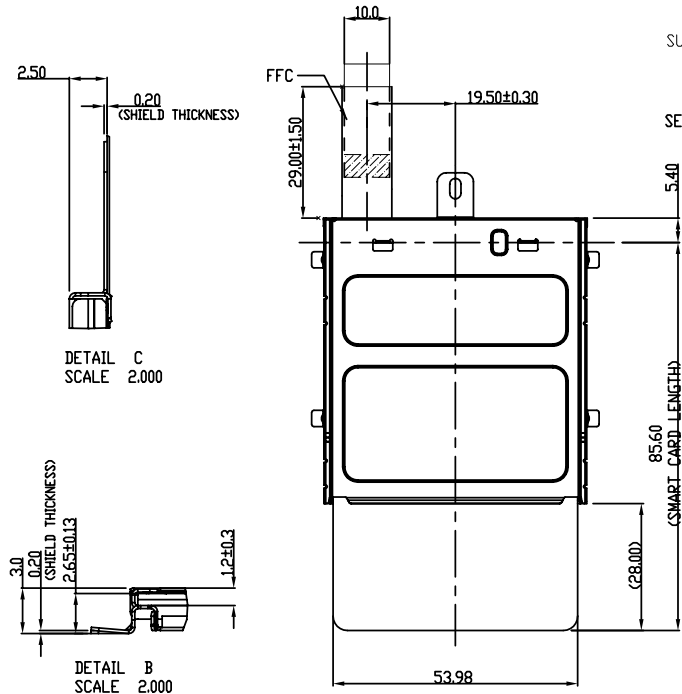
|         |            |
|---------|------------|
| 10      | RFU        |
| 9       | I/O        |
| 8       | Vpp        |
| 7       | GND        |
| 6       | Sensor 2   |
| 5       | Sensor 1   |
| 4       | Vcc        |
| 3       | Reset      |
| 2       | Clock      |
| 1       | RFU        |
| PIN NO. | ASSIGNMENT |

| TOLERANCE UNLESS OTHERWISE SPECIFIED |                                         |
|--------------------------------------|-----------------------------------------|
| LINEAR                               | X.X=±0.25<br>X.XX=±0.13<br>X.XXX=±0.050 |
| ANGLE                                | ±0°30'                                  |

|                                                                      |        |                                                      |      |                                                   |             |                               |                |
|----------------------------------------------------------------------|--------|------------------------------------------------------|------|---------------------------------------------------|-------------|-------------------------------|----------------|
| Mark with<br>10010556-004LF<br>REV.<br>In area indicated<br>by X.... |        | Material<br>Mat code<br>Heat treat<br>Plating/Finish |      | Spec ref<br>tolerance<br>projection<br>size<br>A4 |             | MM<br>Scale<br>0.500          |                |
| rev                                                                  | ecn no | dr                                                   | date | Dr                                                | DANIEL TAO  | 07/05/07                      | Product family |
| V                                                                    |        |                                                      |      | Eng                                               | DANIEL TAO  | 07/05/07                      | Model Name     |
|                                                                      |        |                                                      |      | Chr                                               | DANIEL TAO  | 07/05/07                      | Model Revision |
|                                                                      |        |                                                      |      | Appr                                              | JOSEPH HSIA | 07/05/07                      | REL Level      |
|                                                                      |        |                                                      |      | FCI                                               |             | ASSEMBLY<br>SMART CARD READER |                |
|                                                                      |        |                                                      |      | Pro/E file                                        |             | catalog no                    |                |
|                                                                      |        |                                                      |      | dwg no                                            |             | 10010556                      |                |
|                                                                      |        |                                                      |      | CUSTOEMER DRAWING                                 |             | sheet 8 of                    |                |



|                |
|----------------|
| PRODUCT NO     |
| 10010556-008LF |

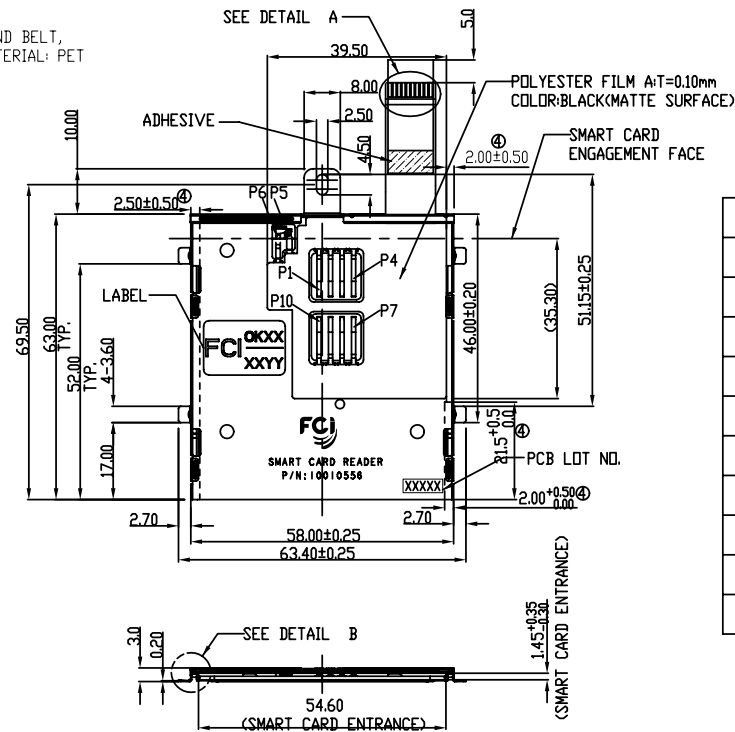
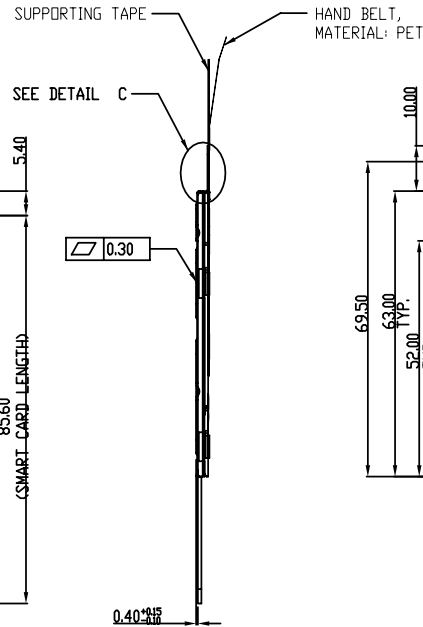
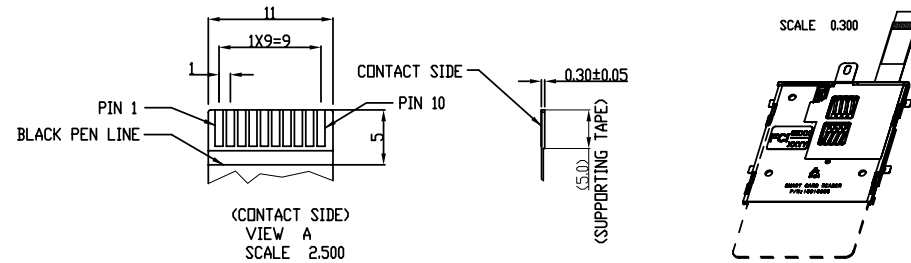


NOTE:  
1. Material:  
METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
FLEXIBLE FLAT CABLE: TOTAL LENGTH=33.5±1mm  
PLATING SPEC AS BELOW:  
CONTACT SURFACE: TIN PLATING.  
SOLDER TAIL: TIN PLATING.

2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

3. REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS 12-231  
PACKING SPEC. GS 14-829

④ THE AREA IS PROHIBITED TO PASTE THE MYLAR AND LABEL.



|         |                 |
|---------|-----------------|
| 10      | RFU             |
| 9       | I/O             |
| 8       | V <sub>pp</sub> |
| 7       | GND             |
| 6       | Sensor 2        |
| 5       | Sensor 1        |
| 4       | V <sub>CC</sub> |
| 3       | Reset           |
| 2       | Clock           |
| 1       | RFU             |
| PIN NO. | ASSIGNMENT      |

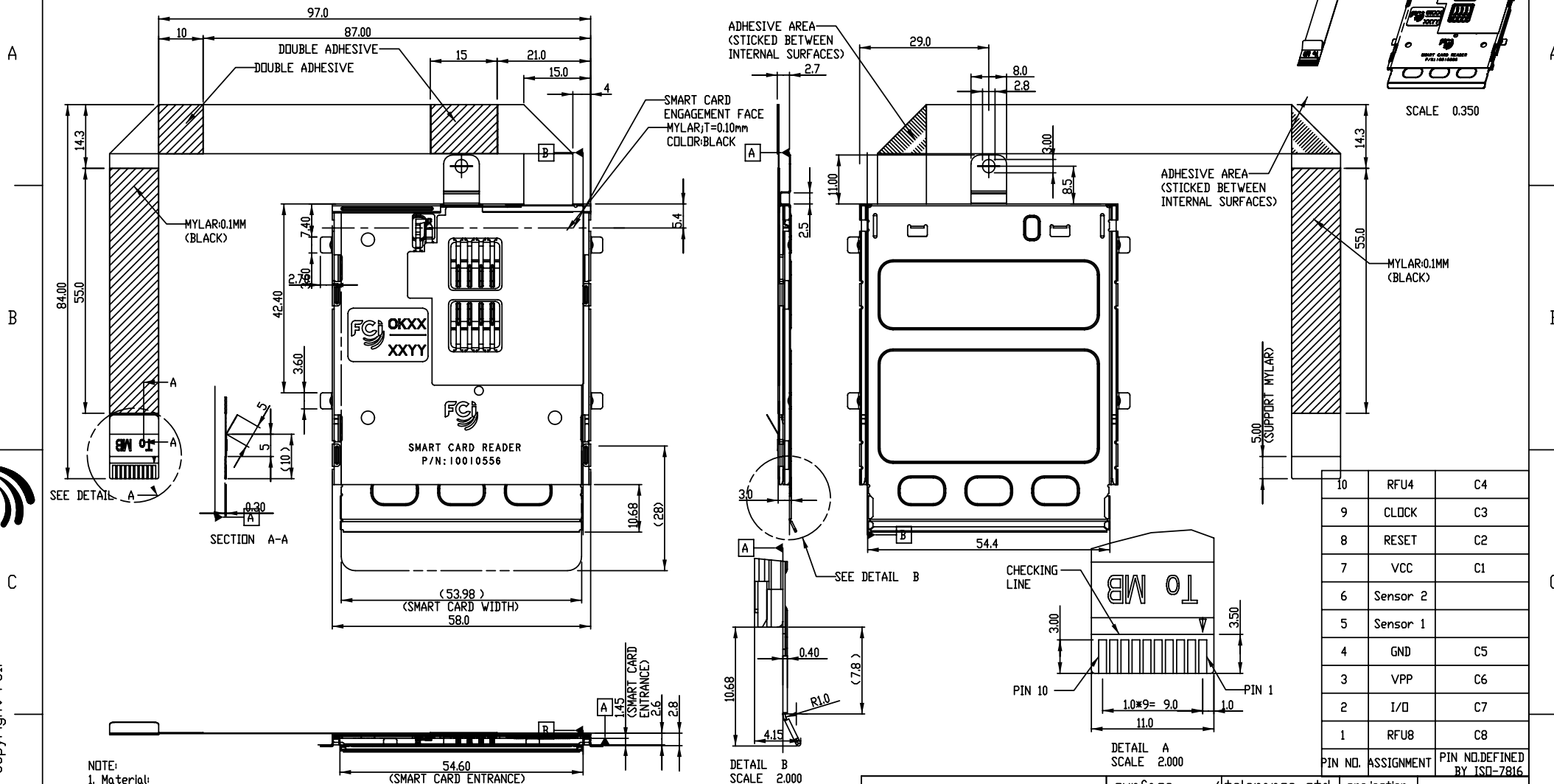
| TOLERANCE UNLESS OTHERWISE SPECIFIED |             |
|--------------------------------------|-------------|
| LINEAR                               | X.X=±0.5    |
|                                      | X.XX=±0.3   |
|                                      | X.XXX=±0.10 |
| ANGLE                                | ±0°30'      |

|                                                                       |        |    |      |                                                                                       |             |                   |                           |                                                                                                  |                  |            |           |                                                  |            |          |           |
|-----------------------------------------------------------------------|--------|----|------|---------------------------------------------------------------------------------------|-------------|-------------------|---------------------------|--------------------------------------------------------------------------------------------------|------------------|------------|-----------|--------------------------------------------------|------------|----------|-----------|
| Mark with<br>10010556-004LF<br>REV.<br>In area indicated<br>by X..... |        |    |      | Material                                                                              |             | Spec ref          |                           |                                                                                                  |                  |            |           |                                                  |            |          |           |
|                                                                       |        |    |      | Mat code                                                                              |             | <div>✓</div>      |                           | tolerance                                                                                        |                  | projection |           | <div><div>MM</div><div>←</div><div>→</div></div> |            |          |           |
|                                                                       |        |    |      | Heatreat                                                                              |             |                   |                           | <div></div> |                  |            |           |                                                  |            |          |           |
|                                                                       |        |    |      | Plating/Finish                                                                        |             |                   |                           |                                                                                                  |                  |            |           |                                                  |            |          |           |
|                                                                       |        |    |      | Dr                                                                                    |             | DANIEL TAO        | 07/05/07                  |                                                                                                  |                  |            |           | size                                             |            | A4       | Scale     |
| rev                                                                   | ecn no | dr | date | Eng                                                                                   | DANIEL TAO  | 07/05/07          | Product family            |                                                                                                  |                  |            |           |                                                  |            |          |           |
| V                                                                     |        |    |      | Chr                                                                                   | DANIEL TAO  | 07/05/07          | Model Name 10010556-008LF |                                                                                                  |                  |            | ECN       |                                                  |            |          |           |
|                                                                       |        |    |      | Appr                                                                                  | JOSEPH HSIA | 07/05/07          | Model Revision            |                                                                                                  |                  |            | REL Level |                                                  |            |          |           |
|                                                                       |        |    |      |  |             | title             |                           |                                                                                                  |                  | ASSEMBLY   |           | no                                               |            | 10010556 | Rev.<br>V |
|                                                                       |        |    |      |                                                                                       |             | SMART CARD READER |                           |                                                                                                  |                  | drawing    |           |                                                  |            |          |           |
|                                                                       |        | -  | -    | Pro/E file                                                                            | catalog no  |                   |                           |                                                                                                  | CUSTOMER DRAWING |            |           |                                                  | sheet 9 of |          |           |

|            |   |                  |             |
|------------|---|------------------|-------------|
| catalog no | * | CUSTOMER DRAWING | sheet 10 of |
|------------|---|------------------|-------------|

<sup>4</sup> Printed: Mar 12, 2010

PART NUMBER  
0010556-009LF



## NOTE:

## 1. Material:

METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: COPPER ALLOY.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
FLEXIBLE FLAT CABLE: TOTAL LENGTH=33.5±1mm  
PLATING SPEC AS BELOW:  
CONTACT SURFACE: TIN PLATING.  
SOLDER TAIL: TIN PLATING.

2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

| rev | ecn no   | dr | date     |
|-----|----------|----|----------|
| P   | N08-0093 | SH | 06/11/08 |
| V   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |

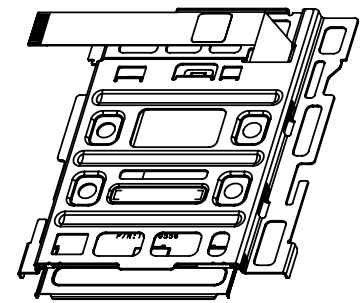
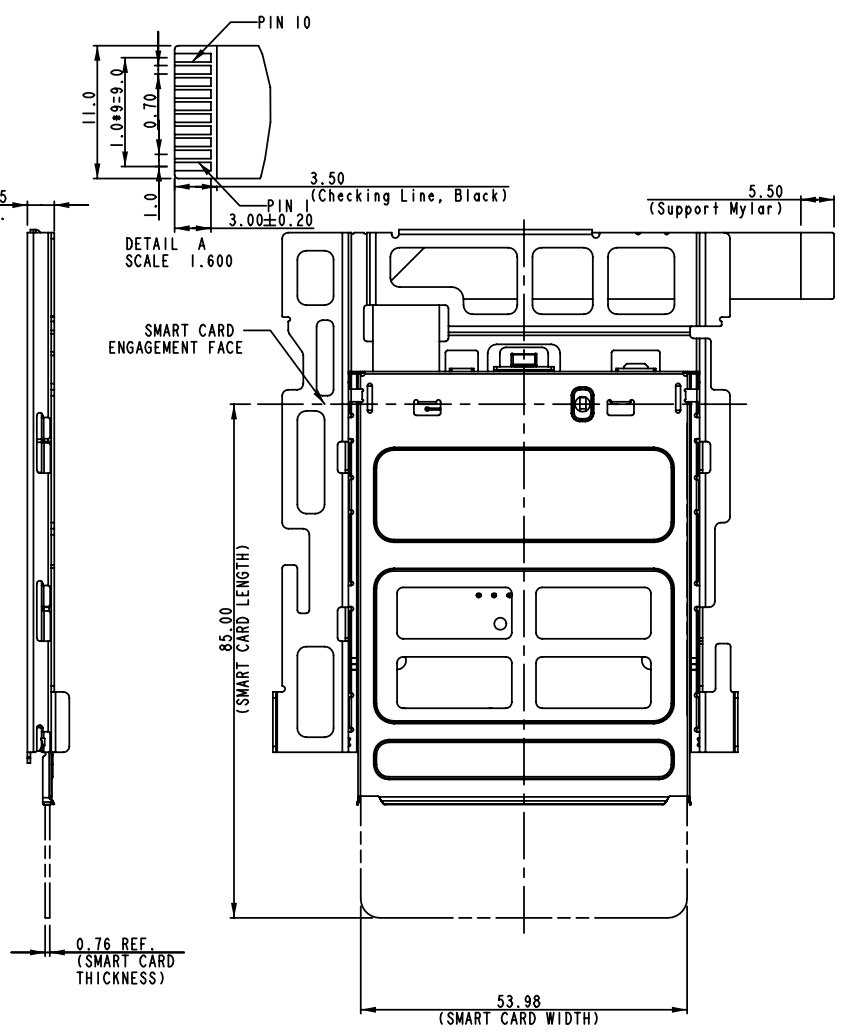
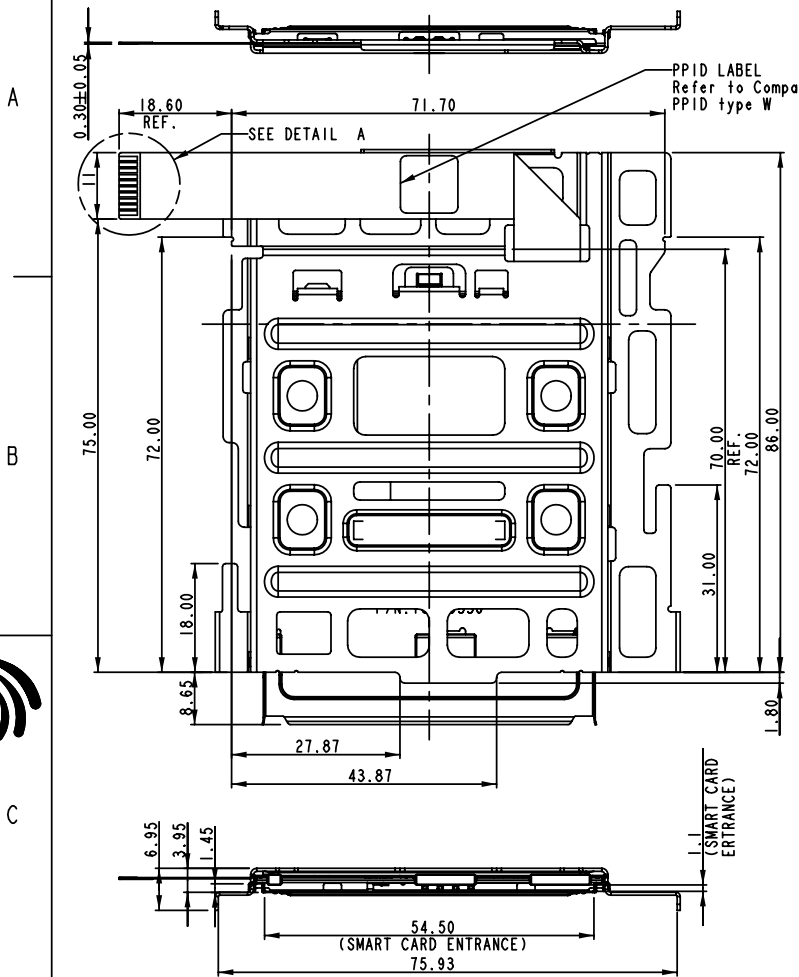
|                                                                                       |             |                                        |                                       |  |                      |  |                                                                                                     |  |                                                                                                      |  |            |                |
|---------------------------------------------------------------------------------------|-------------|----------------------------------------|---------------------------------------|--|----------------------|--|-----------------------------------------------------------------------------------------------------|--|------------------------------------------------------------------------------------------------------|--|------------|----------------|
| www.fciconnect.com                                                                    |             |                                        | surface<br>x                          |  | tolerance std<br>x x |  | projection<br> |  | BY ISO / B1<br> |  |            |                |
|                                                                                       |             |                                        | TOLERANCES UNLESS OTHERWISE SPECIFIED |  |                      |  |                                                                                                     |  |                                                                                                      |  |            |                |
| Dr                                                                                    | BENNY CHEN  | 10/24/07                               | ANGULAR                               |  | LINEAR               |  | 0.X                                                                                                 |  | ±0.4                                                                                                 |  | size<br>A4 | Scale<br>0.500 |
| Eng                                                                                   | BENNY CHEN  | 10/24/07                               |                                       |  |                      |  | 0.XX                                                                                                |  | ±0.25                                                                                                |  |            |                |
| Chr                                                                                   | PAUL WANG   | 12/15/07                               | 0° ±X°                                |  | 0.XXX                |  | ±X                                                                                                  |  | ECN                                                                                                  |  | *          |                |
| Appr                                                                                  | JOSEPH HSIA | 12/15/07                               | Product family                        |  |                      |  |                                                                                                     |  | Spec ref *                                                                                           |  |            |                |
|  |             | title<br>ASSEMBLY<br>SMART CARD READER |                                       |  |                      |  | dwg no<br>10010556                                                                                  |  | Rev.<br>V                                                                                            |  |            |                |
|                                                                                       |             | catalog no                             |                                       |  |                      |  | *                                                                                                   |  | CUSTOMER DRAWING                                                                                     |  |            |                |
|                                                                                       |             |                                        |                                       |  |                      |  |                                                                                                     |  | sheet 11 of                                                                                          |  |            |                |

| PIN NO. | ASSIGNMENT | PIN NO. DEFINED BY ISO-7816 |
|---------|------------|-----------------------------|
| 10      | RFU4       | C4                          |
| 9       | CLOCK      | C3                          |
| 8       | RESET      | C2                          |
| 7       | VCC        | C1                          |
| 6       | Sensor 2   |                             |
| 5       | Sensor 1   |                             |
| 4       | GND        | C5                          |
| 3       | VPP        | C6                          |
| 2       | I/O        | C7                          |
| 1       | RFU8       | C8                          |



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PART NUMBER  
10010556-010LF



SCALE 0.500

|         |            |                             |
|---------|------------|-----------------------------|
| 10      | VCC        | C1                          |
| 9       | Reset      | C2                          |
| 8       | Clock      | C3                          |
| 7       | RFU4       | C4                          |
| 6       | Gnd        | C5                          |
| 5       | VPP        | C6                          |
| 4       | I/O        | C7                          |
| 3       | RFU8       | C8                          |
| 2       | SENSOR 2   |                             |
| 1       | SENSOR 1   |                             |
| PIN NO. | ASSIGNMENT | PIN NO. DEFINED BY ISO-7816 |

NOTE:

- Material:
  - METAL SHELL: STAINLESS STEEL
  - BRACKET: STEEL
  - GUIDE BLOCK: THERMOPLASTIC, UL94V-0.
  - PCB: FR-4, T=0.80mm, UL94V-0.
  - FFC: POLYESTER, UL20624.
  - PLATING SPEC AS BELOW:
  - CONTACT SIDE PLATING: GOLD.
  - SOLDER SIDE PLATING: Pure Tin.
  - TERMINAL: COPPER ALLOY.
  - PLATING SPEC AS BELOW:
  - UNDERPLATING: NICKEL.
  - CONTACT PLATING: GOLD.
  - SOLDER TAIL: Pure TIN.
- CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD
- REFERENCE SPECIFICATION:
  - PRODUCT SPEC.: GS-12-231.
  - PACKING SPEC.: GS-14-829.

| rev | ecn no   | dr | date     |
|-----|----------|----|----------|
| P   | N08-0093 | SH | 06/11/08 |
| R   | N08-0136 | SH | 07/01/08 |
| S   | N08-0212 | SH | 10/06/08 |
| V   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |

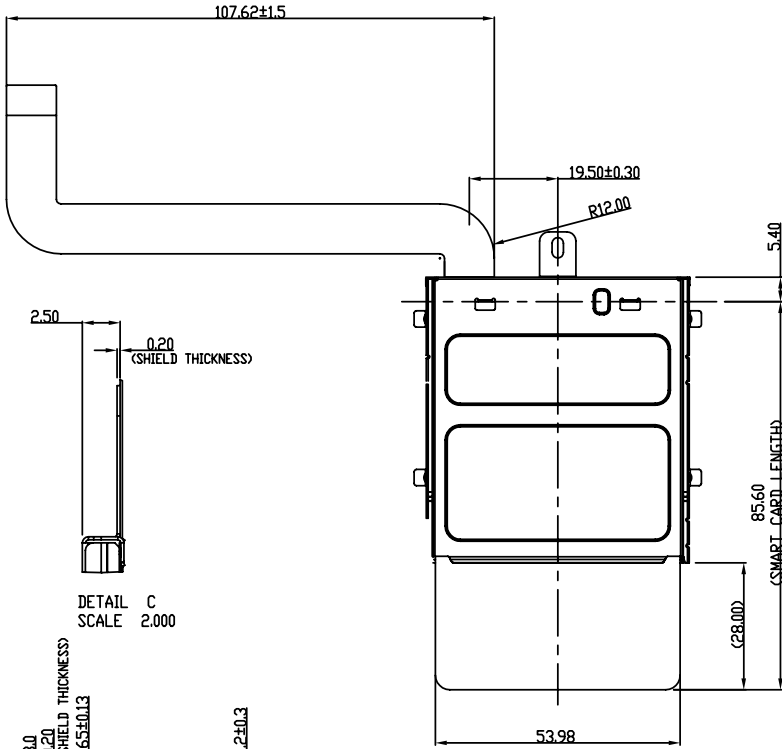
|                    |             |          |                                       |                |          |                 |                |
|--------------------|-------------|----------|---------------------------------------|----------------|----------|-----------------|----------------|
| www.fciconnect.com |             |          | surface<br>x                          | tolerance<br>x | std<br>x | projection<br>⊕ | MM<br>↔        |
|                    |             |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                |          | size<br>A4      | Scale<br>1.000 |
| Dr                 | BENNY CHEN  | 02/05/08 | ANGULAR                               | 0.X            | ±0.3     |                 |                |
| Eng                | BENNY CHEN  | 02/05/08 | LINEAR                                | 0.XX           | ±.20     |                 |                |
| Chr                | PAUL WANG   | 02/13/08 | 0° ±X°                                | 0.XXX          | ±X       |                 |                |
| Appr               | JOSEPH HSIA | 02/15/08 | Product family                        |                |          | ECN *           |                |
| FCI                |             |          | ASSEMBLY<br>SMART CARD READER         |                |          | Spec ref *      |                |
| catalog no         |             |          | dwg no                                |                |          | 10010556        |                |
|                    |             |          | * CUSTOMER DRAWING                    |                |          | sheet 12 of     |                |
|                    |             |          |                                       |                |          | Rev.<br>V       |                |



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PRODUCT NO  
10010556-011LF

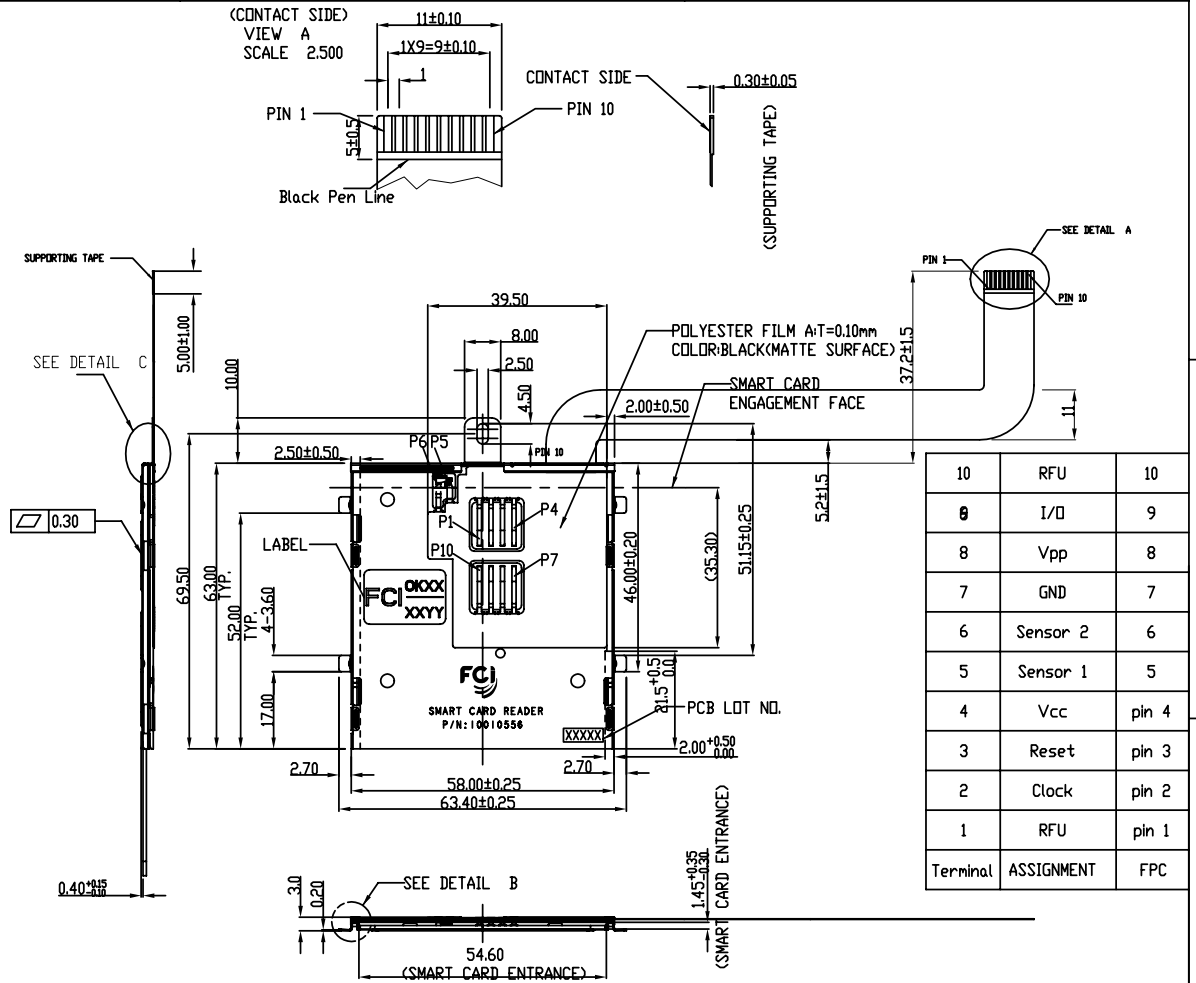


DETAIL C  
SCALE 2.000

DETAIL B  
SCALE 2.000

NOTE:  
1. Material:  
METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.

FPC PLATING SPEC AS BELOW:  
CONTACT SURFACE: GOLD FLASH.  
SOLDER TAIL: TIN PLATING.  
2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD  
3. REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS 12-231  
PACKING SPEC. GS 14-829  
④ THE AREA IS PROHIBITED TO PASTE THE MYLAR AND LABEL.

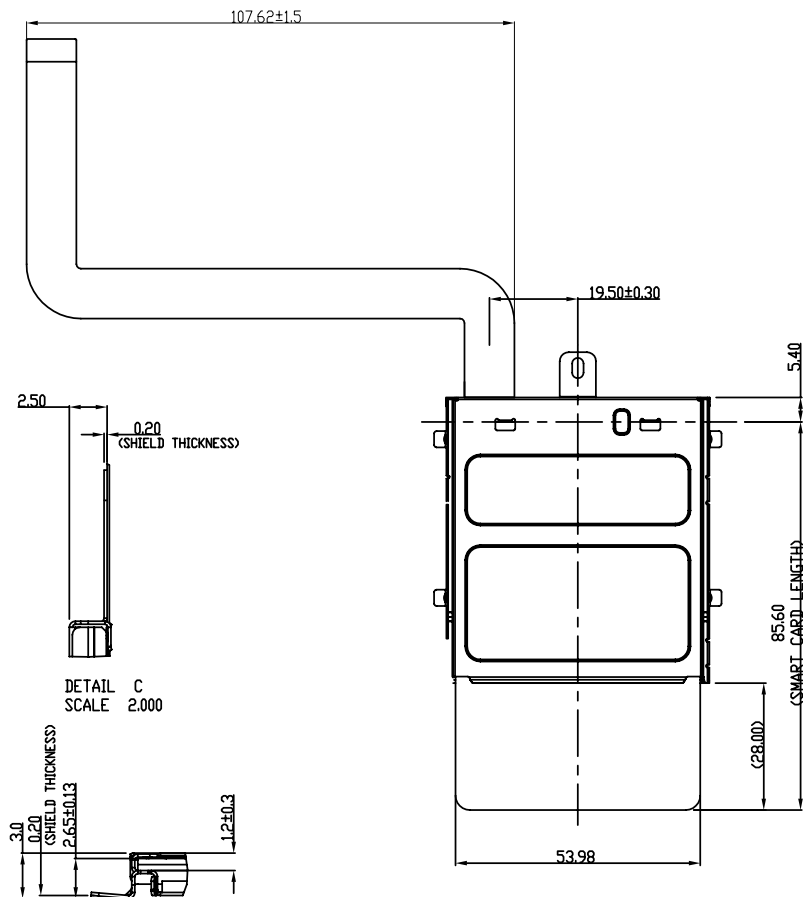


|          |            |       |
|----------|------------|-------|
| 10       | RFU        | 10    |
| 9        | I/O        | 9     |
| 8        | Vpp        | 8     |
| 7        | GND        | 7     |
| 6        | Sensor 2   | 6     |
| 5        | Sensor 1   | 5     |
| 4        | Vcc        | pin 4 |
| 3        | Reset      | pin 3 |
| 2        | Clock      | pin 2 |
| 1        | RFU        | pin 1 |
| Terminal | ASSIGNMENT | FPC   |

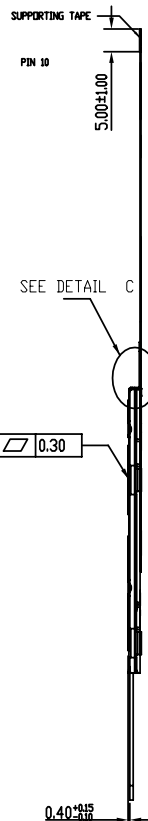
| TOLERANCE UNLESS OTHERWISE SPECIFIED |                                        |
|--------------------------------------|----------------------------------------|
| LINEAR                               | X.X=±0.5<br>X.XX=±0.15<br>X.XXX=±0.050 |
| ANGLE                                | ±0°30'                                 |

|                                                                       |          |    |          |                                                                                                  |             |                                        |                |                  |                                                                                                                |                                                                                                        |  |
|-----------------------------------------------------------------------|----------|----|----------|--------------------------------------------------------------------------------------------------|-------------|----------------------------------------|----------------|------------------|----------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|--|
| Mark with<br>10010556-004LF<br>REV.<br>In area indicated<br>by X..... |          |    |          | Material                                                                                         |             |                                        | Spec ref       |                  |                                                                                                                |                                                                                                        |  |
|                                                                       |          |    |          | Mat code                                                                                         |             |                                        | <div>✓</div>   | tolerance        | projection<br><div></div> | MM<br><div></div> |  |
|                                                                       |          |    |          | Heat treat                                                                                       |             |                                        |                |                  |                                                                                                                |                                                                                                        |  |
|                                                                       |          |    |          | Plating/Finish                                                                                   |             |                                        |                |                  |                                                                                                                |                                                                                                        |  |
|                                                                       |          |    |          | Dr                                                                                               | MIAD SH     | 05/08/08                               |                |                  |                                                                                                                |                                                                                                        |  |
| rev                                                                   | ecn no   | dr | date     | Eng                                                                                              | MIAD SH     | 05/08/08                               | Product family |                  | size<br>A4                                                                                                     | Scale<br>0.500                                                                                         |  |
| N                                                                     | N08-0045 | SH | 05/08/08 | Chr                                                                                              | DANIEL TAO  | 05/08/08                               | Model Name     |                  | ECN                                                                                                            |                                                                                                        |  |
| V                                                                     |          |    |          | Appr                                                                                             | JOSEPH HSIA | 05/08/08                               | Model Revision |                  | REL Level                                                                                                      |                                                                                                        |  |
|                                                                       |          |    |          | <div></div> |             | title<br>ASSEMBLY<br>SMART CARD READER |                |                  | dwg no<br>10010556                                                                                             | Rev.<br>V                                                                                              |  |
|                                                                       |          |    |          | Pro/E file                                                                                       | catalog no  |                                        |                | CUSTOMER DRAWING |                                                                                                                | sheet 13 of                                                                                            |  |
|                                                                       |          | -  | -        |                                                                                                  |             |                                        |                |                  |                                                                                                                |                                                                                                        |  |

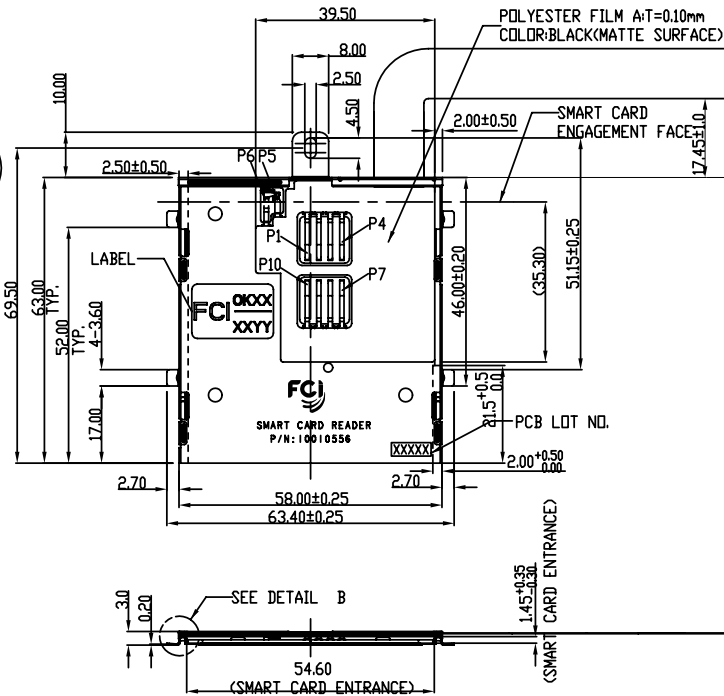
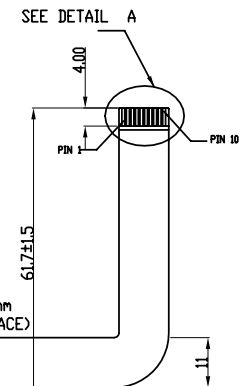
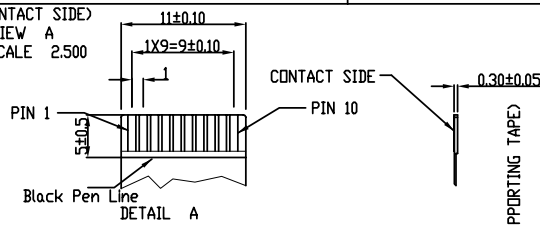
PRODUCT NO  
10010556-012LF



- NOTE:
- Material:  
METAL SHELL: STAINLESS STEEL, T=0.20mm  
PCB: FR-4, T=0.80mm  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
ALL OVER NICKEL UNDERPLATING  
GOLD PLATING ON CONTACT SURFACE.  
MATTE TIN PLATING ON SOLDER TAIL.  
  
FPC PLATING SPEC AS BELOW:  
CONTACT SURFACE: GOLD FLASH.  
SOLDER TAIL: TIN PLATING.
  - CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD
  - REFERENCE SPECIFICATION:  
PRODUCT SPEC. GS 12-231  
PACKING SPEC. GS 14-829
  - THE AREA IS PROHIBITED TO PASTE THE MYLAR AND LABEL.



(CONTACT SIDE)  
VIEW A  
SCALE 2.500

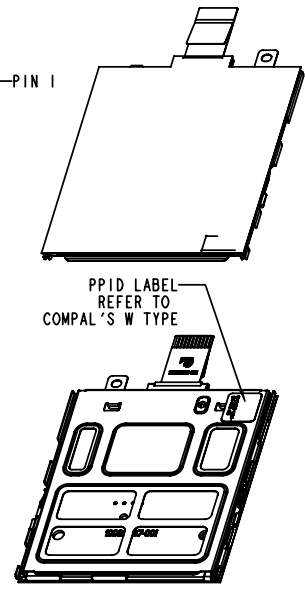
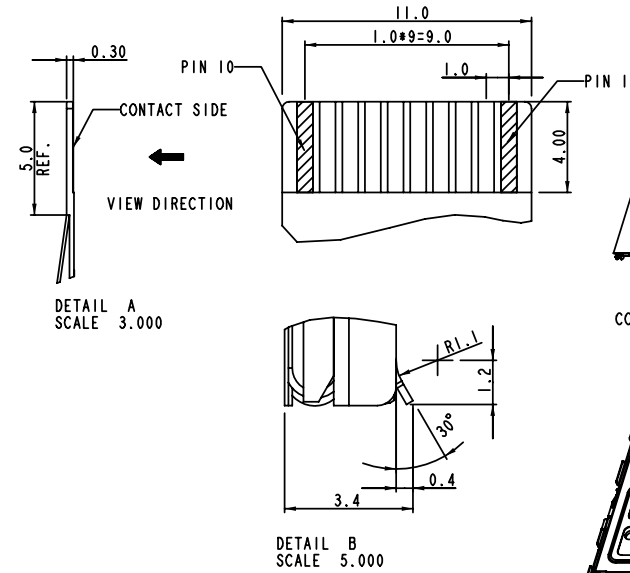
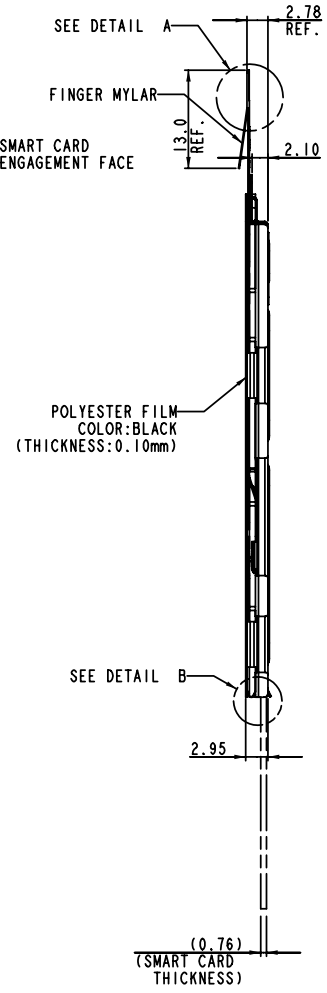
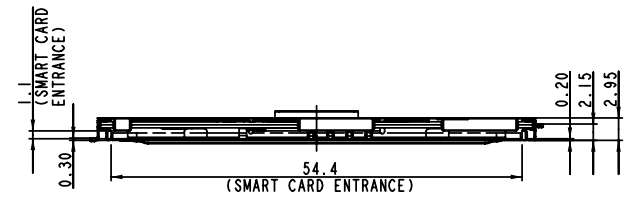
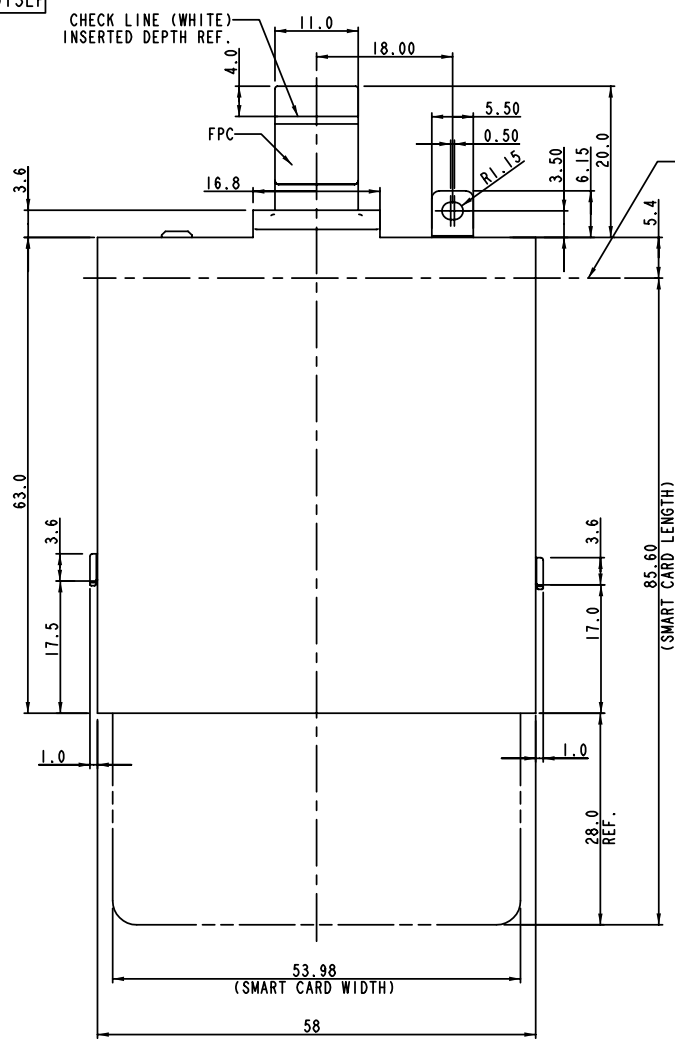


|          |            |     |
|----------|------------|-----|
| 10       | RFU        | 10  |
| 9        | I/O        | 9   |
| 8        | Vpp        | 8   |
| 7        | GND        | 7   |
| 6        | Sensor 2   | 6   |
| 5        | Sensor 1   | 5   |
| 4        | Vcc        | 4   |
| 3        | Reset      | 3   |
| 2        | Clock      | 2   |
| 1        | RFU        | 1   |
| Terminal | ASSIGNMENT | FPC |

| TOLERANCE UNLESS OTHERWISE SPECIFIED |                                        |
|--------------------------------------|----------------------------------------|
| LINEAR                               | X.X=±0.5<br>X.XX=±0.15<br>X.XXX=±0.050 |
| ANGLE                                | ±0°30'                                 |

|                                                                       |          |    |          |                |                                        |          |                           |                    |                           |                         |
|-----------------------------------------------------------------------|----------|----|----------|----------------|----------------------------------------|----------|---------------------------|--------------------|---------------------------|-------------------------|
| Mark with<br>10010556-004LF<br>REV.<br>In area indicated<br>by X..... |          |    |          | Material       |                                        |          | Spec ref                  |                    |                           |                         |
|                                                                       |          |    |          | Mat code       |                                        |          | <div>✓</div>              | tolerance          | projection<br><div></div> | MM<br><div>←————→</div> |
|                                                                       |          |    |          | Heattreat      |                                        |          |                           |                    |                           |                         |
|                                                                       |          |    |          | Plating/Finish |                                        |          |                           |                    |                           |                         |
|                                                                       |          |    |          | Dr             | MIAD SH                                | 05/08/08 |                           |                    |                           |                         |
| rev                                                                   | ecn no   | dr | date     | Eng            | MIAD SH                                | 05/08/08 | Product family            |                    | size<br>A4                | Scale<br>0.500          |
| N                                                                     | N08-0045 | SH | 05/08/08 | Chr            | DANIEL TAO                             | 05/08/08 | Model Name 10010556-008LF |                    |                           |                         |
| V                                                                     |          |    |          | Appr           | JOSEPH HSIA                            | 05/08/08 | Model Revision            |                    | ECN                       |                         |
|                                                                       |          |    |          |                |                                        |          |                           |                    | REL Level                 |                         |
|                                                                       |          |    |          | <div></div>    | title<br>ASSEMBLY<br>SMART CARD READER |          |                           | dwg no<br>10010556 | Rev<br>V                  |                         |
|                                                                       |          |    |          |                |                                        |          |                           |                    |                           |                         |
|                                                                       |          |    |          |                |                                        |          |                           |                    |                           |                         |
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|                                                                       |          |    |          |                |                                        |          |                           |                    |                           |                         |
|                                                                       |          |    |          |                |                                        | </       |                           |                    |                           |                         |

PART NUMBER  
10010556-013LF



NOTE:  
1. Material:  
METAL SHELL:STAINLESS STEEL, T=0.20mm  
GUIDE BLOCK:THERMOPLASTIC,UL94V-0.  
PCB: FR-4, T=0.80mm, UL94V-0.  
FPC: POLYIMIDE, T=0.30mm, UL94V-0.  
PLATING SPEC AS BELOW:  
UNDERPLATING: Ni 50 uin Min.  
CONTACT SIDE PLATING: Au 3 uin Min.  
SOLDER SIDE PLATING: Pure Tin 100 uin Min.  
TERMINAL: COPPER ALLOY.  
PLATING SPEC AS BELOW:  
UNDERPLATING: Ni 50 uin Min.  
CONTACT PLATING: Au 30 uin Min.  
SOLDER TAIL: Pure TIN 75 uin Min.  
2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD  
3. REFERENCE SPECIFICATION:  
PRODUCT SPEC.:GS-12-231.  
PACKING SPEC.:GS-14-829.

|         |            |                     |
|---------|------------|---------------------|
| 10      | VCC        | C 1                 |
| 9       | GND        | C 5                 |
| 8       | RESET      | C 2                 |
| 7       | VPP        | C 6                 |
| 6       | CLOCK      | C 3                 |
| 5       | I/O        | C 7                 |
| 4       | RFU 4      | C 4                 |
| 3       | RFU 8      | C 8                 |
| 2       | SENSOR 2   |                     |
| 1       | SENSOR 1   |                     |
| PIN NO. | ASSIGNMENT | DEFINED BY ISO 7816 |

| rev | ecn no   | dr    | date     |
|-----|----------|-------|----------|
| R   | N08-0136 | BENNY | 05/08/08 |
| S   | N08-0212 | SH    | 10/06/08 |
| V   | -        | -     | -        |
| -   | -        | -     | -        |
| -   | -        | -     | -        |
| -   | -        | -     | -        |
| -   | -        | -     | -        |

|                                                                                       |             |          |                                        |  |                      |  |                                                                                                     |  |                                                                                             |                |  |
|---------------------------------------------------------------------------------------|-------------|----------|----------------------------------------|--|----------------------|--|-----------------------------------------------------------------------------------------------------|--|---------------------------------------------------------------------------------------------|----------------|--|
| www.fciconnect.com                                                                    |             |          | surface<br>X                           |  | tolerance std<br>X X |  | projection<br> |  | MM<br> |                |  |
|                                                                                       |             |          | TOLERANCES UNLESS OTHERWISE SPECIFIED  |  |                      |  |                                                                                                     |  |                                                                                             |                |  |
| Dr                                                                                    | BENNY CHEN  | 05/08/08 | ANGULAR<br>LINEAR                      |  | 0.X                  |  | ±0.25                                                                                               |  | size<br>A4                                                                                  | Scale<br>0.500 |  |
| Eng                                                                                   | BENNY CHEN  | 05/08/08 |                                        |  | 0.XX                 |  | ±0.15                                                                                               |  |                                                                                             |                |  |
| Chr                                                                                   | PAUL WANG   | 05/19/08 | 0° ±3°                                 |  | 0.XXX                |  | ±                                                                                                   |  | ECN *                                                                                       |                |  |
| Appr                                                                                  | JOSEPH HSIA | 06/16/08 | Product family                         |  |                      |  |                                                                                                     |  | Spec ref *                                                                                  |                |  |
|  |             |          | title<br>ASSEMBLY<br>SMART CARD READER |  |                      |  | dwg no<br>10010556                                                                                  |  | Rev.<br>V                                                                                   |                |  |
|                                                                                       |             |          | catalog no *                           |  |                      |  | CUSTOMER DRAWING                                                                                    |  | sheet 15 of                                                                                 |                |  |

DETAIL A

sheet 16 of

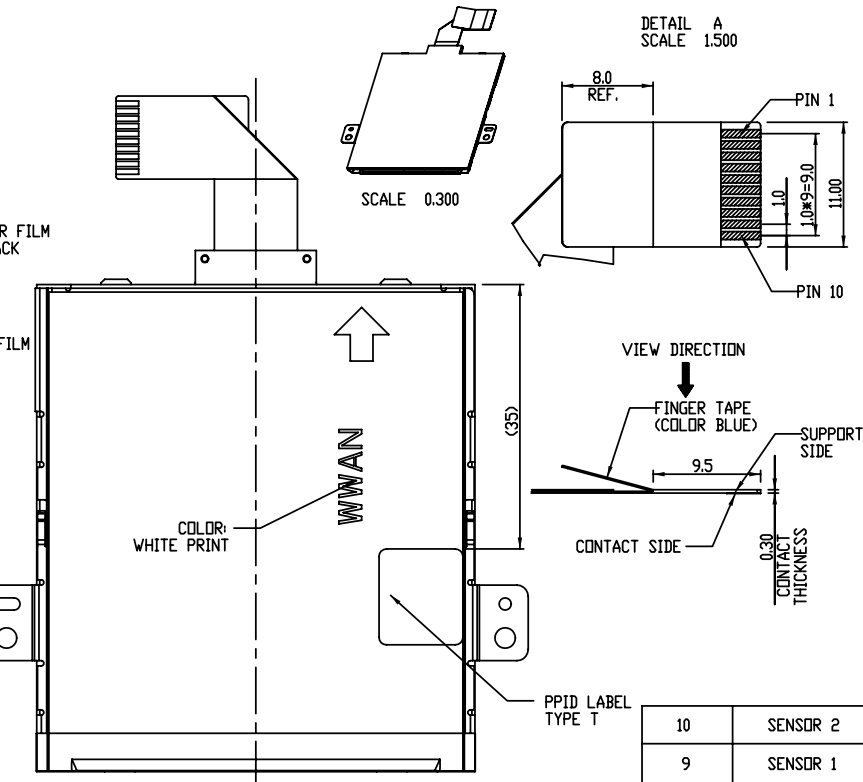
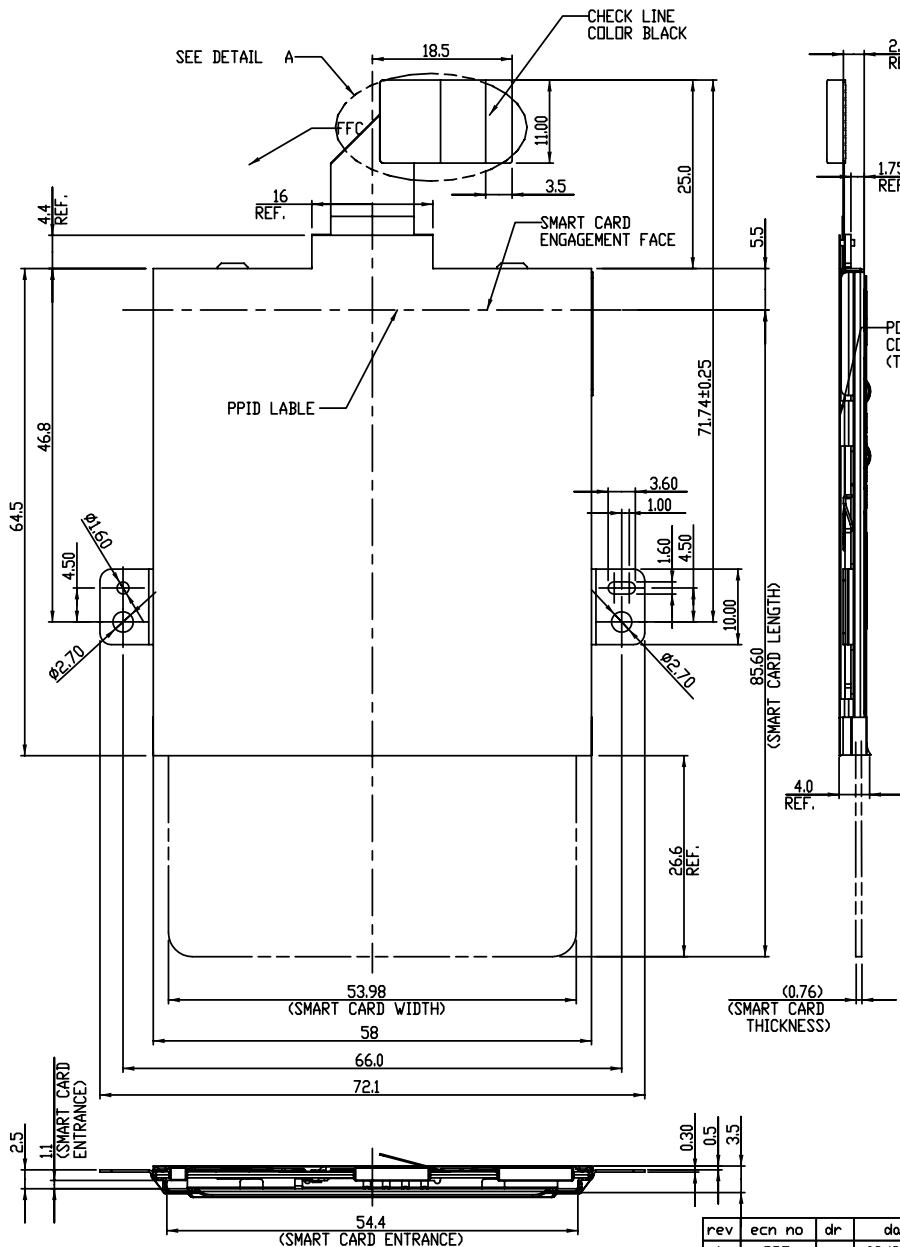
4 Printed: Mar 12, 2010





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PART NUMBER  
10010556-015LF

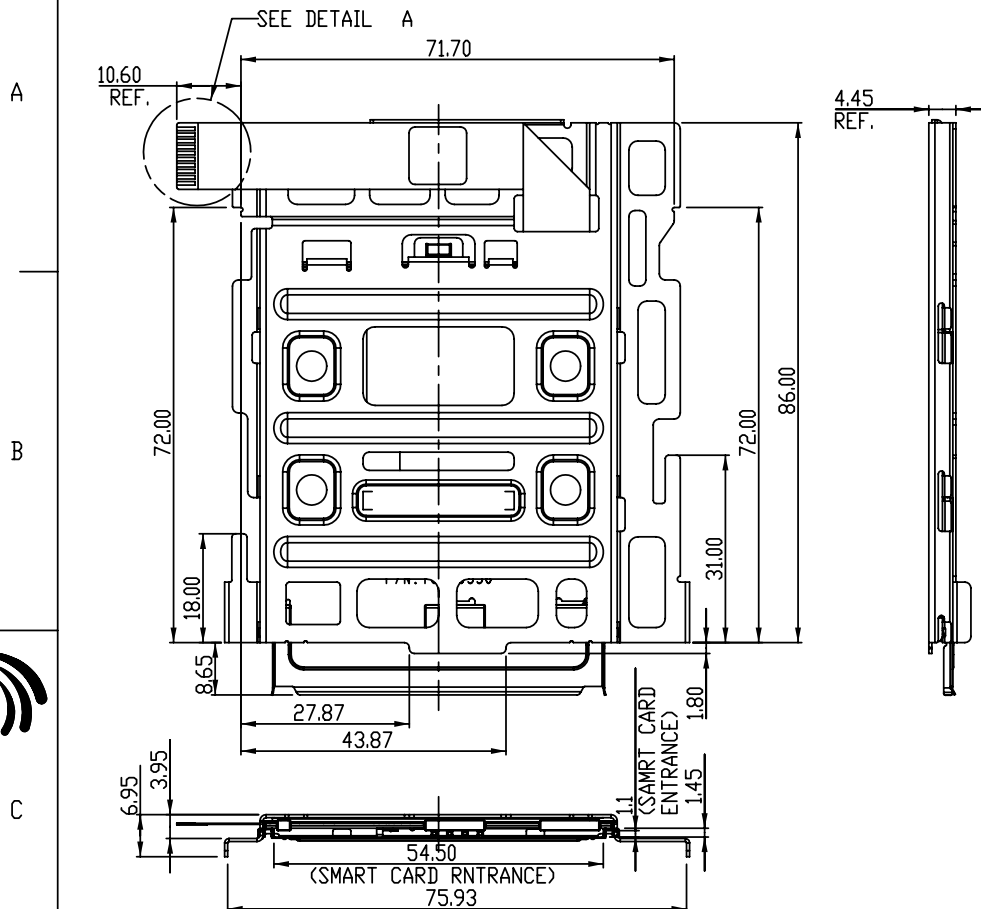


- NOTE:
- Material:  
METAL SHELL: STAINLESS STEEL, T=0.30mm  
GUIDE BLOCK: THERMOPLASTIC, UL94V-0  
PCB: FR-4, T=0.80mm, UL94V-0  
FFC: POLYESTER, T=0.30mm, UL20624, NO PRINTING.  
PLATING SPEC AS BELOW:  
CONTACT SIDE PLATING: Au 3 uin Min.  
SOLDER SIDE PLATING: Pure Tin 100 uin Min.  
TERMINAL: PHOSPHOR BRONZE.  
PLATING SPEC AS BELOW:  
UNDERPLATING: Ni 50 uin Min.  
CONTACT PLATING: Au 30 uin Min.  
SOLDER TAIL: Pure TIN 75 uin Min.
  - LEAD FREE AND ROHS COMPLIANT PRODUCT.
  - CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD.
  - REFERENCE SPECIFICATION:  
PRODUCT SPEC: GS-12-231.  
PACKING SPEC: GS-14-829.

| PIN NO. | ASSIGNMENT |
|---------|------------|
| 10      | SENSOR 2   |
| 9       | SENSOR 1   |
| 8       | RFU8       |
| 7       | I/O        |
| 6       | VPP        |
| 5       | GND        |
| 4       | RFU4       |
| 3       | CLOCK      |
| 2       | RESET      |
| 1       | VCC        |

|                    |             |          |                                       |                 |                              |          |             |
|--------------------|-------------|----------|---------------------------------------|-----------------|------------------------------|----------|-------------|
| www.fciconnect.com |             |          | surface x                             | tolerance std x | projection                   | MM       |             |
|                    |             |          | TOLERANCES UNLESS OTHERWISE SPECIFIED |                 | ⊕                            |          |             |
| Dr                 | BENNY CHEN  | 04/15/09 | ANGULAR                               | 0.X             | ±0.25                        | size A4  | Scale 0.500 |
| Eng                | BENNY CHEN  | 04/15/09 | LINEAR                                | 0.XX            | ±0.15                        | ECN      | *           |
| Chr                | PAUL WANG   | 04/18/09 | 0° ±3°                                | 0.XXX           | ±                            |          |             |
| Appr               | JOSEPH HSIA | 04/20/09 | Product family                        |                 |                              | Spec ref | *           |
| FCI                |             |          | title ASSEMBLY SMART CARD READER      |                 | dwg no 10010556              |          | Rev. V      |
| catalog no         |             |          | *                                     |                 | CUSTOMER DRAWING sheet 17 of |          |             |

PRODUCT NO.  
10010556-016LF



## NOTE:

## 1. Material:

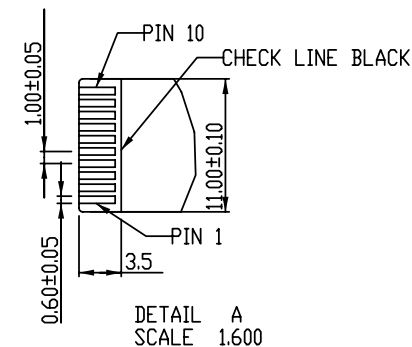
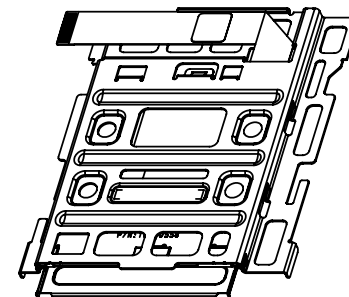
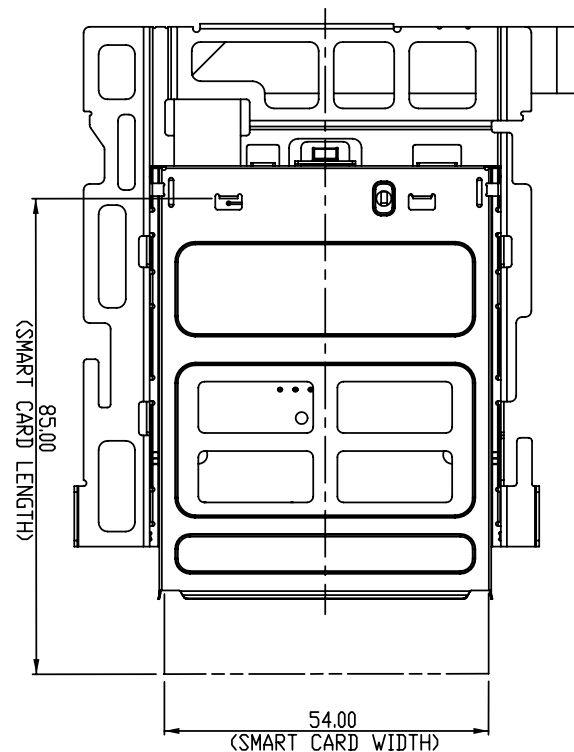
METAL SHELL: STAINLESS STEEL  
BRACKET: STEEL  
GUIDE BLOCK: THERMOPLASTIC, UL94V-0.  
PCB: FR-4, T=0.80mm, UL94V-0.  
FFC: POLYESTER, UL20624.  
PLATING SPEC AS BELOW:  
CONTACT SIDE PLATING: GOLD.  
SOLDER SIDE PLATING: Pure Tin.  
TERMINAL: COPPER ALLOY.

PLATING SPEC AS BELOW:  
UNDERPLATING: NICKEL.  
CONTACT PLATING: GOLD.  
SOLDER TAIL: Pure TIN.

## 2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

## 3. REFERENCE SPECIFICATION:

PRODUCT SPEC: GS-12-231.  
PACKING SPEC: GS-14-829.



|         |            |                             |
|---------|------------|-----------------------------|
| 10      | VCC        | C1                          |
| 9       | RESET      | C2                          |
| 8       | CLOCK      | C3                          |
| 7       | RFU 4      | C4                          |
| 6       | GND        | C5                          |
| 5       | VPP        | C6                          |
| 4       | I/O        | C7                          |
| 3       | RFU 8      | C8                          |
| 2       | SENSOR 2   |                             |
| 1       | SENSOR 1   |                             |
| PIN NO. | ASSIGNMENT | PIN NO. DEFINED BY ISO-7816 |

Copyright FCI.

| rev | ecn no | dr | date |
|-----|--------|----|------|
| V   | -      | -  | -    |
| -   | -      | -  | -    |
| -   | -      | -  | -    |
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| -   | -      | -  | -    |

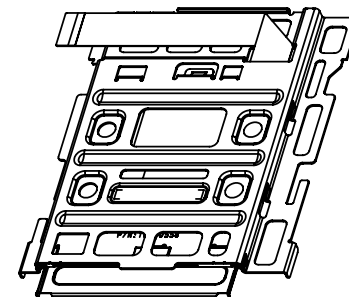
|                                                                                       |            |                              |                                                                                                 |  |               |  |                                                                                                  |      |                                                                                       |             |                |
|---------------------------------------------------------------------------------------|------------|------------------------------|-------------------------------------------------------------------------------------------------|--|---------------|--|--------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|-------------|----------------|
| www.fciconnect.com                                                                    |            |                              | surface -  |  | tolerance std |  | projection  |      |  |             |                |
|                                                                                       |            |                              | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                           |  |               |  |                                                                                                  |      |                                                                                       |             |                |
| Dr                                                                                    | MIAD SH    | 04/14/09                     | ANGULAR                                                                                         |  | LINEAR        |  | 0.X                                                                                              | ±0.3 | size                                                                                  | A4          | Scale<br>1.000 |
| Eng                                                                                   | MIAD SH    | 04/14/09                     |                                                                                                 |  |               |  | 0.XX                                                                                             | ±0.2 |                                                                                       |             |                |
| Chr                                                                                   | TAD DANIEL | 04/14/09                     | 0° ±2°                                                                                          |  |               |  | 0.XXX                                                                                            | ±0.1 |                                                                                       |             |                |
| Appr                                                                                  | TAD DANIEL | 04/14/09                     | Product family                                                                                  |  |               |  |                                                                                                  | -    | Spec ref                                                                              |             |                |
|  |            | title<br>- SMART CARD READER |                                                                                                 |  |               |  | dwg no<br>10010556                                                                               |      |                                                                                       | Rev.<br>V   |                |
|                                                                                       |            | catalog no                   |                                                                                                 |  |               |  | - CUSTOMER DRAWING                                                                               |      |                                                                                       | sheet 18 of |                |

PRODUCT NO.  
10010556-017LF

CHECK LINE  
COLOR BLACK

4.45  
REF.

SEE DETAIL A



A

B

C

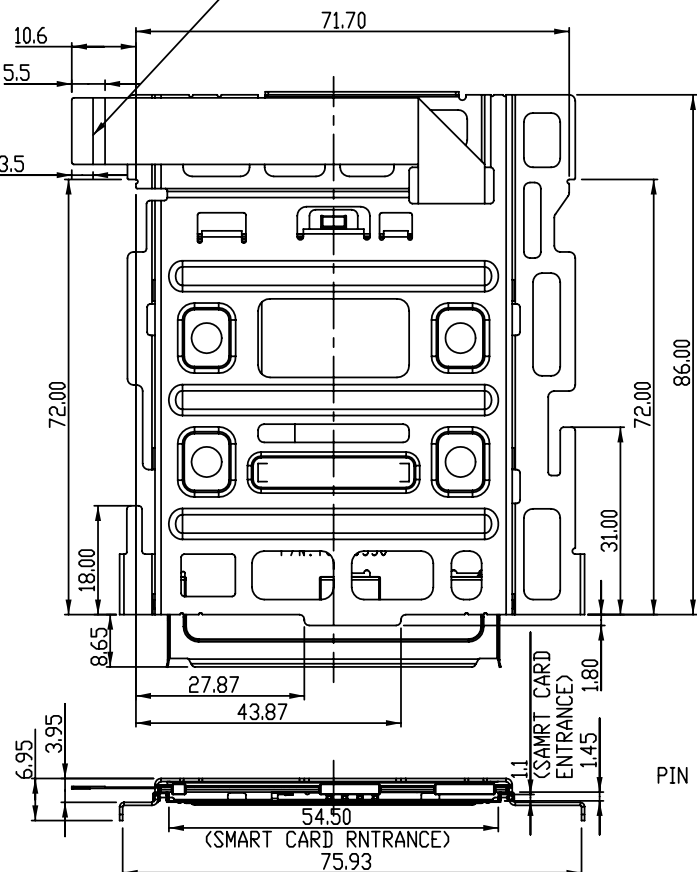
D

A

B

C

D



NOTE:

1. Material:

METAL SHELL: STAINLESS STEEL

BRACKET: STEEL

GUIDE BLOCK: THERMOPLASTIC, UL94V-0

PCB: FR-4, T=0.80mm, UL94V-0

FFC: POLYESTER, UL20624

PLATING SPEC AS BELOW:

CONTACT SIDE PLATING: GOLD FLASH 0.076um MIN.

SOLDER SIDE PLATING: MATTE TIN.

TERMINAL: COPPER ALLOY.

PLATING SPEC AS BELOW:

UNDERPLATING: NICKEL.

CONTACT PLATING: GOLD 0.76um MIN.

SOLDER TAIL: MATTE TIN.

2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

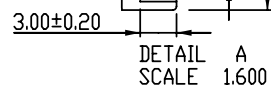
3. REFERENCE SPECIFICATION:

PRODUCT SPEC: GS-12-231.

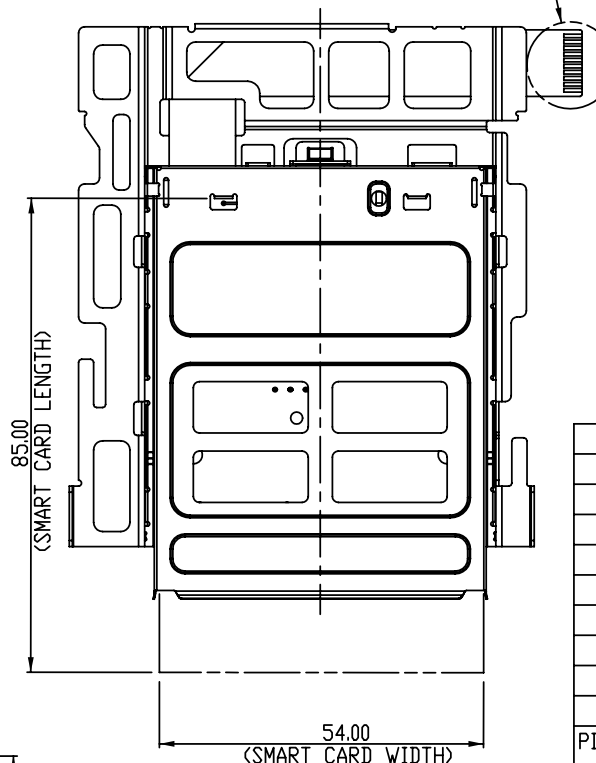
PACKING SPEC: GS-14-829.

PIN 10

PIN 1



| rev | ecn no   | dr | date     |
|-----|----------|----|----------|
| 1   | N09-XXXX | SH | 04/14/09 |
| 2   | -        | SH | 07/16/09 |
| V   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |
| -   | -        | -  | -        |



|         |            |                             |
|---------|------------|-----------------------------|
| 10      | VCC        | C1                          |
| 9       | RESET      | C2                          |
| 8       | CLOCK      | C3                          |
| 7       | RFU 4      | C4                          |
| 6       | GND        | C5                          |
| 5       | VPP        | C6                          |
| 4       | I/O        | C7                          |
| 3       | RFU 8      | C8                          |
| 2       | SENSOR 2   |                             |
| 1       | SENSOR 1   |                             |
| PIN NO. | ASSIGNMENT | PIN NO. DEFINED BY ISO-7816 |

www.fciconnect.com

surface - ✓ tolerance std

TOLERANCES UNLESS OTHERWISE SPECIFIED

ANGULAR LINEAR

0° ±2°

0.X ±0.3

0.XX ±0.2

0.XXX ±0.1

Product family

-

Spec ref

size A4

Scale 1.000

ECN



SMART CARD READER

title

-

catalog no

-

CUSTOMER DRAWING

sheet 19 of

Rev. V

10010556

STATUS: Released

Printed: Mar 12, 2010

3 PDM: Rev:V

4

PRODUCT NO

10010556-018LF

A

B

C

D

A

B

C

D

SEE DETAIL A

FFC

75.00

9.10

85.60  
(SMART CARD LENGTH)

(28.00)

(53.98)  
(SMART CARD WIDTH)DETAIL C  
SCALE 2.000DETAIL B  
SCALE 2.000

## NOTE:

## 1. Material:

METAL SHELL: STAINLESS STEEL, T=0.20mm

PCB: FR-4, T=0.80mm

TERMINAL: PHOSPHOR BRONZE.

PLATING SPEC AS BELOW:

ALL OVER NICKEL UNDERPLATING

GOLD PLATING ON CONTACT SURFACE.

MATTE TIN PLATING ON SOLDER TAIL.

FLEXIBLE FLAT CABLE: TOTAL LENGTH=124±2mm

PLATING SPEC AS BELOW:

CONTACT SURFACE: TIN PLATING.

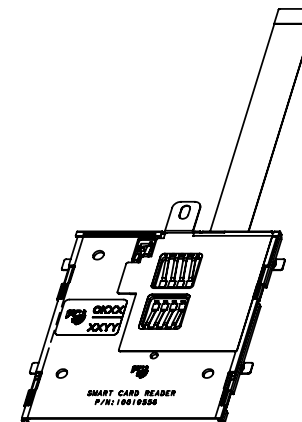
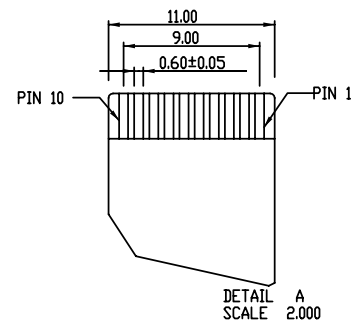
SOLDER TAIL: TIN PLATING.

## 2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

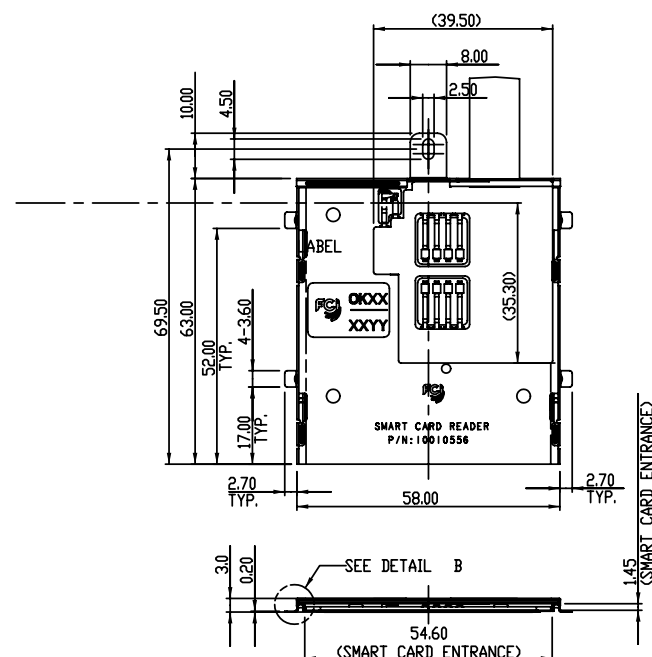
## 3. REFERENCE SPECIFICATION:

PRODUCT SPEC. GS 12-231

PACKING SPEC. GS 14-829



SEE DETAIL C



|         |            |
|---------|------------|
| 10      | RFU        |
| 9       | I/O        |
| 8       | Vpp        |
| 7       | GND        |
| 6       | Sensor 2   |
| 5       | Sensor 1   |
| 4       | Vcc        |
| 3       | Reset      |
| 2       | Clock      |
| 1       | RFU        |
| PIN NO. | ASSIGNMENT |

| TOLERANCE UNLESS OTHERWISE SPECIFIED |                                      |
|--------------------------------------|--------------------------------------|
| LINEAR                               | X.X=±0.8<br>X.XX=±0.3<br>X.XXX=±0.13 |
| ANGLE                                | ±3°                                  |

|                                                                                       |            |          |                                                                                               |  |               |       |                                                                                                  |      |                                                                                       |       |        |  |             |  |      |  |
|---------------------------------------------------------------------------------------|------------|----------|-----------------------------------------------------------------------------------------------|--|---------------|-------|--------------------------------------------------------------------------------------------------|------|---------------------------------------------------------------------------------------|-------|--------|--|-------------|--|------|--|
| www.fciconnect.com                                                                    |            |          | surface  |  | tolerance std |       | projection  |      |  |       |        |  |             |  |      |  |
|                                                                                       |            |          | TOLERANCES UNLESS OTHERWISE SPECIFIED                                                         |  |               |       |                                                                                                  |      |                                                                                       |       |        |  |             |  |      |  |
| Dr                                                                                    | MIAD SH    | 09/25/09 | ANGULAR                                                                                       |  | LINEAR        | 0.X   | ±0.8                                                                                             | size | A4                                                                                    | Scale |        |  |             |  |      |  |
| Eng                                                                                   | MIAD SH    | 09/25/09 |                                                                                               |  |               | 0.XX  | ±0.25                                                                                            |      |                                                                                       |       |        |  |             |  |      |  |
| Chr                                                                                   | TAD DANIEL | 09/25/09 | 0° ±°                                                                                         |  |               | 0.XXX | ±0.13                                                                                            |      |                                                                                       |       |        |  |             |  |      |  |
| Appr                                                                                  |            |          | Product family                                                                                |  |               |       |                                                                                                  |      | ECN                                                                                   |       |        |  |             |  |      |  |
|                                                                                       |            |          | Spec ref                                                                                      |  |               |       |                                                                                                  |      |                                                                                       |       |        |  |             |  |      |  |
|  |            |          | title                                                                                         |  |               |       | SMART CARD READER                                                                                |      |                                                                                       |       | dwg no |  | 10010556    |  | Rev. |  |
|                                                                                       |            |          | catalog no                                                                                    |  |               |       |                                                                                                  |      |                                                                                       |       |        |  | sheet 20 of |  | V    |  |

| rev | ecn no | dr | date     |
|-----|--------|----|----------|
| 1   | -      | SH | 09/25/09 |
| V   | -      | -  | -        |
| -   | -      | -  | -        |
| -   | -      | -  | -        |
| -   | -      | -  | -        |
| -   | -      | -  | -        |