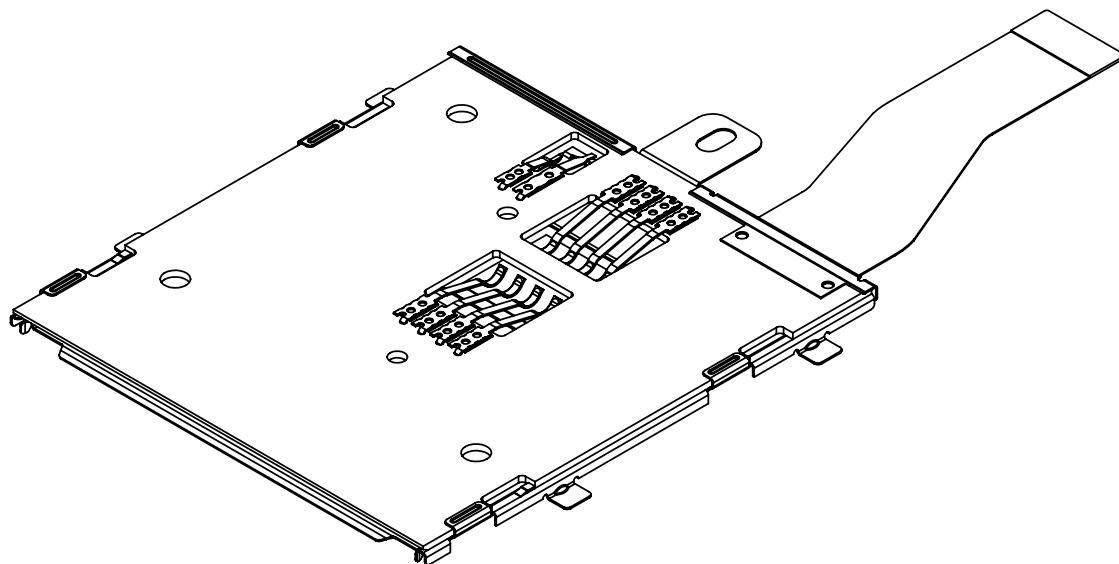




PRODUCT NO.	FPC	PACKAGING	COMPONENTS	LEAD FREE	PCB COLOR
10010556-002LF	10010559-002LF	10017475-02-002	ELEC. PARTS	YES	BLUE
10010556-003LF	10105325-001	10017475-02-009	N/A	YES	BLACK
10010556-004LF	10056226-002LF(FFC)	10017475-02-004	N/A	YES	BLUE
10010556-006LF	10058983-001LF	10017475-02-003	N/A	YES	BLACK
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

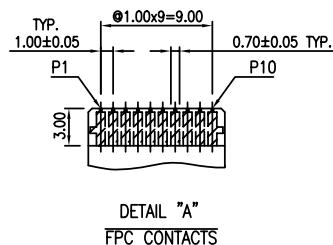


NOTE :

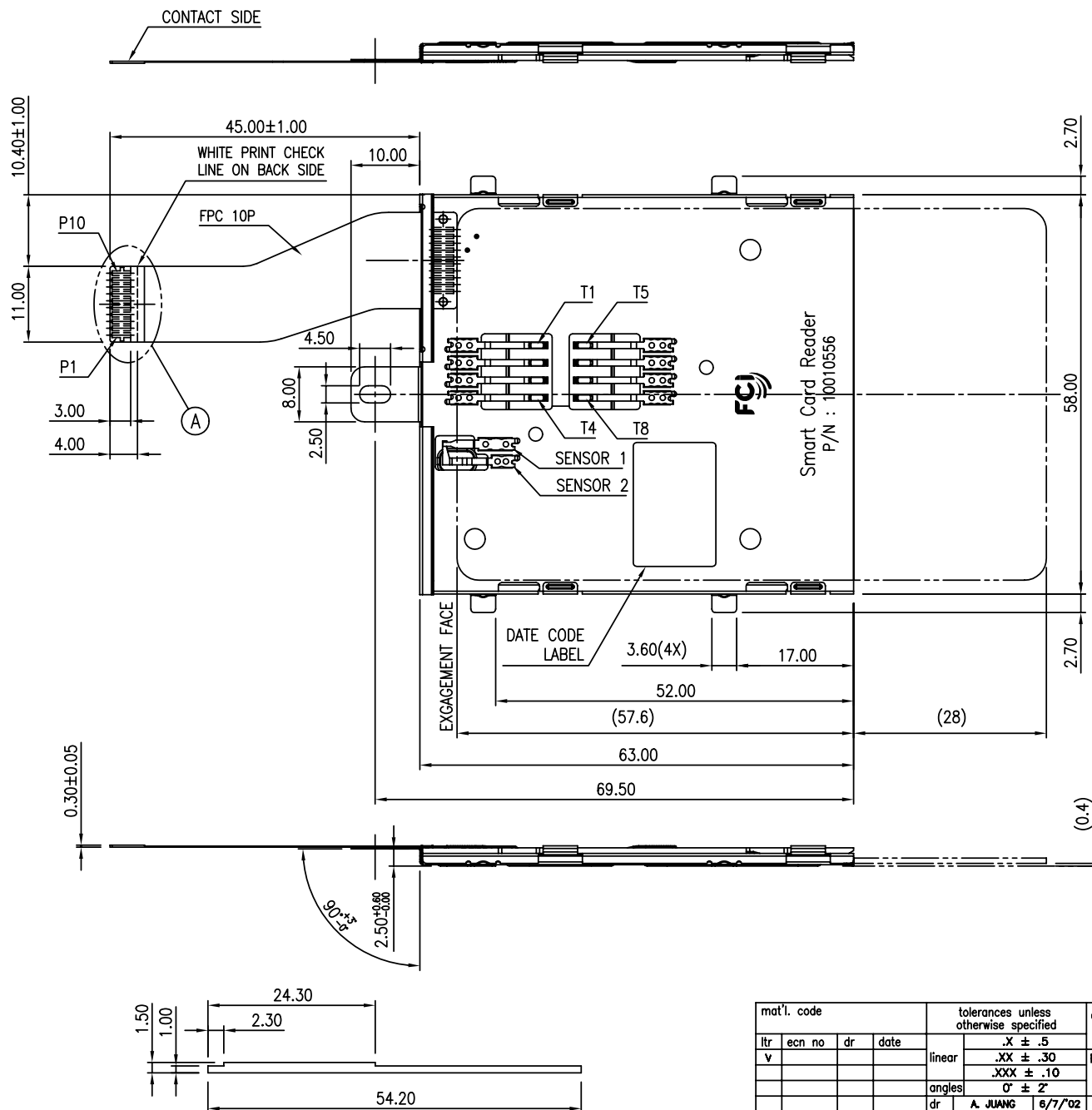
1. SMART CARD READER FOR LOWER PROFILE HEIGHT OF 3.0 mm.
2. TOTAL CIRCUIT RESISTANCE PER ONE LOOP SHALL NOT EXCEED 100 MILLIOHMS.
3. MATERIALS :
CONTACTS : COPPER ALLOY, GOLD OVER NICKEL ON CONTACT AREA.
TOP PCB : FR4.
COVER : STAINLESS STEEL.
4. ENVIRONMENT :
STORAGE TEMPERATURE : FROM -40°C TO 100°C.
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		title		product family	95	code
R	N08-0136	SH	07/07/08	linear	.XX ± 0.30						
S	N08-0212	SH	10/06/08		.XXX ± 0.10						
T	N09-0224	SH	7/15/09	angles	0° ± 2°		A3	10010556	sheet 1 of 20		
U	N09-0306	SH	10/13/09	dr	A.JUANG 6/7'02						
V	N10-0058	SH	3/3/10	enrg	A.JUANG 6/7'02						
				chr	A.JUANG 6/7'02						
				appd	JENN.TSAO 6/7'02						
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



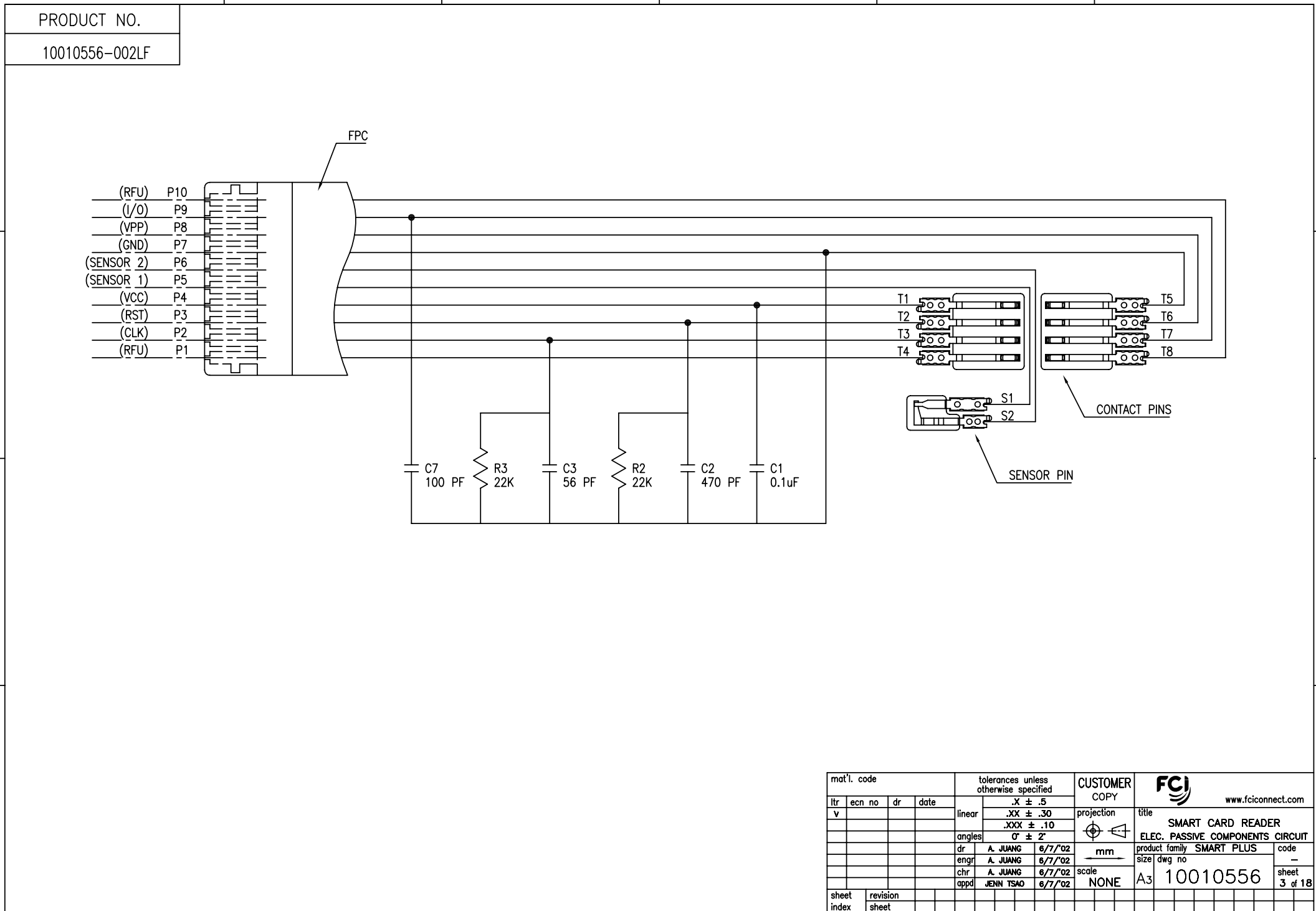
ENTRANCE RECOMMEND

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				code	
v					.XX ± .30			product family SMART PLUS				sheet	
				angles	.XXX ± .10			size dwg no				2 of 18	
				dr	0° ± 2°	mm		A3				10010556	
				enr	A. JUANG 6/7/'02	scale	NONE						
				chr	A. JUANG 6/7/'02								
				appd	JENN TSAO 6/7/'02								
sheet index	revision sheet												

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mat'l. code				tolerances unless otherwise specified		CUSTOMER COPY		FCI		www.fciconnect.com	
ltr	ecn no	dr	date	linear	.X ± .5	projection		title			code
v					.XX ± .30						
					.XXX ± .10						
				angles	0° ± 2°	mm		product family			sheet
				dr	A. JUANG 6/7/'02						
				enrg	A. JUANG 6/7/'02						
				chr	A. JUANG 6/7/'02	scale	NONE	size			3 of 18
				appd	JENN TSAO 6/7/'02						
sheet index	revision sheet							A3 10010556			
PDM: Rev:V				STATUS: Released				Printed: Mar 12, 2010			
form no. 7530-001-103								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

53.98 REF.
(SMART CARD WIDTH)

56.90

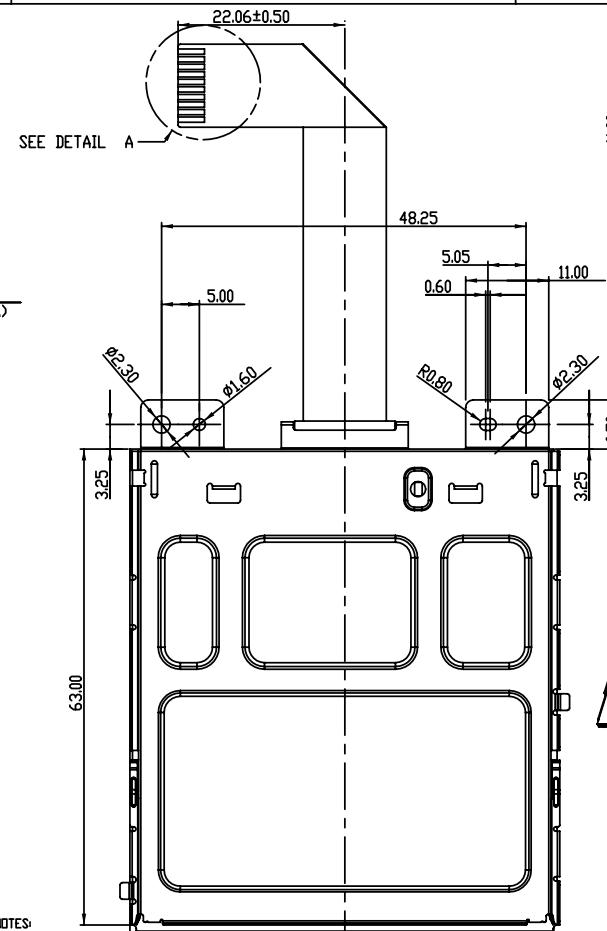
PPID LABEL
TYPE W

POLYESTER FILM
COLOR:BLACK
(THICKNESS:0.10mm)

3.0
(REF.)

3.1
(REF.)

(0.76)
(SMART CARD
THICKNESS)

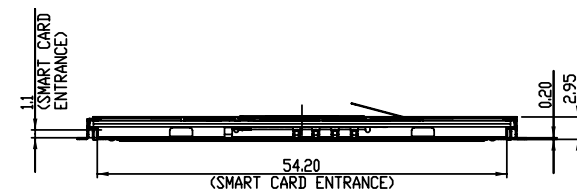


- NOTES:
1. Material:
 - 1a. METAL SHELL: STAINLESS STEEL, T=0.20mm.
 - 1b. GUIDE BLOCK: THERMOPLASTIC, UL94V-0.
 - 1c. PCB: FR-4, T=0.80mm, UL94V-0.
 - 1d. FLAT CABLE: POLYESTER, UL20624, NO PRINTING, PLATING SPEC AS BELOW:
 - CONTACT SIDE PLATING: Au 1-3 uin.
 - SOLDER SIDE PLATING: Pure Tin 50uin 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 ISO 7816

www.fciconnect.com		surface x	tolerance x	std x	projection x	MM	
		TOLERANCES UNLESS OTHERWISE SPECIFIED					
Dr	BENNY CHEN	08/21/09	ANGULAR	LINEAR	0.X	±0.25	size A4
Eng	BENNY CHEN	08/21/09			0.XX	±0.15	Scale 0.500
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			dwg no 10010556		Rev. V
catalog no		* CUSTOMER DRAWING			sheet 4 of		

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	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-



REV F - 2006-04-17

1

2

3 PDM: Rev:V

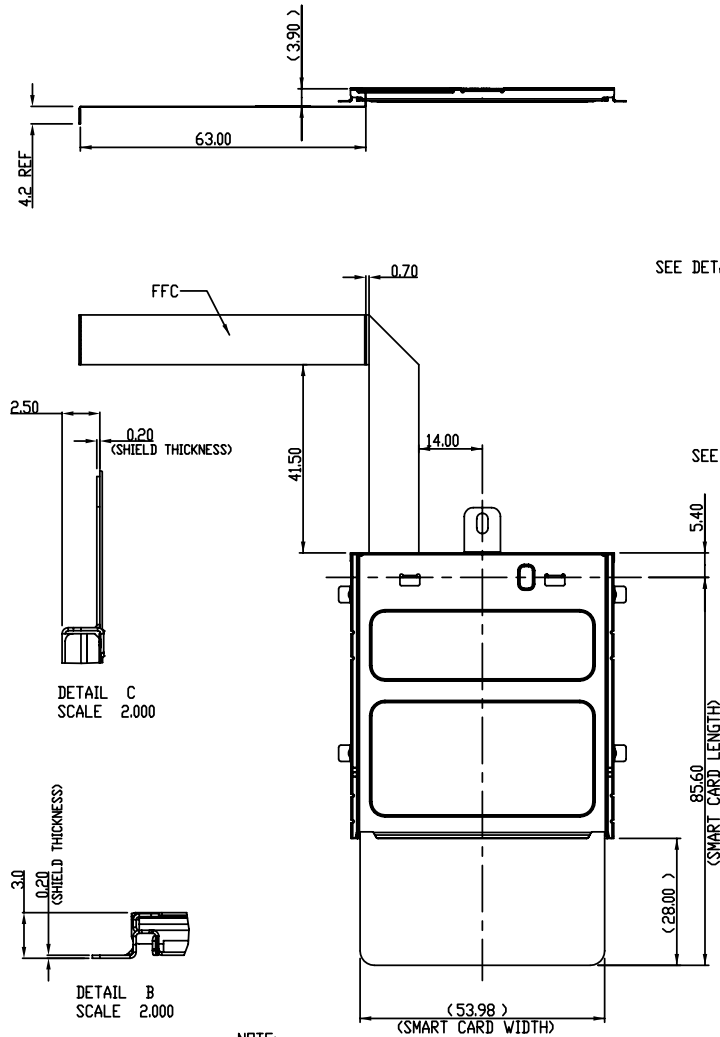
STATUS: Released

4 Printed: Mar 12, 2010

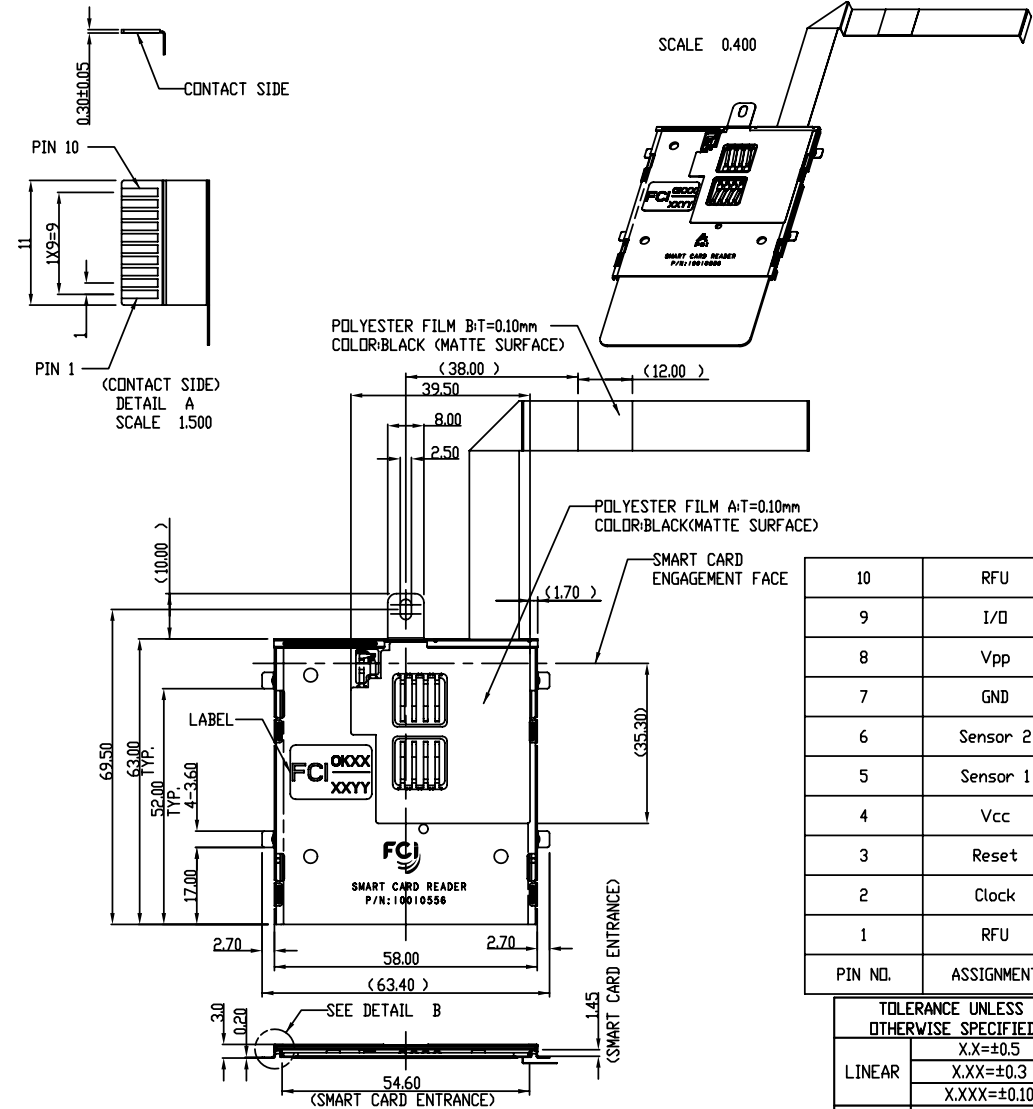


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PRODUCT NO
10010556-004LF



- NOTE: (SMART CARD WIDTH)
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



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=±0.5
	X.XX=±0.3
	X.XXX=±0.10
ANGLE	±0°30'

Mark with 10010556-004LF REV. In area indicated by X....				Material		Spec ref			
				Mat code		✓	tolerance	projection 	MM 
				Heat treat					
				Plating/Finish					
Dr	BENNY CHEN	07/06/05				size A4	Scale 0.500		
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 SMART CARD READER				no dwg 10010556		Rev. V	
Pro/E file		catalog no				CUSTOMER DRAWING		sheet 5 of	

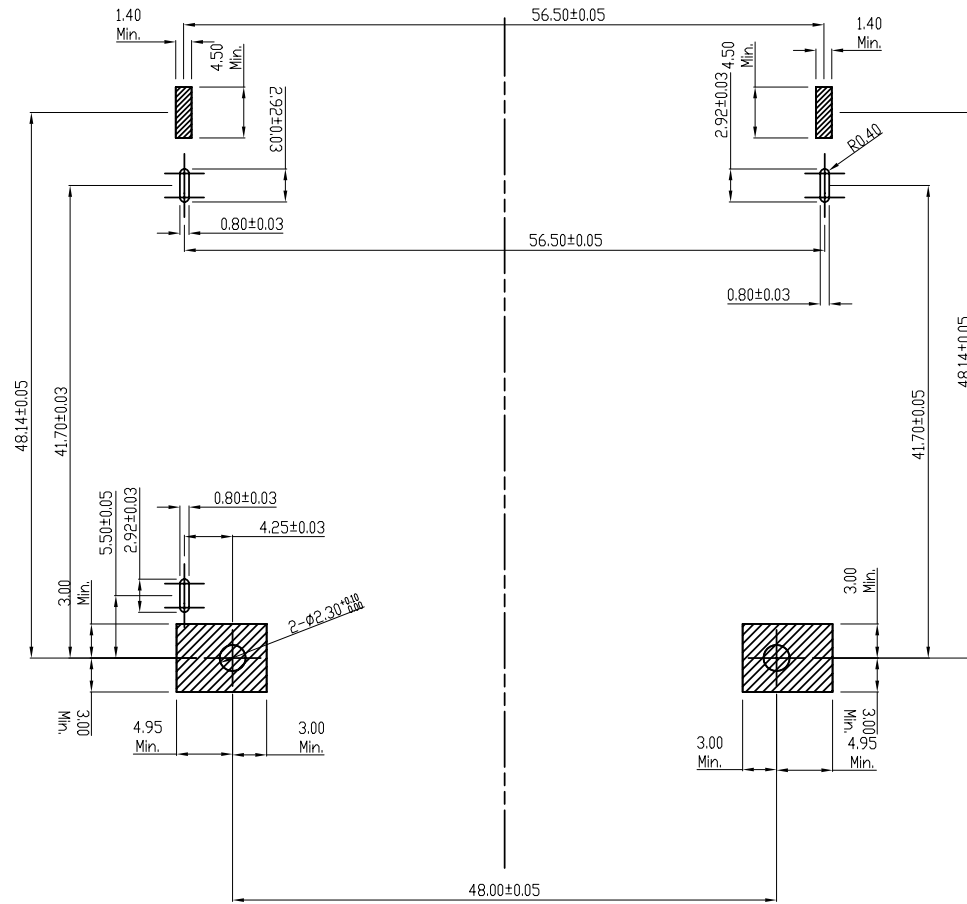
⁴ Printed: Mar 12, 2010

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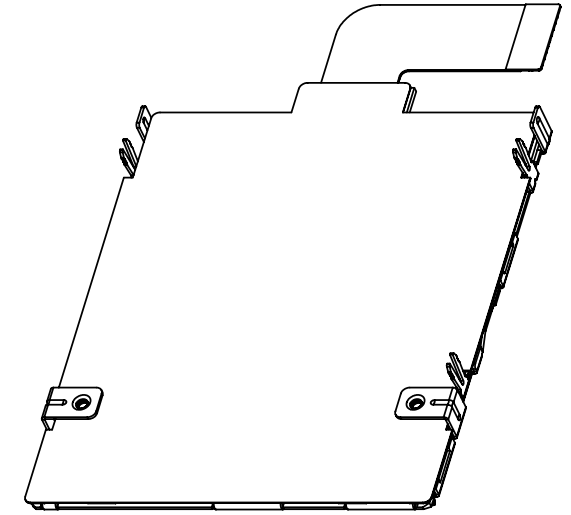


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PRODUCT NO
10010556-006LF



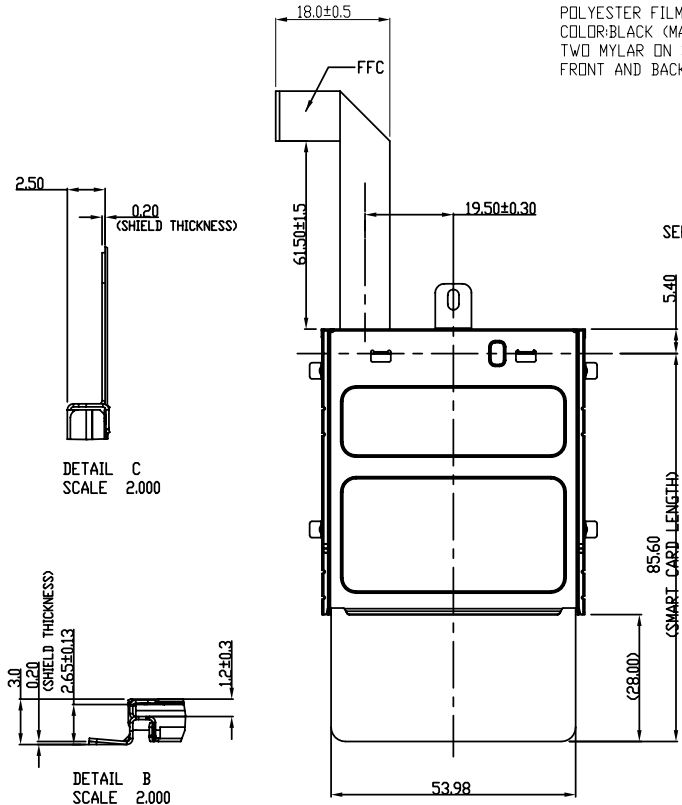
RECOMMENDED PCB LAYOUT
(PCB THICKNESS: 1.2 mm)
(MOUNTING SIDE)



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

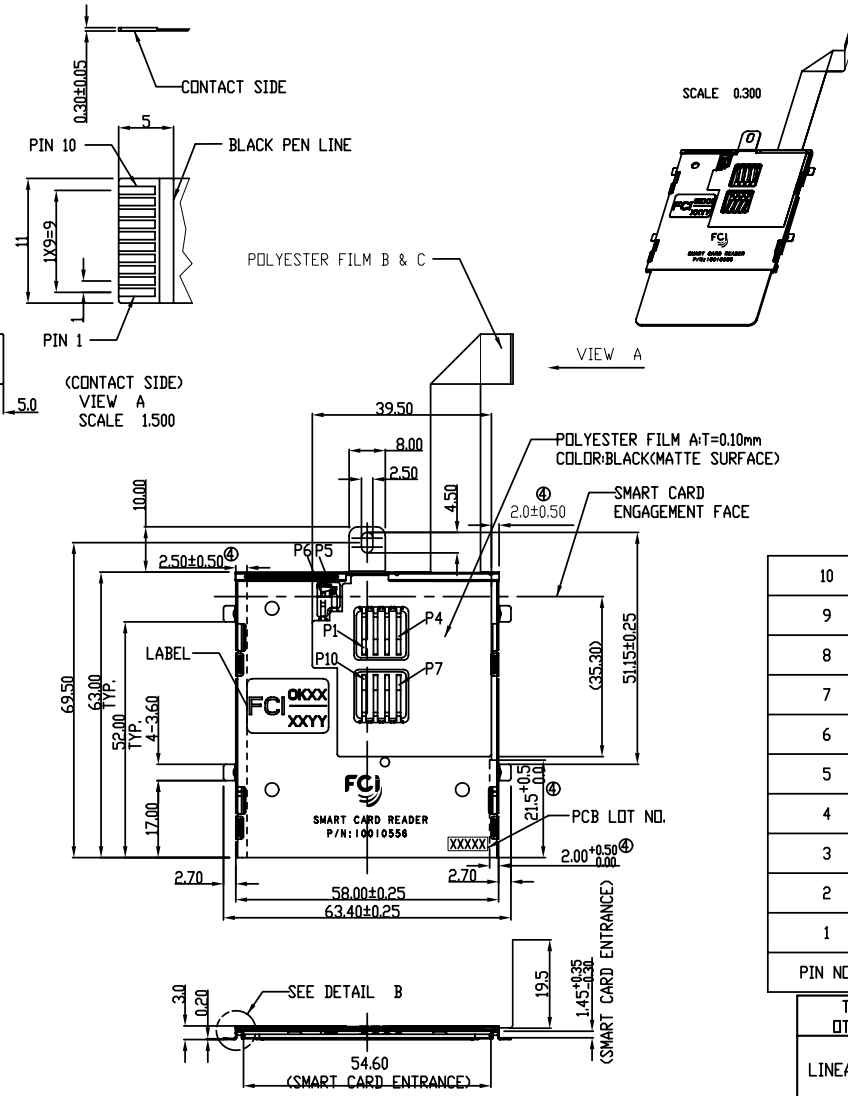
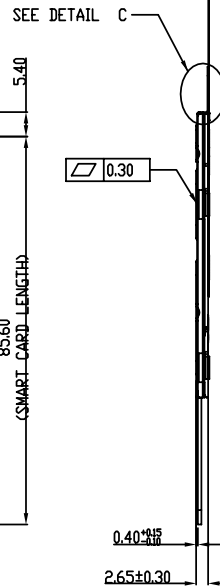
			www.fciconnect.com				tolerance					
Dr	BENNY CHEN	08/04/05	Product family				size		A4		Scale	
Eng	BENNY CHEN	08/04/05	Spec ref								1.000	
Chr	PAUL WANG	09/02/05	Material				ECN					
Appr	JOSEPH HSIA	09/02/05										
title	SMART CARD READER (FPC CABLE)						dwg no	10010556			Rev. V	
	ASSEMBLY		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

SUPPORTING TAPE
POLYESTER FILM B & C: T=0.10mm
COLOR: BLACK (MATTE SURFACE)
TWO MYLAR ON SAME POSITION:
FRONT AND BACK SURFACE OF FFC

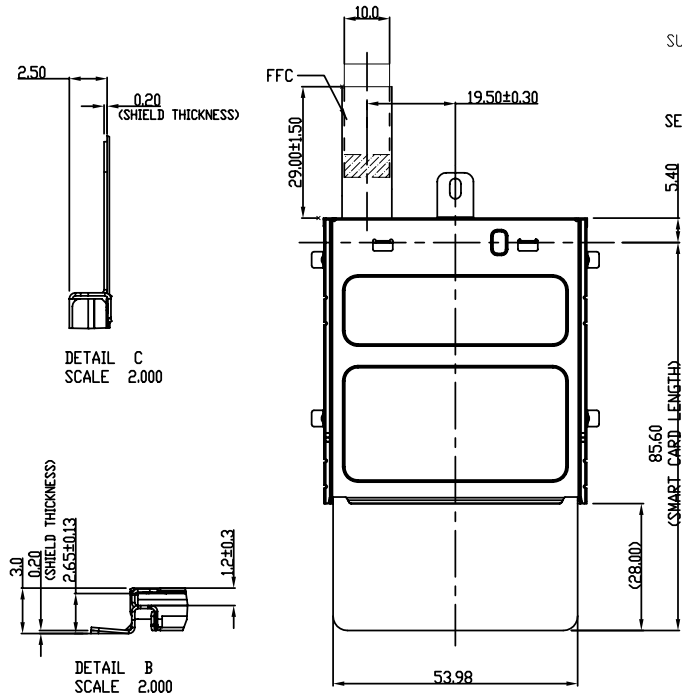


10	RFU
9	I/O
8	Vpp
7	GND
6	Sensor 2
5	Sensor 1
4	Vcc
3	Reset
2	Clock
1	RFU
PIN NO.	ASSIGNMENT

TOLERANCE UNLESS OTHERWISE SPECIFIED	
LINEAR	X.X=±0.25 X.XX=±0.13 X.XXX=±0.050
ANGLE	±0°30'

Mark with 10010556-004LF REV. In area indicated by X.....				Material			Spec ref									
				Mat code			✓ tolerance			projection		 MM ← →				
				Heat treat												
				Plating/Finish												
				rev	ecn no	dr	date	Dr	DANIEL TAO	07/05/07				size	A4	Scale
V				Eng	DANIEL TAO	07/05/07	Product family									
				Chr	DANIEL TAO	07/05/07	Model Name			10010556-005LF			ECN			
				Appr	JOSEPH HSIA	07/05/07	Model Revision						REL Level			
						title			ASSEMBLY			dwg no		10010556		Rev.
									SMART CARD READER							V
				Pro/E file	catalog no						CUSTOEMER DRAWING			sheet 8 of		

PRODUCT NO
10010556-008LF

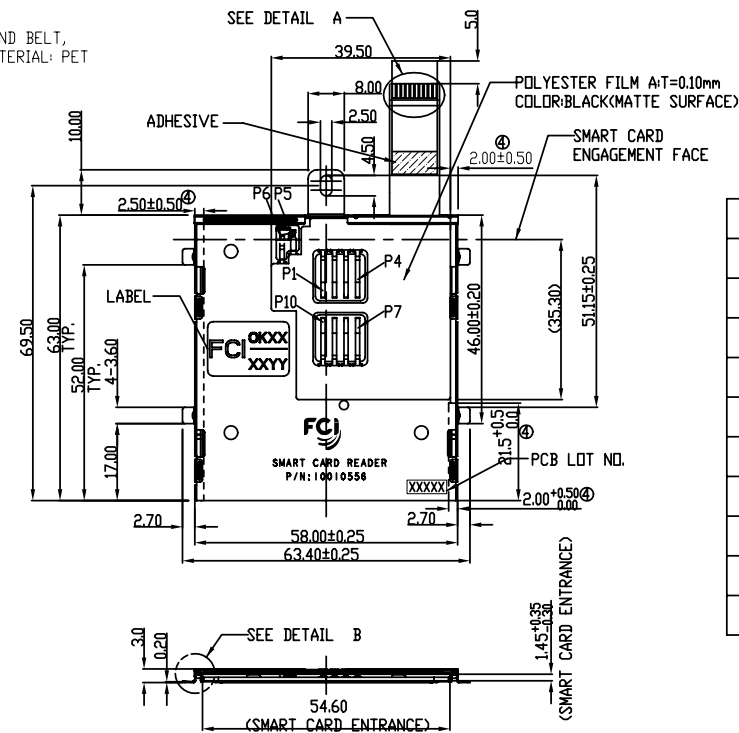
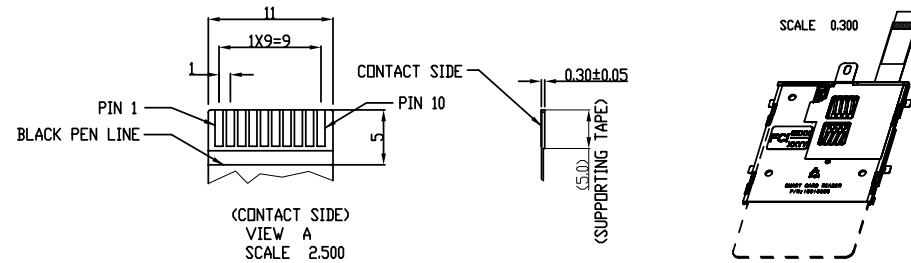


NOTE:
1. Material:
METAL SHELL: STAINLESS STEEL, T=0.20mm
PCB: FR-4, T=0.80mm
TERMINAL: PHOSPHOR BRONZE.
PLATING SPEC AS BELOW:
ALL OVER NICKEL UNDERPLATING
GOLD PLATING ON CONTACT SURFACE.
MATTE TIN PLATING ON SOLDER TAIL.
FLEXIBLE FLAT CABLE: TOTAL LENGTH=33.5±1mm
PLATING SPEC AS BELOW:
CONTACT SURFACE: 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 _{pp}
7	GND
6	Sensor 2
5	Sensor 1
4	V _{CC}
3	Reset
2	Clock
1	RFU
PIN NO.	ASSIGNMENT

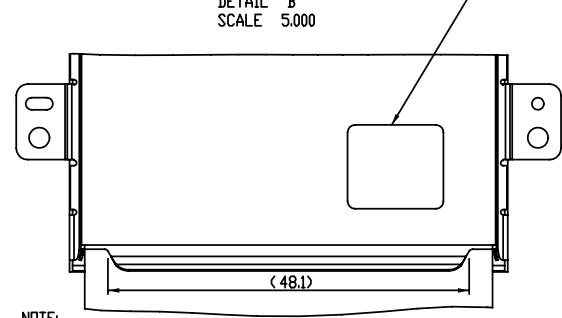
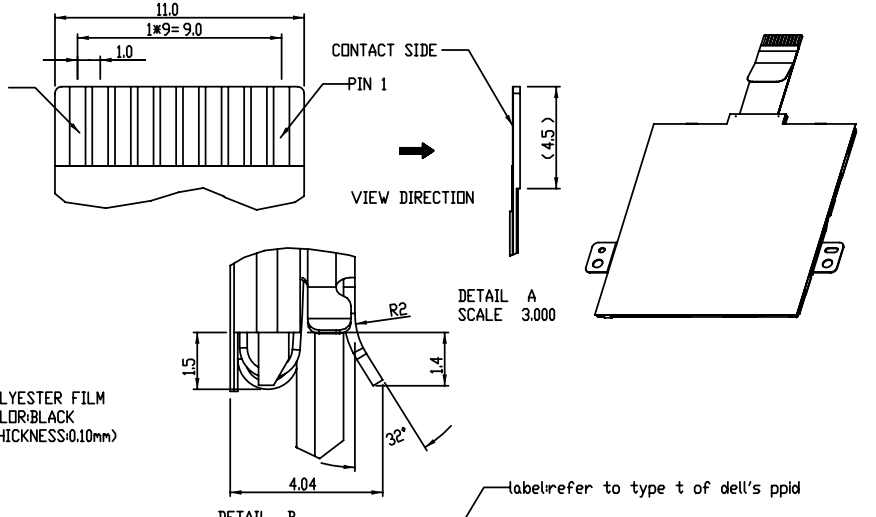
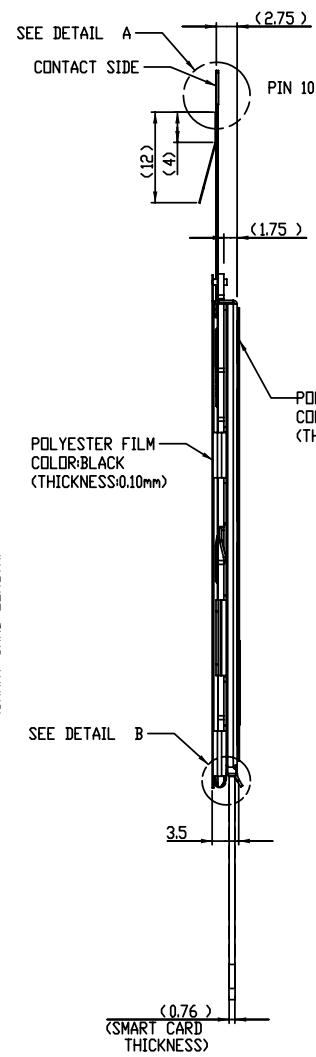
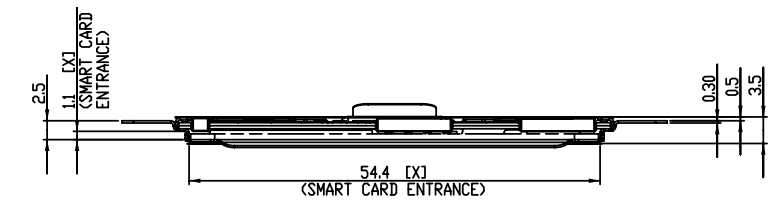
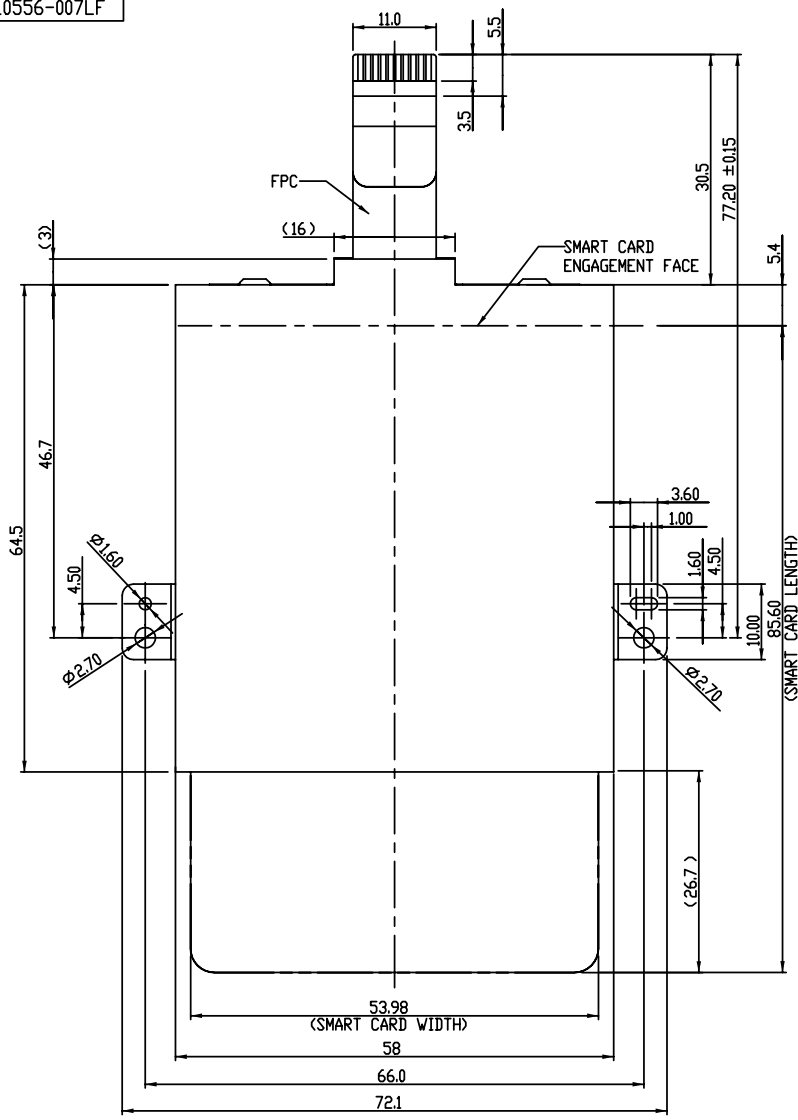
TOLERANCE UNLESS OTHERWISE SPECIFIED	
LINEAR	X.X $\pm$ 0.5
	X.XX $\pm$ 0.3
	X.XXX $\pm$ 0.10
ANGLE	$\pm 0^{\circ}30'$

Mark with 10010556-004LF REV. In area indicated by X....				Material		Spec ref							
				Mat code		✓		tolerance		projection		MM	
				Heatreat									
				Plating/Finish									
				Dr	DANIEL TAO	07/05/07					size	A4	
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				no dwg		Rev.	
								ASSEMBLY					
								SMART CARD READER				V	
				Pro/E file	catalog no				CUSTOMER DRAWING		sheet 9 of		



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PART NUMBER
0010556-007LF



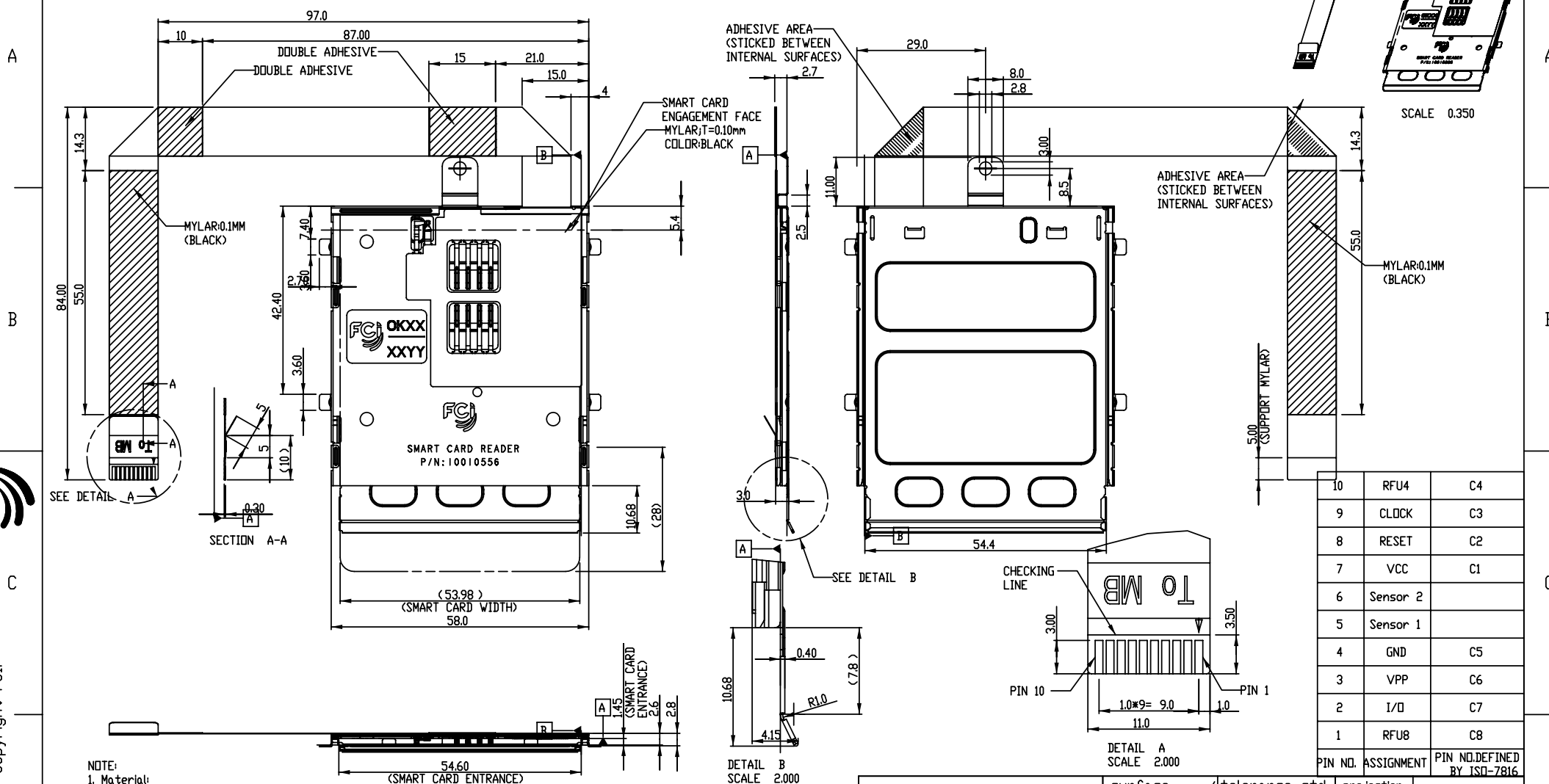
NOTE:
1. Material:
METAL SHELL: STAINLESS STEEL, T=0.30mm
GUIDE BLOCK: THERMOPLASTIC, UL94V-0.
PCB: FR-4, T=0.80mm, UL94V-0.
FPC: POLYIMIDE, T=0.30mm, UL94V-0.
PLATING SPEC AS BELOW:
UNDERPLATING: Ni 50 uin Min.
CONTACT SIDE PLATING: Au 3 uin, Min.
SOLDER SIDE PLATING: Pure Tin 100 uin Min.
TERMINAL: 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	SENSOR 2
9	SENSOR 1
8	RFU
7	I/O
6	VPP
5	GND
4	RFU
3	CLOCK
2	RESET
1	VCC
PIN NO.	ASSIGNMENT

rev	ecn no	dr	date
M	N08-0024	BENNY	03/05/08
N	N08-0045	BENNY	05/05/08
V	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

PACKING SPEC:GS-14-829. www.fciconnect.com			surface X		tolerance std X X		projection 		MM 			
			TOLERANCES UNLESS OTHERWISE SPECIFIED									
Dr	BENNY CHEN	07/23/07	ANGULAR		LINEAR		0.X		±0.25			
Eng	BENNY CHEN	07/23/07					0.XX		±0.15			
Chr	PAUL WANG	09/10/07	0° ±3°				0.XXX		±			
Appr	JOSEPH HSIA	09/11/07	Product family					ECN		*		
								Spec ref		*		
			title				dwg no				Rev.	
			ASSEMBLY				10010556				V	
			SMART CARD READER									
catalog no			*				CUSTOMER DRAWING		sheet 10 of			

PART NUMBER
0010556-009LF



SCALE 0.350

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

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

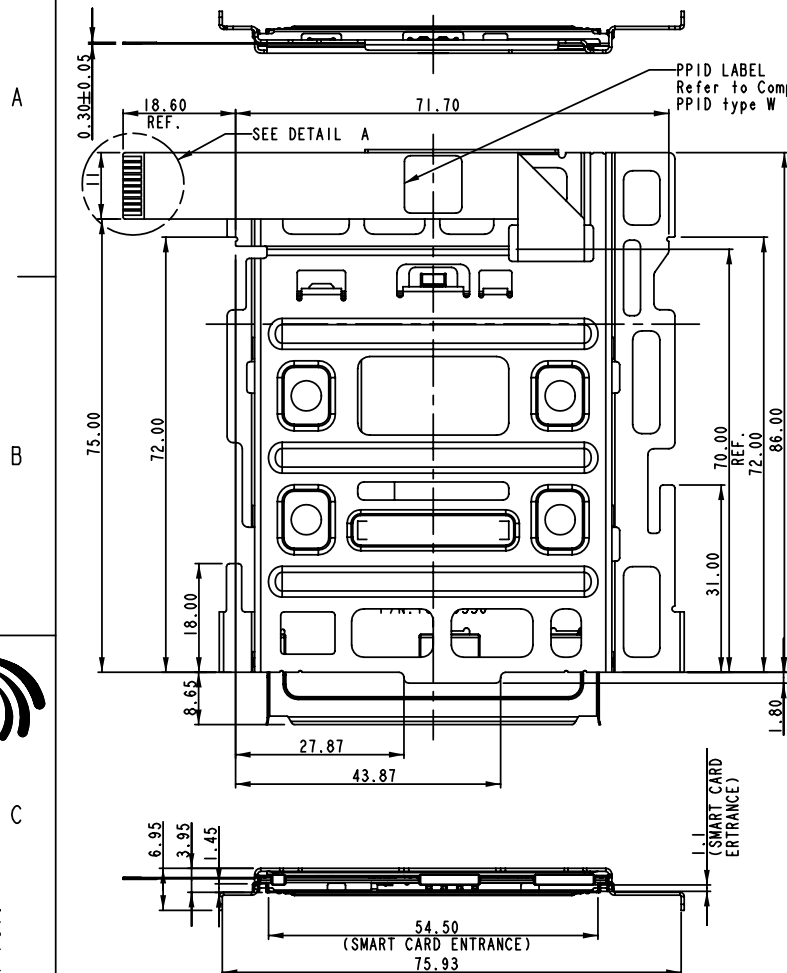
rev	ecn no	dr	date
P	N08-0093	SH	06/11/08
V	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

www.fciconnect.com			surface X		tolerance std X X		projection 		MM 		
			TOLERANCES UNLESS OTHERWISE SPECIFIED								
Dr	BENNY CHEN	10/24/07	ANGULAR		0.X		±0.4		size A4	Scale 0.500	
Eng	BENNY CHEN	10/24/07	LINEAR		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 ASSEMBLY SMART CARD READER				dwg no 10010556				Rev. V
catalog no			*				CUSTOMER DRAWING				sheet 11 of



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PART NUMBER
10010556-010LF



NOTE:

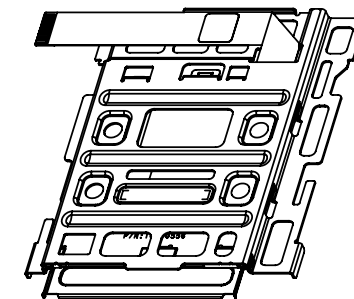
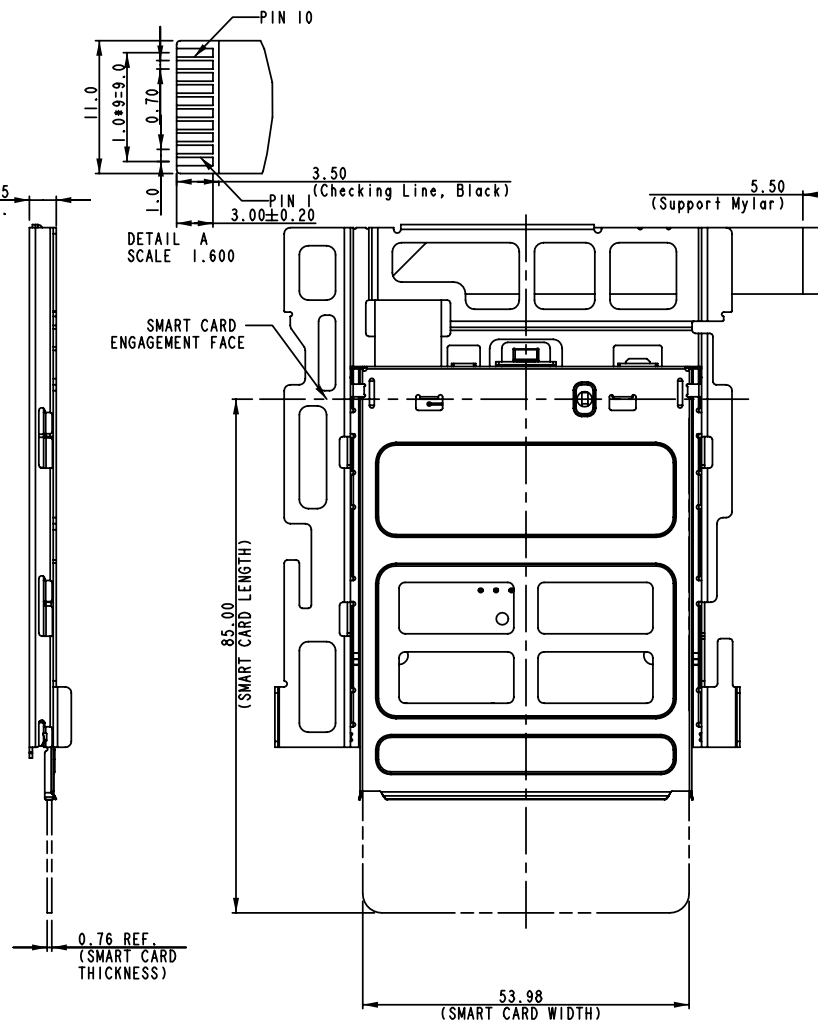
1. Material:

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.

2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD
3. REFERENCE SPECIFICATION:
PRODUCT SPEC.: GS-12-231.
PACKING SPEC.: GS-14-829.

2

2



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

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 X		tolerance std X X		projection 		MM 		
			TOLERANCES UNLESS OTHERWISE SPECIFIED								
Dr	BENNY CHEN	02/05/08	ANGULAR	LINEAR	0.X		±0.3		size A4	Scale 1.000	
Eng	BENNY CHEN	02/05/08			0.XX		±.20				
Chr	PAUL WANG	02/13/08			0.XXX		±X				
Appr	JOSEPH HSIA	02/15/08	Product family					ECN		*	
			Product family					Spec ref		*	
			title ASSEMBLY SMART CARD READER				dwg no 10010556			Rev V	
			catalog no				* CUSTOMER DRAWING			sheet 12 of	

REV F - 2008-04-17

3 PDM: Rev:V

STATUS: Released

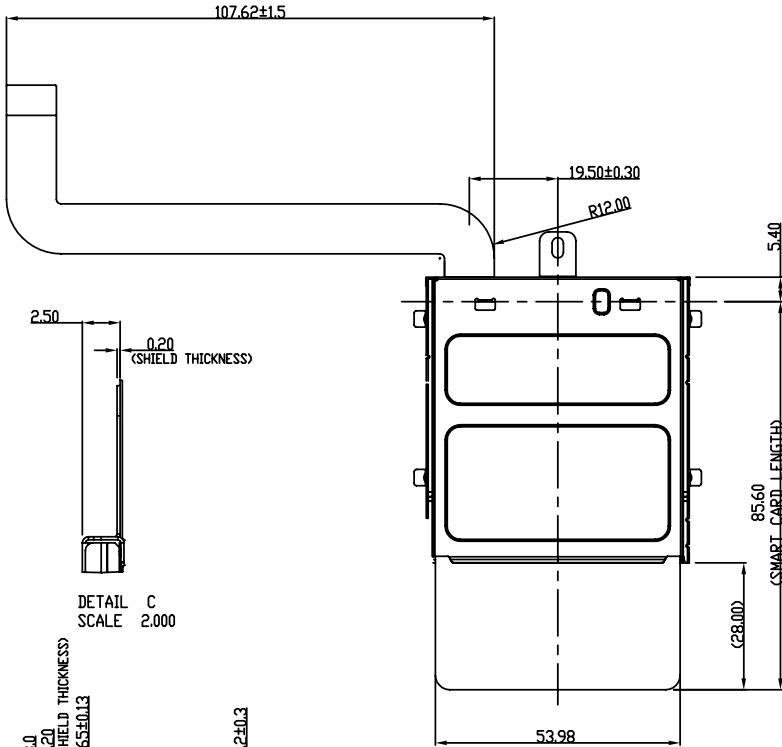
4 Printed: Mar 12, 2010



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PRODUCT NO
10010556-011LF

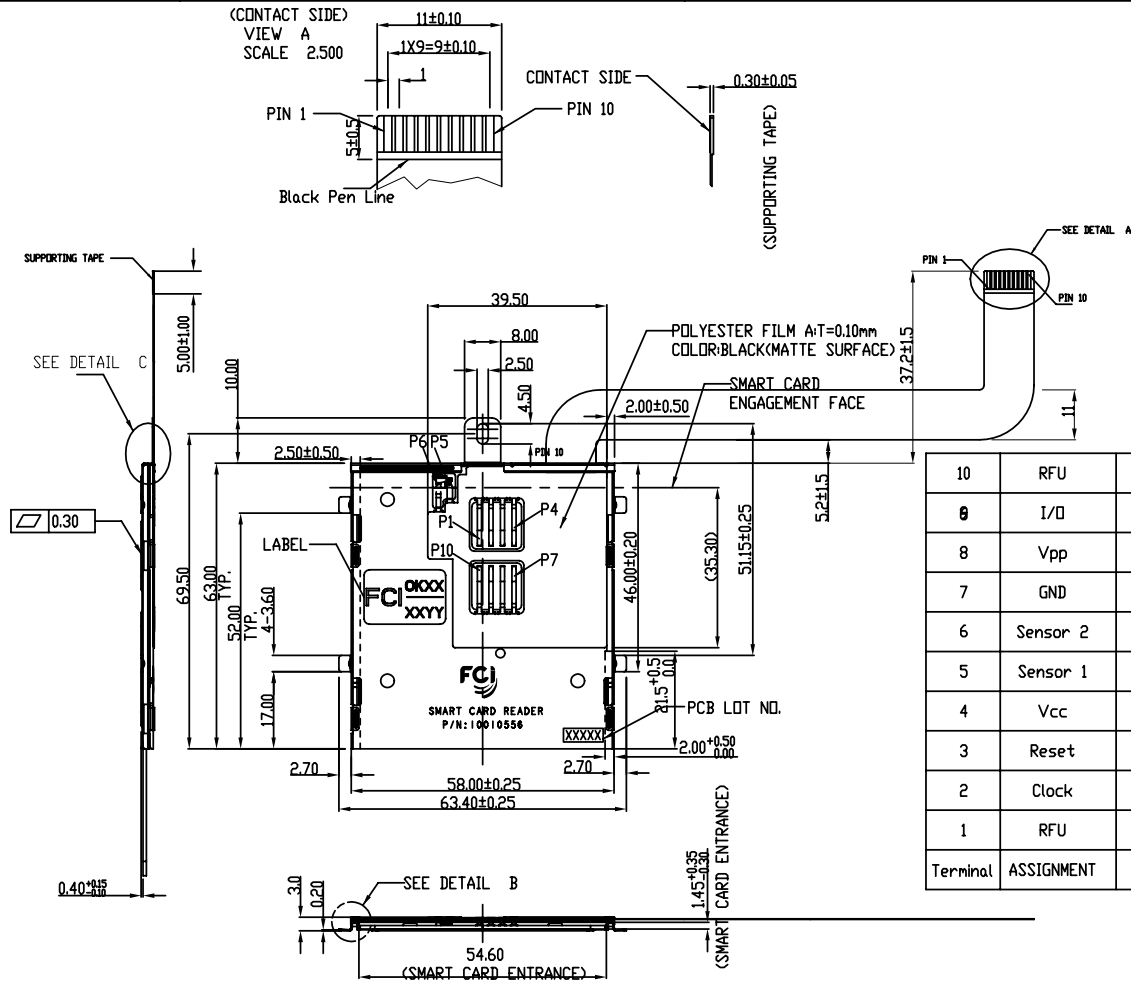


DETAIL C
SCALE 2.000

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	XX=±0.5 X.XX=±0.15 X.XXX=±0.050
ANGLE	±0°30'

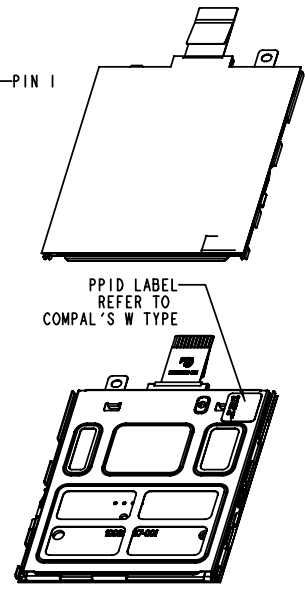
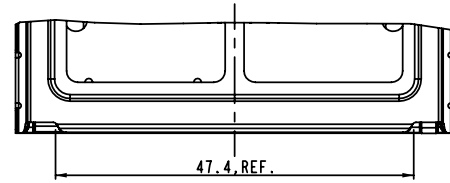
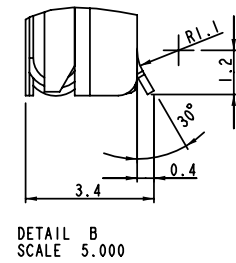
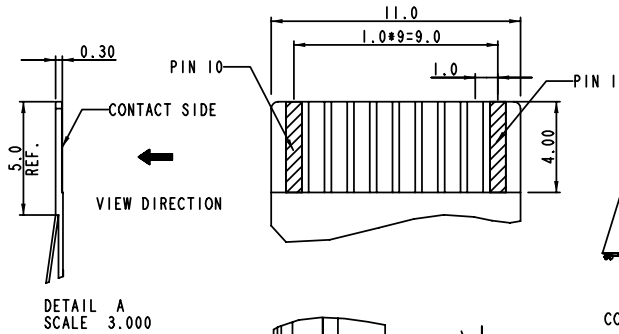
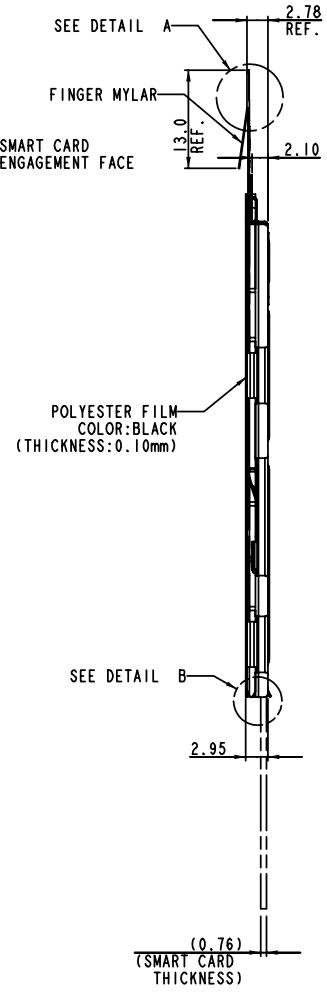
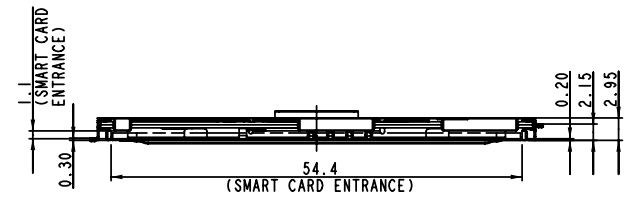
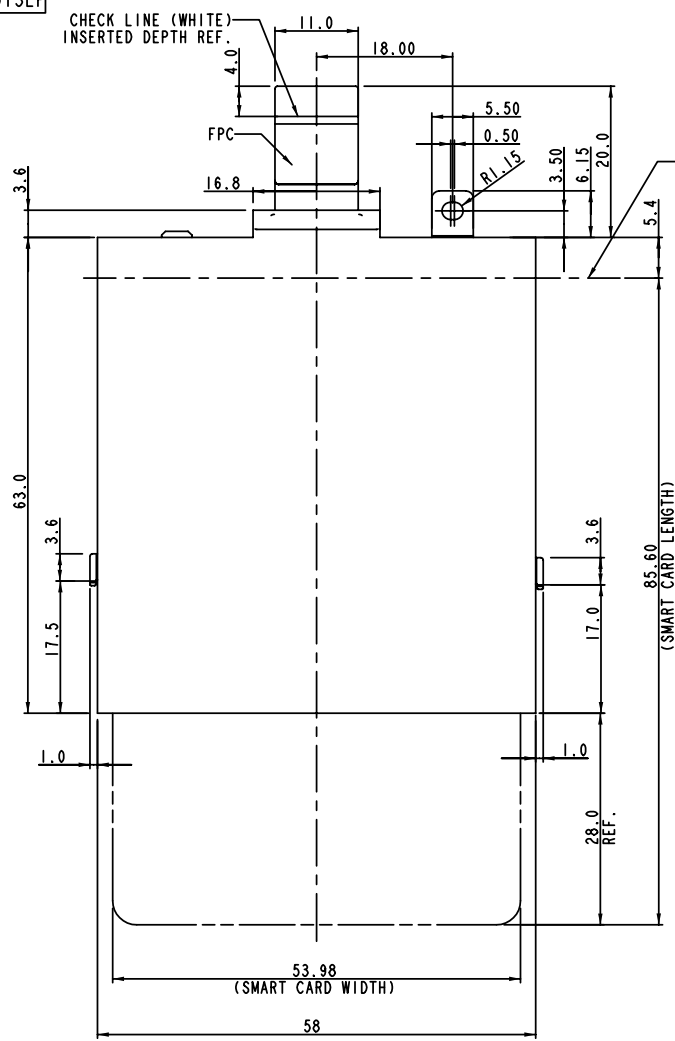
Mark with 10010556-004LF REV. In area indicated by X....				Material			Spec ref			
				Mat code			✓	tolerance	projection 	MM
				Heattreat						
				Plating/Finish						
				Dr	MIAO SH	05/08/08				
rev	ecn no	dr	date	Eng	MIAO SH	05/08/08	Product family		size A4	Scale 0.500
N	N08-0045	SH	05/08/08	Chr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

⁴ Printed: Mar 12, 2010



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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

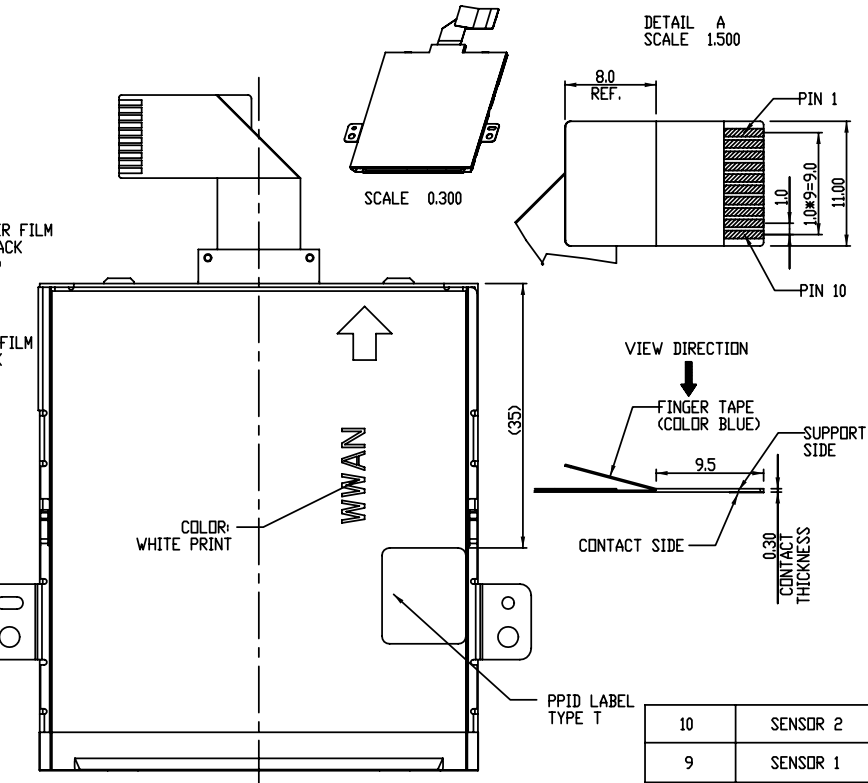
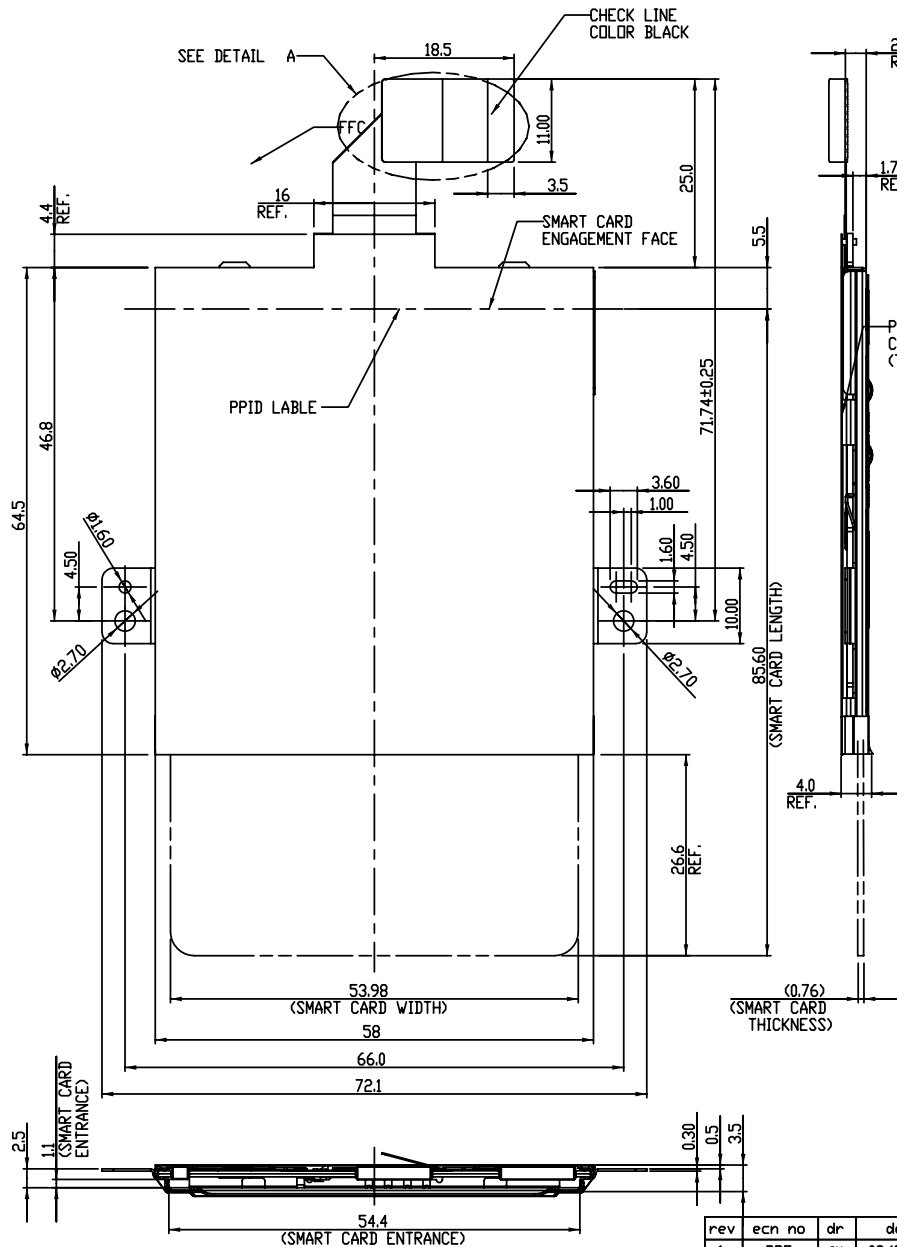
rev	ecn no	dr	date
R	N08-0136	BENNY	05/08/08
S	N08-0212	SH	10/06/08
V	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-
-	-	-	-

www.fciconnect.com			surface X		tolerance std X X		projection 		MM 	
			TOLERANCES UNLESS OTHERWISE SPECIFIED							
Dr	BENNY CHEN	05/08/08	ANGULAR LINEAR		0.X		±0.25		size A4	Scale 0.500
Eng	BENNY CHEN	05/08/08			0.XX		±0.15			
Chr	PAUL WANG	05/19/08			0° ±3°		0.XXX ±			
Appr	JOSEPH HSIA	06/16/08	Product family						ECN *	
									</	



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PART NUMBER
10010556-015LF



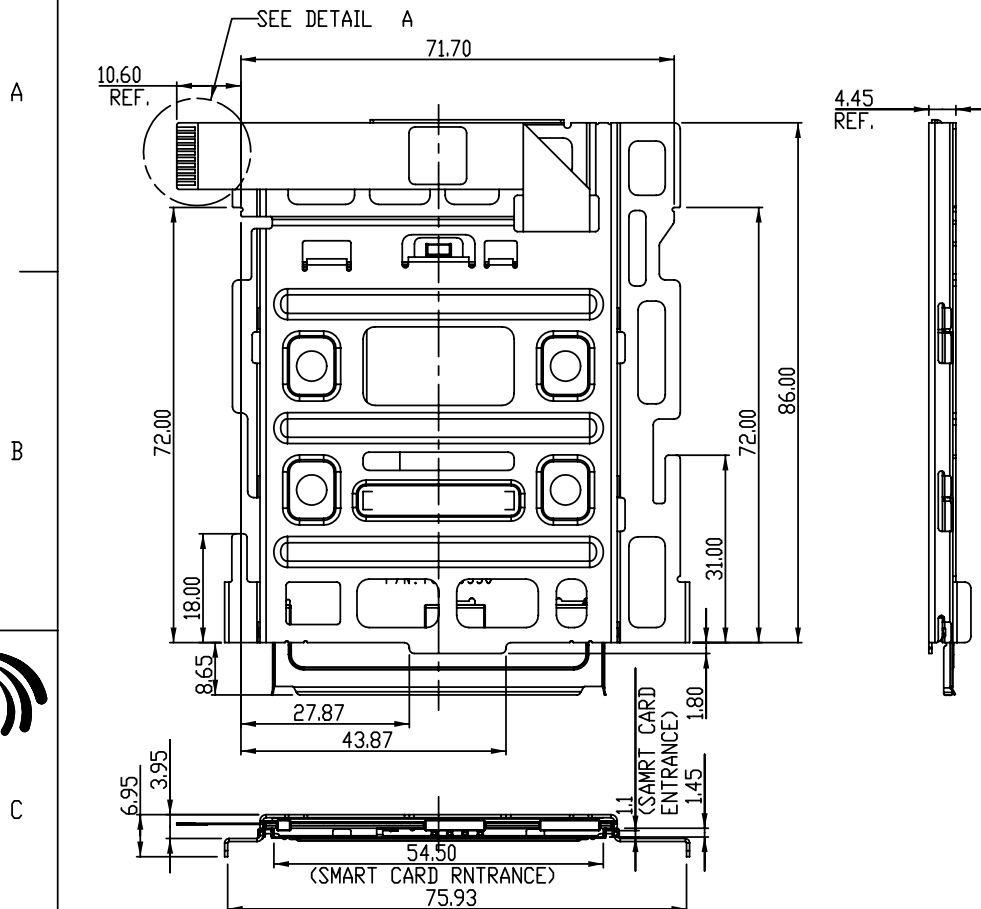
- NOTE:
- Material:
 - METAL SHELL: STAINLESS STEEL, T=0.30mm
 - GUIDE BLOCK: THERMOPLASTIC, UL94V-0
 - PCB: FR-4, T=0.80mm, UL94V-0
 - FFC: POLYESTER, T=0.30mm, UL20624, NO PRINTING
 - PLATING SPEC AS BELOW:
 - CONTACT SIDE PLATING: Au 3 uin Min.
 - SOLDER SIDE PLATING: Pure Tin 100 uin Min.
 - TERMINAL: 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
Eng	BENNY CHEN	04/15/09	LINEAR	0.XX	±0.15	Scale 0.500
Chr	PAUL WANG	04/18/09	0° ±3°	0.XXX	±	ECN *
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			

rev	ecn no	dr	date
1	PRE	SH	03/31/09
2	PRE	BENNY	04/15/09
3	PRE	BENNY	07/31/09
T	N09-0224	SH	08/19/09
V	-	-	-
-	-	-	-
-	-	-	-

PRODUCT NO.
10010556-016LF



NOTE:

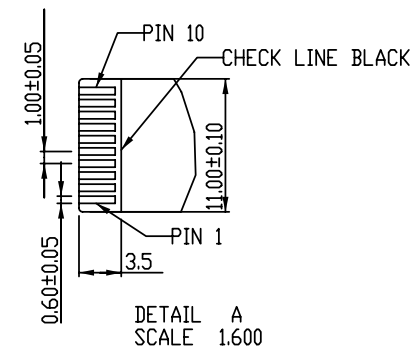
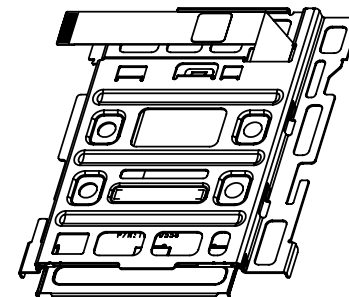
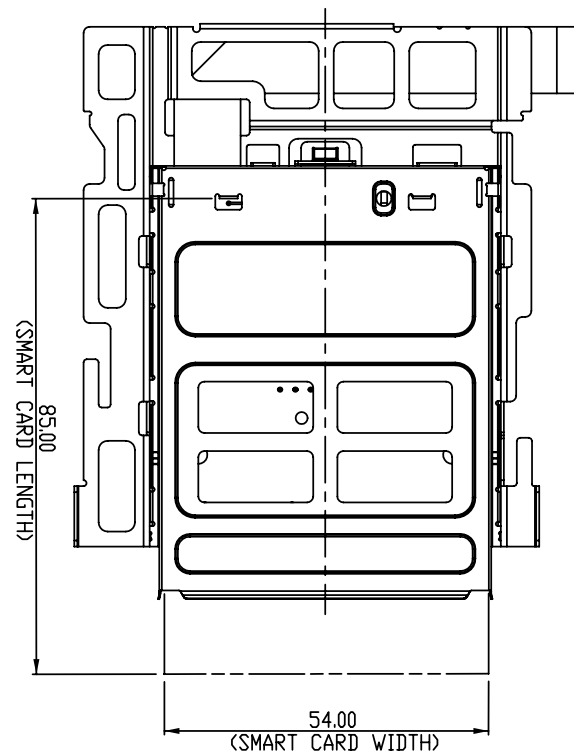
1. Material:

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

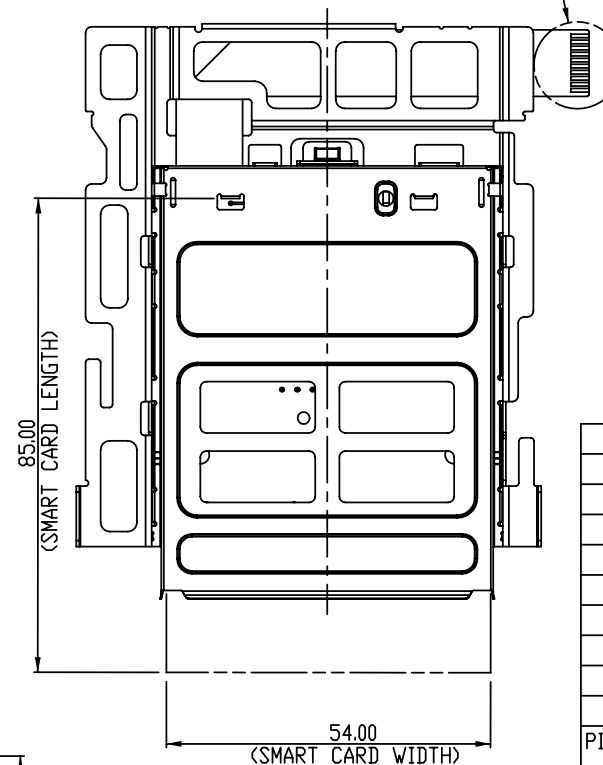
3. REFERENCE SPECIFICATION:
PRODUCT SPEC: GS-12-231.
PACKING SPEC: GS-14-829.



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

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 1.000	
Eng	MIAD SH	04/14/09				0.XX	±0.2				
Chr	TAD DANIEL	04/14/09	0°	±2°		0.XXX	±0.1	ECN			
Appr	TAD DANIEL	04/14/09	Product family				-	Spec ref			
		title				dwg no				Rev.	
		SMART CARD READER				10010556				V	
		-									
		catalog no				CUSTOMER DRAWING				sheet 18 of	

rev	ecn no	dr	date
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

Technical drawing of a 16-pin connector (Detail A). The drawing shows a side view of the connector with 16 pins. The overall width is 3.00 ± 0.20 . The height of the connector body is 1.10 . The height of the pins is 0.60 . The distance between the pins is 1.00 . The pins are labeled PIN 1 and PIN 10. The drawing is labeled DETAIL A and SCALE 1.600.

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

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	1.000
Eng	MIAD SH	04/14/09			0.XX	±0.2				
Chr	TAD DANIEL	04/14/09			0° ±2°	0.XXX				
Appr	TAD DANIEL	04/14/09	Product family -				Spec ref			
		title SMART CARD READER -				dwg no 10010556		Rev. V		
catalog no		-				CUSTOMER DRAWING		sheet 19 of		



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PRODUCT NO
10010556-018LF

SEE DETAIL A

FFC

2.50
0.20
(SHIELD THICKNESS)

DETAIL C
SCALE 2.000

3.0
0.20
(SHIELD THICKNESS)

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.

FLEXIBLE FLAT CABLE: TOTAL LENGTH=124±2mm

PLATING SPEC AS BELOW:

CONTACT SURFACE: TIN PLATING.

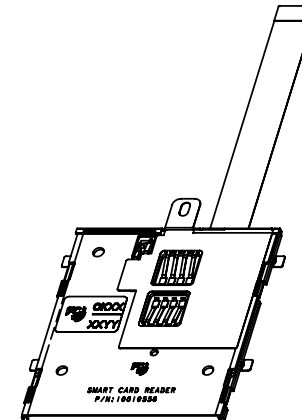
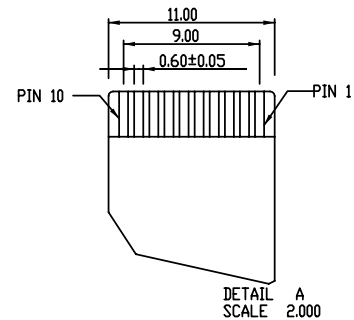
SOLDER TAIL: TIN PLATING.

2. CARD DETECTION SWITCH NORMALLY OPEN WITHOUT MATING CARD

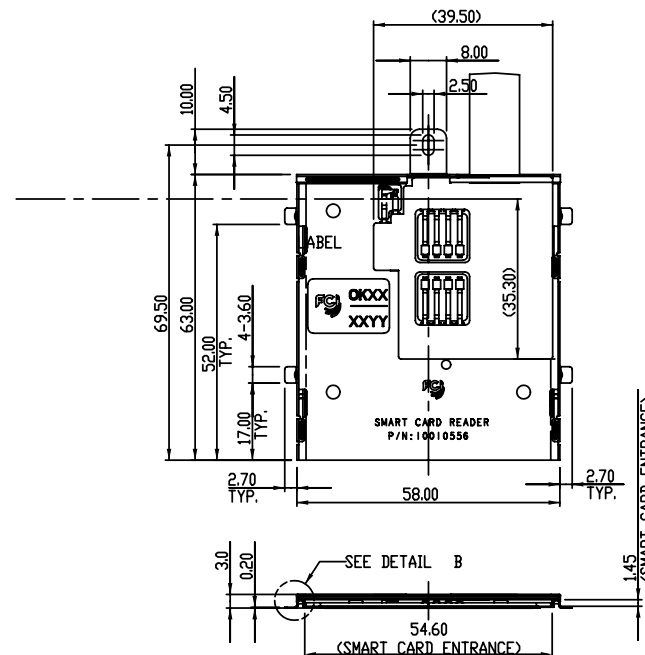
3. REFERENCE SPECIFICATION:

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 X.XX=±0.3 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			
Eng	MIAD SH	09/25/09			size	A4	Scale 0.500
Chr	TAD DANIEL	09/25/09	0°	±°			ECN
Appr			Product family			Spec ref	
			SMART CARD READER			dwg no	10010556
			catalog no			sheet 20 of	
						Rev.	V