

CABLINE® -CA IIP PLUS

全屏蔽設計, 64 Gbps/Lane PAM4, 0.4 mm 間距, 水平插拔款, 雙芯線 & 極細同軸線裝配

Product Specifications:

Mating type	Horizontal	
Board Pitch	1.2 mm (differential pair) 0.4 mm (signal contacts)	
Wiping Length	0.495 mm	
Mated size	Height	1.14 mm (1.3 mm max.)
	Width	30.95 mm
	Depth	8.20 mm
Pin Counts	Range	Up to 60
	Available	60

Applicable Cable Size:

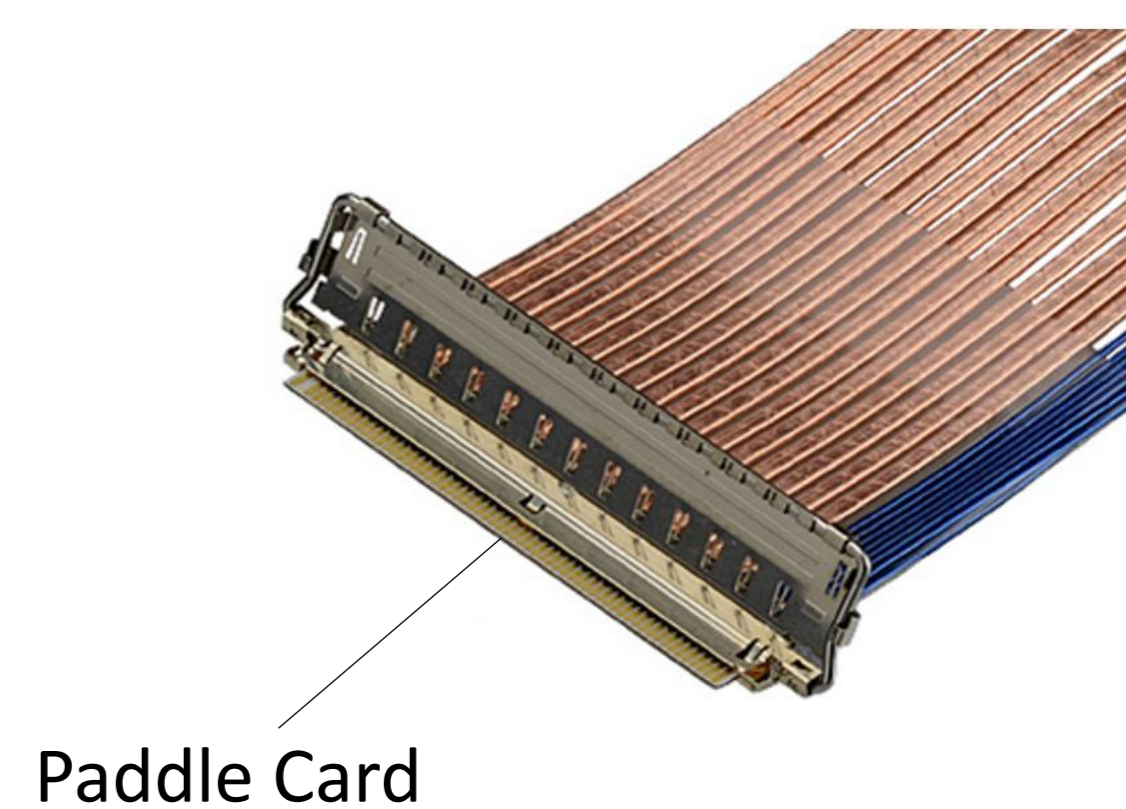
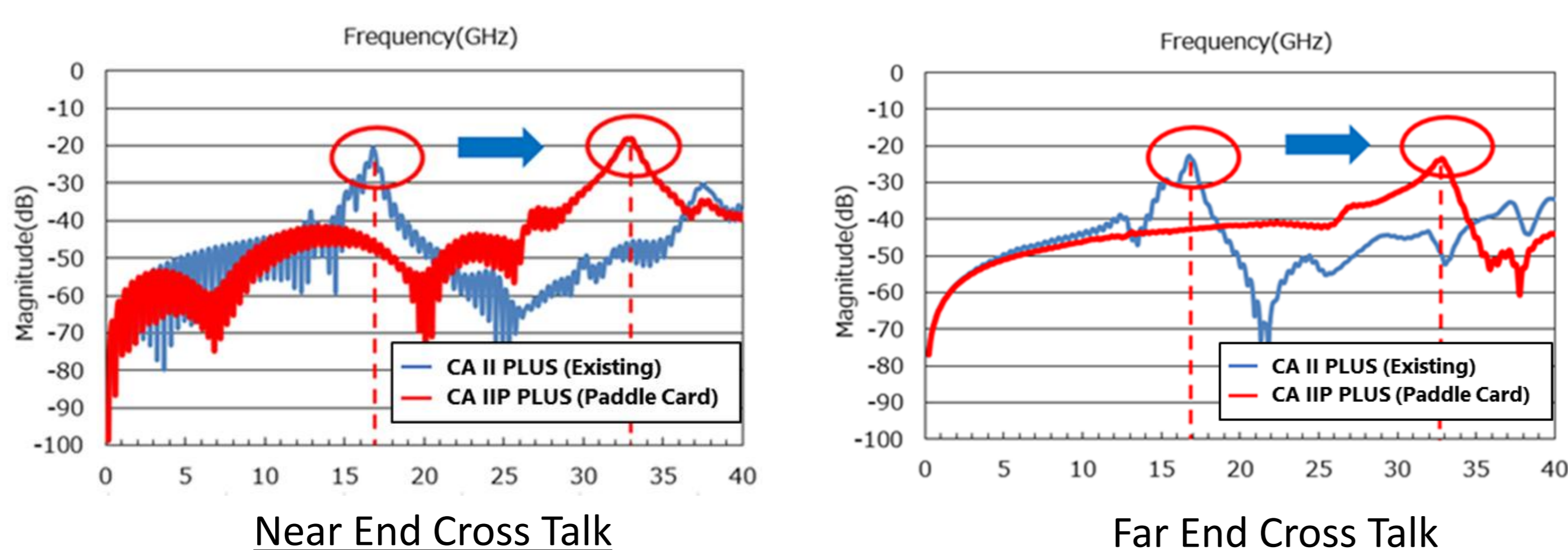
Maximum O.D.	1.2 mm (Twinaxial) 0.4 mm (Micro-Coaxial) 0.4 mm (Discrete)
Micro-Coaxial for Signal	Diff 85 ohm: AWG 38 & 36
Twinaxial for Signal	Diff 85 ohm: AWG 34
Discrete	AWG 32 or smaller



**CABLINE®-CAP IIP PLUS是線束產品的名稱。公座為CABLINE®-CA II PLUS (料號: 20796-060E-##)。
*若您想了解未列出或超出上述範圍的Pin數, 請聯絡我們。
*公座作為線束產品提供。電纜長度可根據需要自訂。

▶ 使用paddle card 技術, 支援高速傳輸64 Gbps/通道PAM4

透過在電纜公座中使用paddle card, 提供高訊號完整性。
現有CABLINE系列產品的數據速率和串擾性能得到了進一步優化。



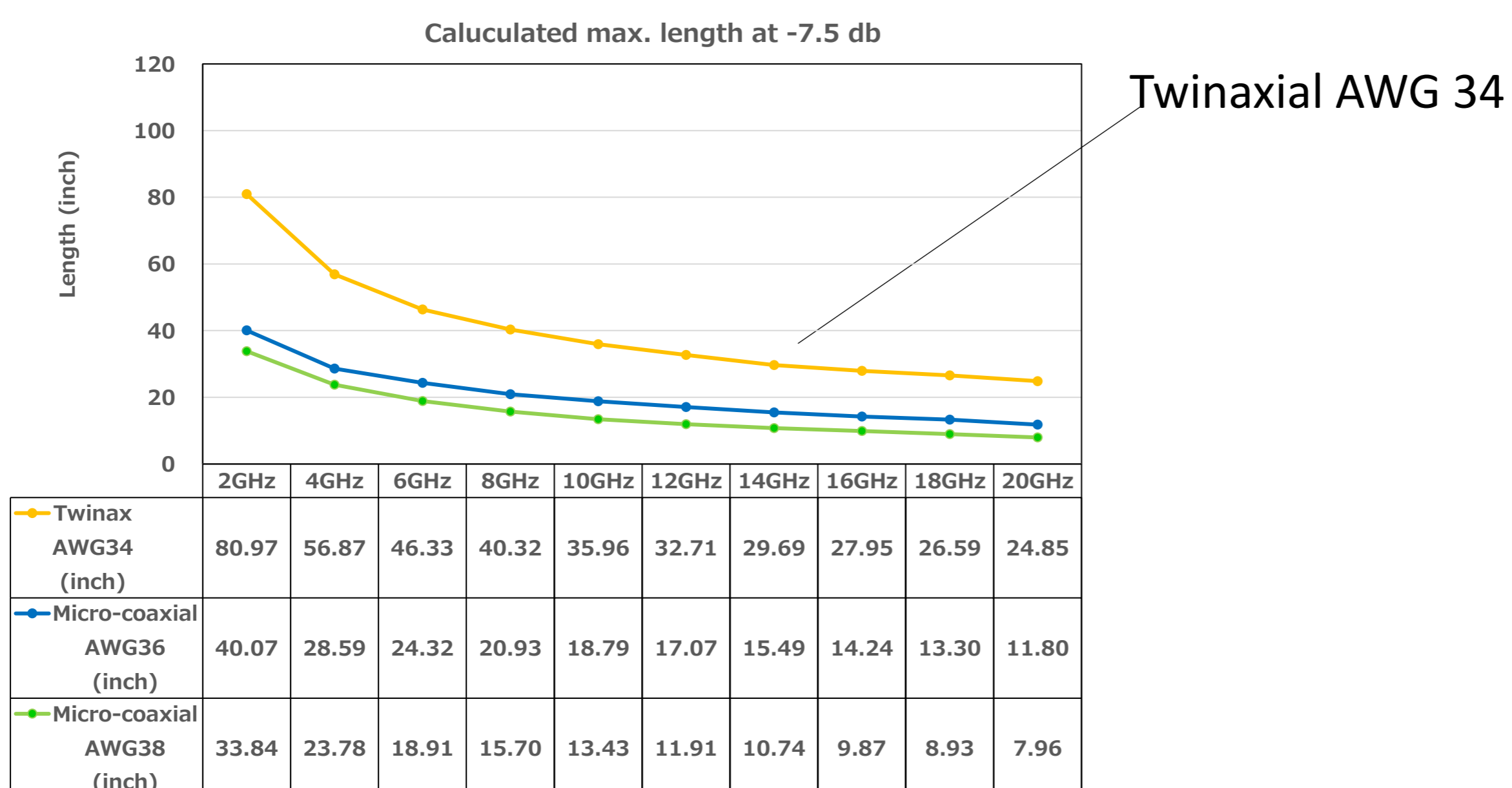
Paddle Card

關於Paddle card 技術

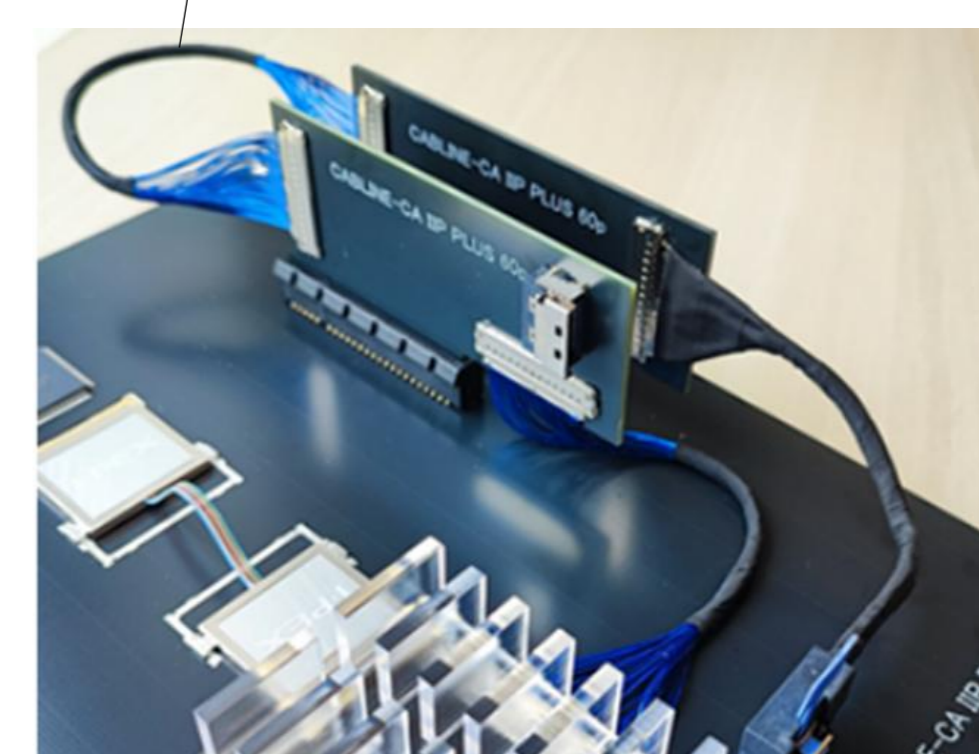
<https://www.i-pex.com/library/white-papers/paddle-card-technology>

▶ AWG 34雙芯電纜適用於長距離傳輸

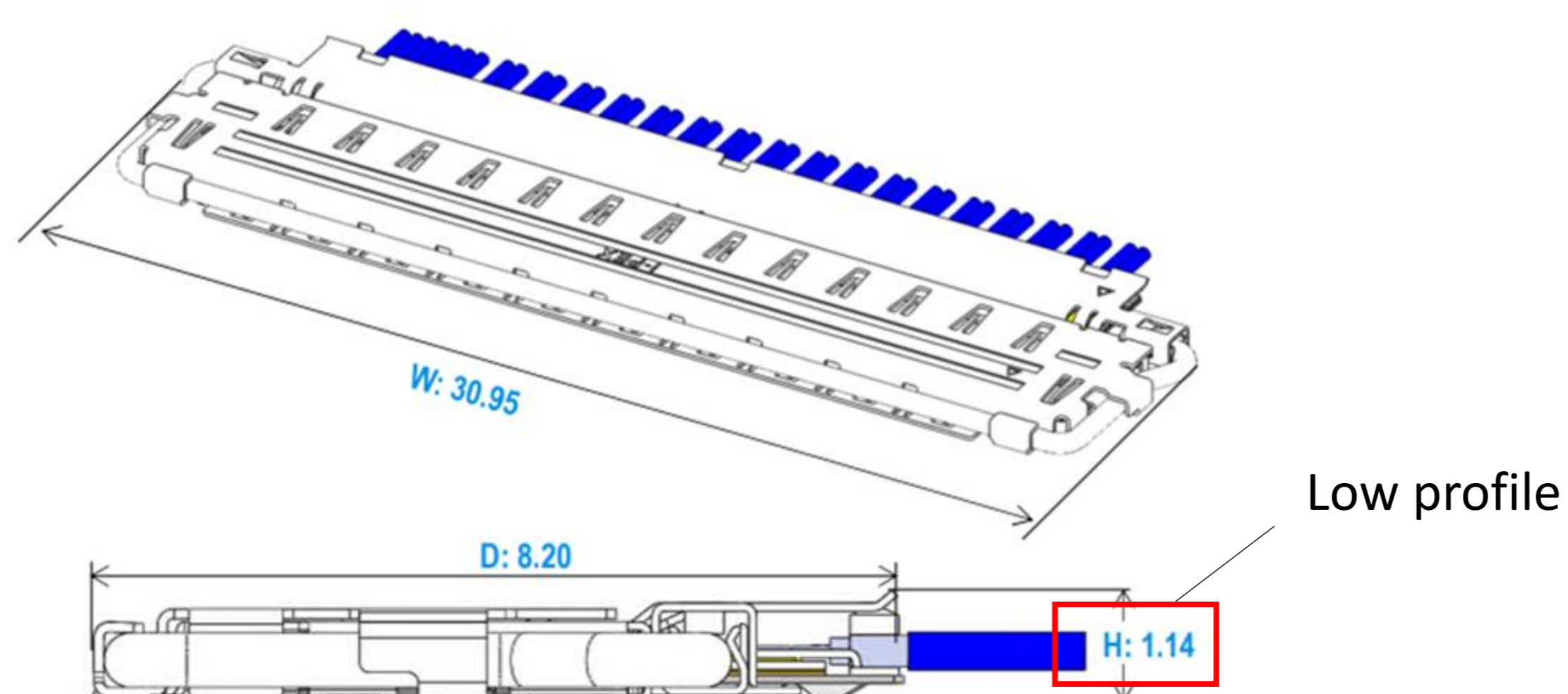
也支援AWG 36和38極細同軸電纜, 可實現佈線靈活性



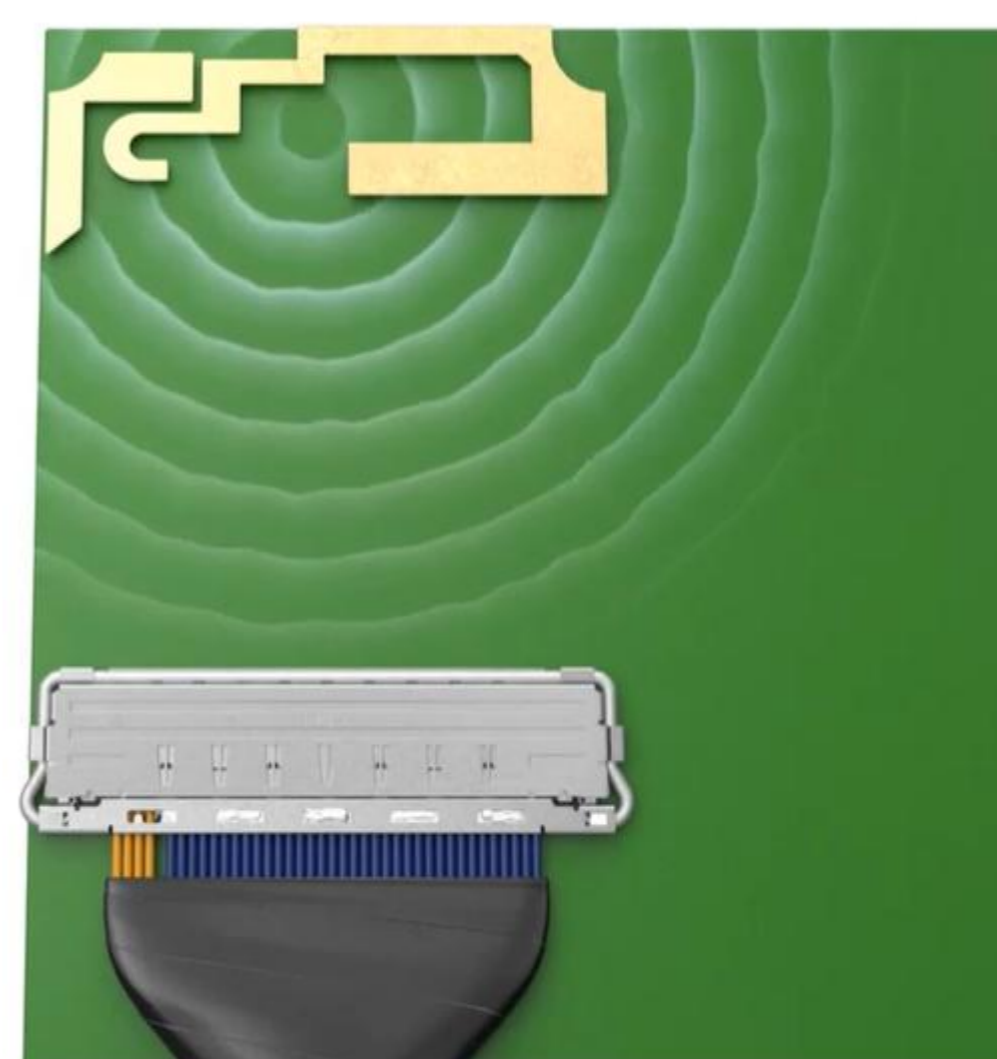
Flexibility of Micro-coaxial cable



▶ 外型小巧, 嵌合高度僅1.14 mm, 非常適合空間受限的應用, 採用全屏蔽 ZenShield® 技術

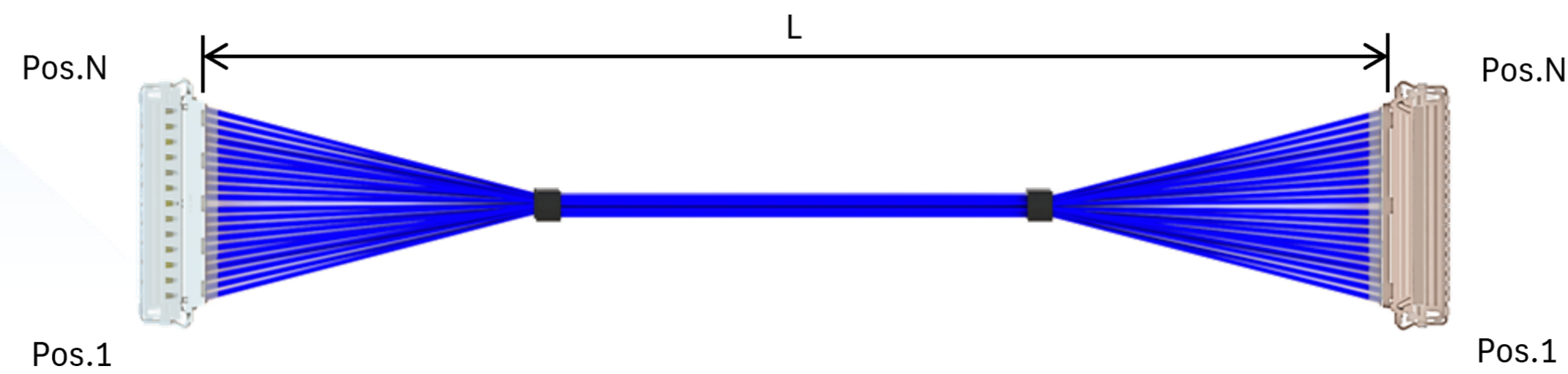


EMC ZenShield® technology



CABLINE® -CA IIP PLUS standard harness

- ◆ Please click the part number to get its 2D drawing.
- ◆ Please be advised that if it becomes necessary to change the harness specifications, the part number will also need to be updated. The following part number is valid only when used with the harness specifications shown below.
- ◆ Please contact us via [Inquiry form](#) for other harness specifications.



Part Number Description	Part Number (Link to Drawing)	Sample available
CABLINE-CA IIP PLUS harness 60pin twinax 34AWG L=200mm pinassign A 1-1	82065-600B-01	Contact us
CABLINE-CA IIP PLUS harness 60pin twinax 34AWG L=500mm pinassign A 1-1	82065-600B-02	Contact us
CABLINE-CA IIP PLUS harness 60pin twinax 34AWG L=200mm pinassign B 1-1	82065-600B-03	Contact us
CABLINE-CA IIP PLUS harness 60pin twinax 34AWG L=500mm pinassign B 1-1	82065-600B-04	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 36AWG L=200mm pinassign A 1-1	82065-400B-01	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 36AWG L=500mm pinassign A 1-1	82065-400B-02	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 36AWG L=200mm pinassign B 1-1	82065-400B-03	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 36AWG L=500mm pinassign B 1-1	82065-400B-04	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 38AWG L=200mm pinassign A 1-1	82065-100B-01	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 38AWG L=500mm pinassign A 1-1	82065-100B-02	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 38AWG L=200mm pinassign B 1-1	82065-100B-03	Contact us
CABLINE-CA IIP PLUS harness 60pin micro-coaxial 38AWG L=500mm pinassign B 1-1	82065-100B-04	Contact us

Component Parts Details

Component Parts

Connector parts



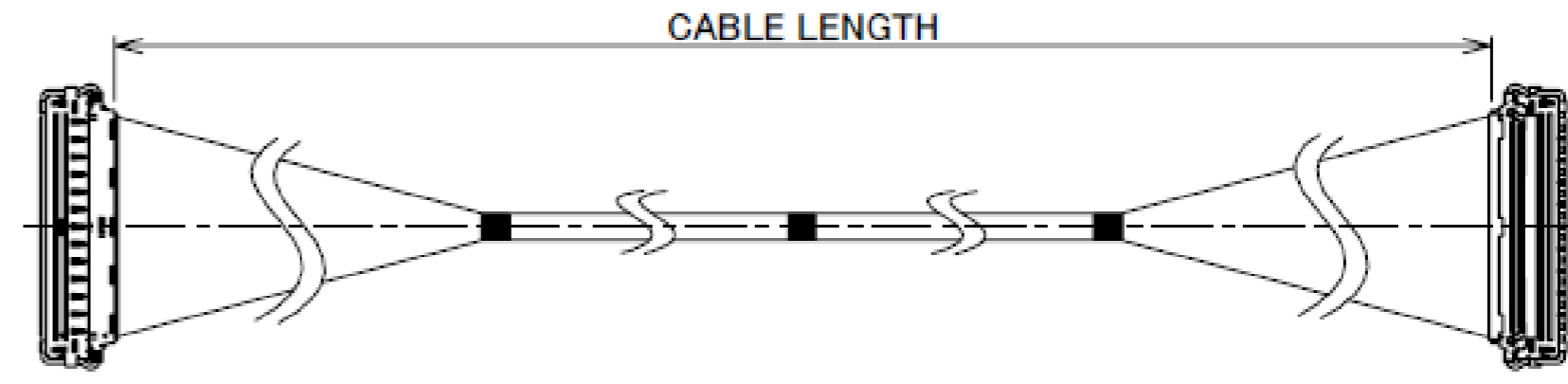
PLUG Harness



RECEPTACLE

Plug Harness Assembly

PART No.	PIN ASSIGNMENT	CABLE LENGTH	DIFFERENTIAL LANE:C
82065-600B-01	A	200.00±5.00	TWINAXIAL CABLE, AWG #34 85 OHM
82065-600B-02		500.00±10.00	
82065-600B-03		200.00±5.00	
82065-600B-04		500.00±10.00	
82065-400B-01	B	200.00±5.00	MICRO COAXIAL CABLE, AWG #36 42.5 OHM, BLUE
82065-400B-02		500.00±10.00	
82065-400B-03		200.00±5.00	
82065-400B-04		500.00±10.00	
82065-100B-01	A	200.00±5.00	MICRO COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
82065-100B-02		500.00±10.00	
82065-100B-03		200.00±5.00	
82065-100B-04		500.00±10.00	



FOR PIN ASSIGNMENT A

PIN ASSIGNMENT		
CONNECTOR 1	CABLE	CONNECTOR 2
60	NO CABLE	60
59	MICRO COAXIAL CABLE, AWG #38 42.5 OHM, BLUE	59
.	.	.
53	MICRO COAXIAL CABLE, AWG #38 42.5 OHM, BLUE	53
52	GROUND	52
51	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	51
50	CABLE SPEC.	50
49	GROUND	49
48	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	48
47	CABLE SPEC.	47
46	GROUND	46
.	.	.
.	.	.
9	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	9
8	CABLE SPEC.	8
7	GROUND	7
6	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	6
5	CABLE SPEC.	5
4	GROUND	4
3	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	3
2	CABLE SPEC.	2
1	GROUND	1

FOR PIN ASSIGNMENT B

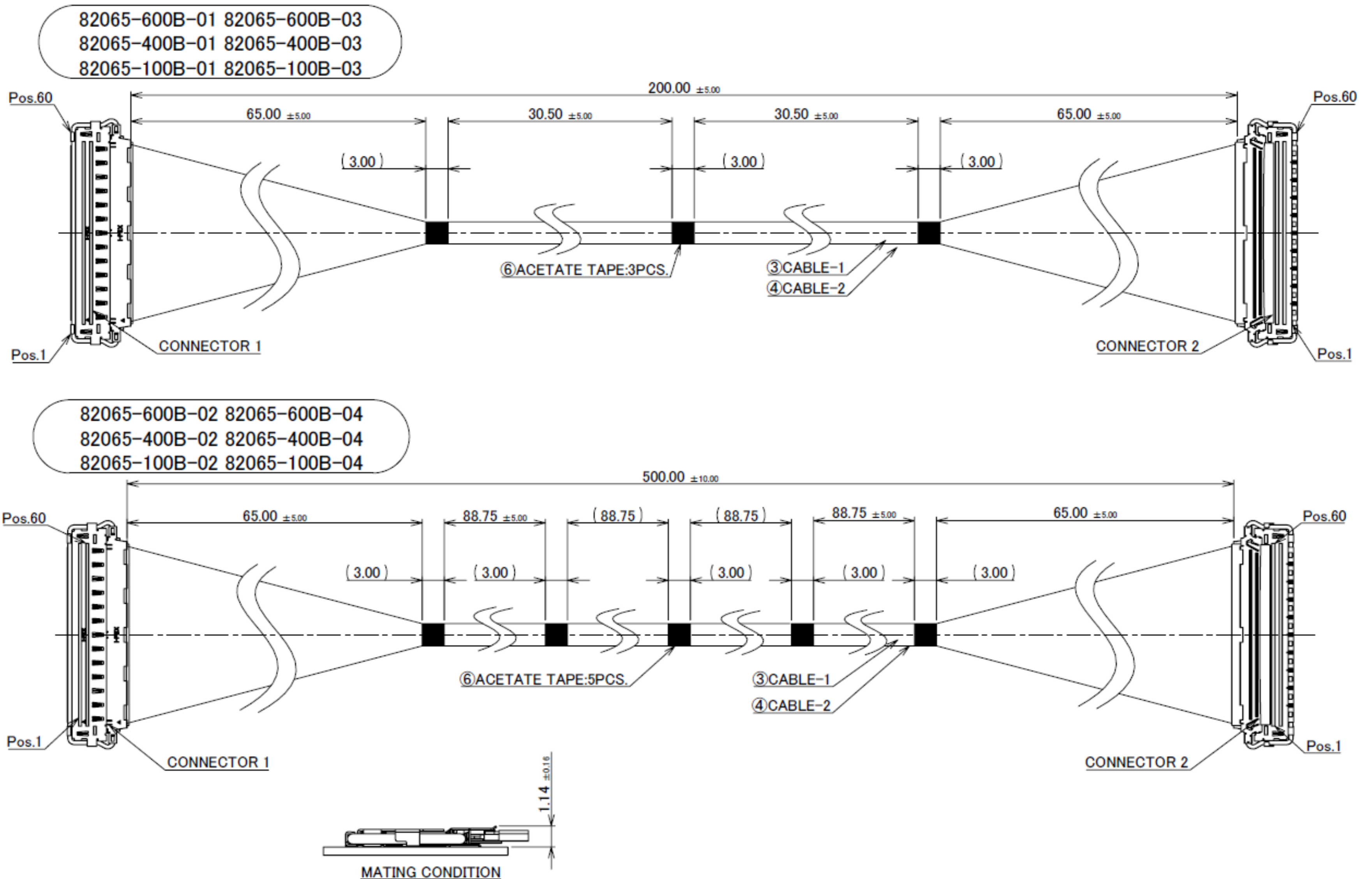
PIN ASSIGNMENT		
CONNECTOR 1	CABLE	CONNECTOR 2
60	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	60
59	NO CABLE	59
58	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	58
57	GROUND	57
56	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	56
55	CABLE SPEC.	55
54	GROUND	54
53	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	53
52	CABLE SPEC.	52
51	GROUND	51
.	.	.
.	.	.
17	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	17
16	CABLE SPEC.	16
15	GROUND	15
14	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	14
13	CABLE SPEC.	13
12	GROUND	12
11	C(*) SEE THE UPPER TABLE TO FIND CABLE SPEC.	11
10	CABLE SPEC.	10
9	GROUND	9
8	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE	8
.	.	.
.	.	.
1	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE	1

NOTE.

- TO HANDLE THIS CONNECTOR YOU MUST READ AND FOLLOW THE INSTRUCTION MANUAL BELOW.
I-PEX INSTRUCTION MANUAL No.HIM-24004.
- ELECTRIC CHARACTERISTICS
WITHSTANDVOLTAGE : AC 250V LEAKAGE CURRENT 2.0mA MAX.
INSULATION RESISTANCE : 50MΩ MIN. DC 100V
- THE OPERATING TEMPERATURE OF THE HARNESS : 80°C MAX.

Rev.5

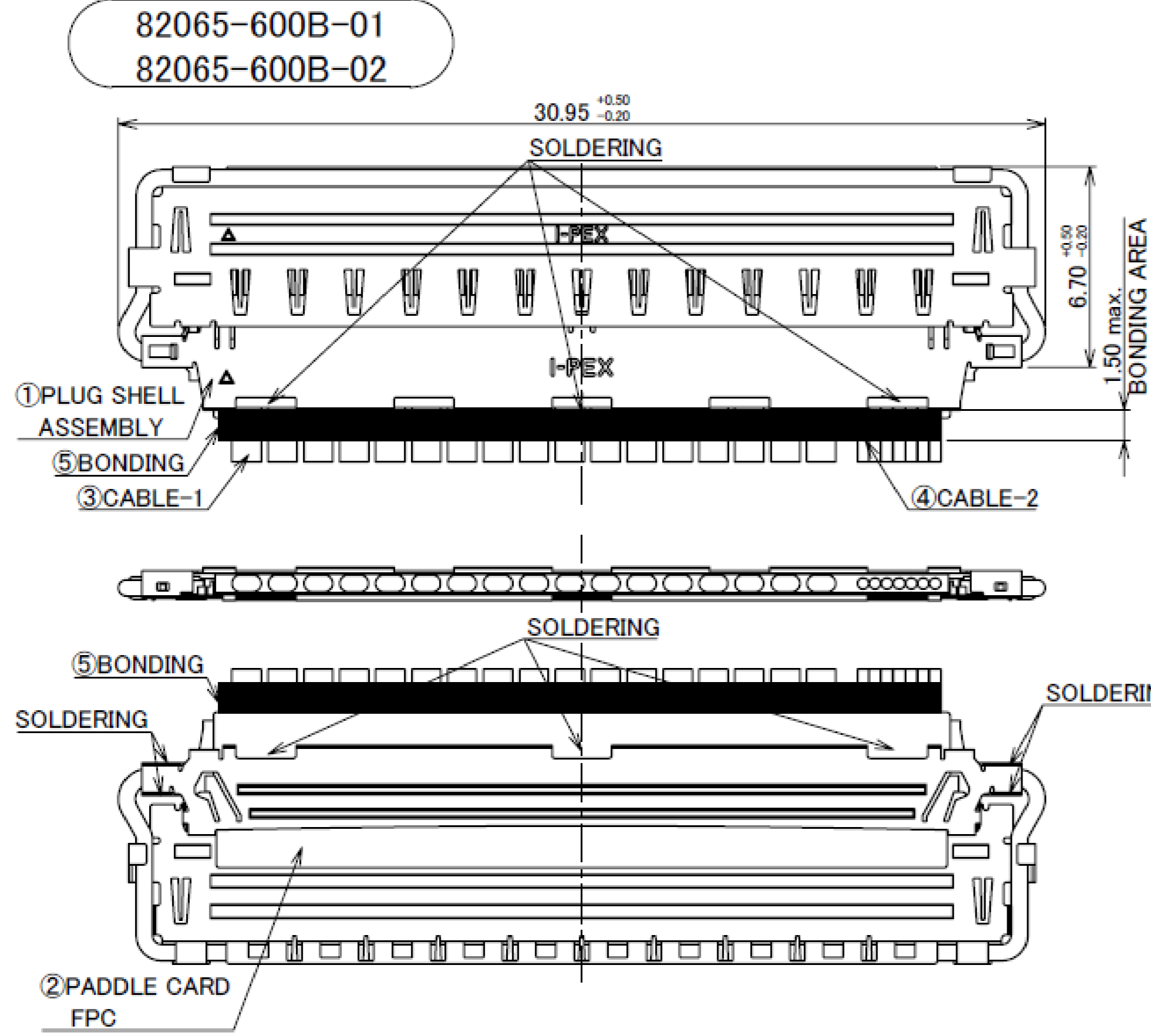
PART No.
82065-*00B-0#



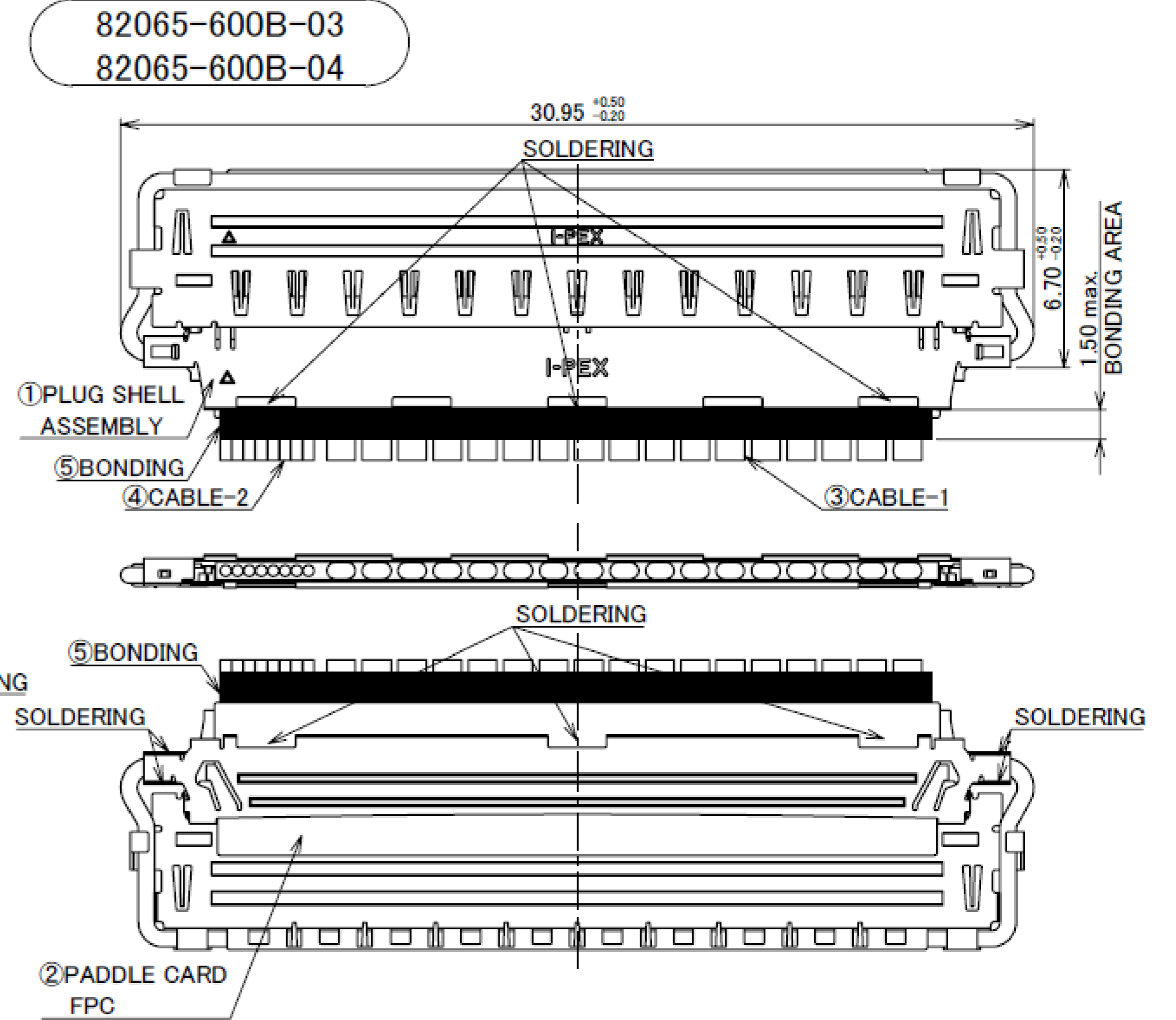
Rev.5

Plug Harness Assembly

PART No.
82065-600B-0#



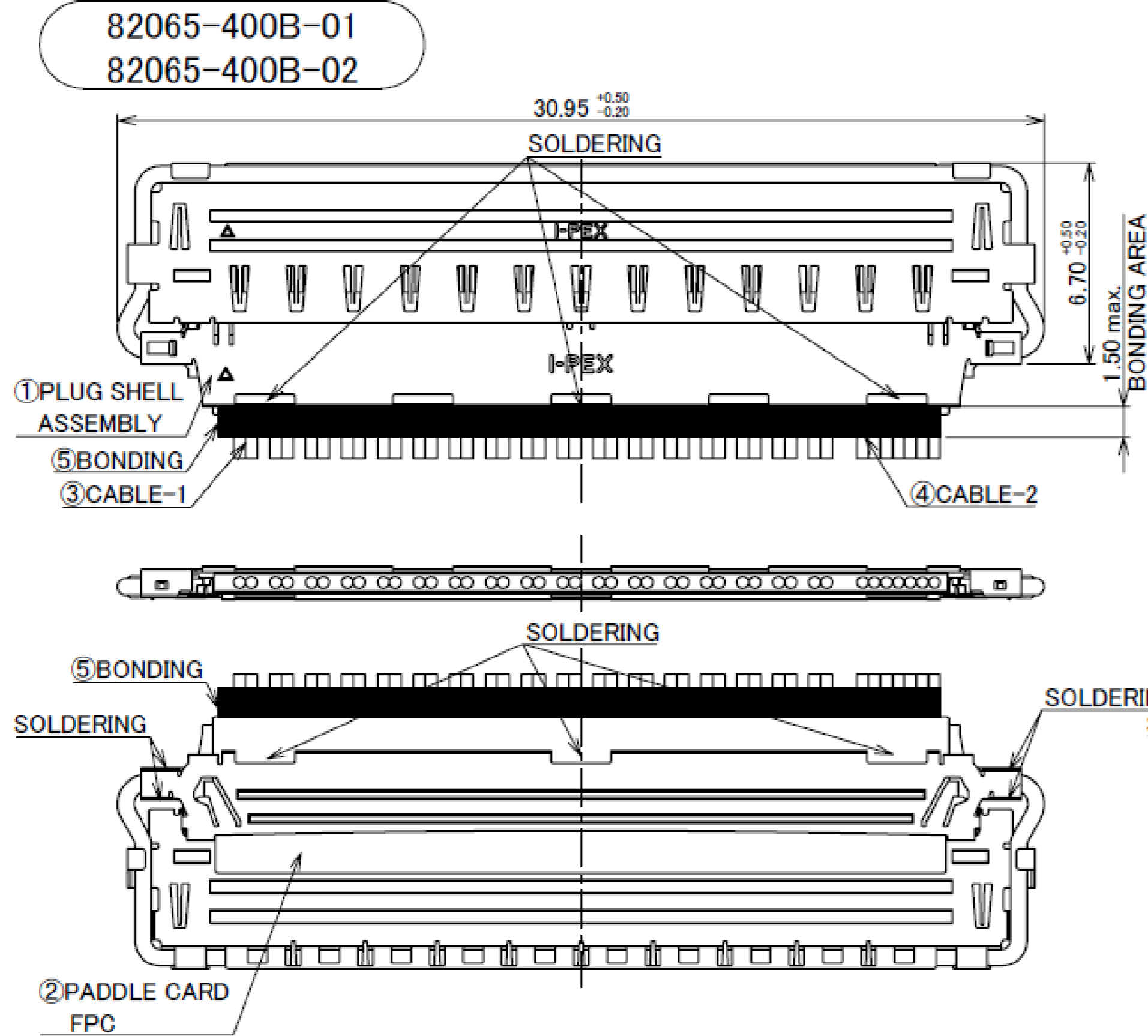
6	ACETATE TAPE	-	30R5	BLACK
5	BONDING	-	-	UV GLUE
4	CABLE-2	-	7	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
3	CABLE-1	-	17	TWINAXIAL CABLE, AWG #34 85 OHM
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS



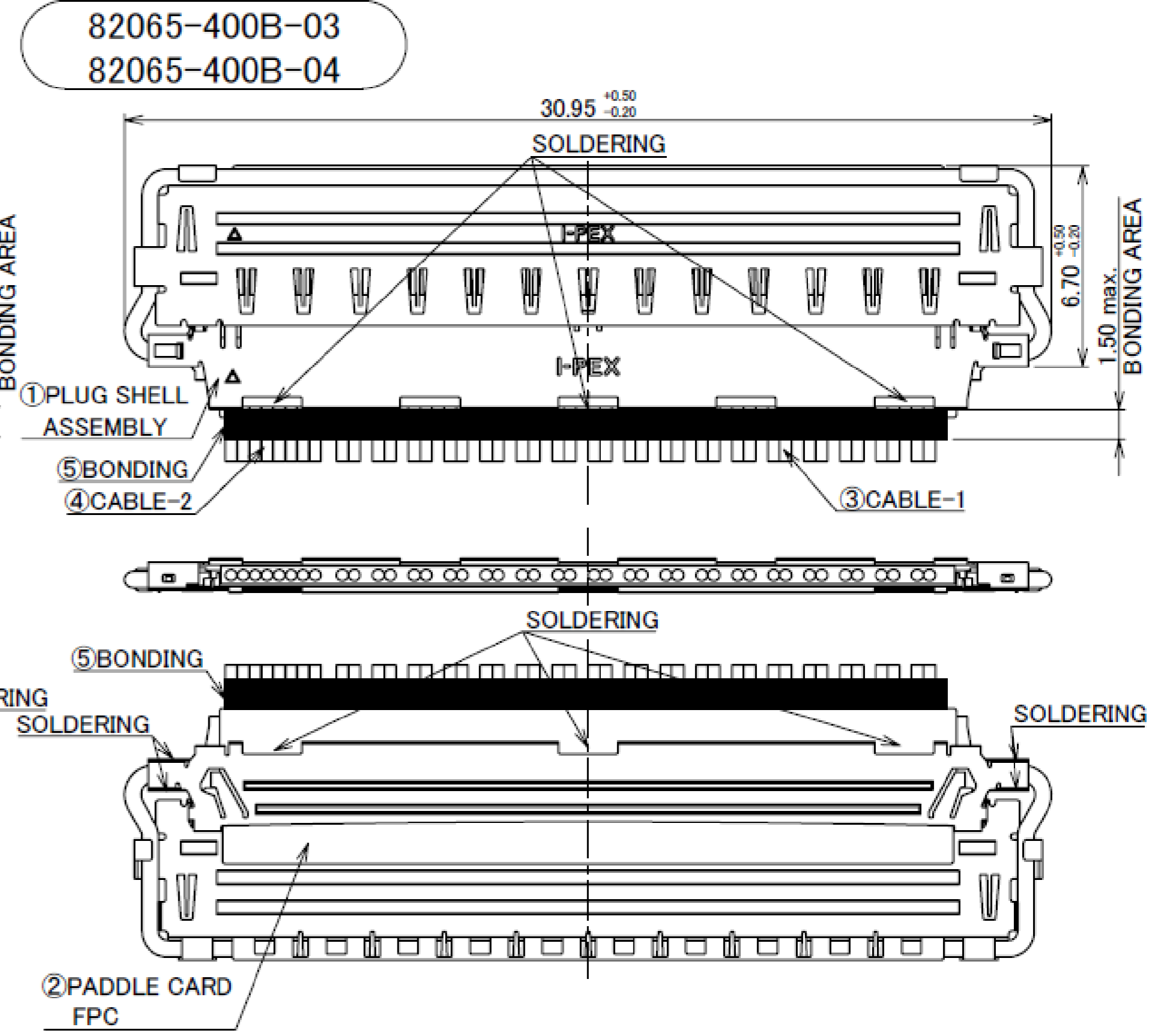
6	ACETATE TAPE	-	30R5	BLACK
5	BONDING	-	-	UV GLUE
4	CABLE-2	-	8	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
3	CABLE-1	-	17	TWINAXIAL CABLE, AWG #34 85 OHM
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS

Rev.5

PART No.
82065-400B-0#



6	ACETATE TAPE	-	30R5	BLACK
5	BONDING	-	-	UV GLUE
4	CABLE-2	-	7	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
3	CABLE-1	-	34	MICRO-COAXIAL CABLE, AWG #36 42.5 OHM, BLUE
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS



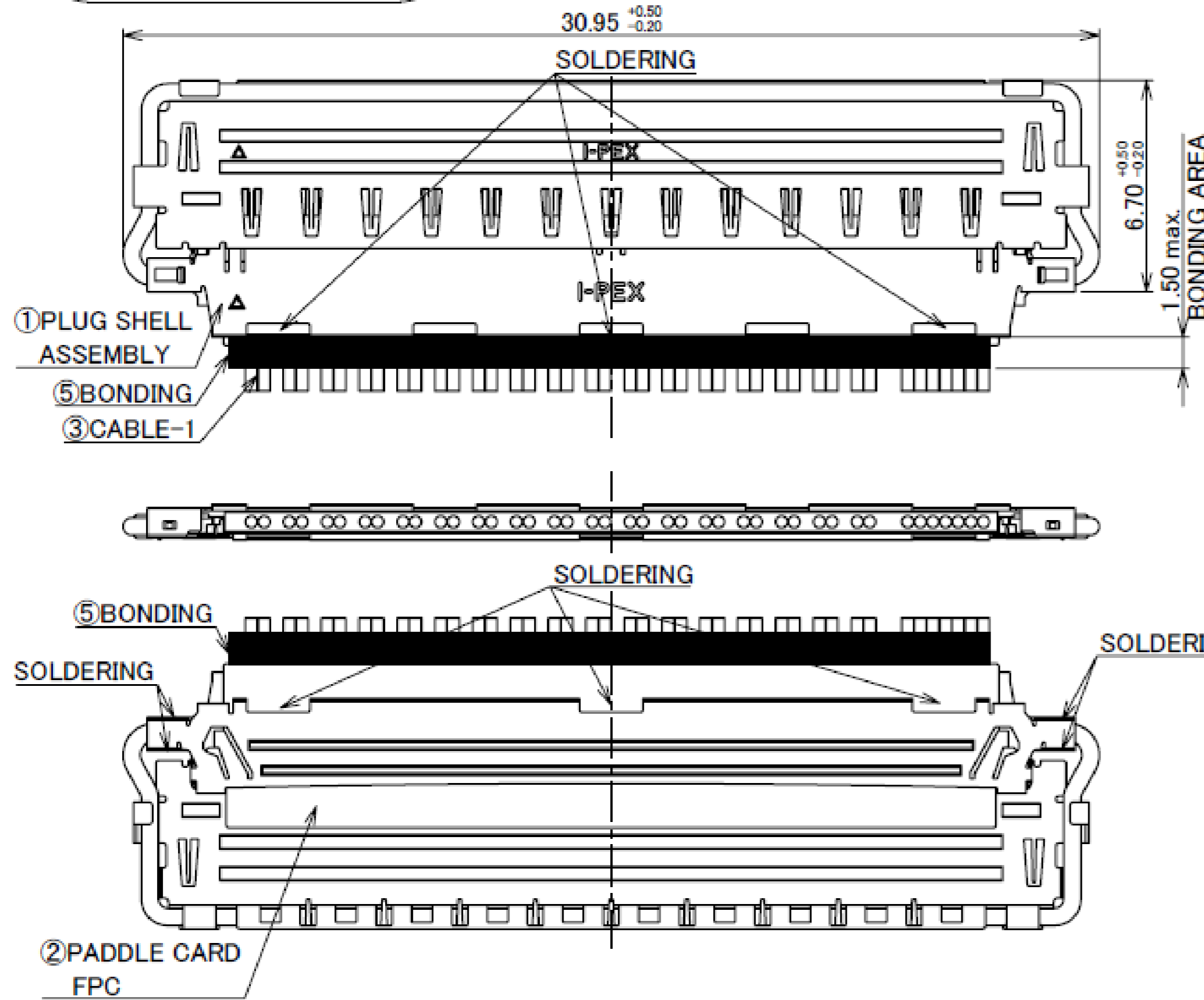
6	ACETATE TAPE	-	30R5	BLACK
5	BONDING	-	-	UV GLUE
4	CABLE-2	-	8	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
3	CABLE-1	-	34	MICRO-COAXIAL CABLE, AWG #36 42.5 OHM, BLUE
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS

Rev.5

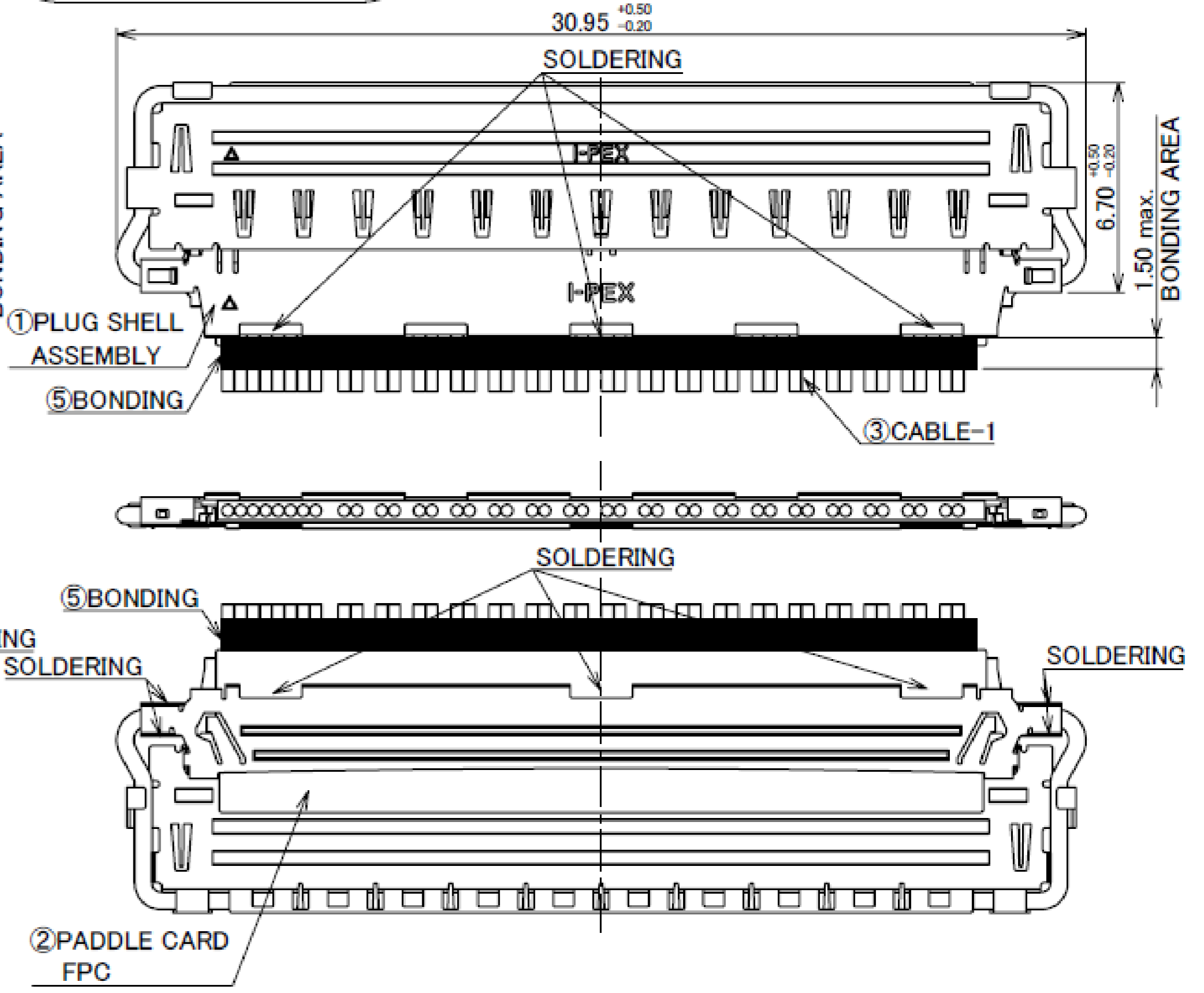
Plug Harness Assembly

PART No.
82065-100B-0#

82065-100B-01
82065-100B-02



82065-100B-03
82065-100B-04



6	ACETATE TAPE	-	3OR5	BLACK
5	BONDING	-	-	UV GLUE
3	CABLE-1	-	41	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS

6	ACETATE TAPE	-	3OR5	BLACK
5	BONDING	-	-	UV GLUE
3	CABLE-1	-	42	MICRO-COAXIAL CABLE, AWG #38 42.5 OHM, BLUE
2	PADDLE CARD FPC	-	2	CONNECTOR 1 & 2
1	PLUG SHELL ASSEMBLY	21036-060T-01	2	CONNECTOR TO BE MATED : 20790-060E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS

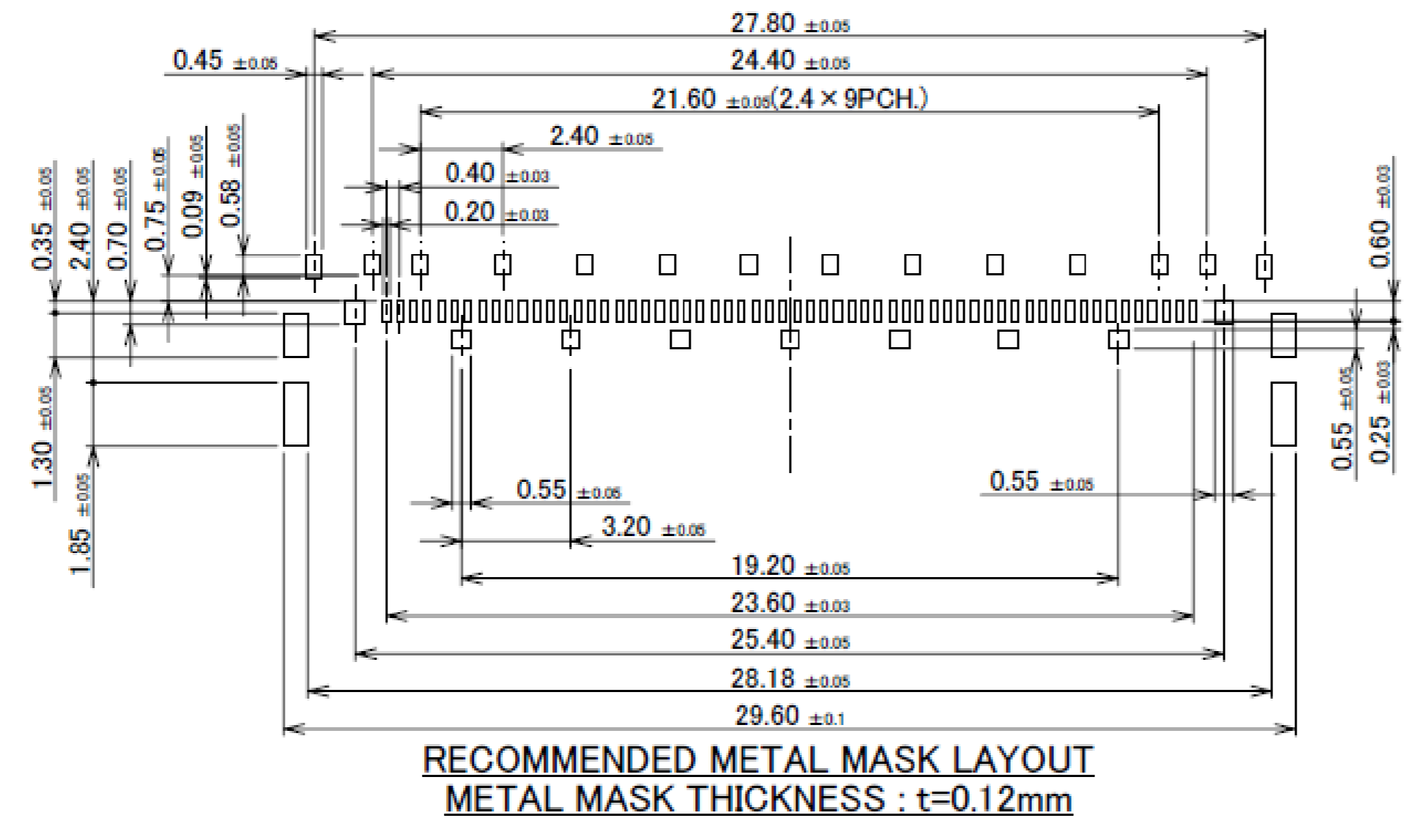
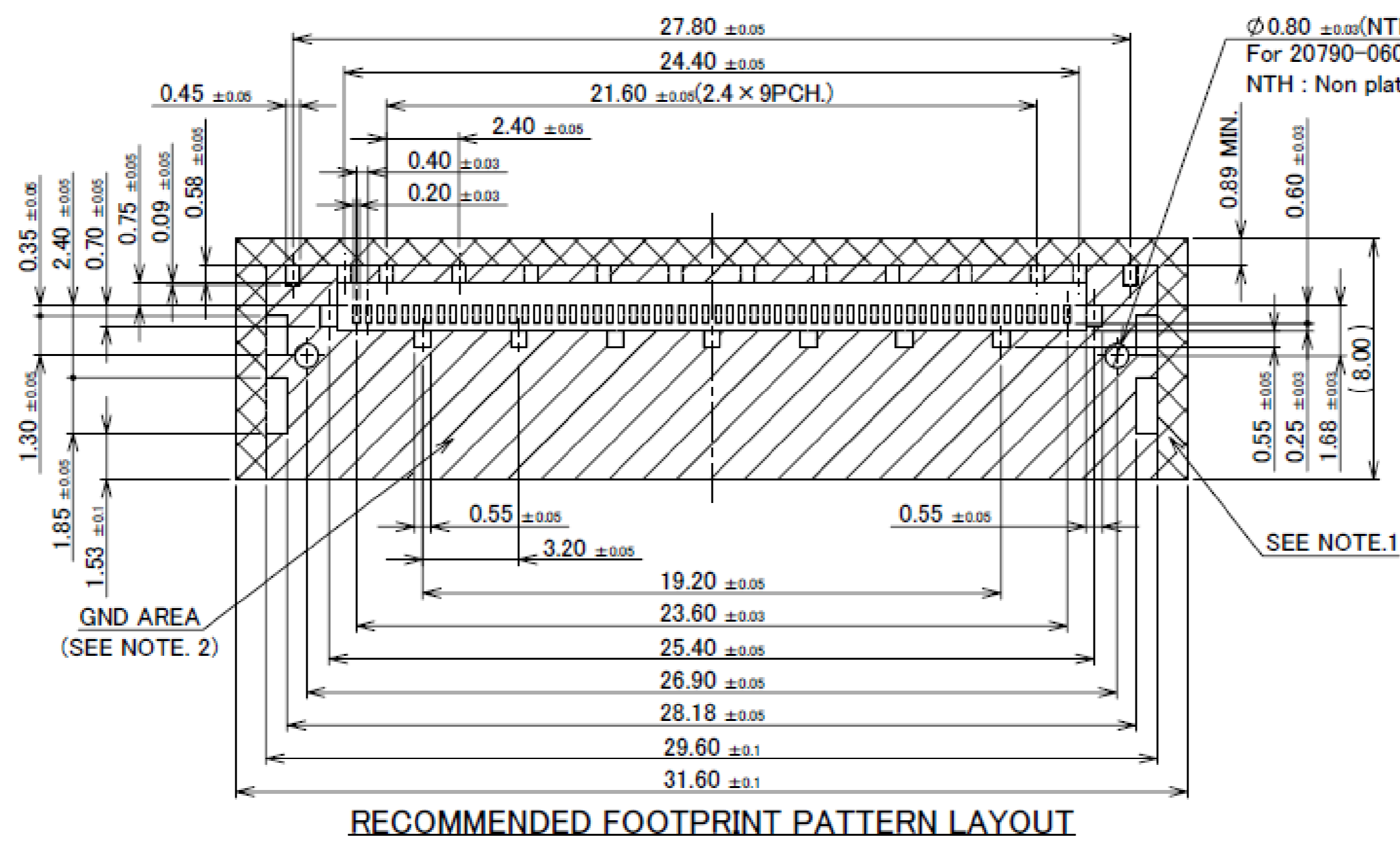
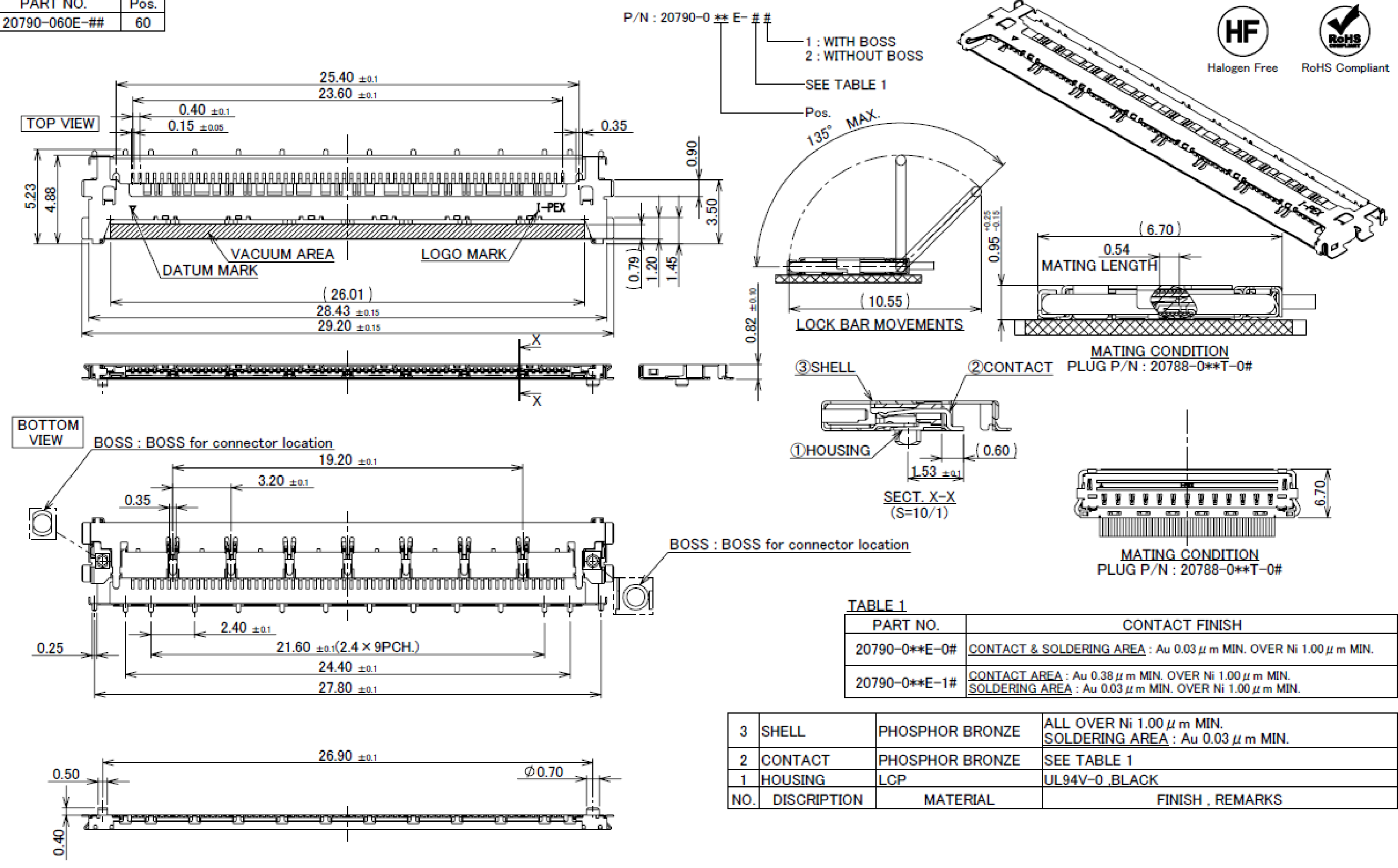
Rev.5

ITEMS	SPECIFICATIONS
APPLICABLE CABLE	MICRO-COAXIAL: AWG 38 42.5 ohm (Diff. 85 ohm) MICRO-COAXIAL: AWG 38 42.5 ohm (Diff. 85 ohm) TWINAXIAL: AWG 34 85 ohm
RATING AMPERAGE (FOR CONTACT)	0.4 A AC/DC (MICRO-COAXIAL: AWG 38 42.5 ohm (Diff. 85 ohm)) 0.4 A AC/DC (MICRO-COAXIAL: AWG 36 42.5 ohm (Diff. 85 ohm)) 0.6 A AC/DC (TWINAXIAL: AWG 34 85ohm) ※TESTING BY REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
RATING VOLTAGE	100 V AC (PER CONTACT PIN)
OPERATING TEMPERATURE	233 K~358 K (-40°C~85°C)
OPERATING HUMIDITY	85 % MAX. (NON-CONDENDING)
CONTACT RESISTANCE	INITIAL: 380 mΩ MAX. (MICRO-COAXIAL: AWG 38) 275 mΩ MAX. (MICRO-COAXIAL: AWG 36) 180 mΩ MAX. (TWINAXIAL: AWG 34 85 ohm) AFTER TEST: Δ40 mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 50 mΩ MAX. / AFTER TEST : Δ40 mΩ MAX.
INSULATION RESISTANCE	INITIAL: 1000 MΩ MIN. / AFTER TEST: 500 MΩ MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC 250 V 1 min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER 30 CYCLES)	60 pin: 40.0 N MAX.
UNMATING FORCE (INITIAL / AFTER 30 CYCLES)	60 pin: 2.0 N MIN.
CABLE RETENTION FORCE	60 pin: 29.40 N MIN.
PRODUCT SPECIFICATION	PRS-2908
TEST REPORT	TR-24055
INSTRUCTION MANUAL	HIM-24004

Rev.0

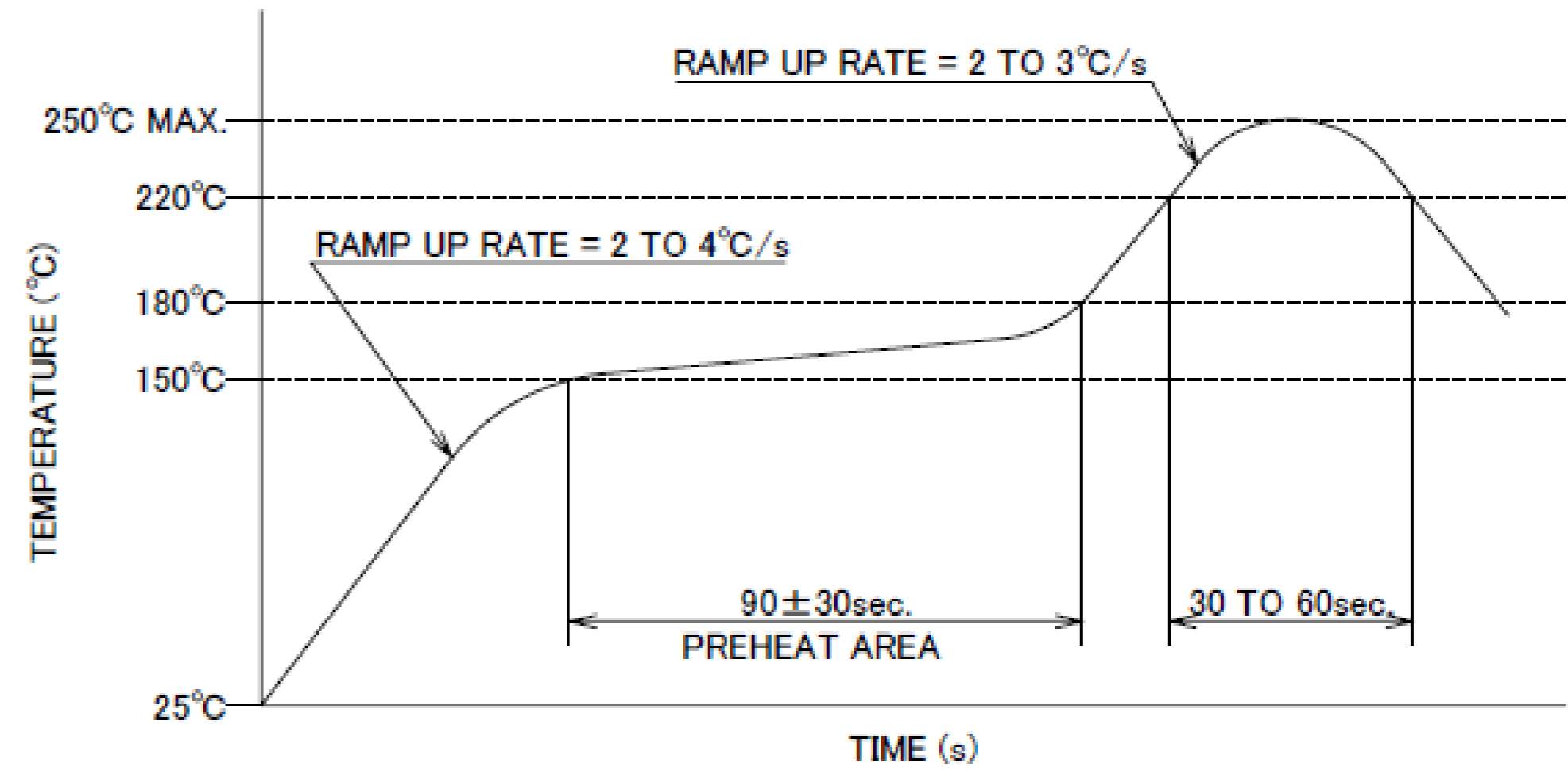
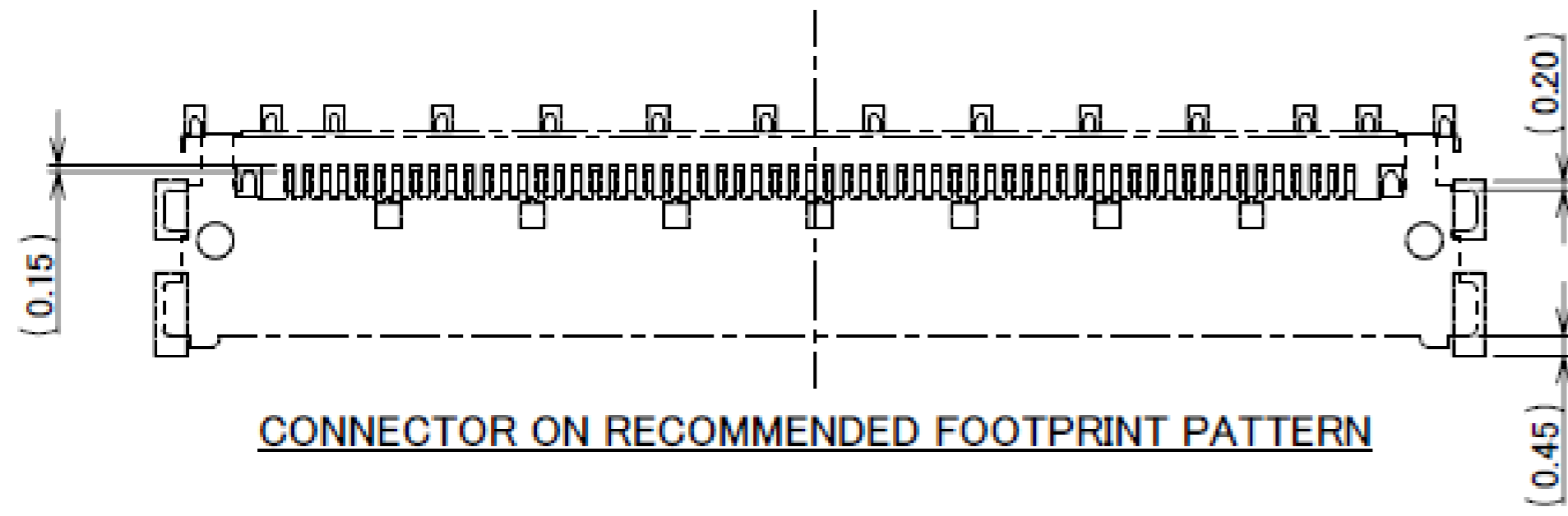
Receptacle Assembly

Recommended P/N	20790-060E-02
PART NO.	Pos.
20790-060E-##	60



NOTES.
1. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
2. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Receptacle Assembly



REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

Rev.18

FOR CABLINE-CA II PLUS PLUG CABLE ASSEMBLY (DWG. NO. 20788)

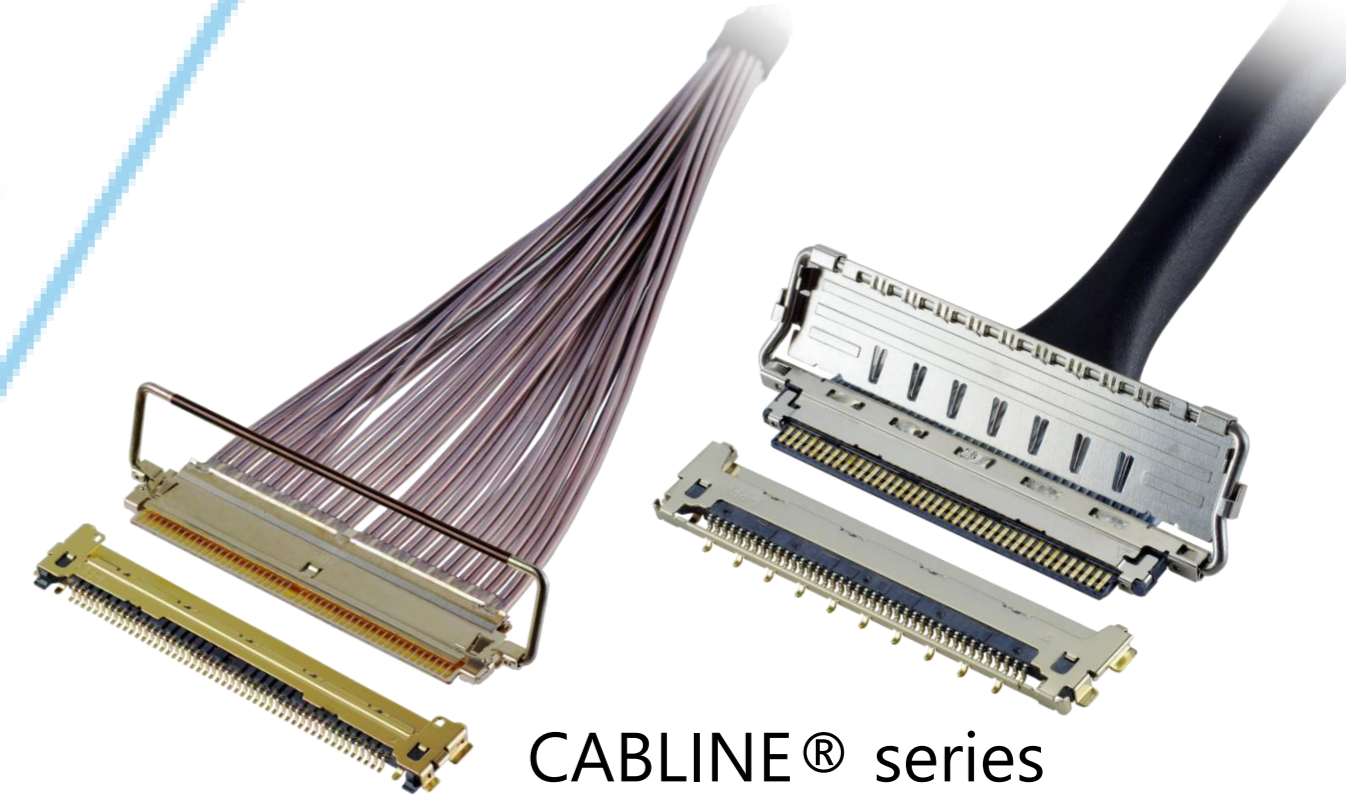
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG #44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG #36 , 34 TWINAXIAL CABLE : AWG #40 , 42
RATED VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED.
RATED AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG #44] PER CONTACT PIN/UP TO 60 CONTACTS 0.24A AC/DC [AWG #42] PER CONTACT PIN/UP TO 60 CONTACTS 0.3A AC/DC [AWG #40] PER CONTACT PIN/UP TO 60 CONTACTS 0.5A AC/DC [AWG #38] PER CONTACT PIN/UP TO 18 CONTACTS 0.8A AC/DC [AWG #36] PER CONTACT PIN/UP TO 6 CONTACTS 1.0A AC/DC [AWG #34] PER CONTACT PIN/UP TO 6 CONTACTS ※TESTING BY REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233 TO 378K (-40°C TO 105°C)
OPERATING HUMIDITY	85% MAX
CONTACT RESISTANCE	INITIAL : 180mohm MAX.(AWG #34) / AFTER TEST : \triangleleft140mohm MAX. 275mohm MAX.(AWG #36) 360mohm MAX.(AWG #38) 600mohm MAX.(AWG #40) 700mohm MAX.(AWG #42) 1080mohm MAX.(AWG #44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \triangleleft140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER 30 CYCLES)	29.10N MAX.
UN-MATING FORCE (INITIAL / AFTER 30 CYCLES)	6.0N MIN.
CABLE RETENTION FORCE	29.40N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2261
TEST REPORT	TR-16075, TR-23031
INSTRUCTION MANUAL	HIM-16028
PACKING STANDARD	PST-16078
APPEARANCE CRITERIA NO.	QLS-A***

Rev.18

Custom Connectors Available

RF Connectors

MHF® series



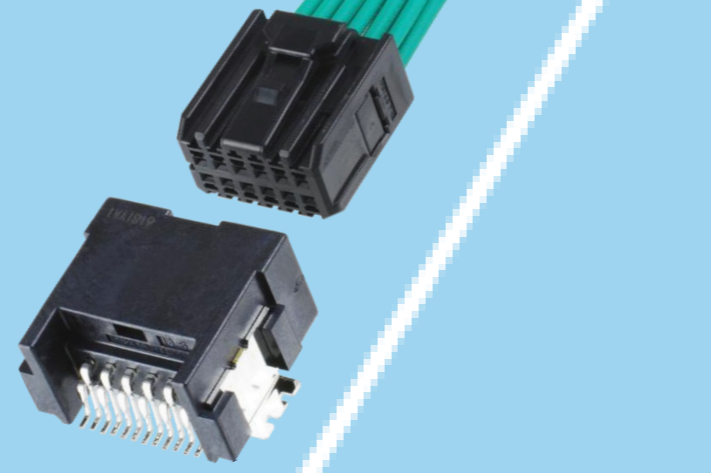
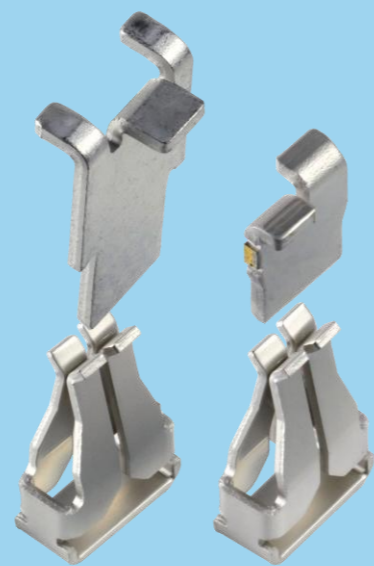
Micro-Coaxial/Twinaxial Connectors



Wire-to-Board Connectors/Terminals

AP series

ISH® series



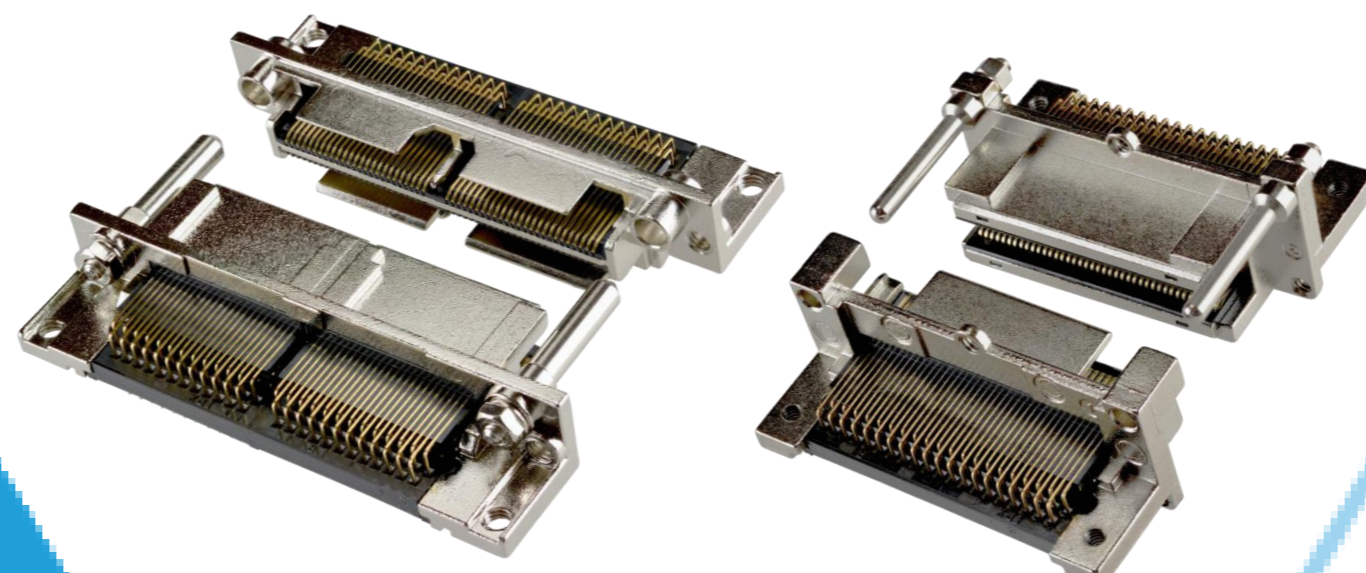
NOVASTACK® series



Board-to-Board Connectors



I/O Connectors



MINIDOCK™ series

MINIFLEX® series EVAFLEX® series



FPC/FFC Connectors



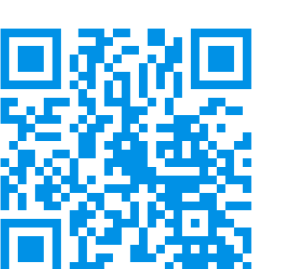
Inquiry



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Contact your sales representative or more detailed information.

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