

CABLINE®-CAP

高速伝送対応（64Gbps/lane PAM4）
0.4mmピッチ、水平嵌合タイプ細線同軸ケーブルアッセンブリ

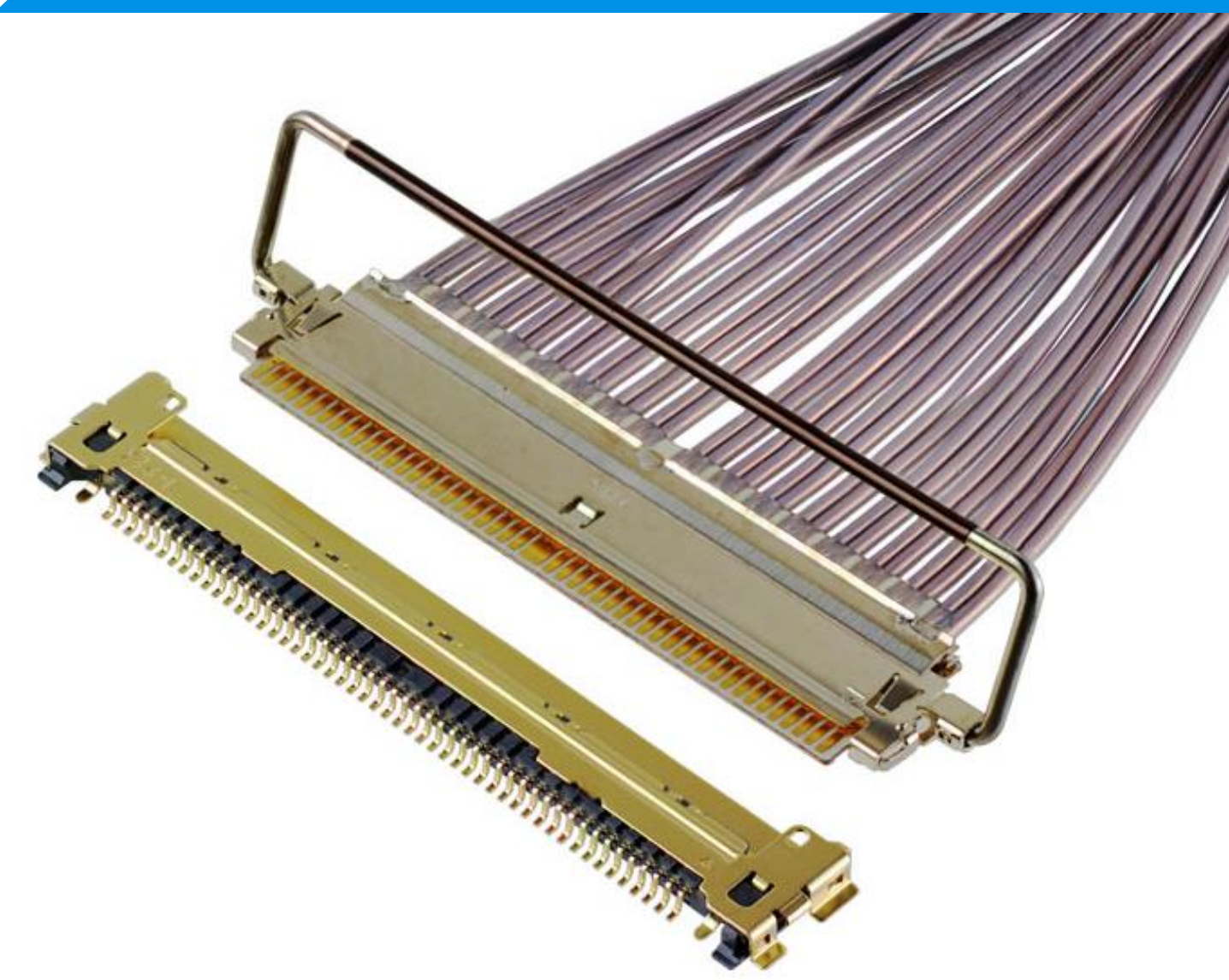
Product Specifications:

Mating type		Horizontal
Board Pitch (mm)		0.4
Wiping Length (mm)		0.54
Mated size (mm)	Height	1.35 Max
	Width	Formula: 5.75mm + (0.4mm* # of pins)
	Depth	6.86
Pin Counts	Range	Up to 60
	Available	50 (16 differential pair Max)

Applicable Cable Size:

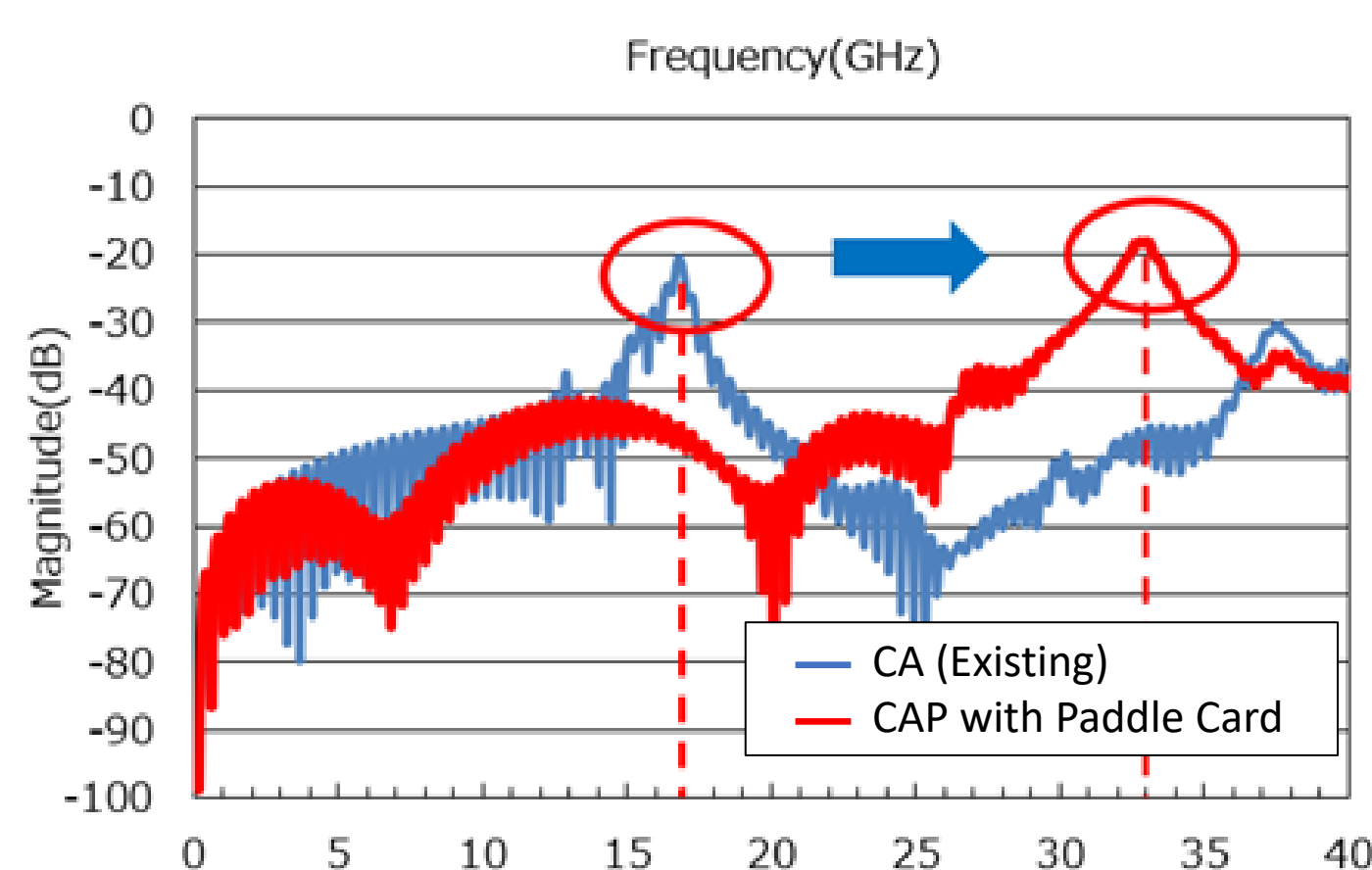
Maximum O.D. (mm)	0.47
Micro-Coaxial For Signal (AWG)	Diff 90 ohm: #38

*製品名CABLINE®-CAPは、ハーネス品の製品名称です。Receptacleは、CABLINE®-CAのReceptacle (PN 20525-#50E-02)です。
*Plugはハーネス品での提供となります。ケーブル長はご希望の長さにてカスタマイズが可能です。
*記載が無い極数の対応についてはお問い合わせ下さい。

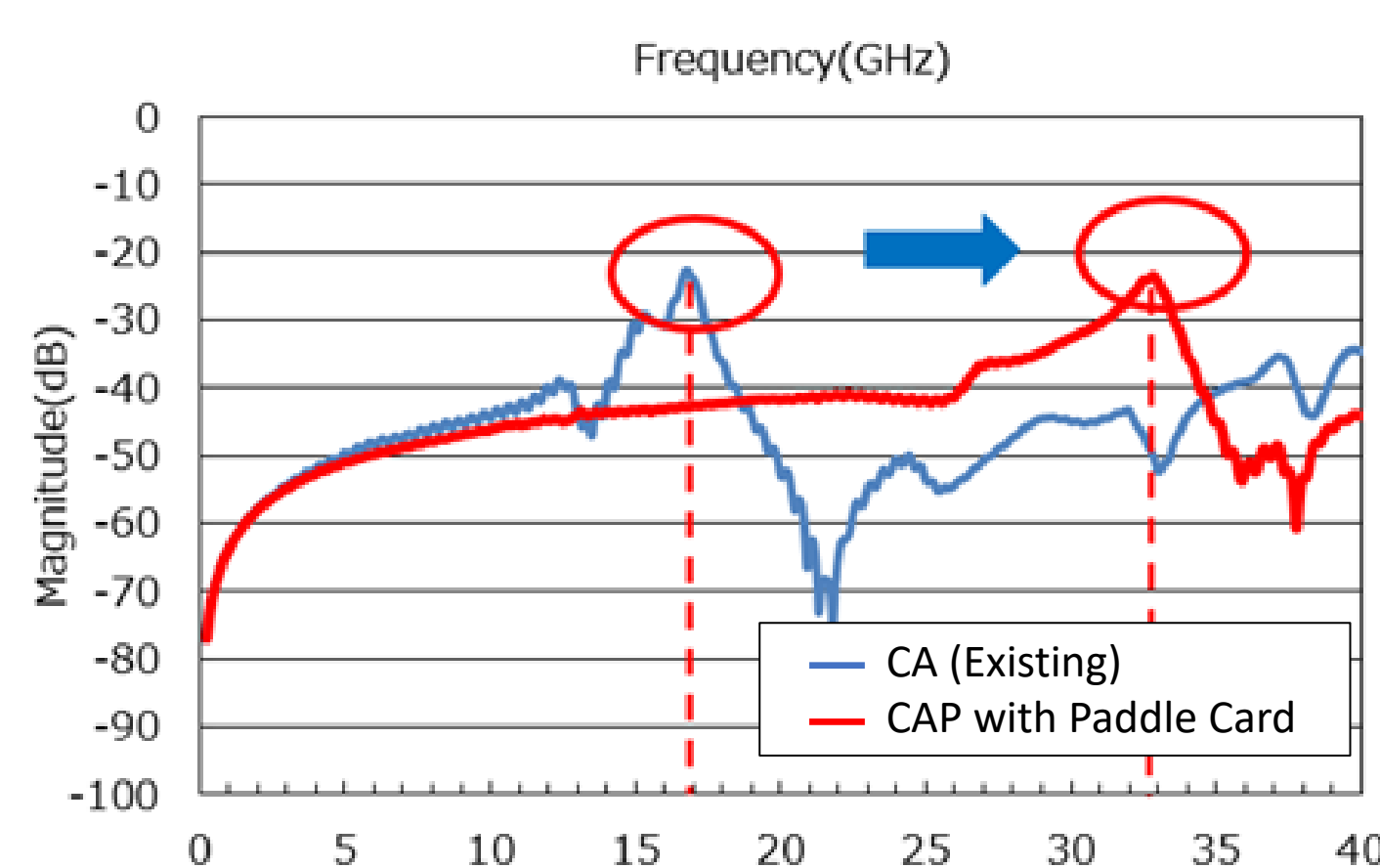


▶ パドルカード技術を駆使した高速伝送 64Gbps/lane PAM4

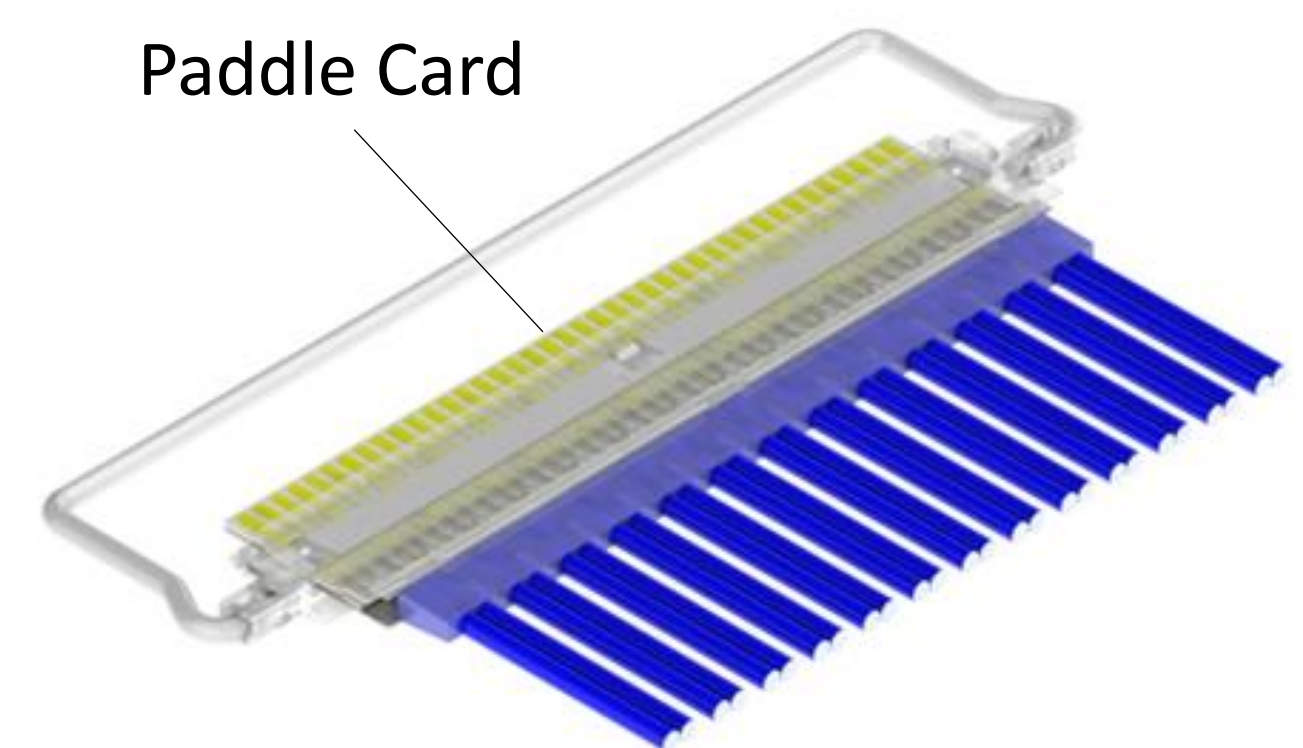
ケーブルプラグ部にパドルカードを採用する事で、信号品質を向上させ
既存のCABLINEシリーズから更なる高速伝送を実現



Near End Cross Talk



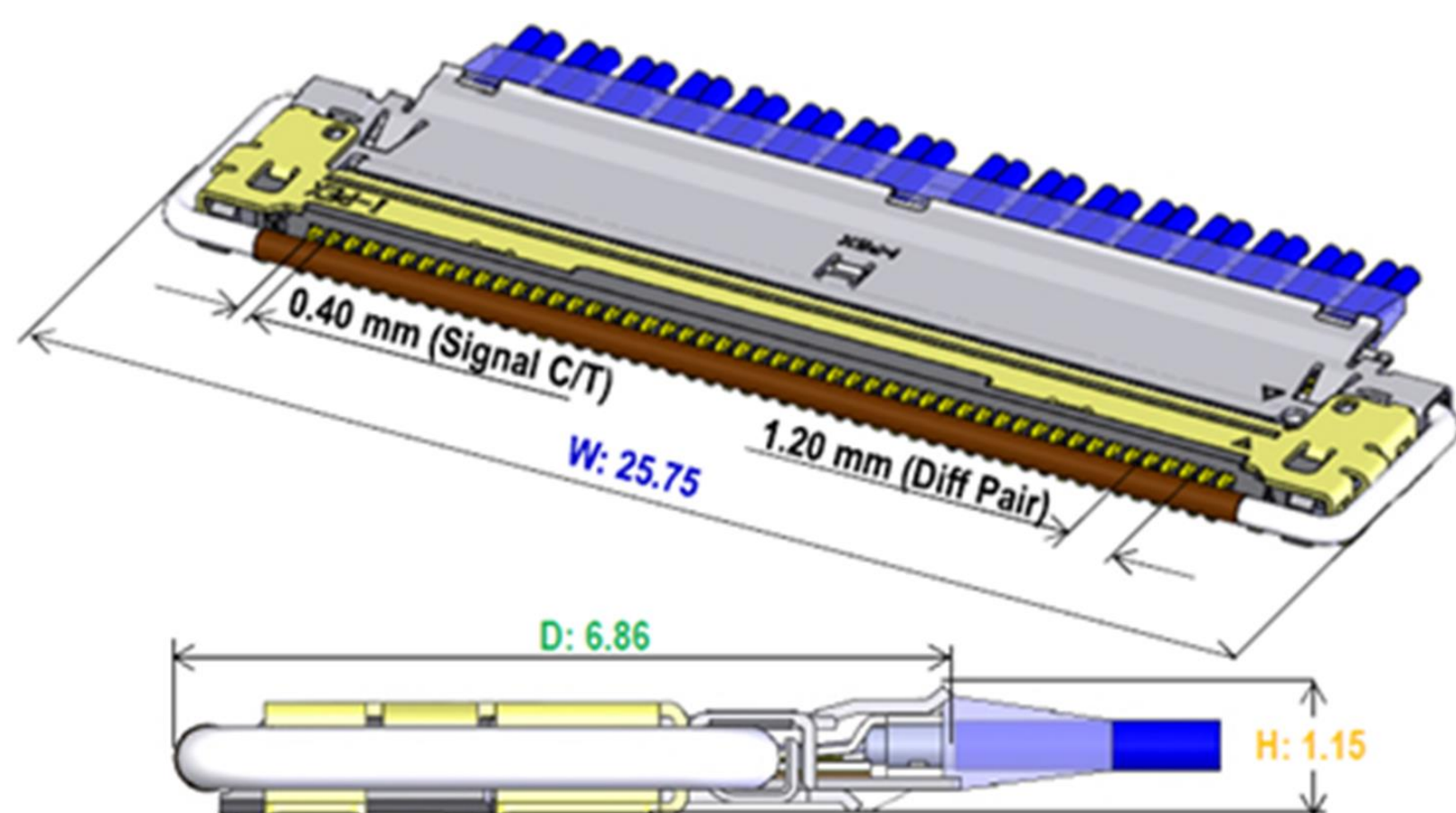
Far End Cross Talk



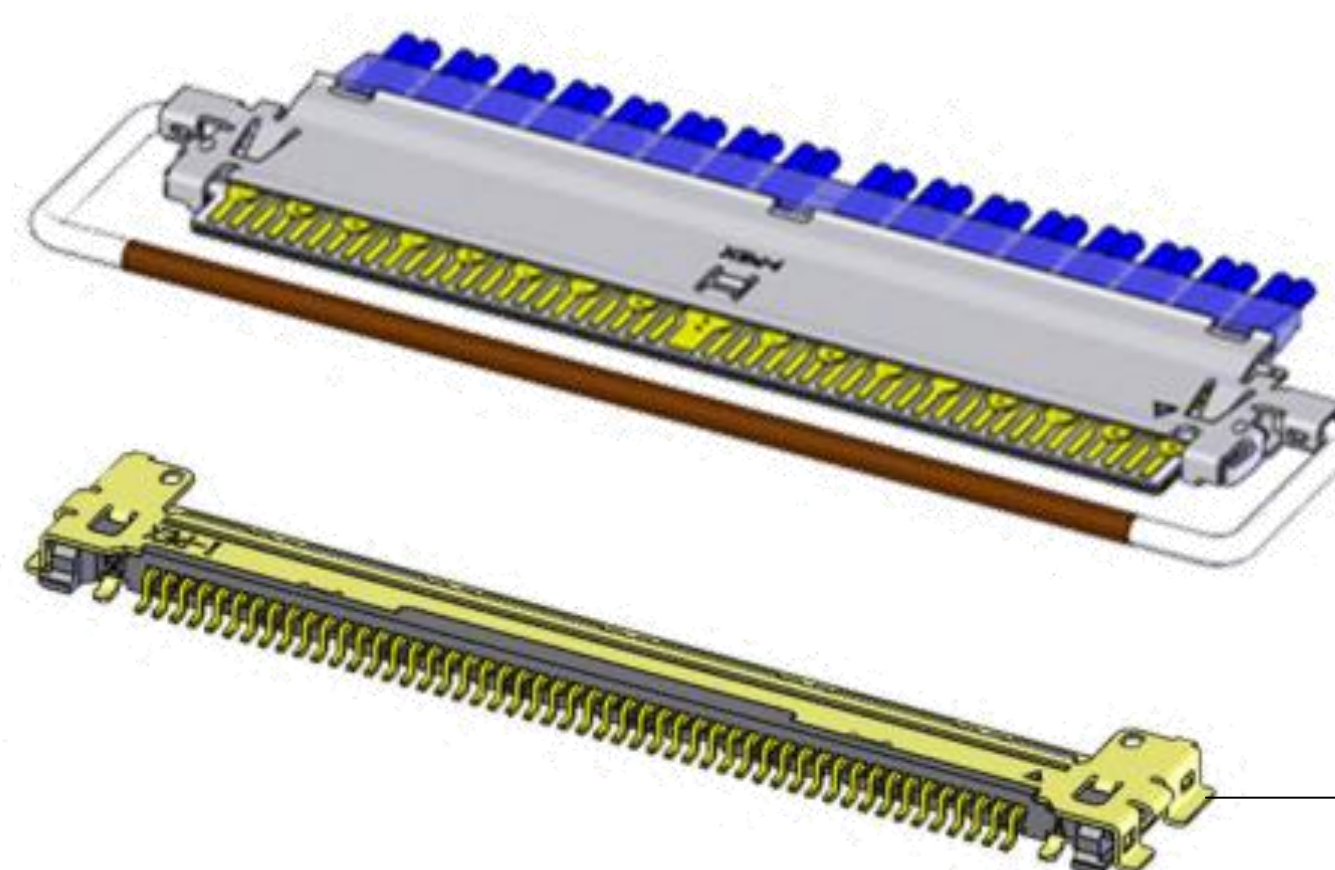
パドルカードの技術ページ

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

▶ 低背でスペース制約のあるアプリケーションに最適 H=1.15mm



Mating condition



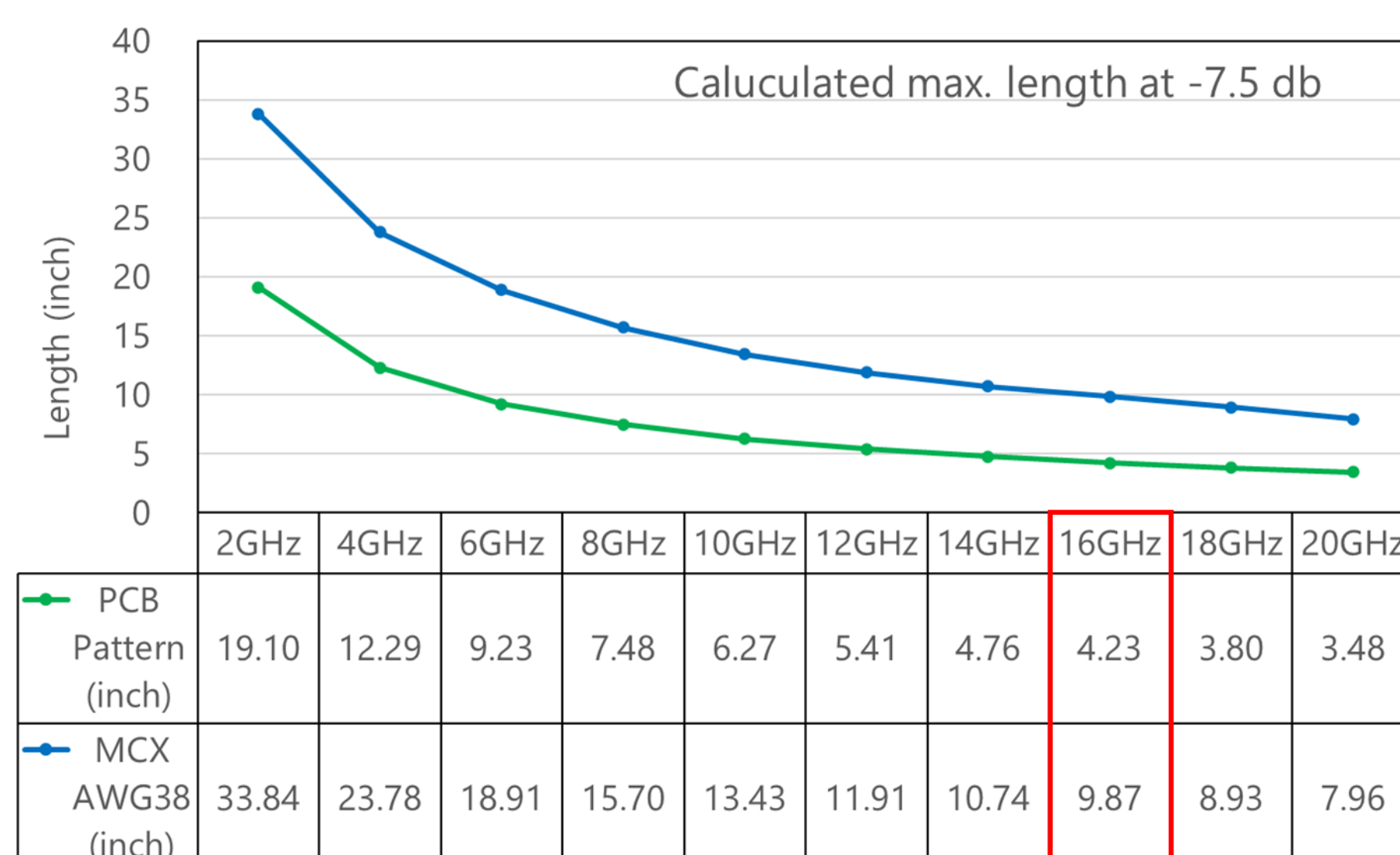
Un-Mating condition

プラグ:
CABLINE®-CAPハーネス

レセプタクル:
CABLINE®-CAのレセプタクル
(PN 20525-#50E-02)

▶ 細線同軸ケーブルを使用したLEAPWIREジャンパーソリューション

ケーブルジャンパーハーネスは基板伝送よりも有利です。低損失PCB(Dk3.7)とCABLINE-CAP®ハーネスの
伝送距離比較です。細線同軸ケーブルは、低損失PCB(Dk3.7)と比較して、16GHz帯で約2.3倍の伝送が可能です。



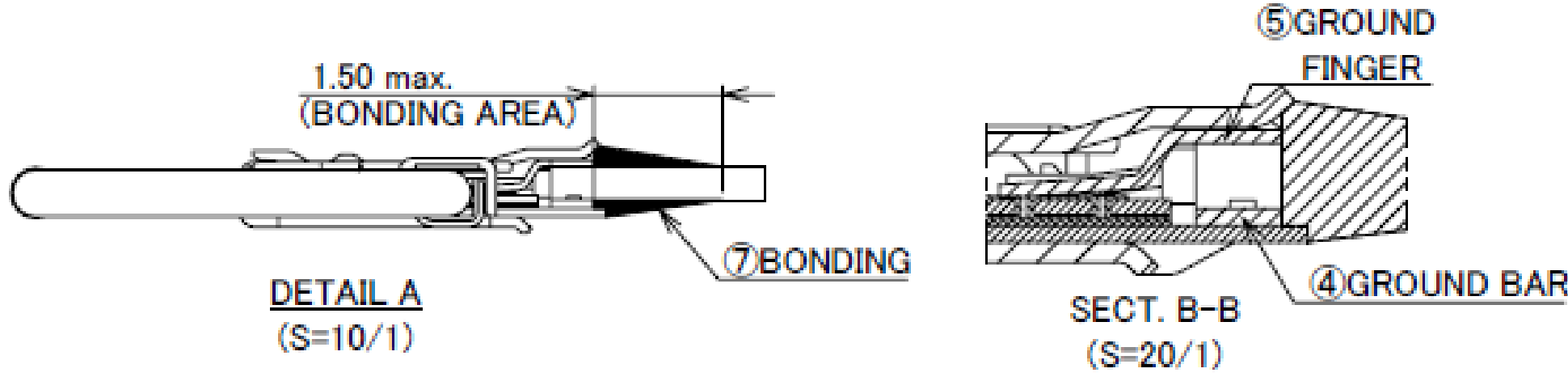
Component Parts Details

Component Parts

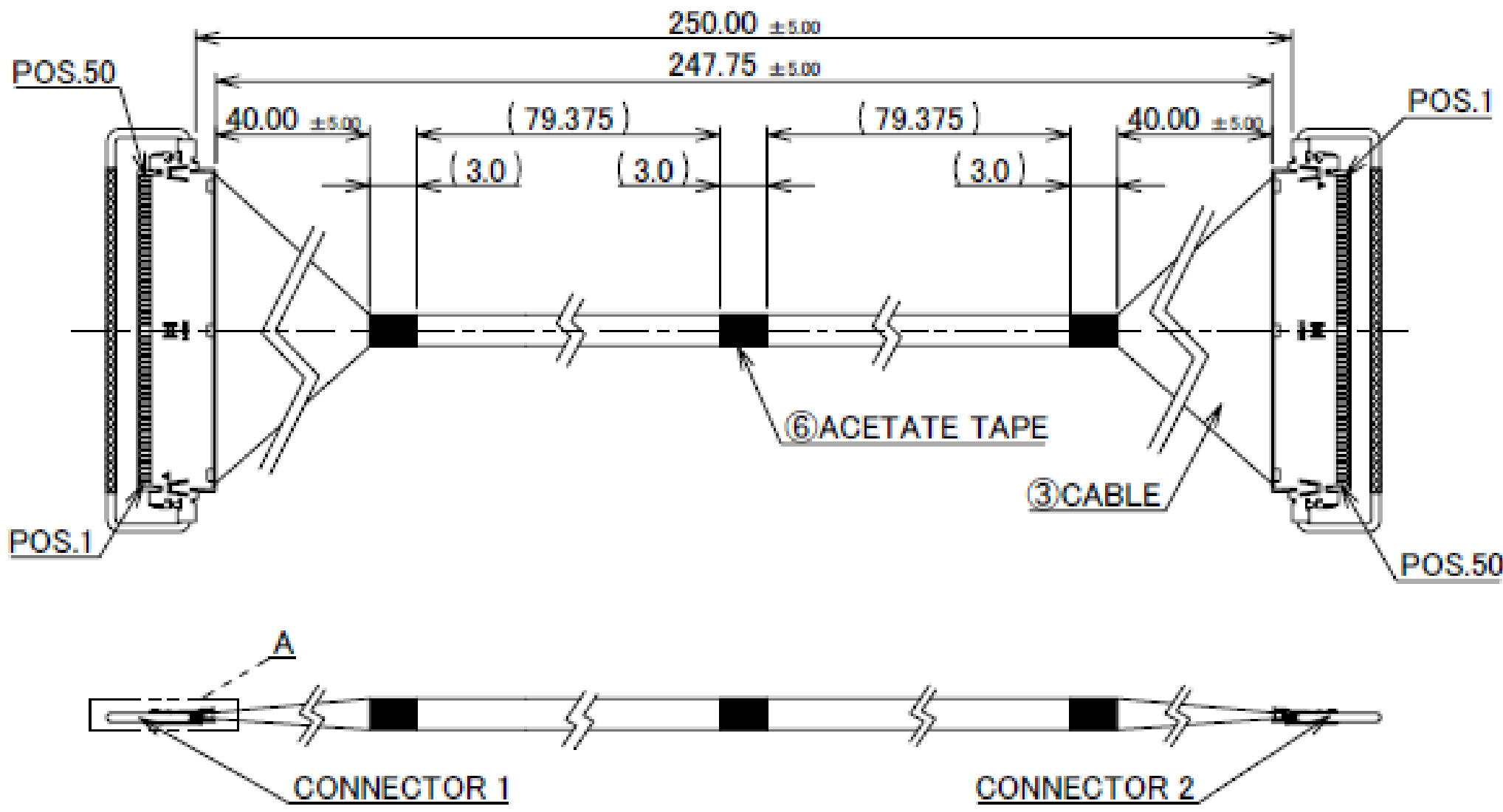
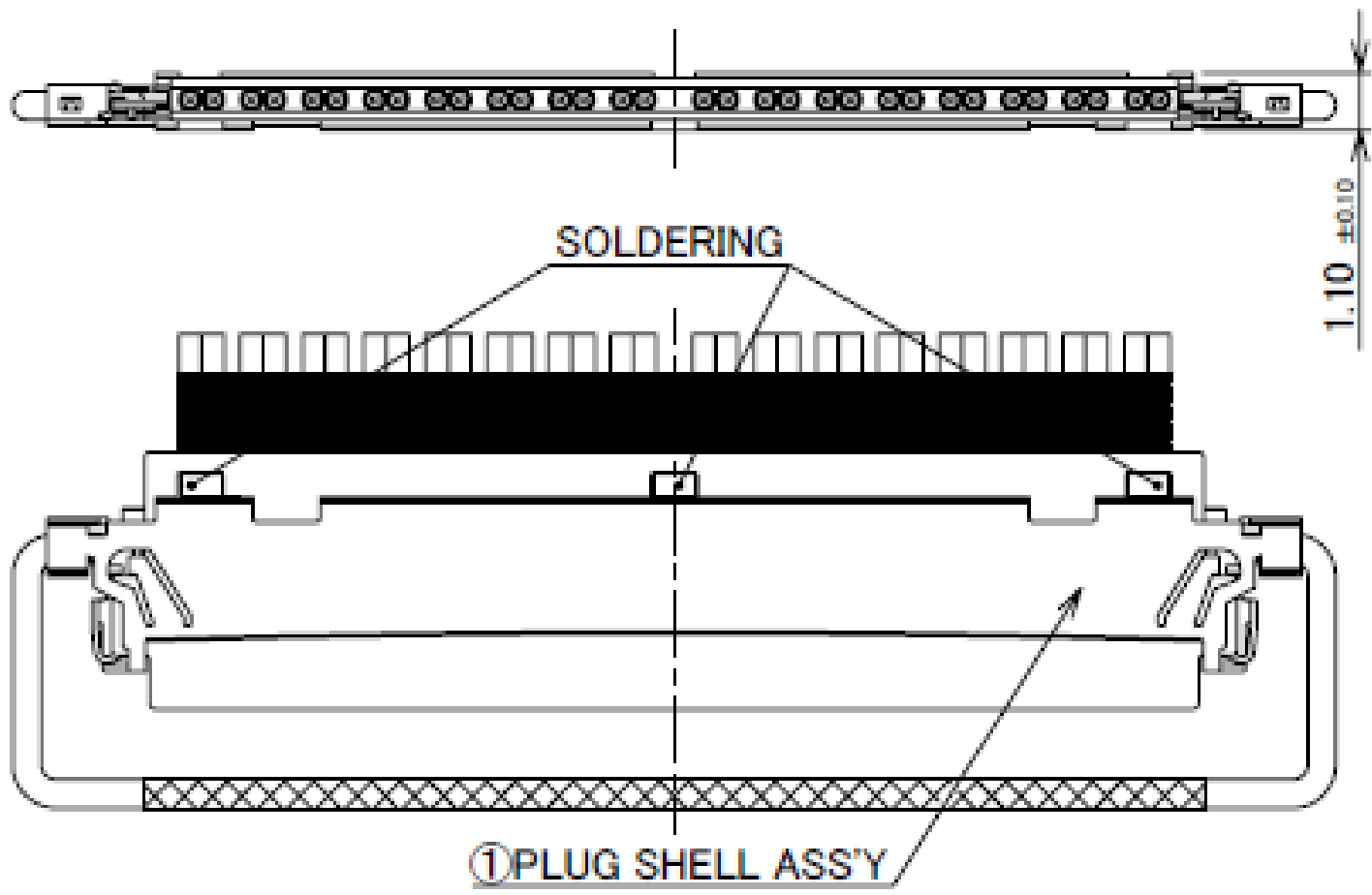
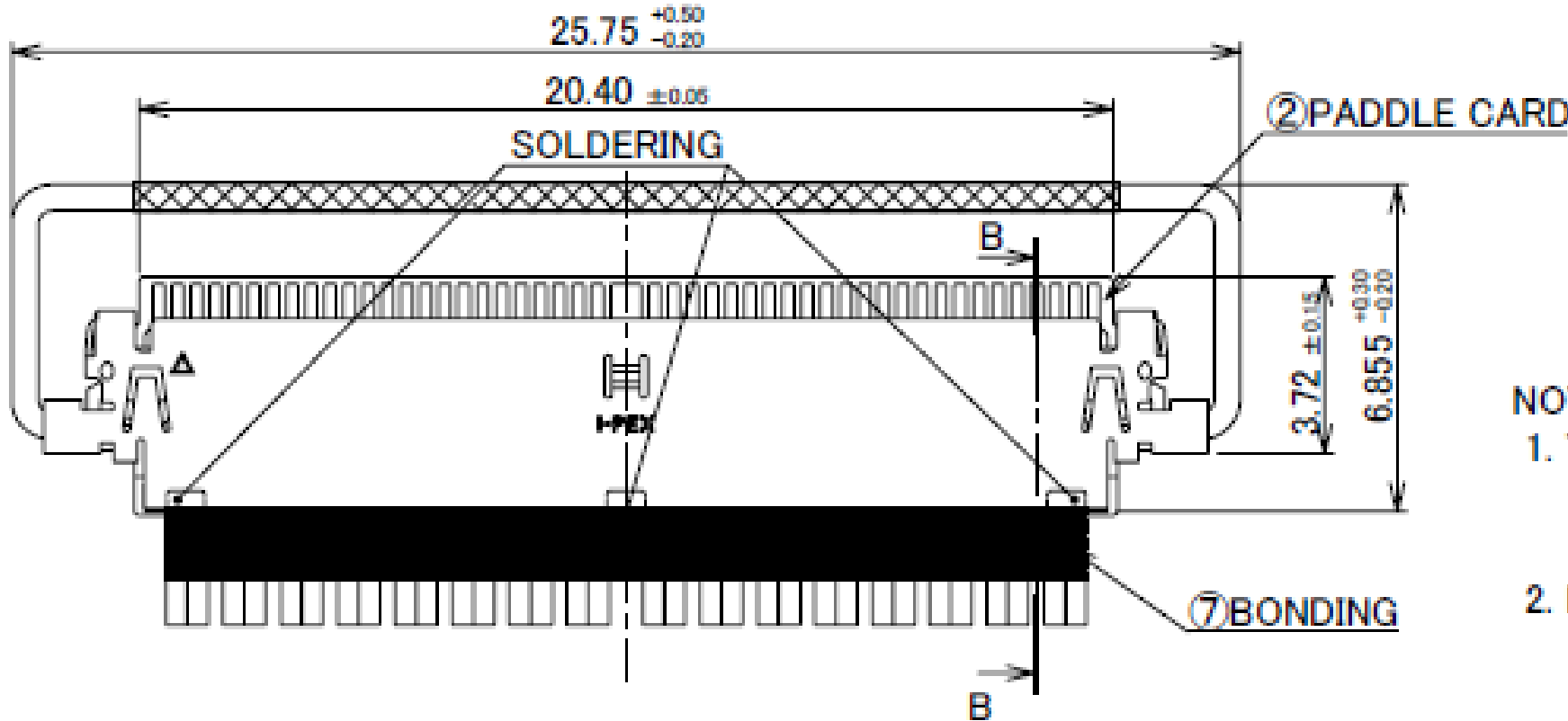
Connector parts	
	
PLUG Harness	RECEPTACLE

Plug Harness Assembly

I-PEX PART NO.	HARNESS LENGTH
81863-100B-01	250



CONNECTOR 1&2
(S=5/1)

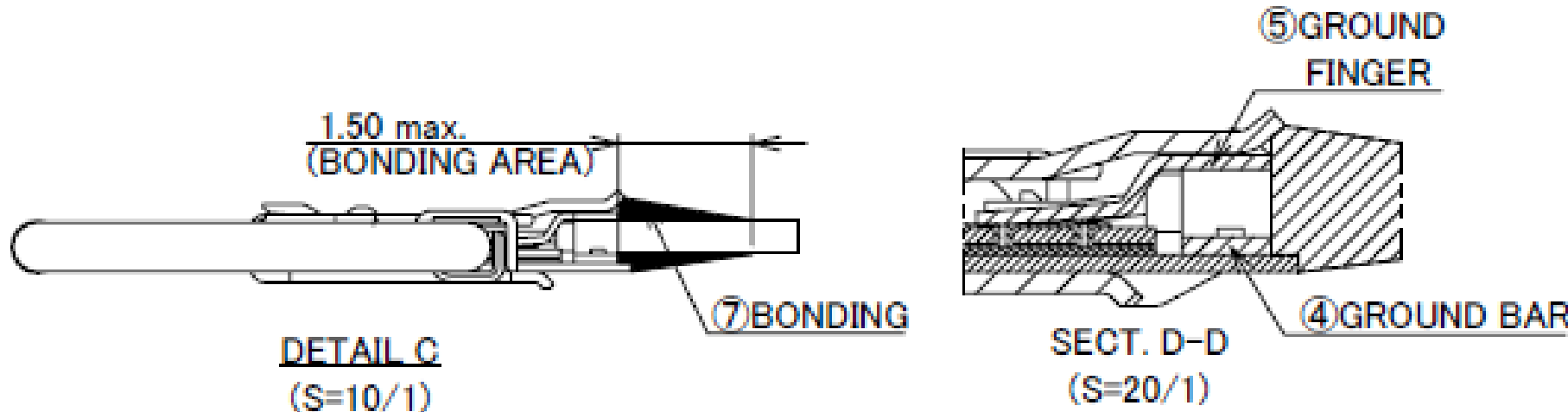


- NOTE.
1. TO HANDLE THIS CONNECTOR :
YOU MUST READ AND FOLLOW THE INSTRUCTION MANUAL BELOW.
I-PEX INSTRUCTION MANUAL No.HIM-23013.
 2. ELECTRIC CHARACTERISTICS
WITHSTANDING VOLTAGE: AC 250V LEAKAGE CURRENT 2.0mA MAX.
INSULATION RESISTANCE: 50MΩ MIN. DC 100V
 3. THE OPERATING TEMPERATURE OF THE HARNESS: 80°C MAX.
 4. MINIMUM HARNESS LENGTH: 85mm

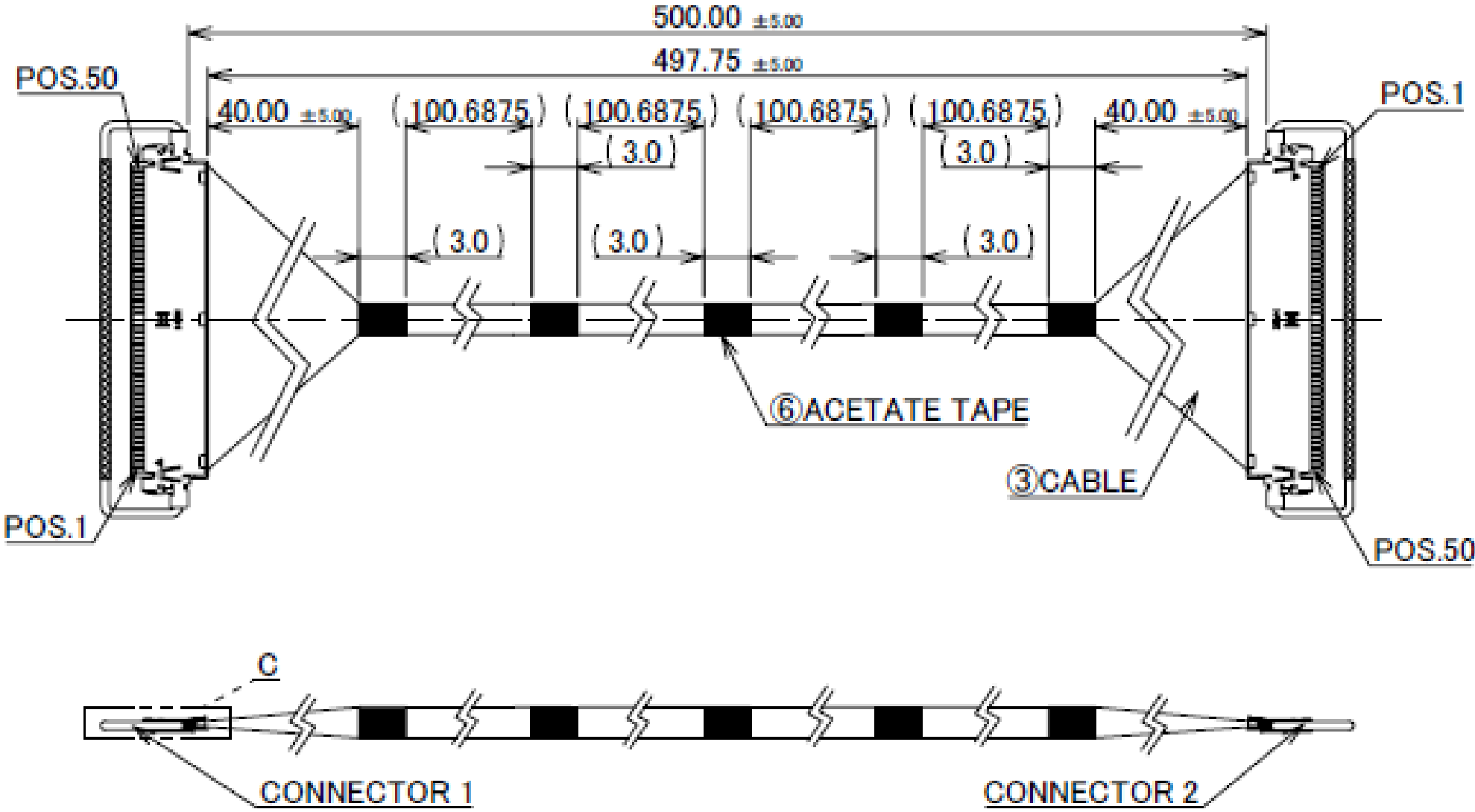
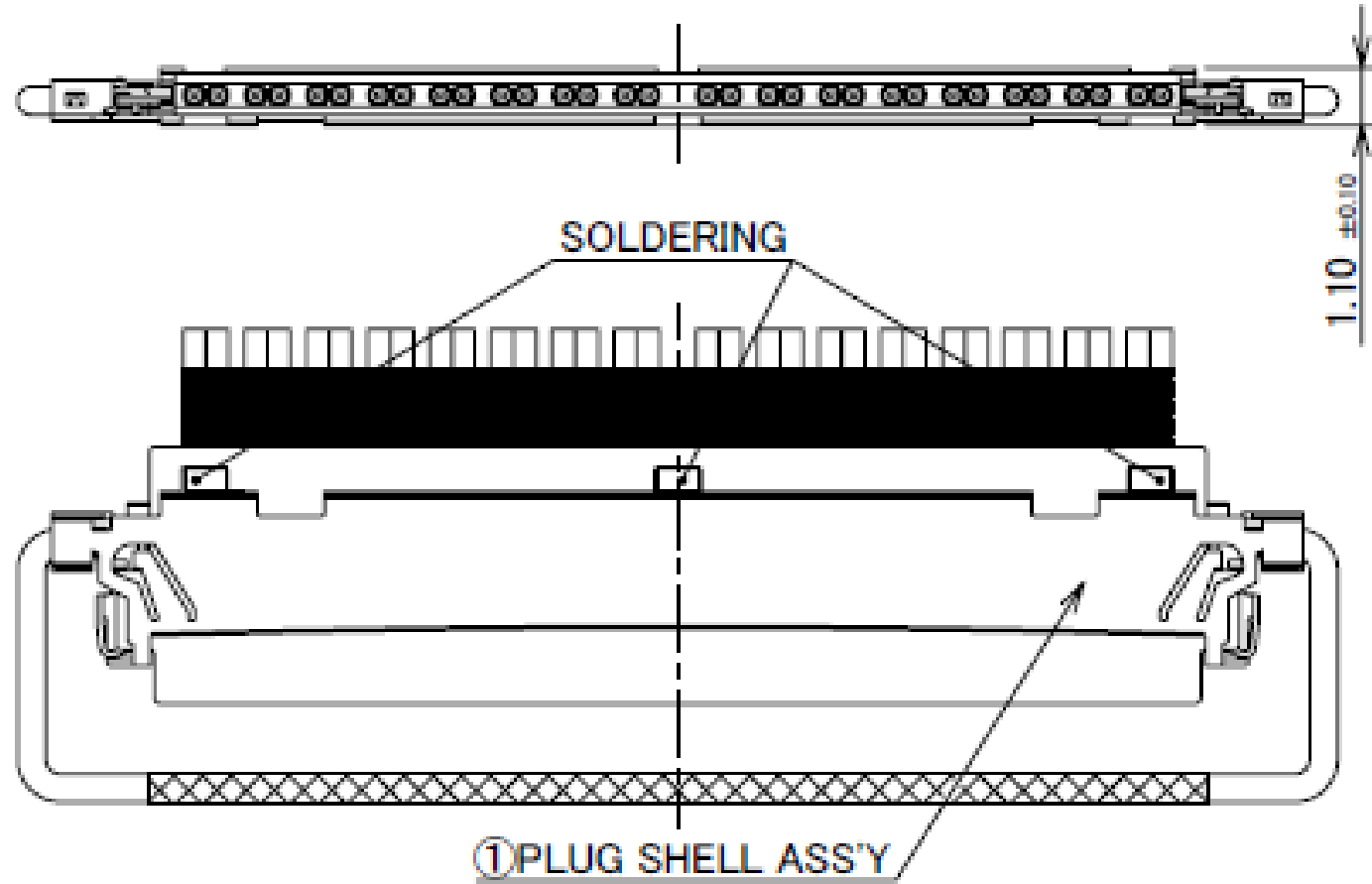
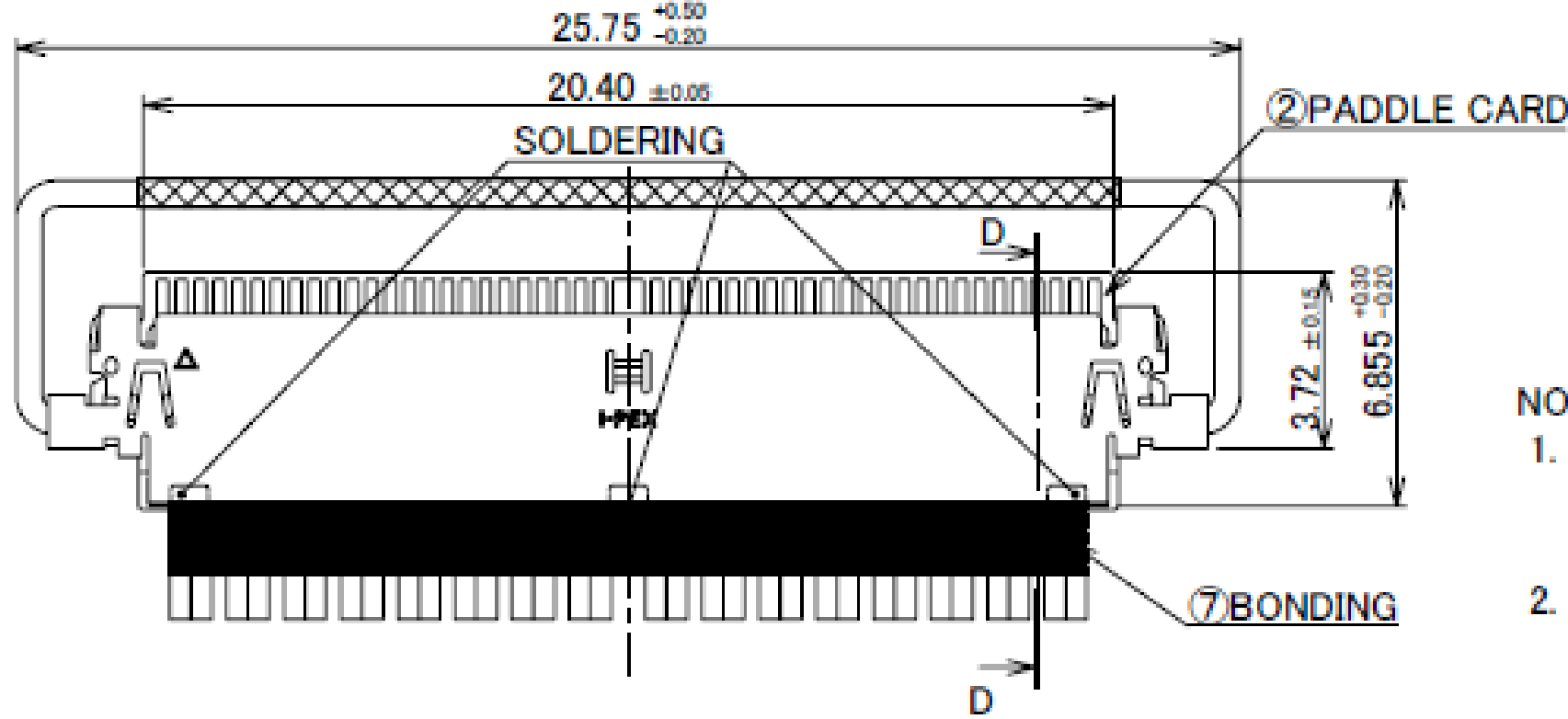
7	BONDING	-	-	UV GLUE
6	ACETATE TAPE	-	3	BLACK
5	GROUND-FINGER	-	2	-
4	GROUND-BAR	-	2	-
3	CABLE	-	32	MICRO-COAXIAL CABLE AWG #38, 45 OHM, BLUE
2	PADDLE CARD	3660-0501	2	CONNECTOR 1&2
1	PLUG SHELL ASS'Y	20993-050T-01	2	CABLINE®-CAP PLUG SHELL ASS'Y P/N: 20993-050T-01 CONNECTOR TO BE MATED: 20525-050E-02
NO.	DESCRIPTION	PARTS NO.	QTY	REMARKS

Rev.1

I-PEX PART NO.	HARNESS LENGTH
81863-100B-02	500



CONNECTOR 1&2
(S=5/1)



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7	BONDING	-	-	UV GLUE
6	ACETATE TAPE	-	5	BLACK
5	GROUND-FINGER	-	2	-
4	GROUND-BAR	-	2	-
3	CABLE	-	32	MICRO-COAXIAL CABLE AWG #38, 45 OHM, BLUE
2	PADDLE CARD	3660-0501	2	CONNECTOR 1&2
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Rev.1

Plug Harness Assembly

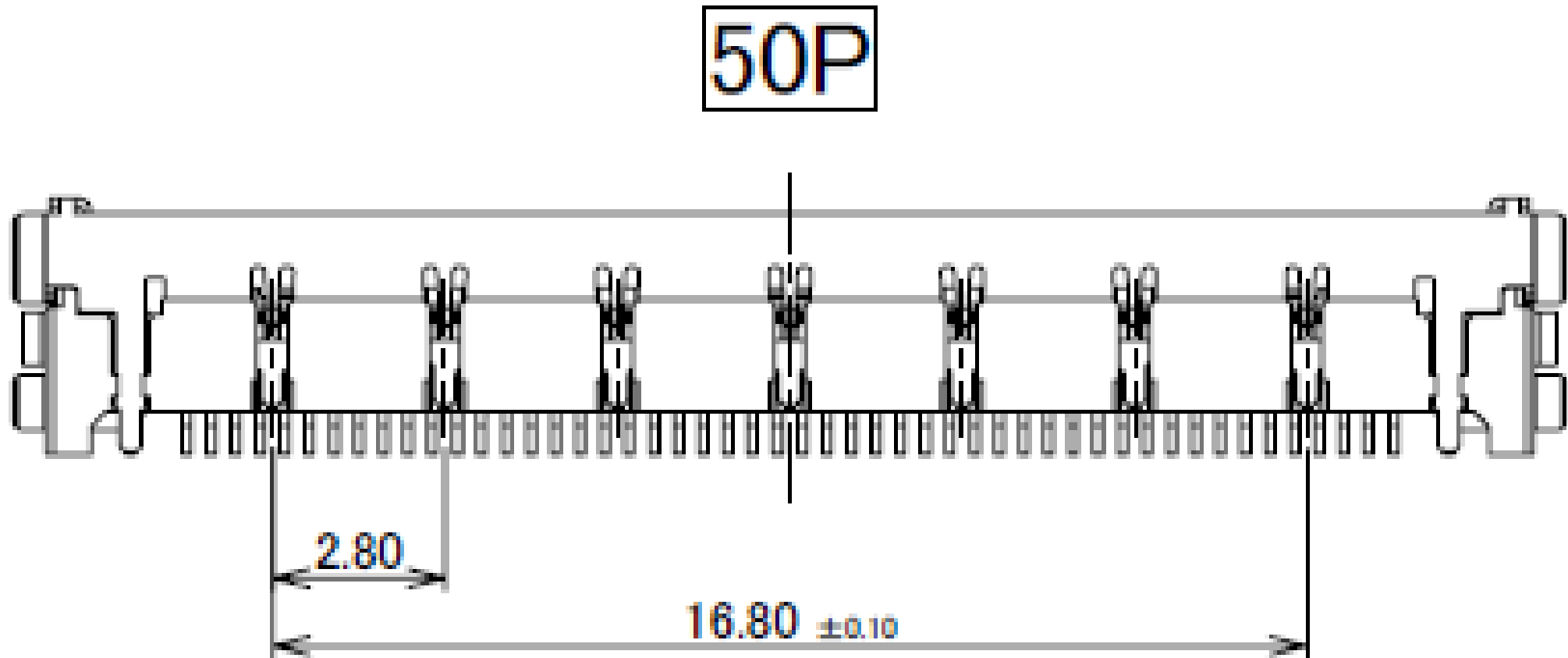
ITEMS	SPECIFICATION
APPLICABLE CABLE	Micro Coaxial: AWG#38 Diff 90ohm
RATING AMPERAGE (FOR CONTACT)	0.4A AC/DC (AWG#38)
RATING VOLTAGE	100V AC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K (-40℃~85℃)
OPERATING HUMIDITY	85℃ MAX. (NON-CONDENDING)
CONTACT RESISTANCE	INITIAL: 270mohm MAX.(AWG#38) / AFTER TEST: Δ40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : Δ40mohm MAX.
INSULATION RESISTANCE	INITIAL: 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30CYCLES
MATING FORCE (INITIAL / AFTER 30 CYCLES)	50P: 18.9N MAX.
UNMATING FORCE (INITIAL / AFTER 30 CYCLES)	50P: 2.5N MIN.
CABLE RETENTION FORCE	50P: 24.5N MIN.
PRODUCT SPECIFICATION	PRS-2832
TEST REPORT	TR-23020
INSTRUCTION MANUAL	HIM-23013

Rev.1

Receptacle Assembly

PART NO.
20525-050E-02

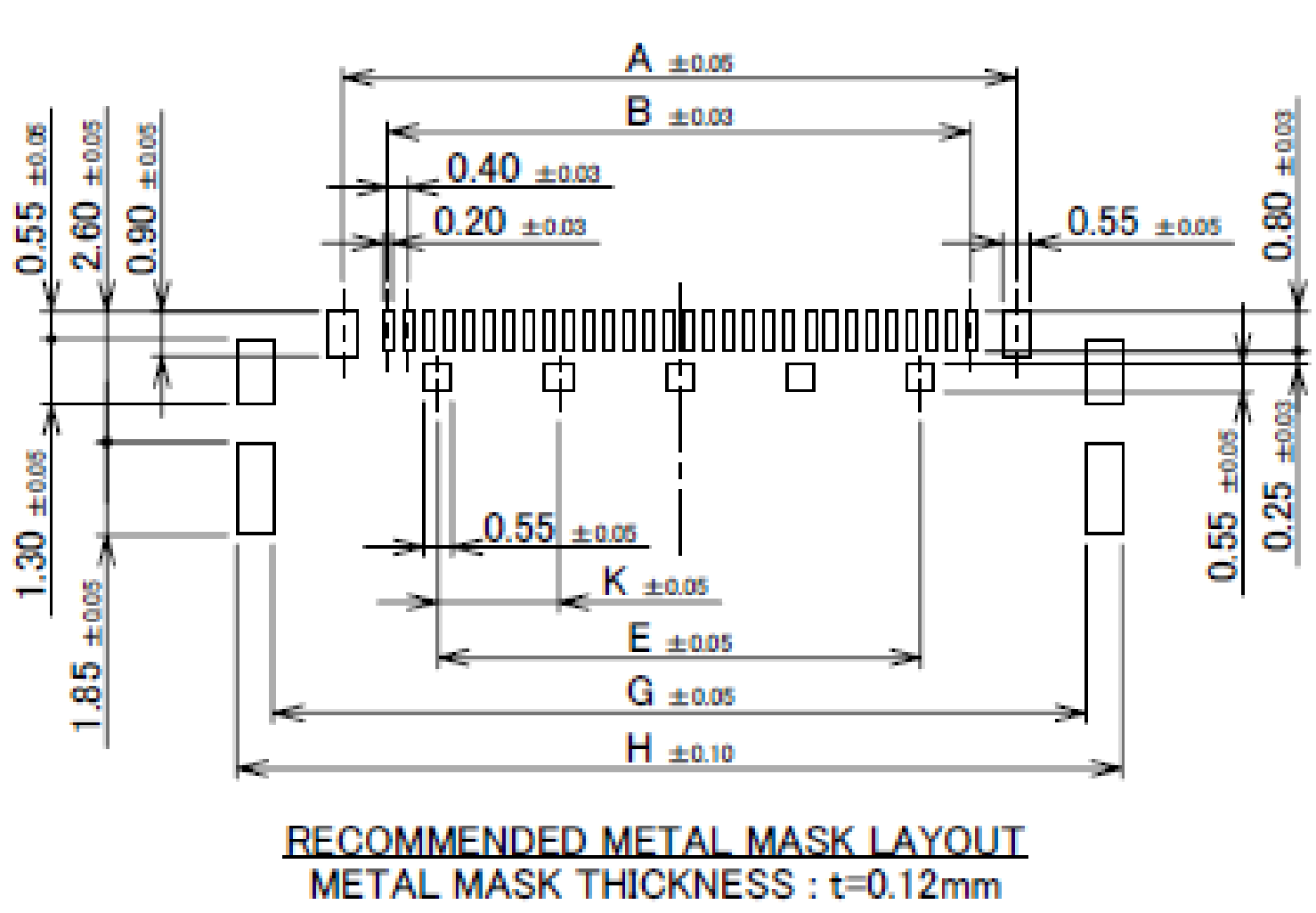
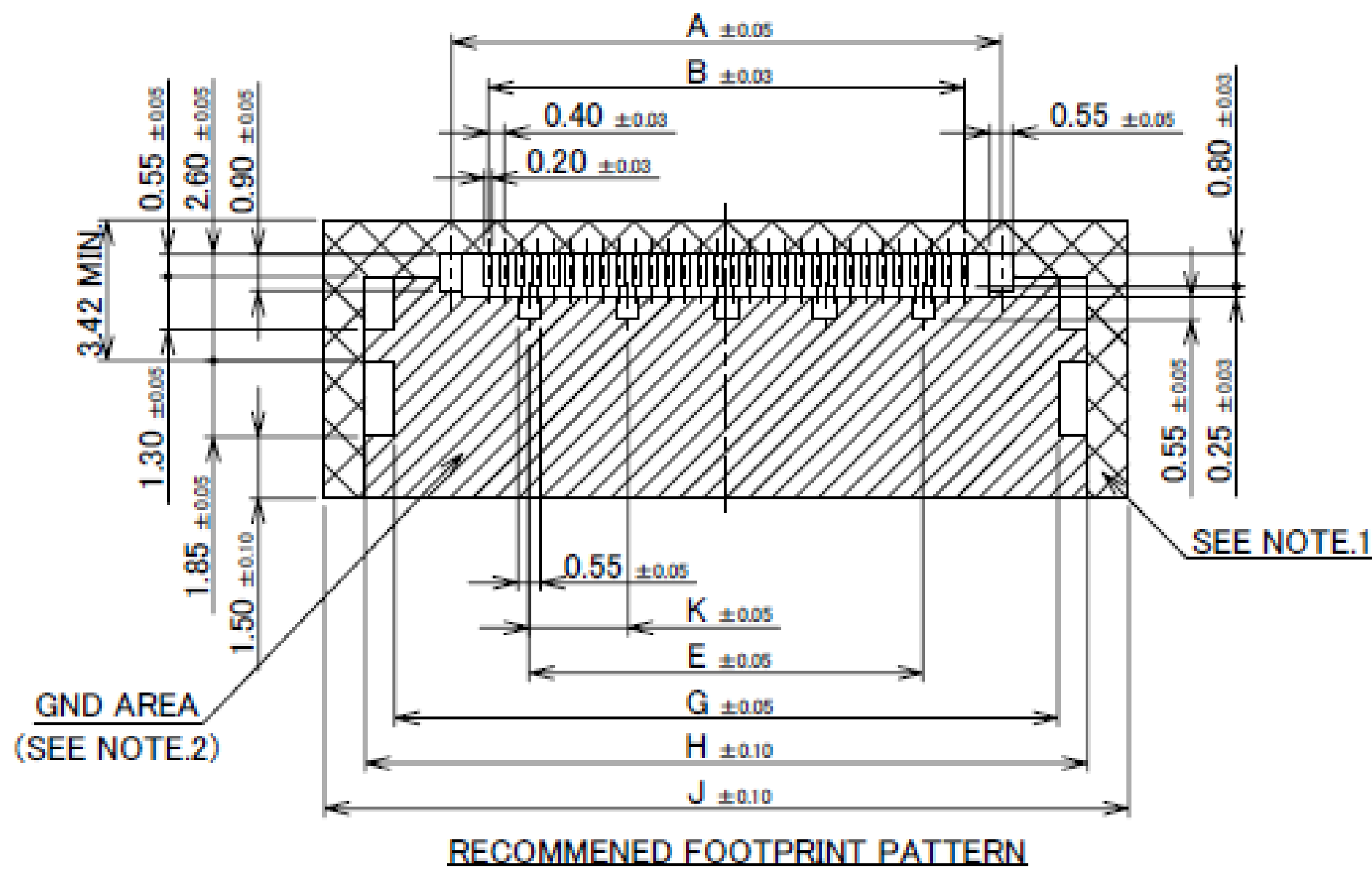
BOTTOM VIEW



Rev.32

Receptacle Assembly

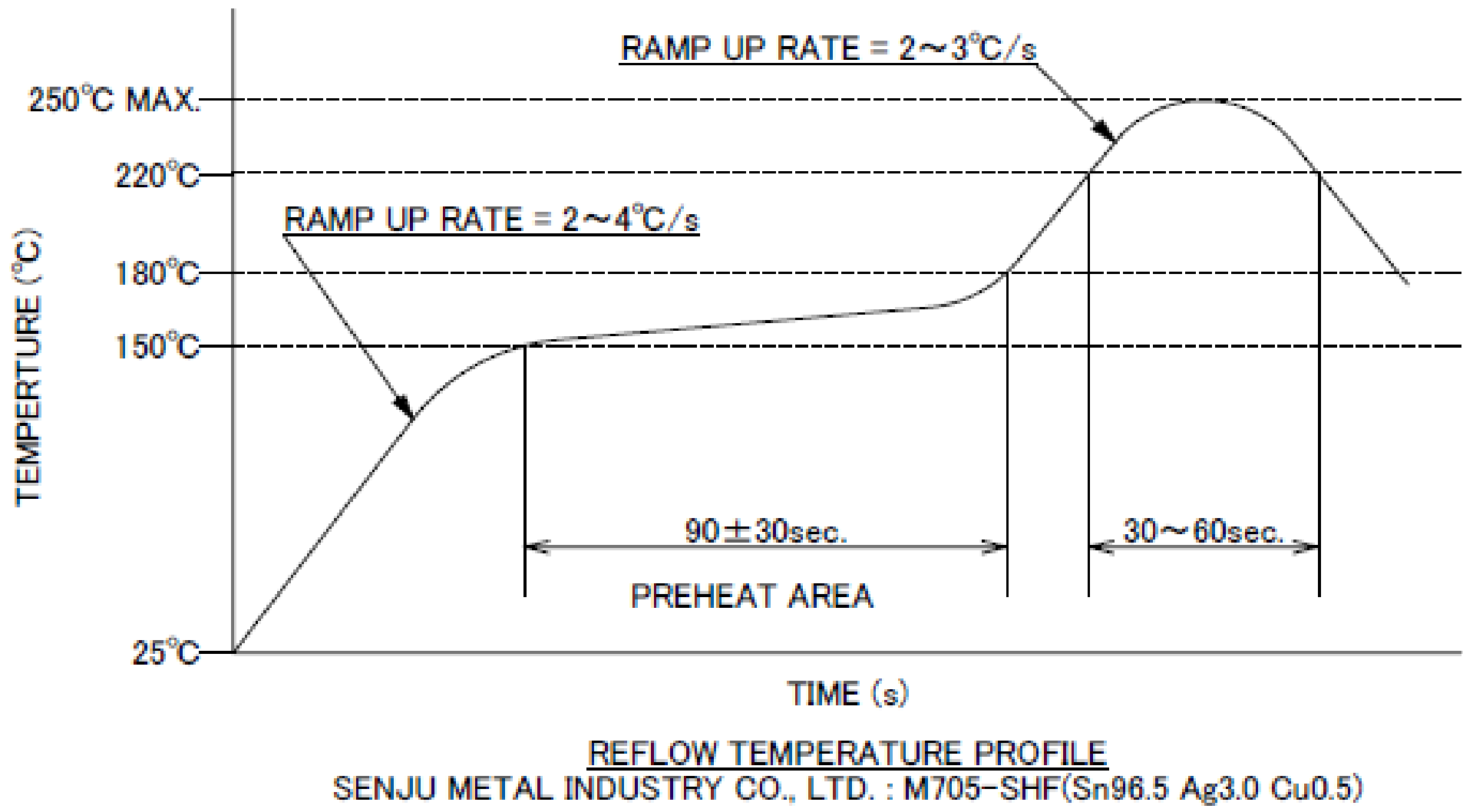
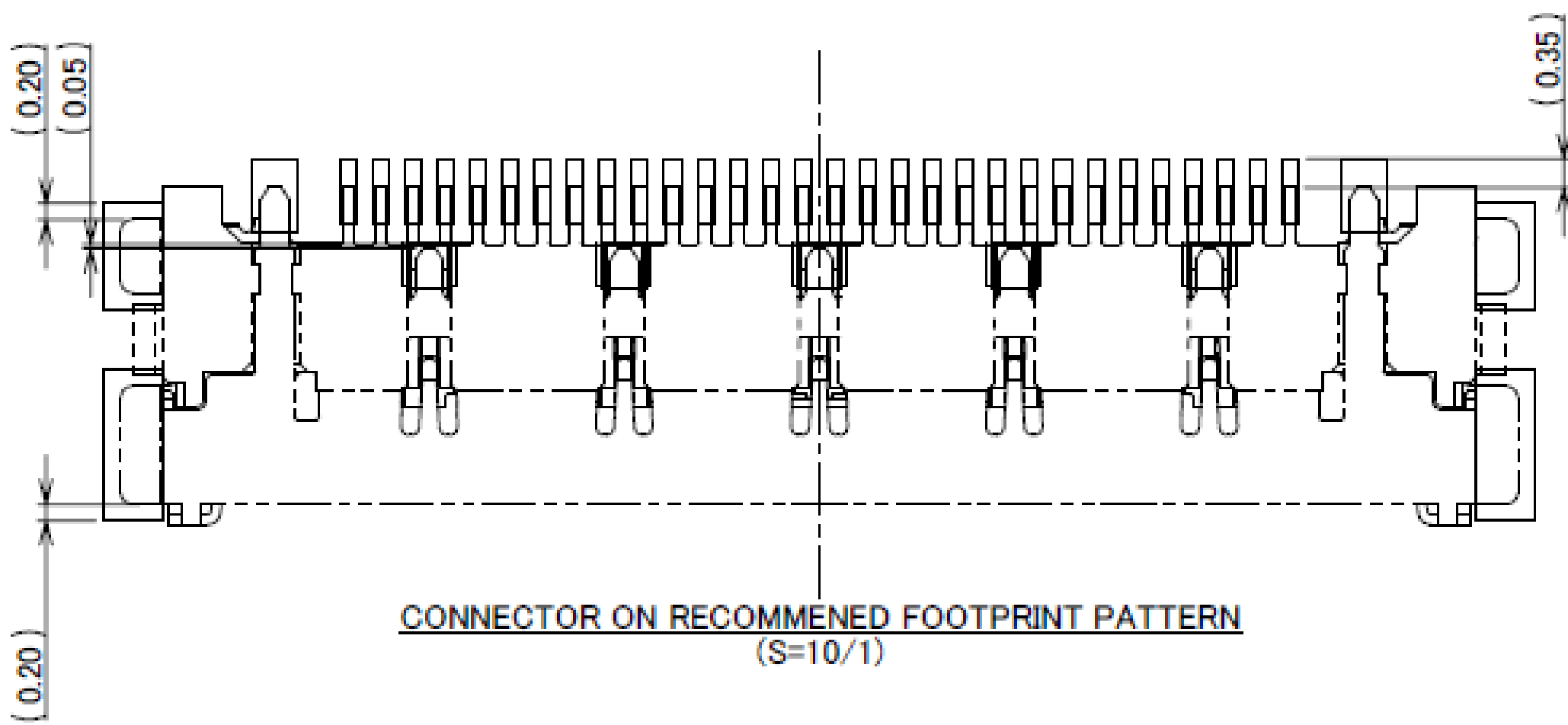
PART NO.	POS.	A	B	E	G	H	J	K
20525-050E-02	50	21.40	19.60	16.80	24.18	25.60	27.60	2.80



NOTES.
1. IN CASE OF PLUG WITH PULL BAR(20633-#**T-01S), DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
2. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Rev.32

Receptacle Assembly



Rev.32

Receptacle Assembly

FOR CABLINE-CA PLUG CABLE ASSEMBLY (DWG NO. 20633)

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE WIRE : AWG# 36 , 34 TWINAX CABLE : AWG# 40 , 42
RATING 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.
RATING 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 50 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 40 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 14 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 4 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~358K (-40℃~85℃)
OPERATING HUMIDITY	85% MAX.
CONTACT RESISTANCE	INITIAL : 180mohm MAX. (AWG#34) / AFTER TEST : ≦140mohm 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 : ≦140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER 30 CYCLES)	10P : 7.80N MAX. 40P : 19.40N MAX. 12P : 8.20N MAX. 50P : 24.25N MAX. 20P : 9.70N MAX. 60P : 29.10N MAX. 30P : 14.55N MAX.
UNMATING FORCE (INITIAL / AFTER 30 CYCLES)	10P : 1.00N MIN. 40P : 4.00N MIN. 12P : 1.20N MIN. 50P : 5.00N MIN. 20P : 2.00N MIN. 60P : 6.00N MIN. 30P : 3.00N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 40P : 19.60N MIN. 12P : 5.88N MIN. 50P : 24.50N MIN. 20P : 9.80N MIN. 60P : 29.40N MIN. 30P : 14.70N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1968
TEST REPORT	TR-14122 (20525-0**E-0#) / TR-16023 (20525-2**E-0#)
PACKING STANDARD	300-824
INSTRUCTION MANUAL	HIM-09008
APPEARANCE CRITERIA No.	QLS-A***

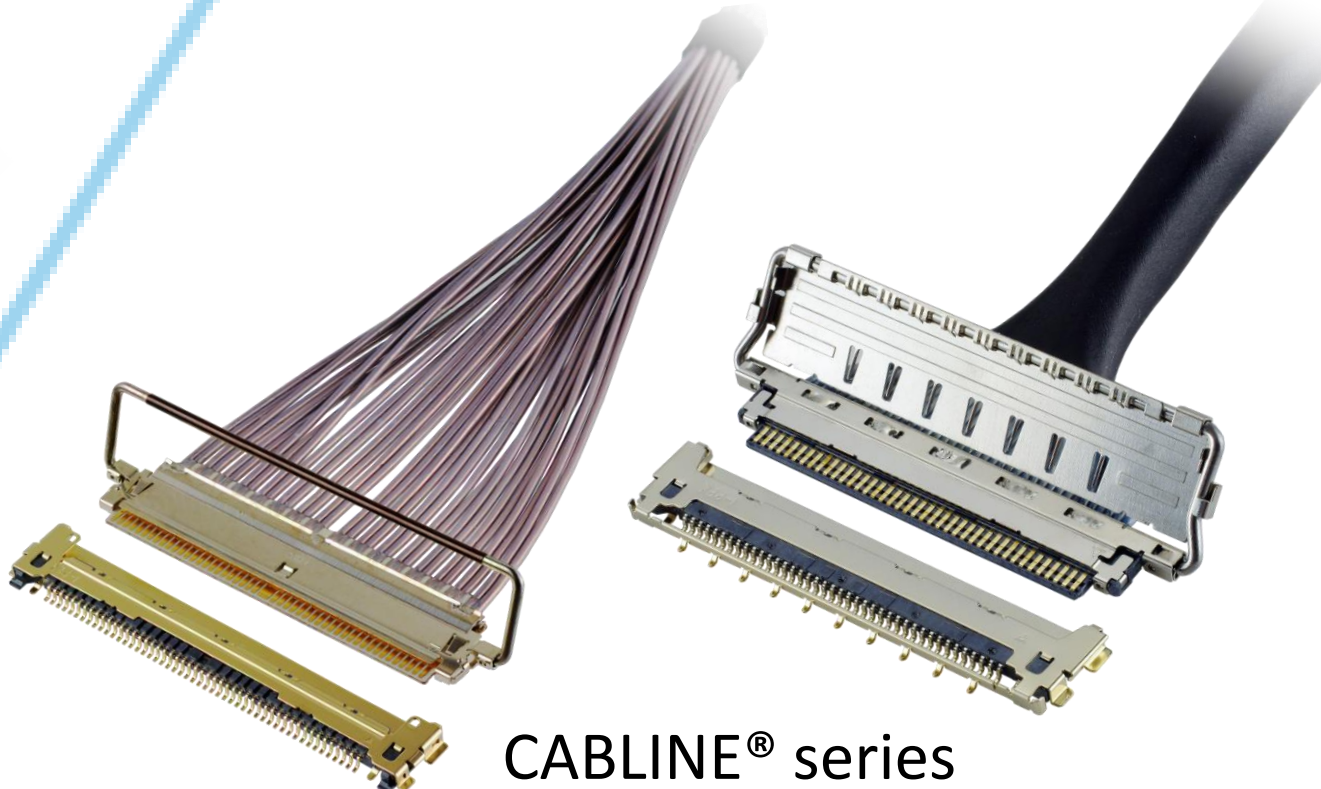
Custom Connectors Available

 RF
Connectors

MHF® series



CABLINE® series



Micro-Coaxial/Twinax
Connectors



Wire-to-Board
Connectors/
Terminals

AP series



ISH® series



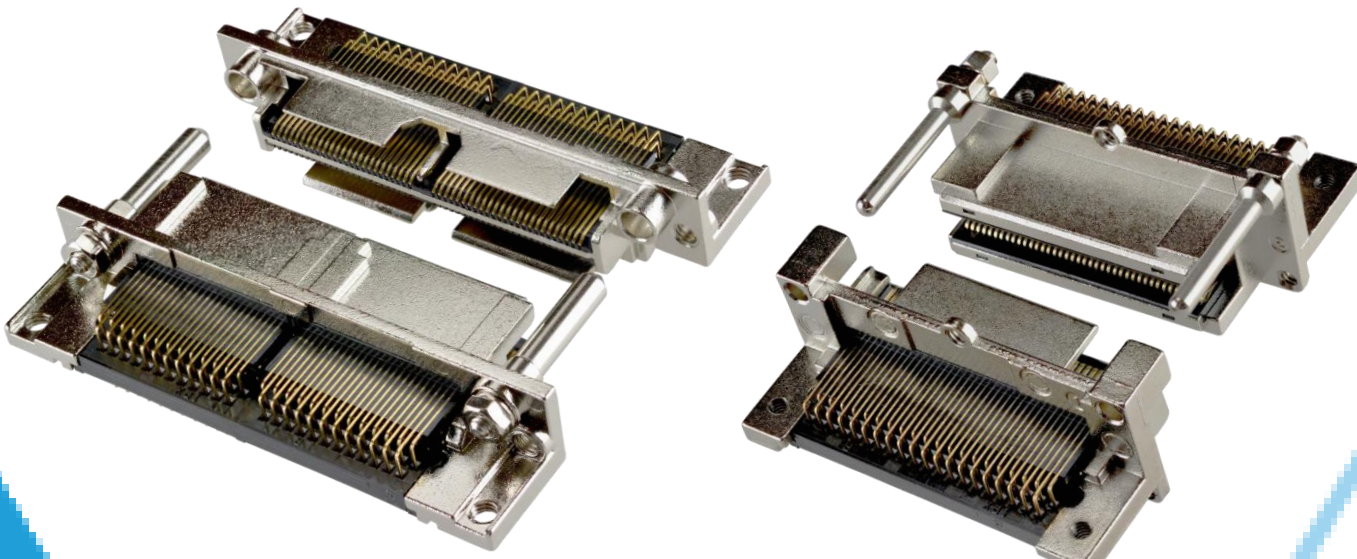
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC
Connectors



Inquiry



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