

CABLINE®-CAP

64Gbps PAM4,
0.4mm pitch, 水平插拔款極細同軸線連接器

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)

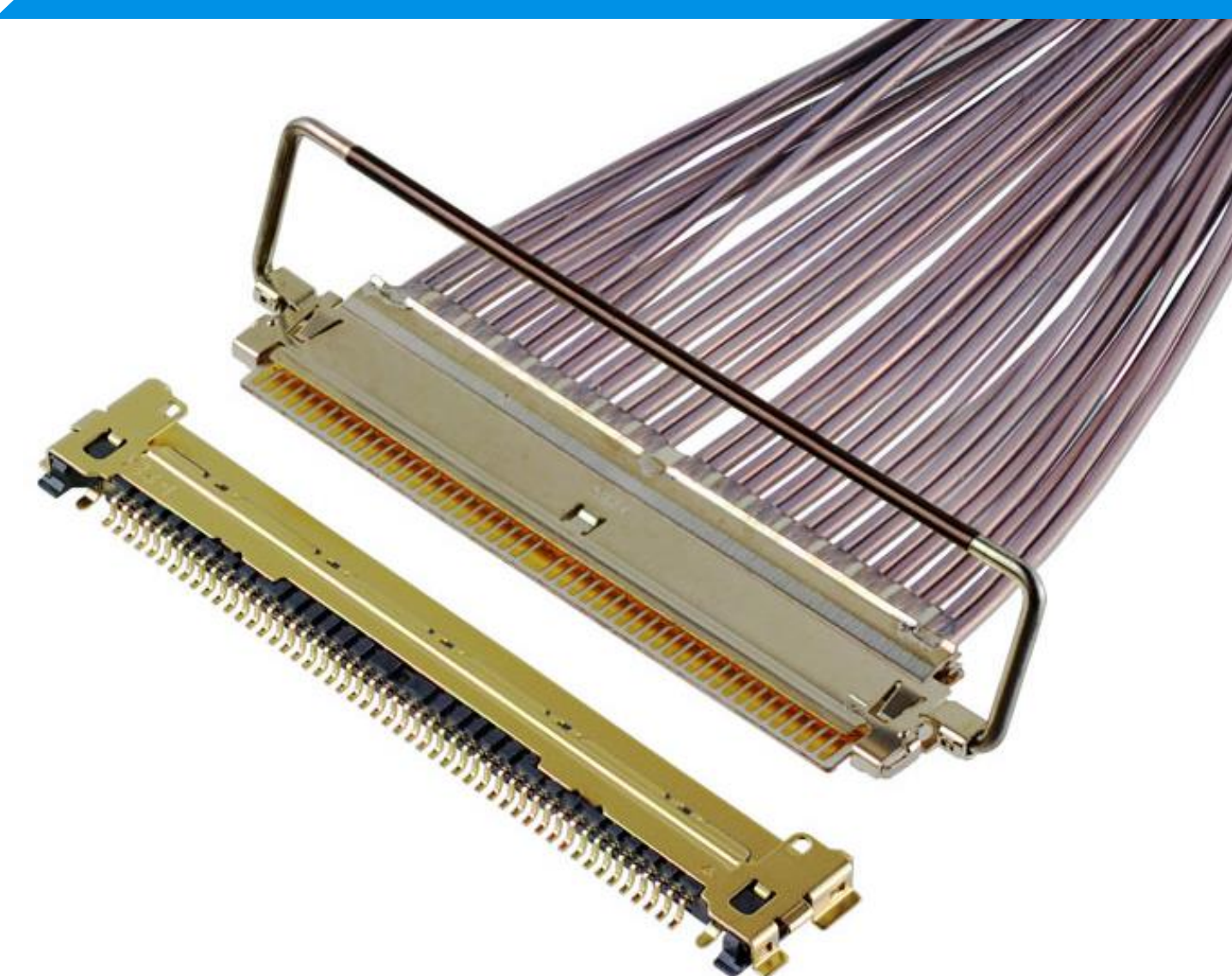
Applicable Cable Size:

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

*CABLINE®-CAP 是線束產品的名稱。母座為 CABLINE®-CA (PN 20525-#50E-02)。

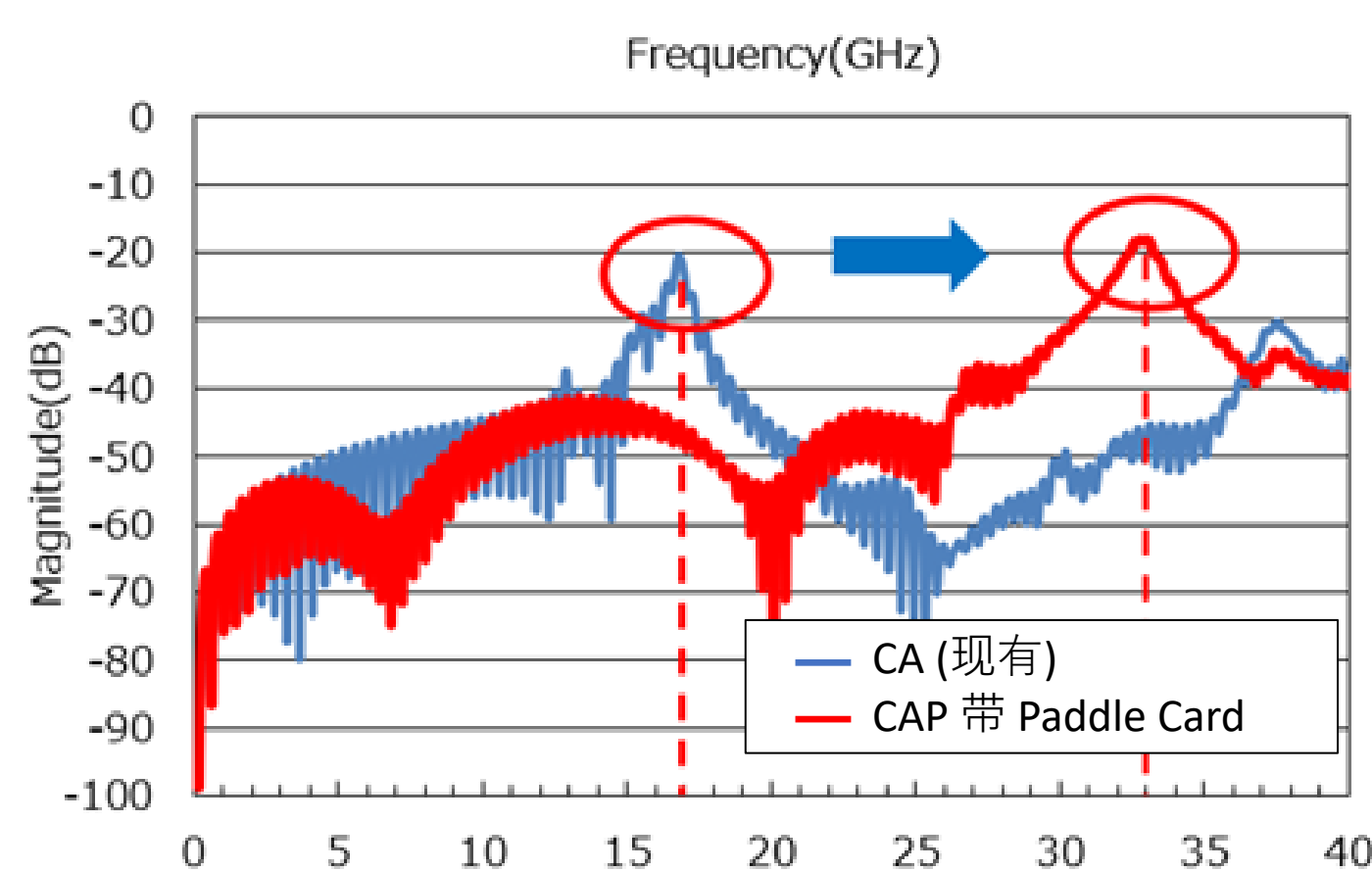
*未列出的或超出上述範圍的pin數，請您聯絡我們諮詢。

*PLUG 作為線束產品提供。電纜長度可根據需要自訂。

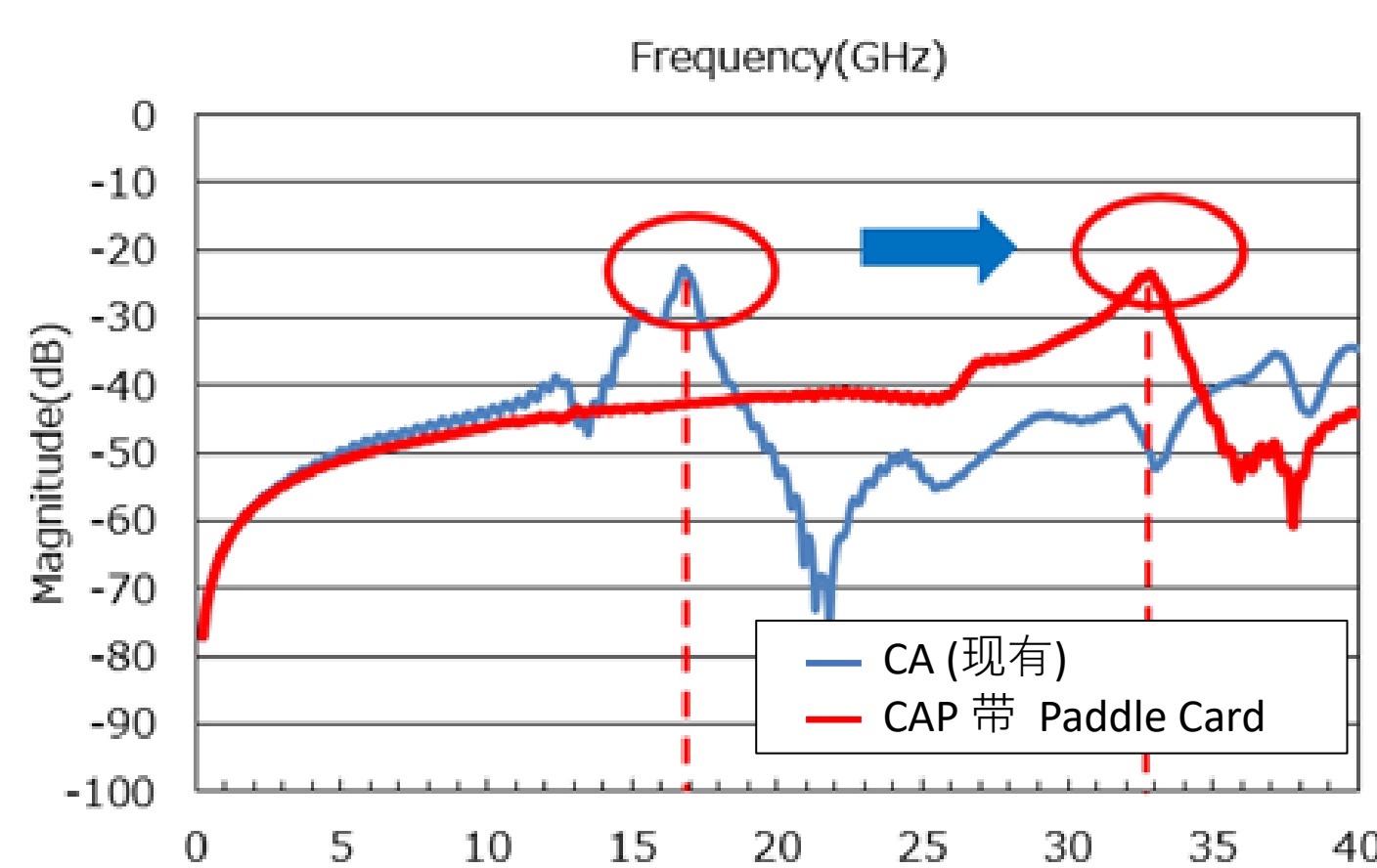


高速傳輸 64Gbps/通道 PAM4，採用Paddle Card技術

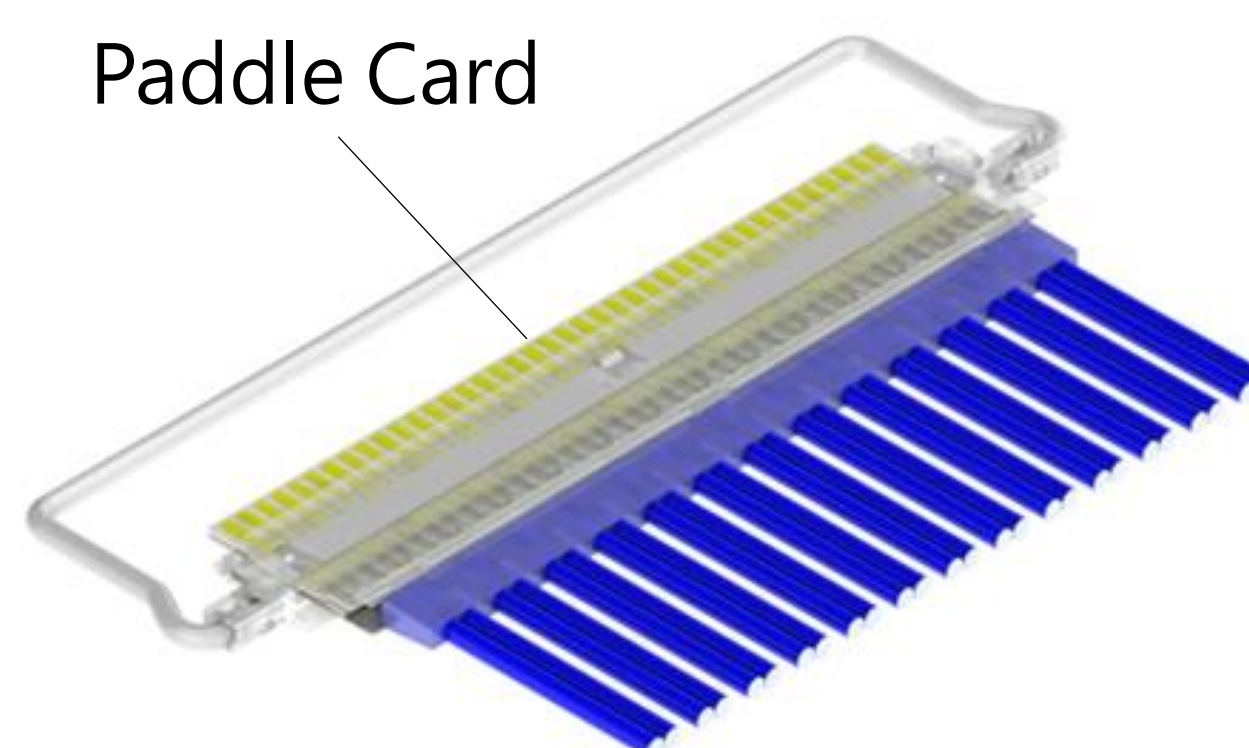
透過在電纜線端部分採用paddle card來提高訊號品質。
這使得現有 CABLINE 系列的傳輸速度更快。



近端串擾



遠端串擾

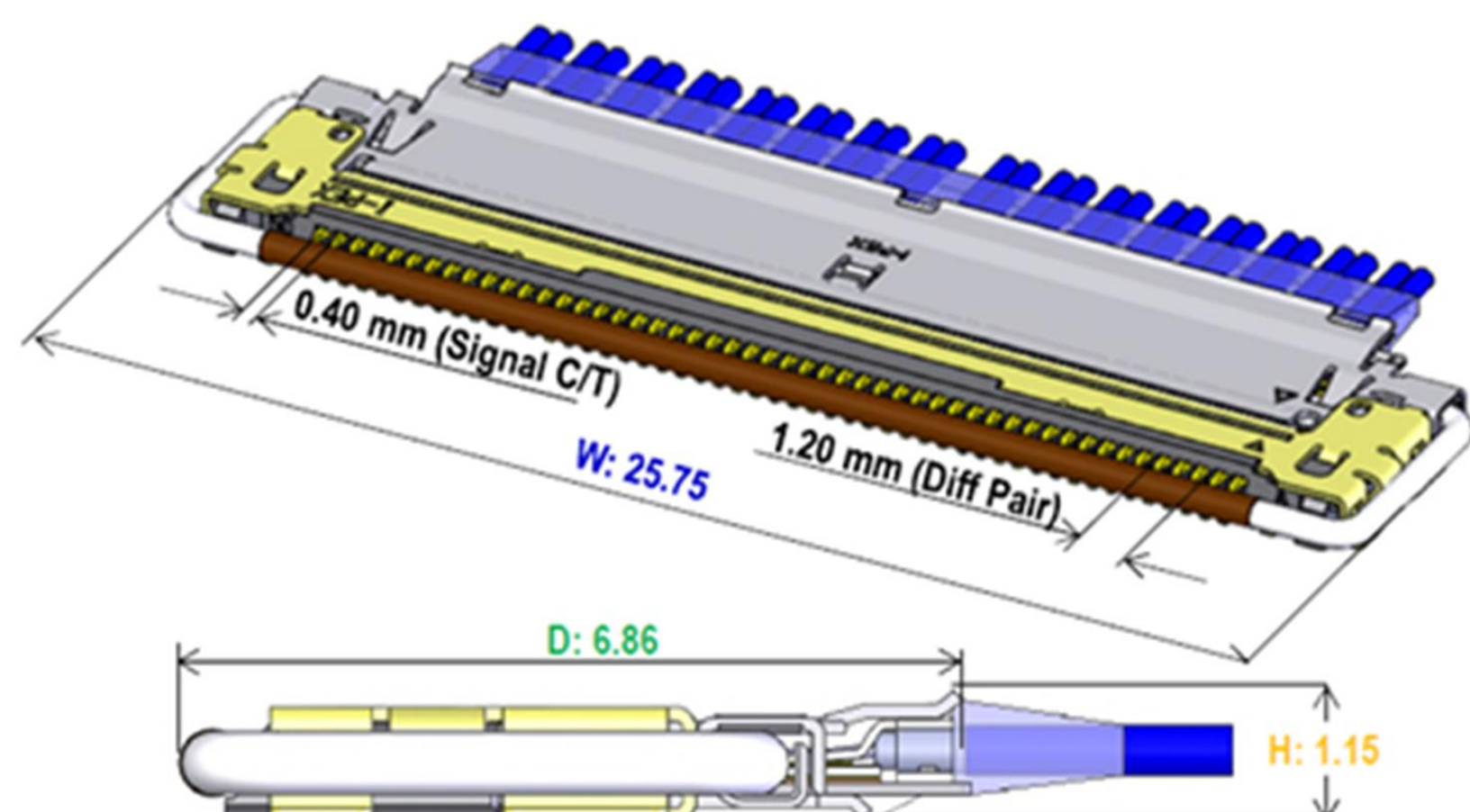


Paddle Card

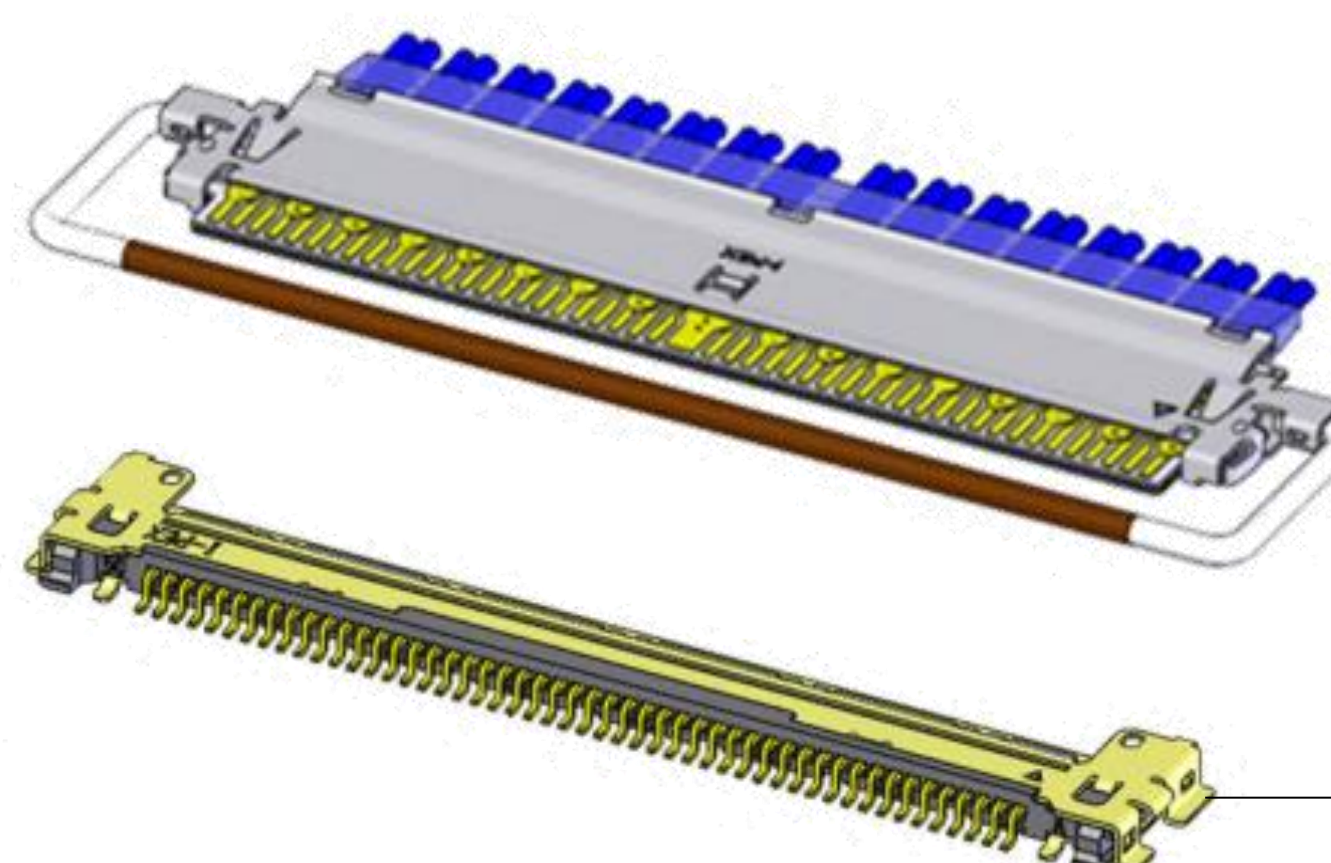
Paddle card技術資訊頁面

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

薄款（低背）設計 H=1.15mm，非常適合空間受限的應用



Mating condition



Un-Mating condition

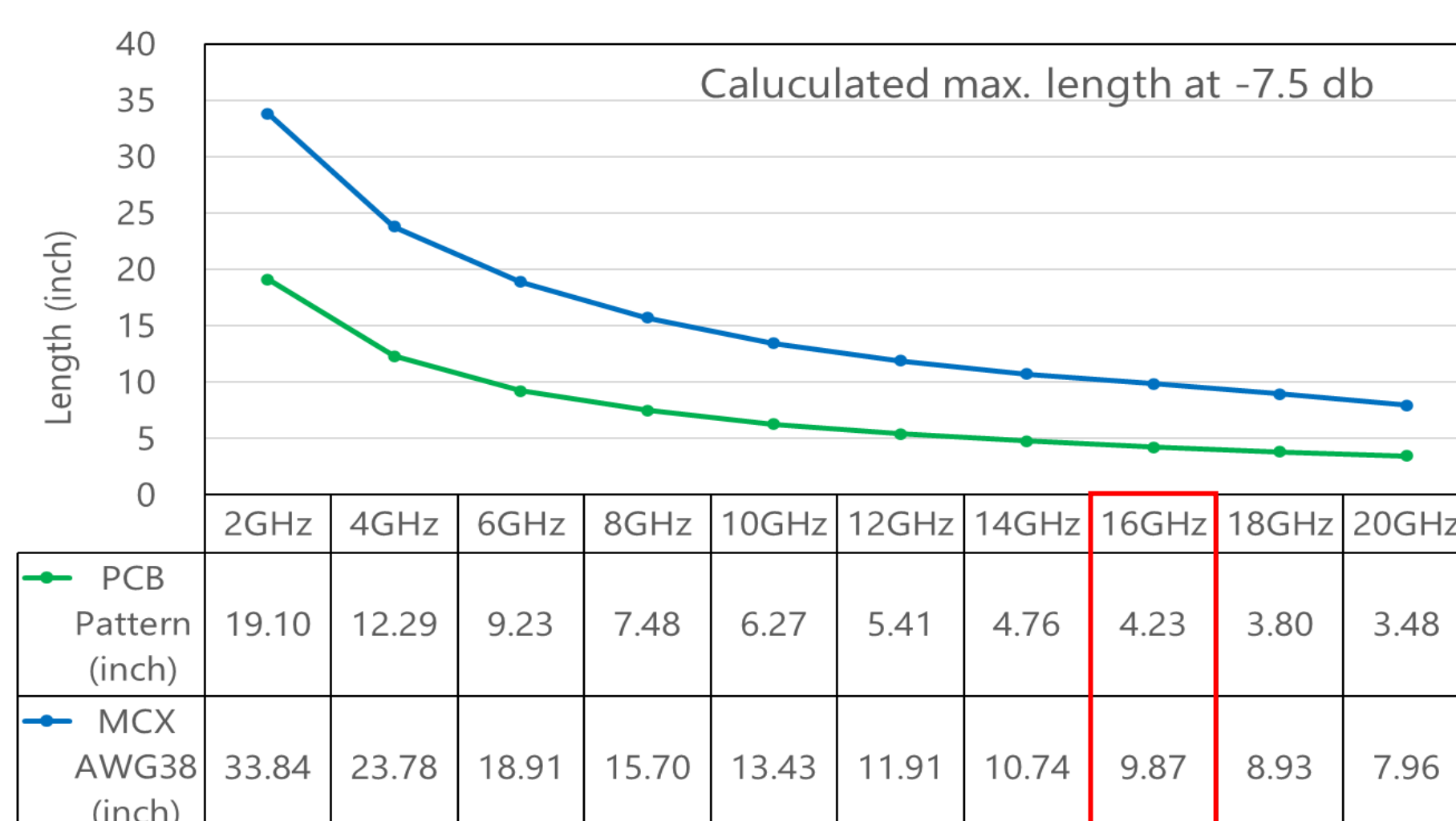
公座：
CABLINE®-CAP線束

母座：
CABLINE®-CA母座
(PN 20525-#50E-02)

極細同軸電纜的LEAPWIRE®跳線解決方案

電纜跳線線束在傳輸方面比PCB更具優勢。

低損耗 PCB (Dk3.7) 與 CABLINE-CAP® 線束 (極細同軸電纜) 的傳輸距離比較
極細同軸電纜在 16GHz 頻段的傳輸距離約為低損耗 PCB (Dk3.7) 傳輸的 2.3 倍。



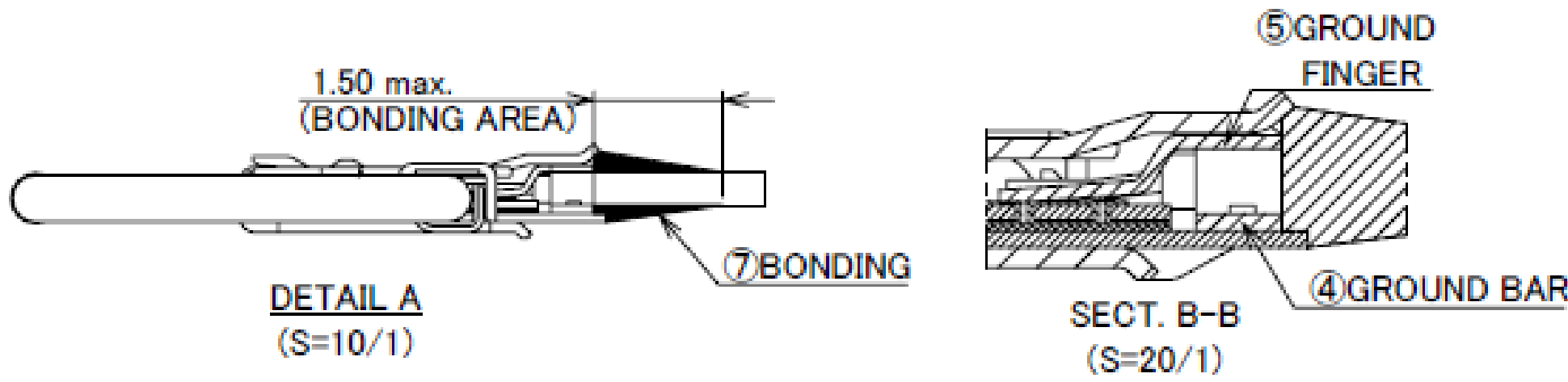
Component Parts Details

Component Parts

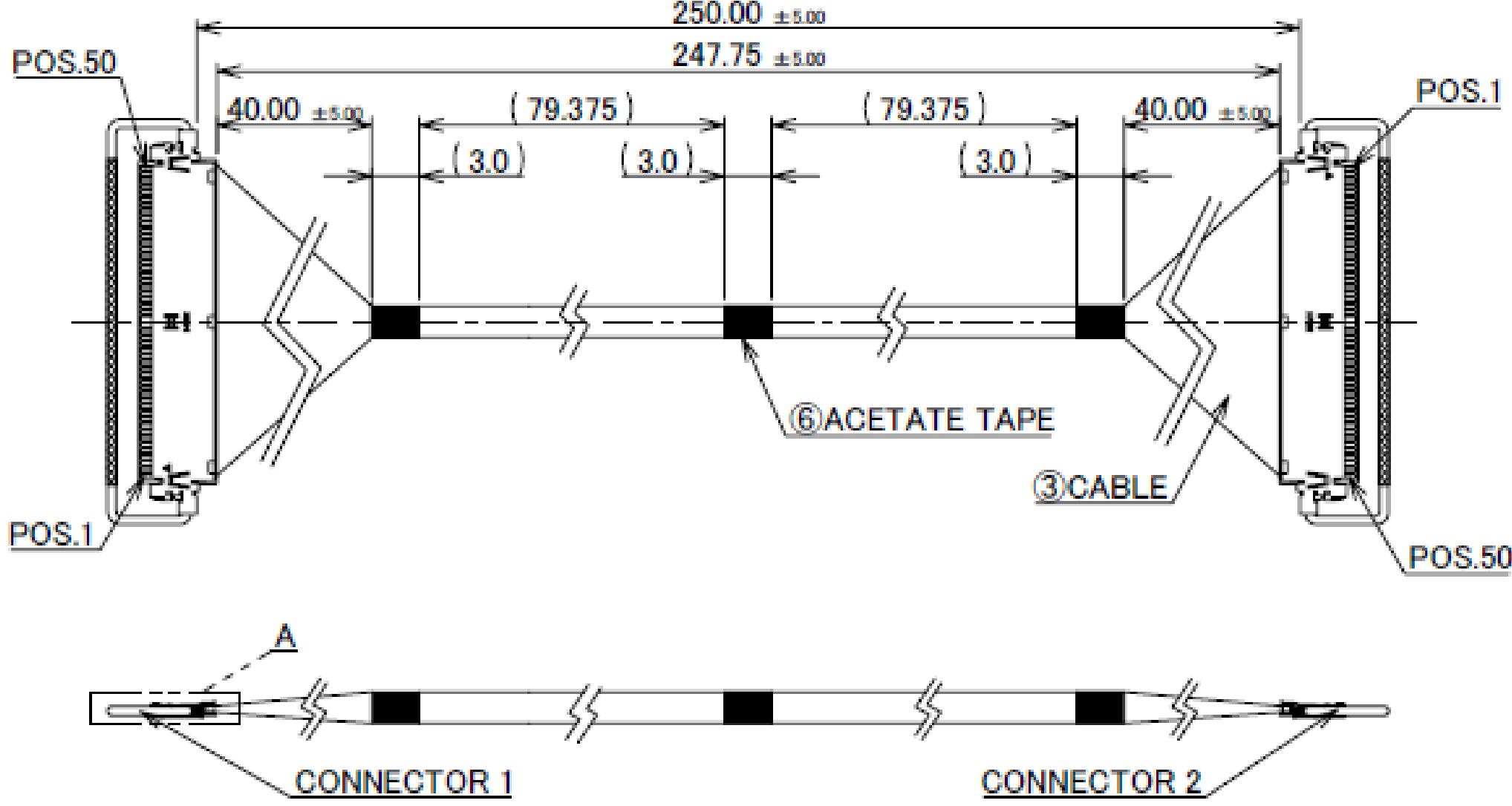
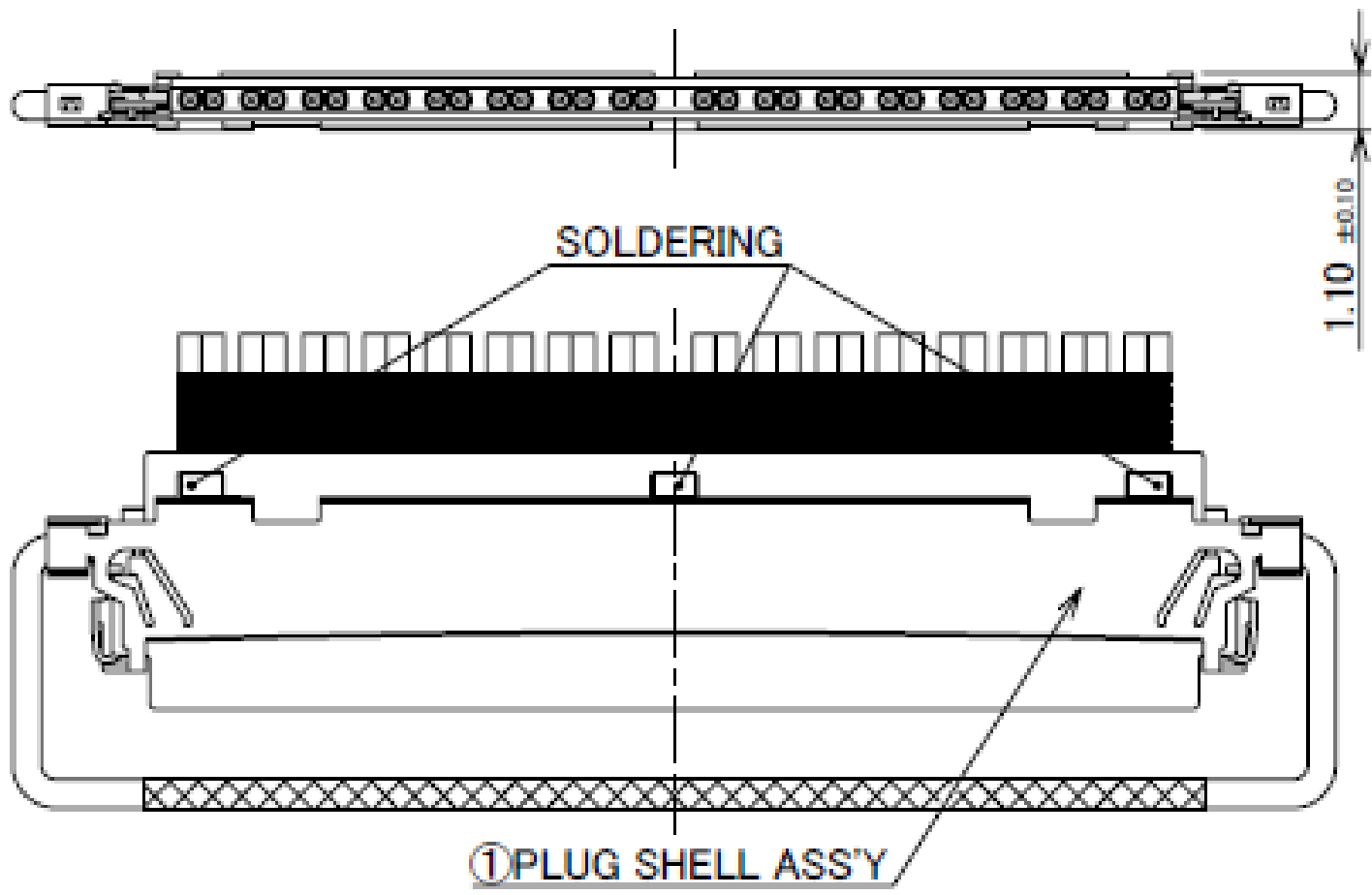
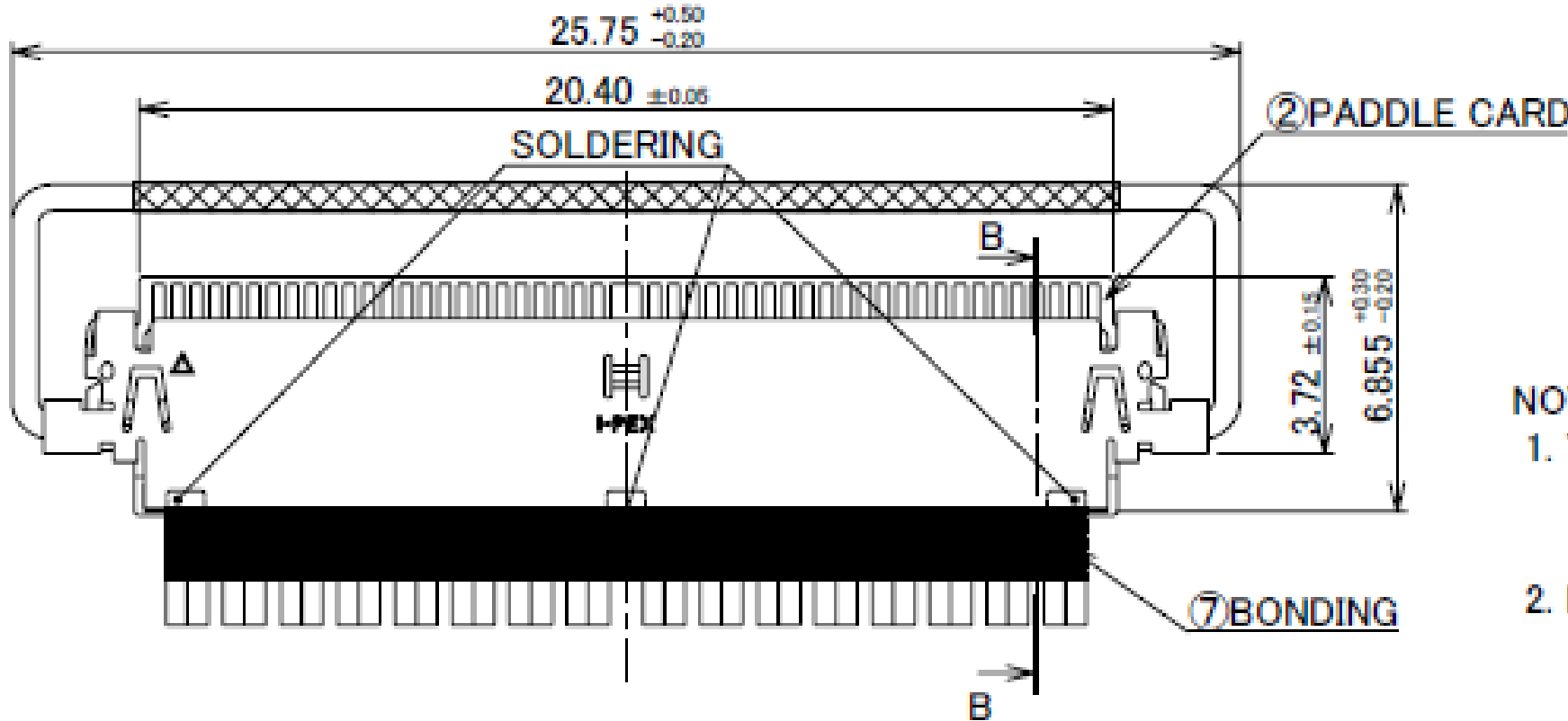
Connector parts	
	
PLUG Harness	RECEPTACLE

Plug Harness Assembly

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



CONNECTOR 1&2
(S=5/1)

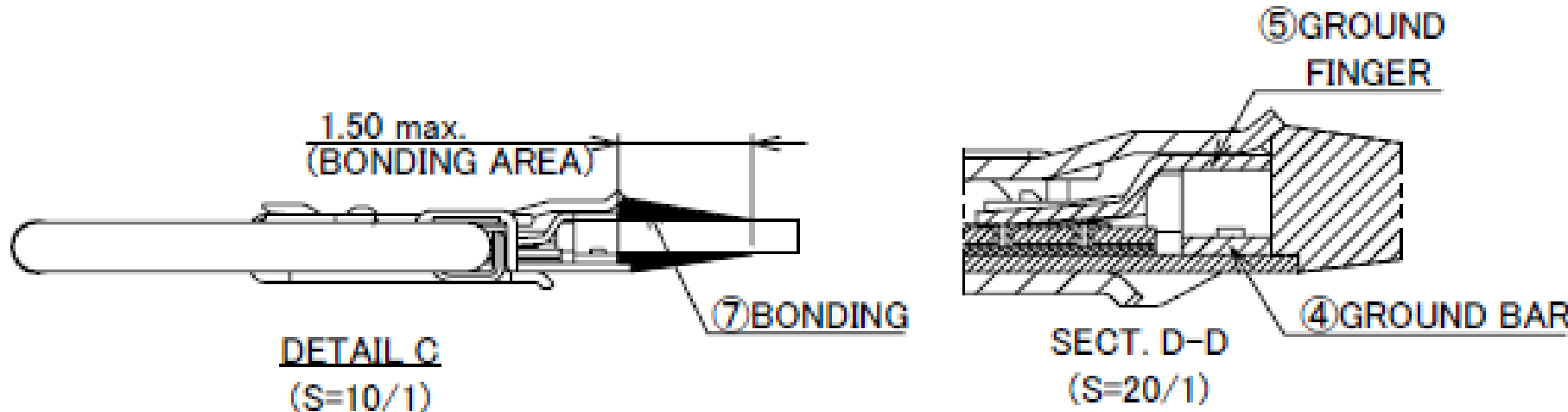


- NOTE.
- 1. TO HANDLE THIS CONNECTOR :
YOU MUST READ AND FOLLOW THE INSTRUCTION MANUAL BELOW.
I-PEX INSTRUCTION MANUAL No.HIM-23013.
 - 2. ELECTRIC CHARACTERISTICS
WITHSTANDING VOLTAGE: AC 250V LEAKAGE CURRENT 2.0mA MAX.
INSULATION RESISTANCE: 50MΩ MIN. DC 100V
 - 3. THE OPERATING TEMPERATURE OF THE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

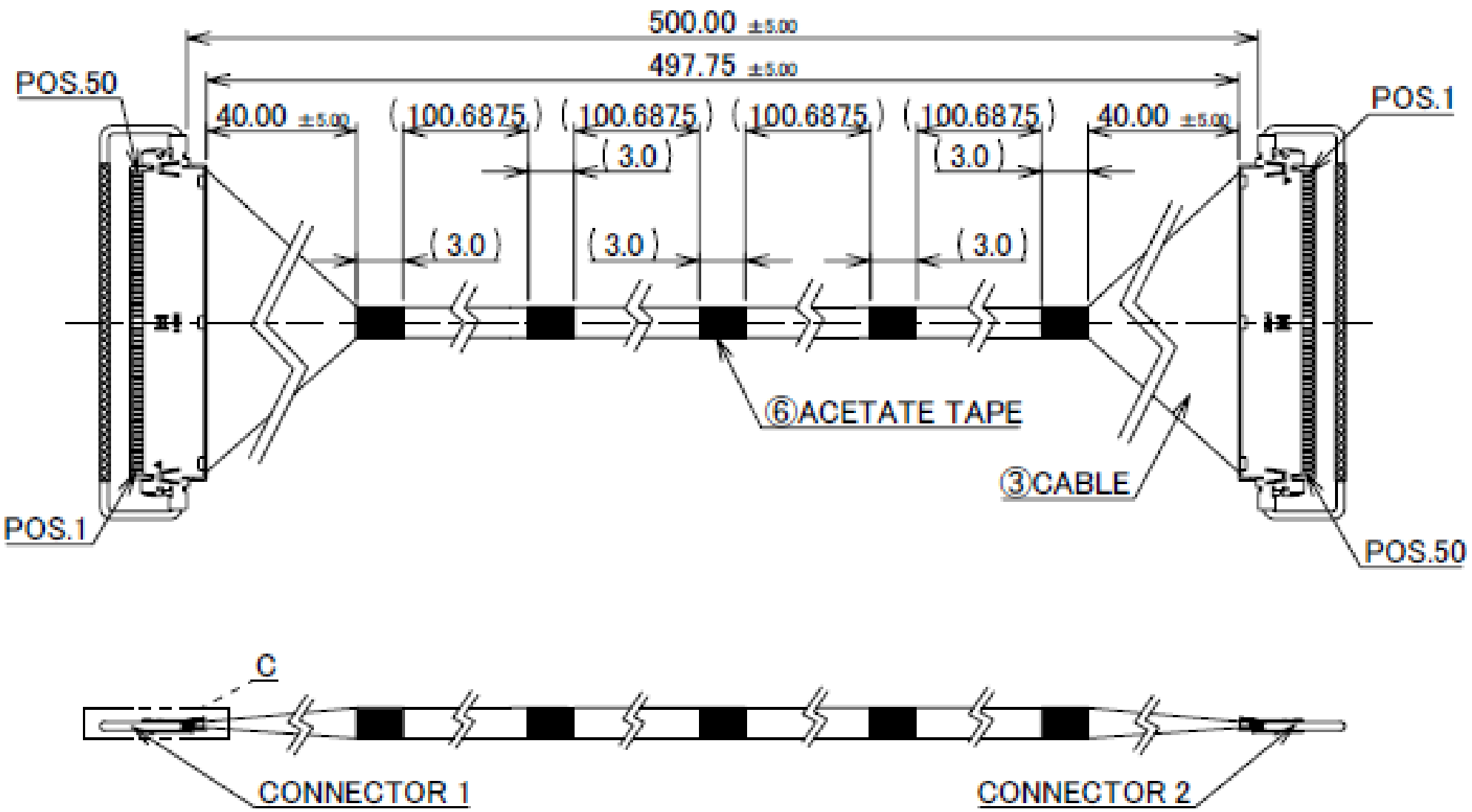
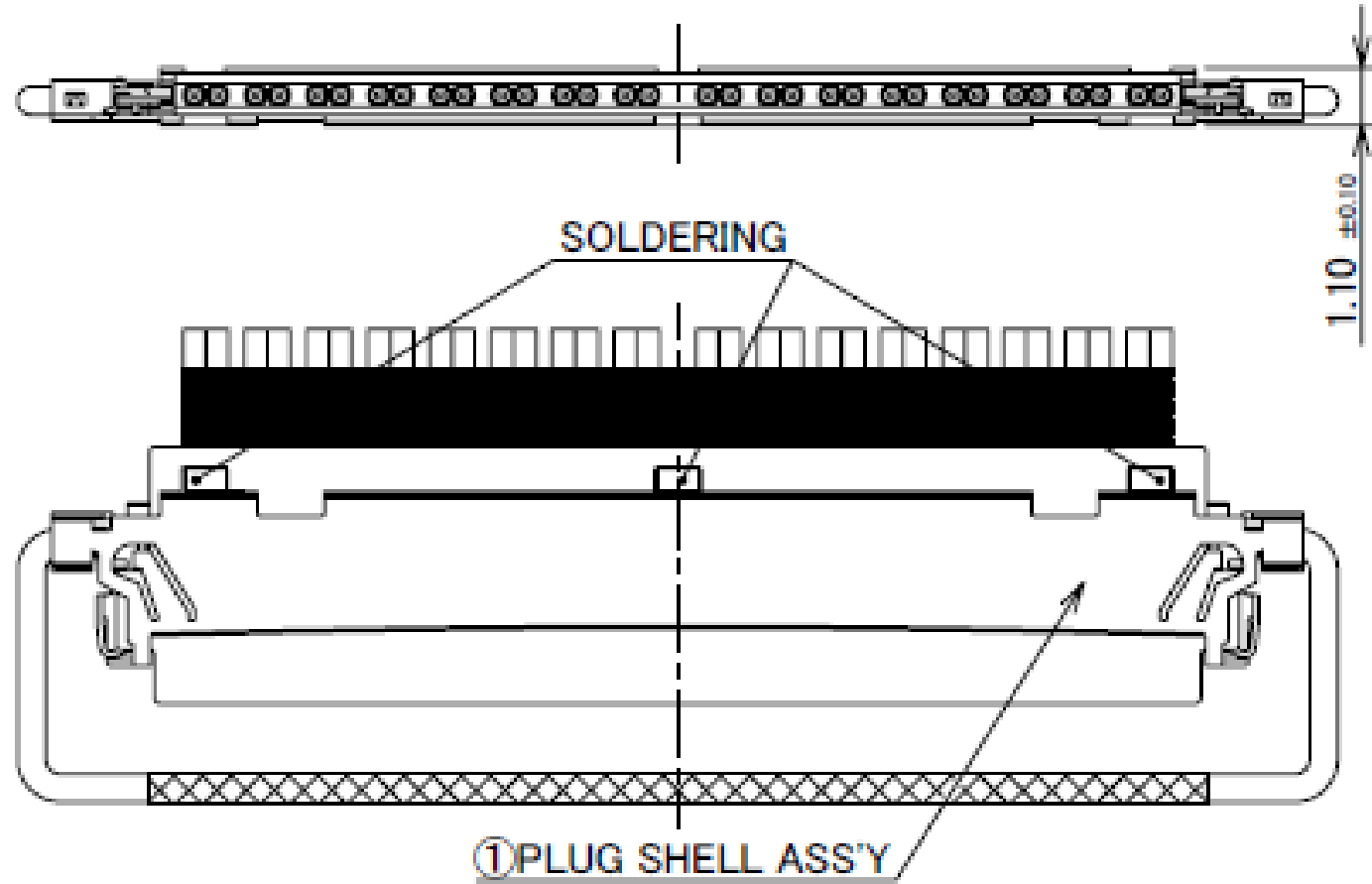
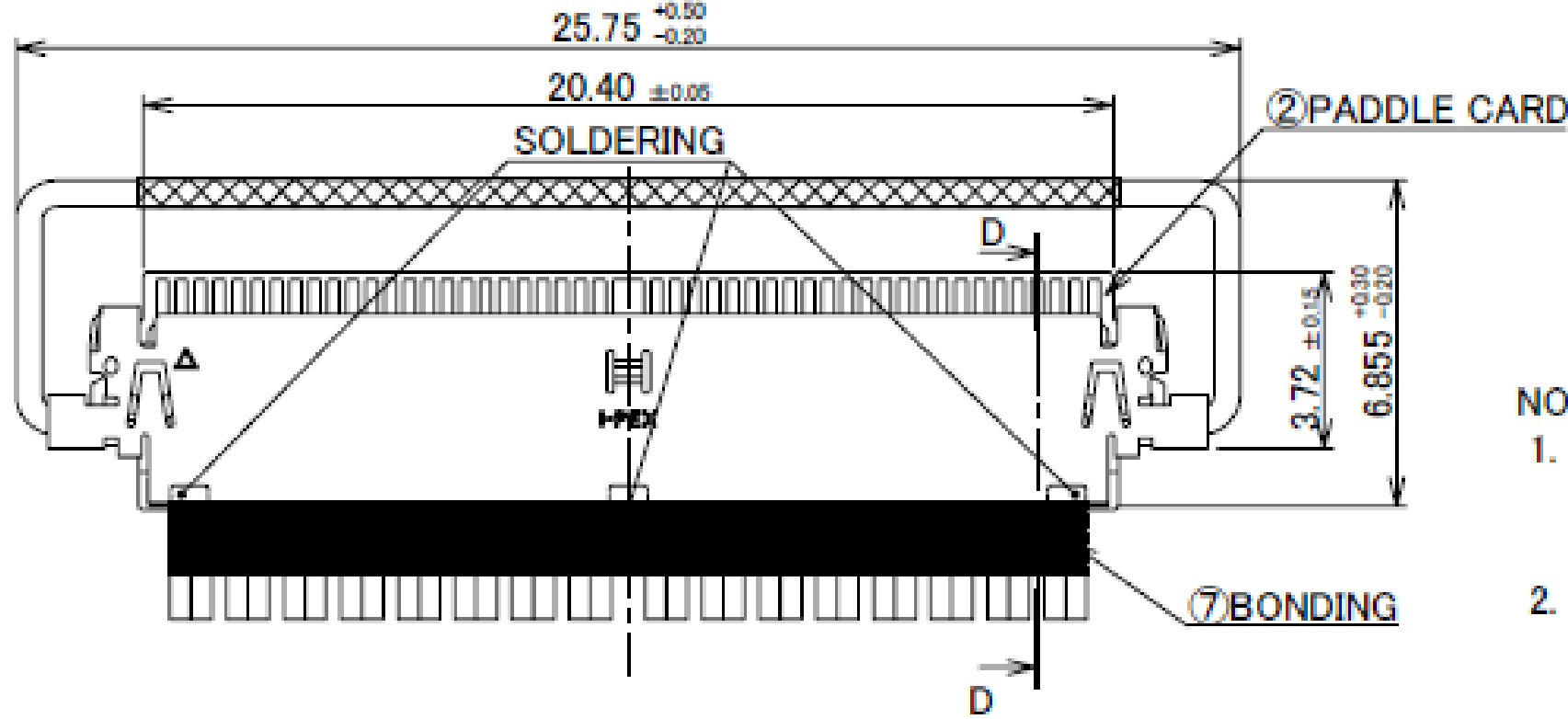
7	BONDING	-	-	UV GLUE
6	ACETATE TAPE	-	3	BLACK
5	GROUND-FINGER	-	2	-
4	GROUND-BAR	-	2	-
3	CABLE	-	32	MICRO-COAXIAL CABLE AWG #38, 45 OHM, BLUE
2	PADDLE CARD	3660-0501	2	CONNECTOR 1&2
1	PLUG SHELL ASS'Y	20993-050T-01	2	CABLINE®-CAP PLUG SHELL ASS'Y P/N: 20993-050T-01 CONNECTOR TO BE MATED: 20525-050E-02
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
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

Plug Harness Assembly

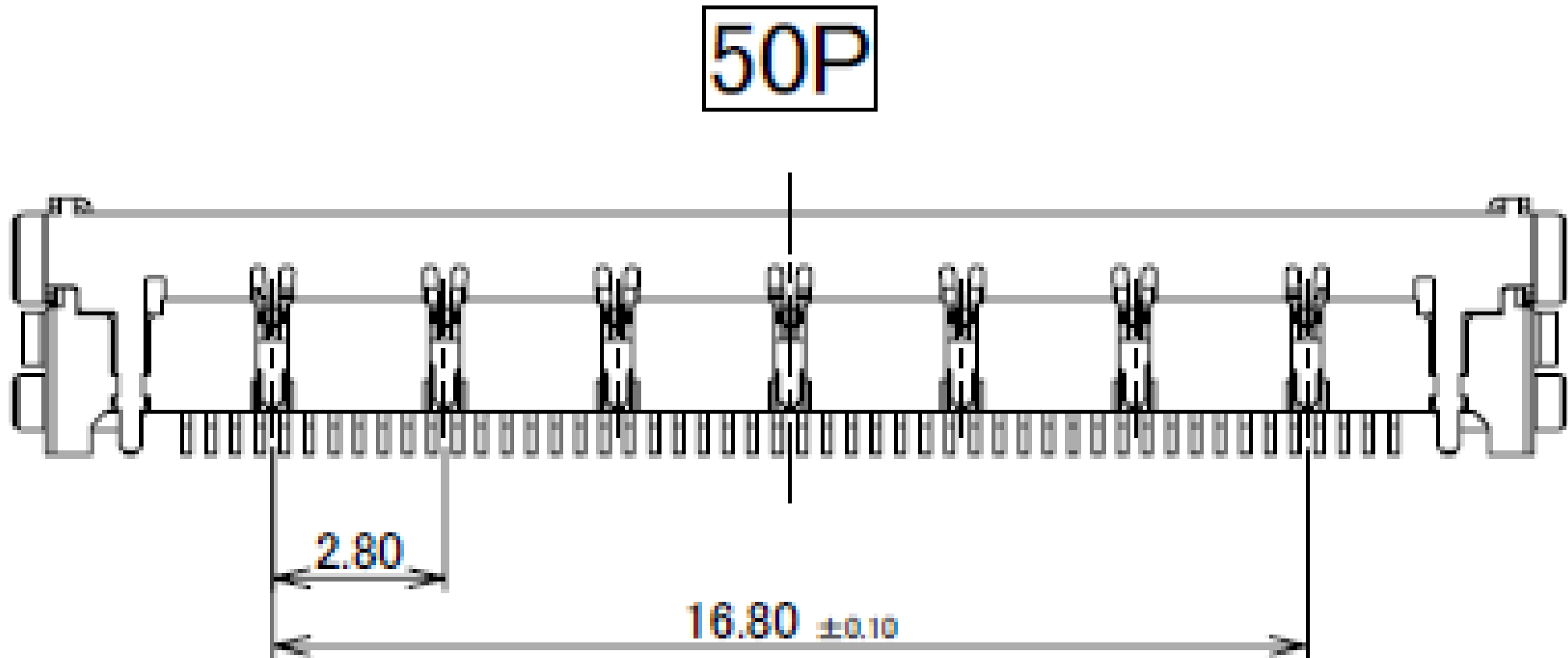
ITEMS	SPECIFICATION
APPLICABLE CABLE	Micro Coaxial: AWG#38 Diff 90ohm
RATING AMPERAGE (FOR CONTACT)	0.4A AC/DC (AWG#38)
RATING VOLTAGE	100V AC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K (-40℃~85℃)
OPERATING HUMIDITY	85℃ MAX. (NON-CONDENDING)
CONTACT RESISTANCE	INITIAL: 270mohm MAX.(AWG#38) / AFTER 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

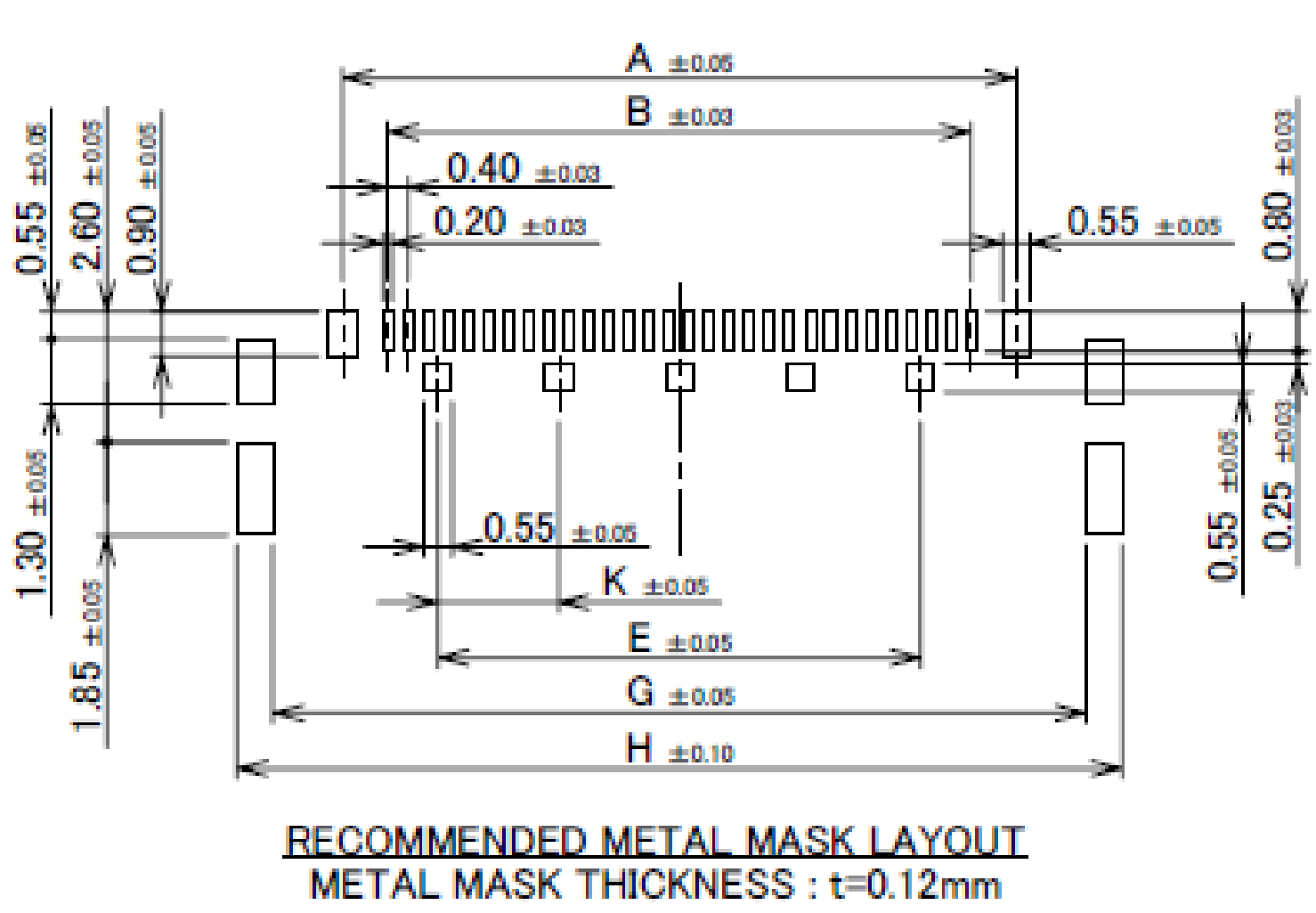
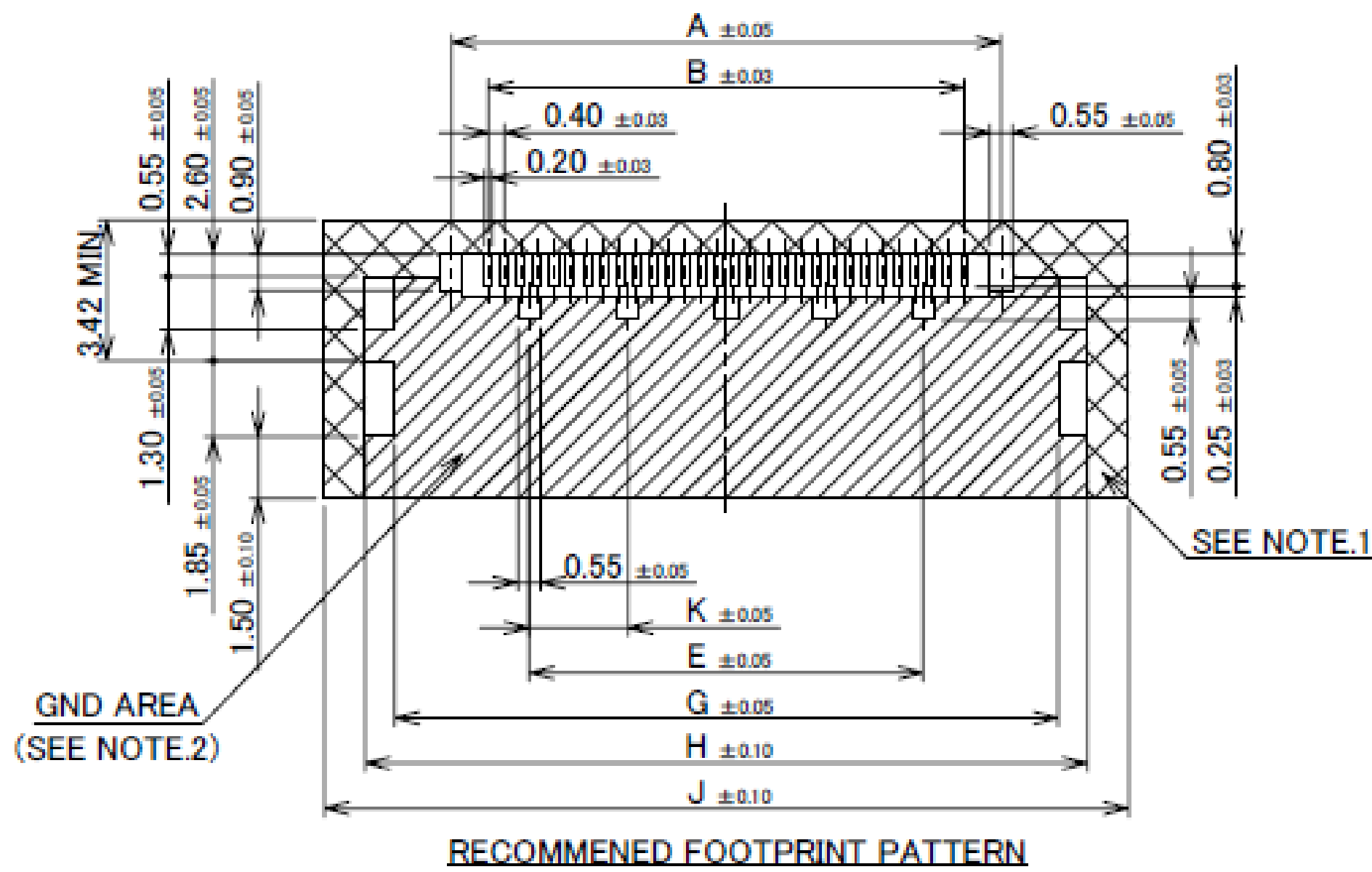
BOTTOM VIEW



Rev.32

Receptacle Assembly

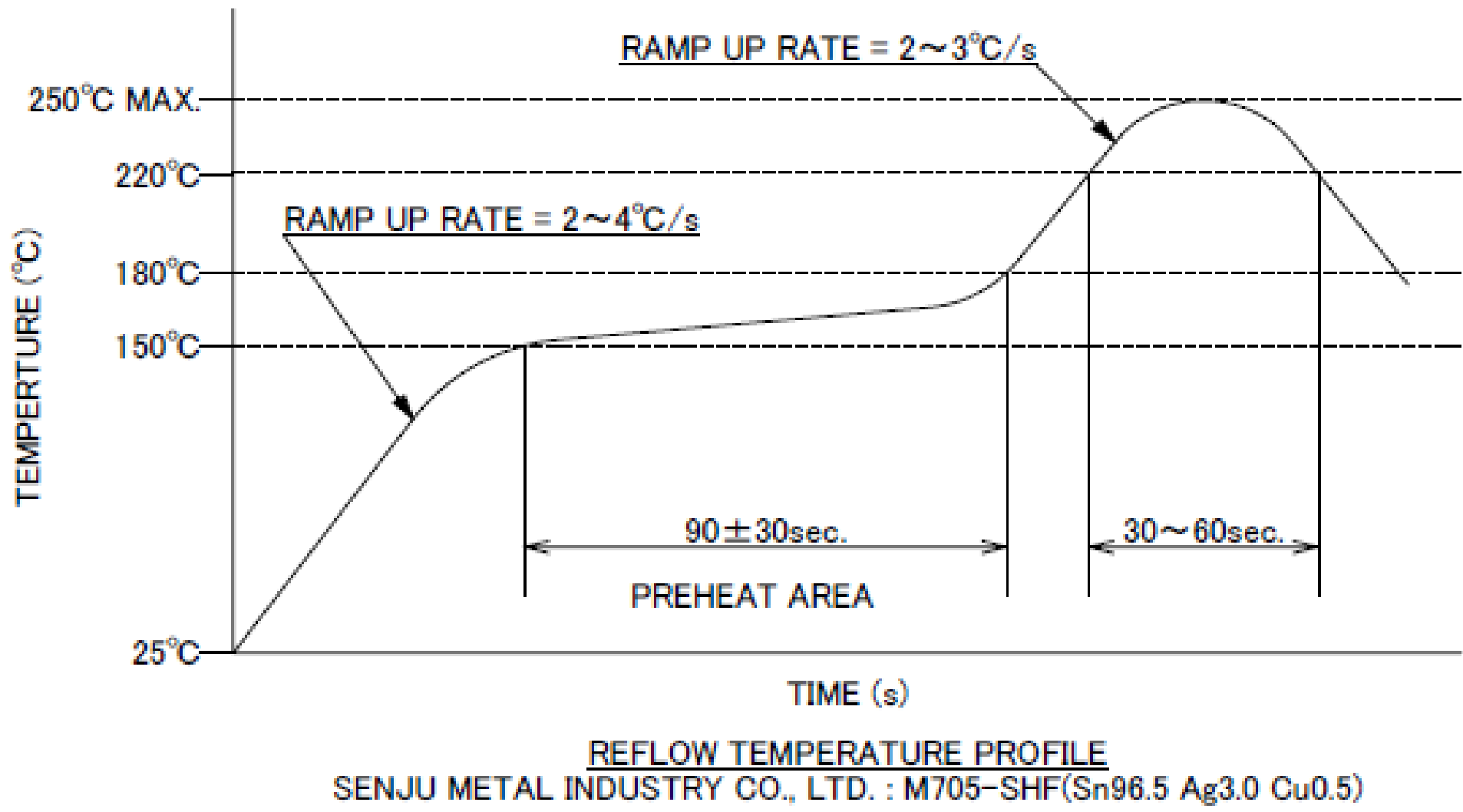
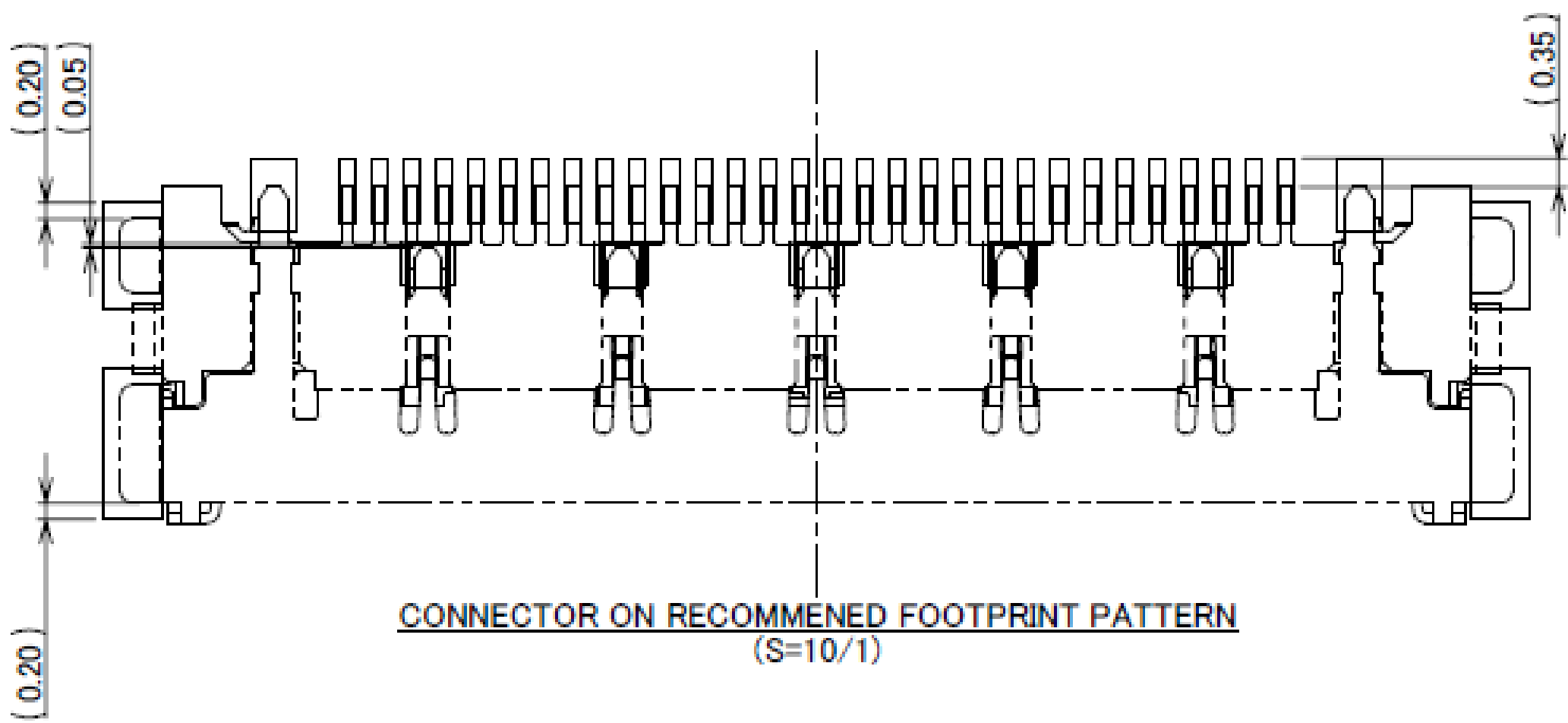
PART NO.	POS.	A	B	E	G	H	J	K
20525-050E-02	50	21.40	19.60	16.80	24.18	25.60	27.60	2.80



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

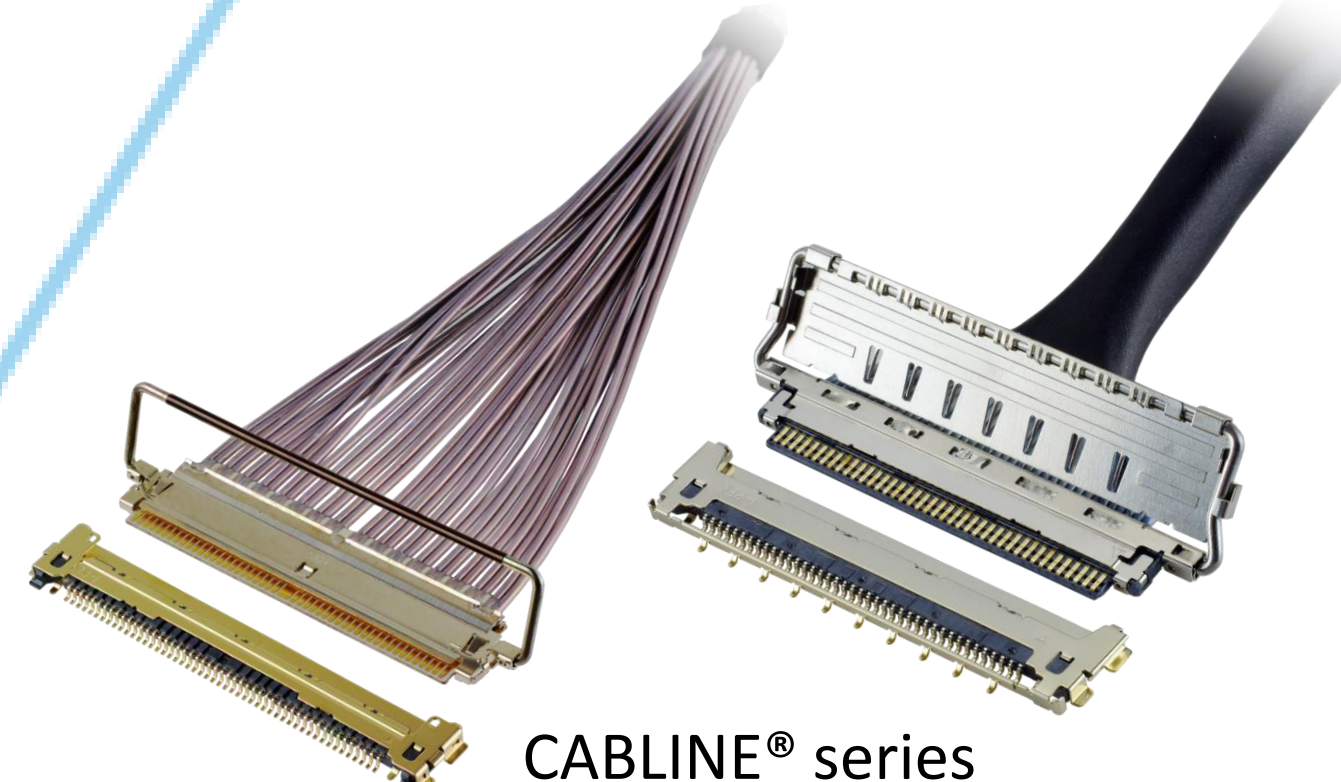
MHF® series



CABLINE® series



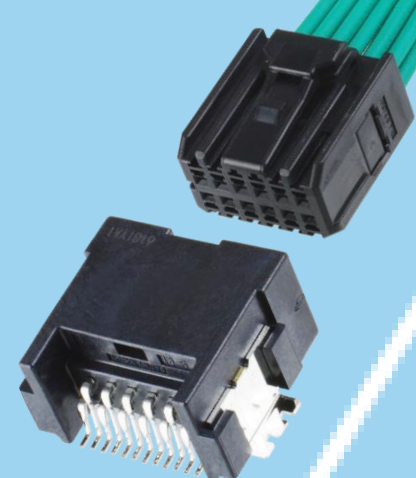
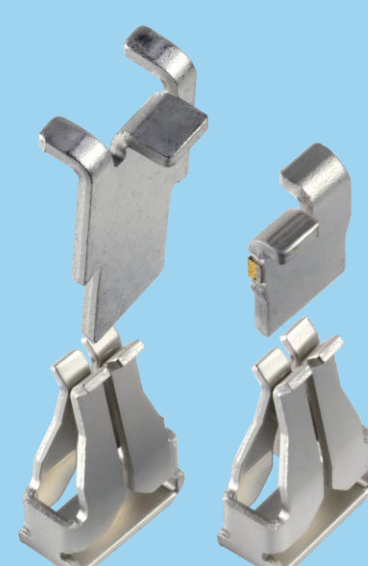
Micro-Coaxial/Twinax
Connectors



Wire-to-Board
Connectors/
Terminals

AP series

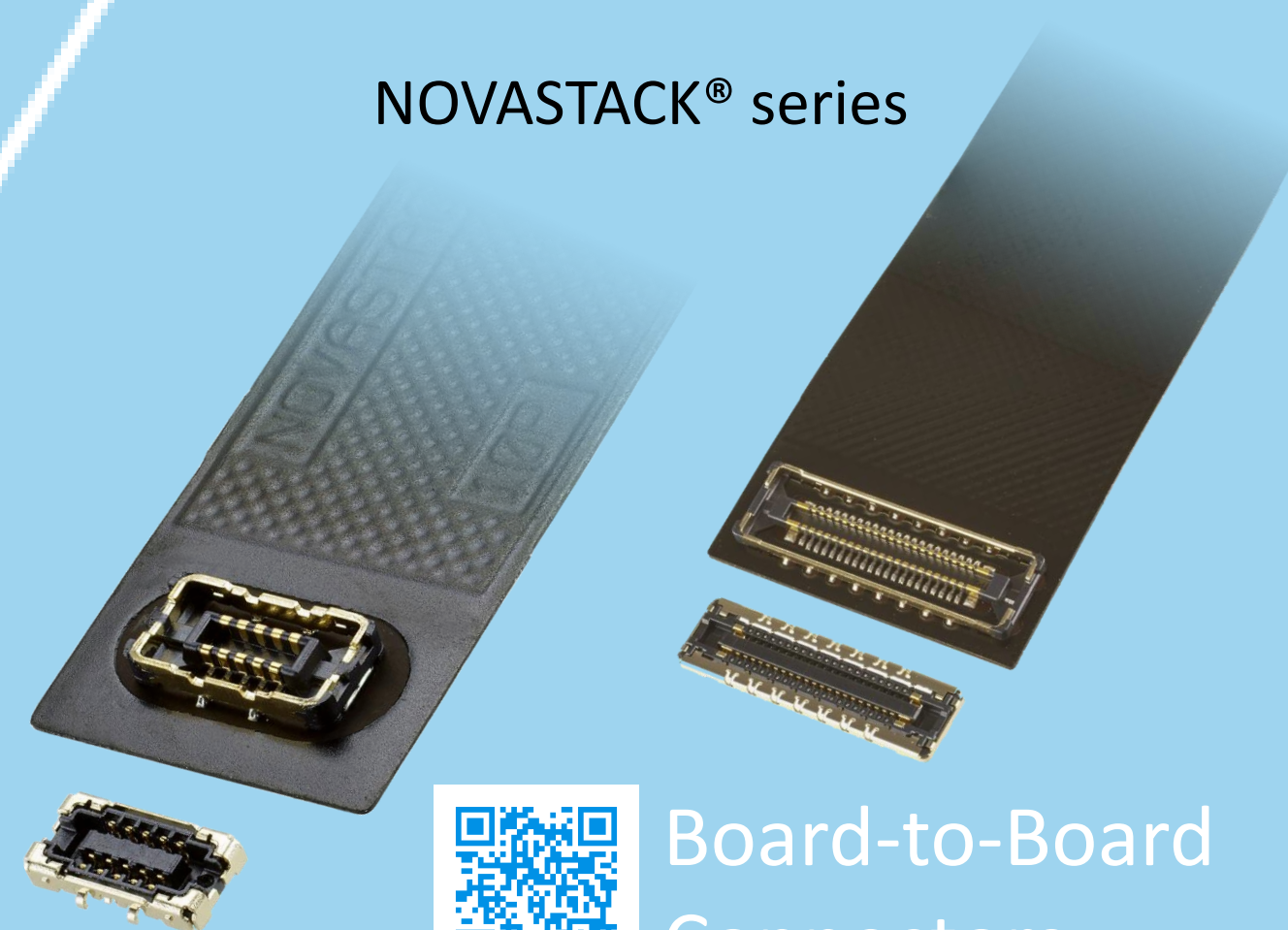
ISH® series



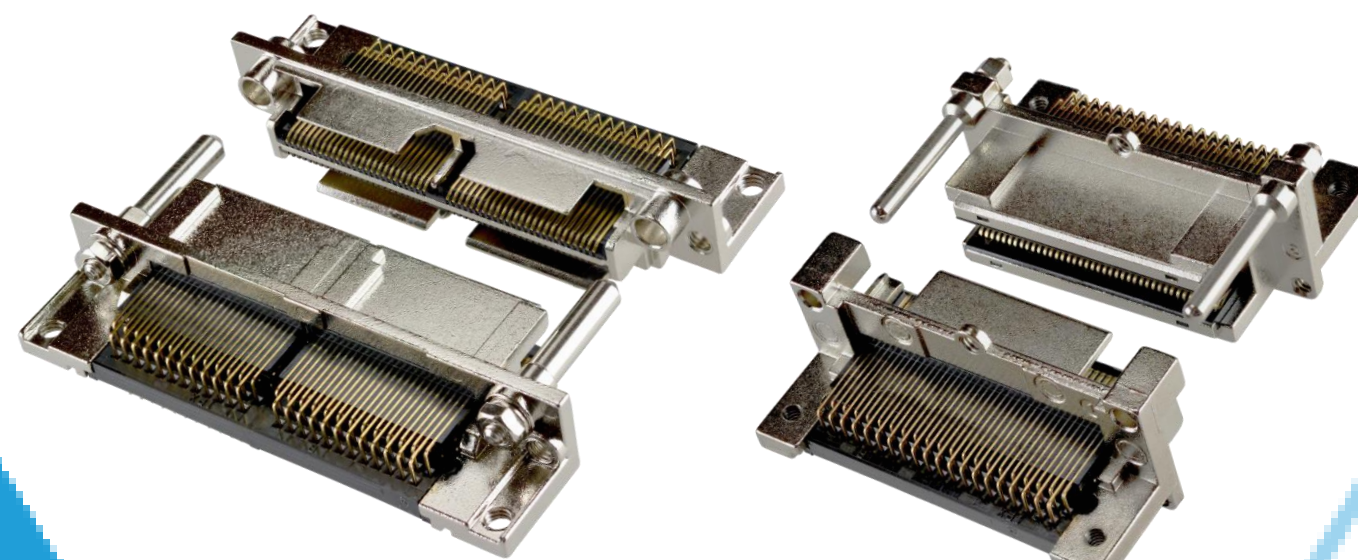
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



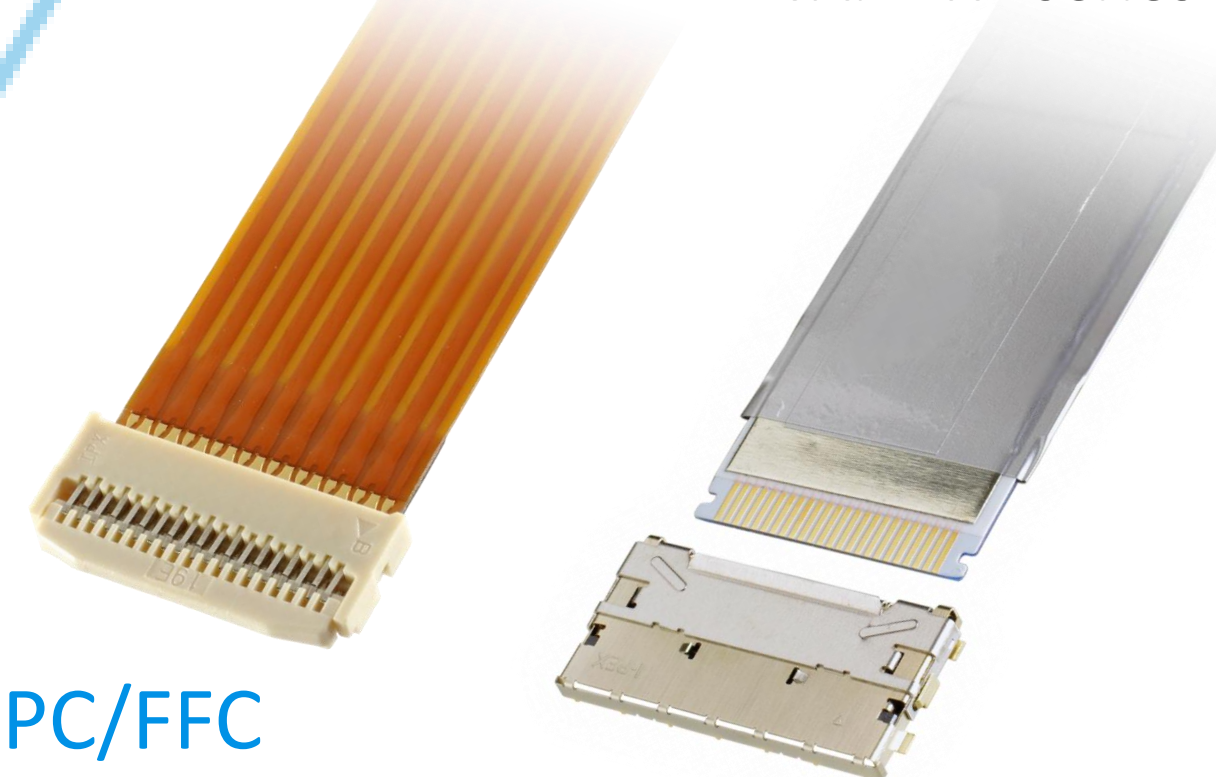
MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC
Connectors



Inquiry



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