

CABLINE®-CAP

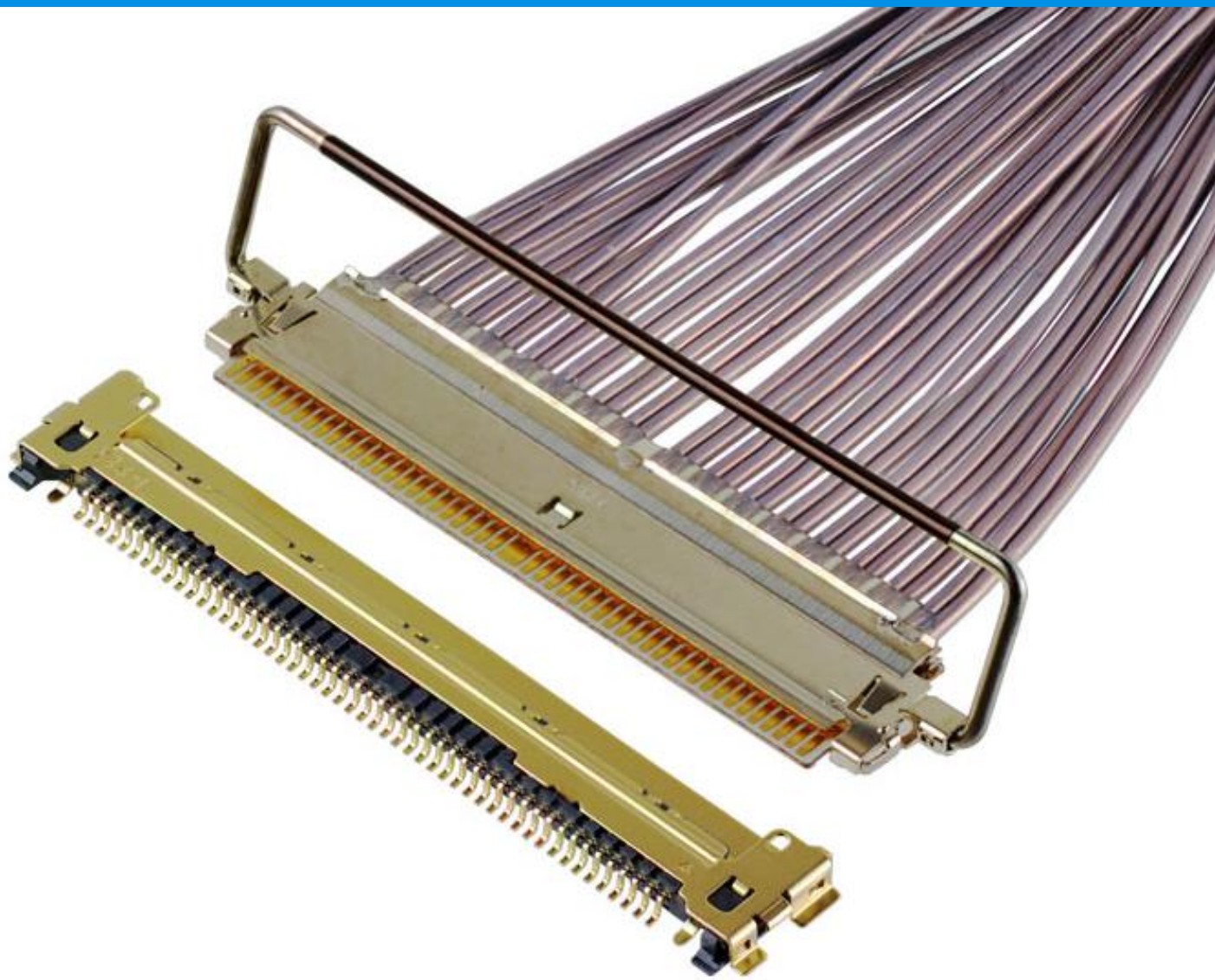
64Gbps PAM4,
0.4mm pitch, 水平插拔款极细同轴线连接器

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:

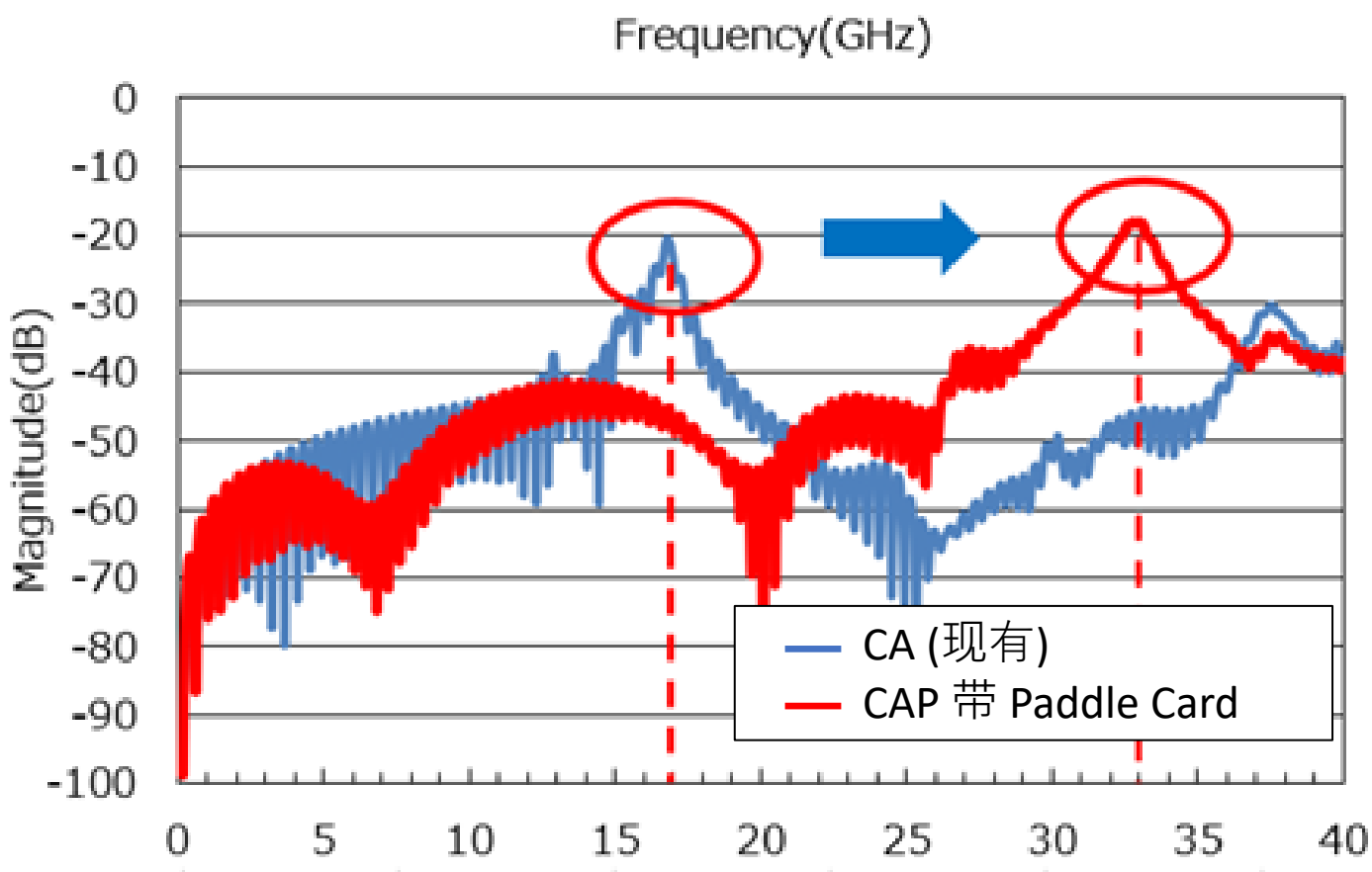
Maximum O.D. (mm)	0.47
Micro-Coaxial For Signal (AWG)	Diff 90 ohm: #38



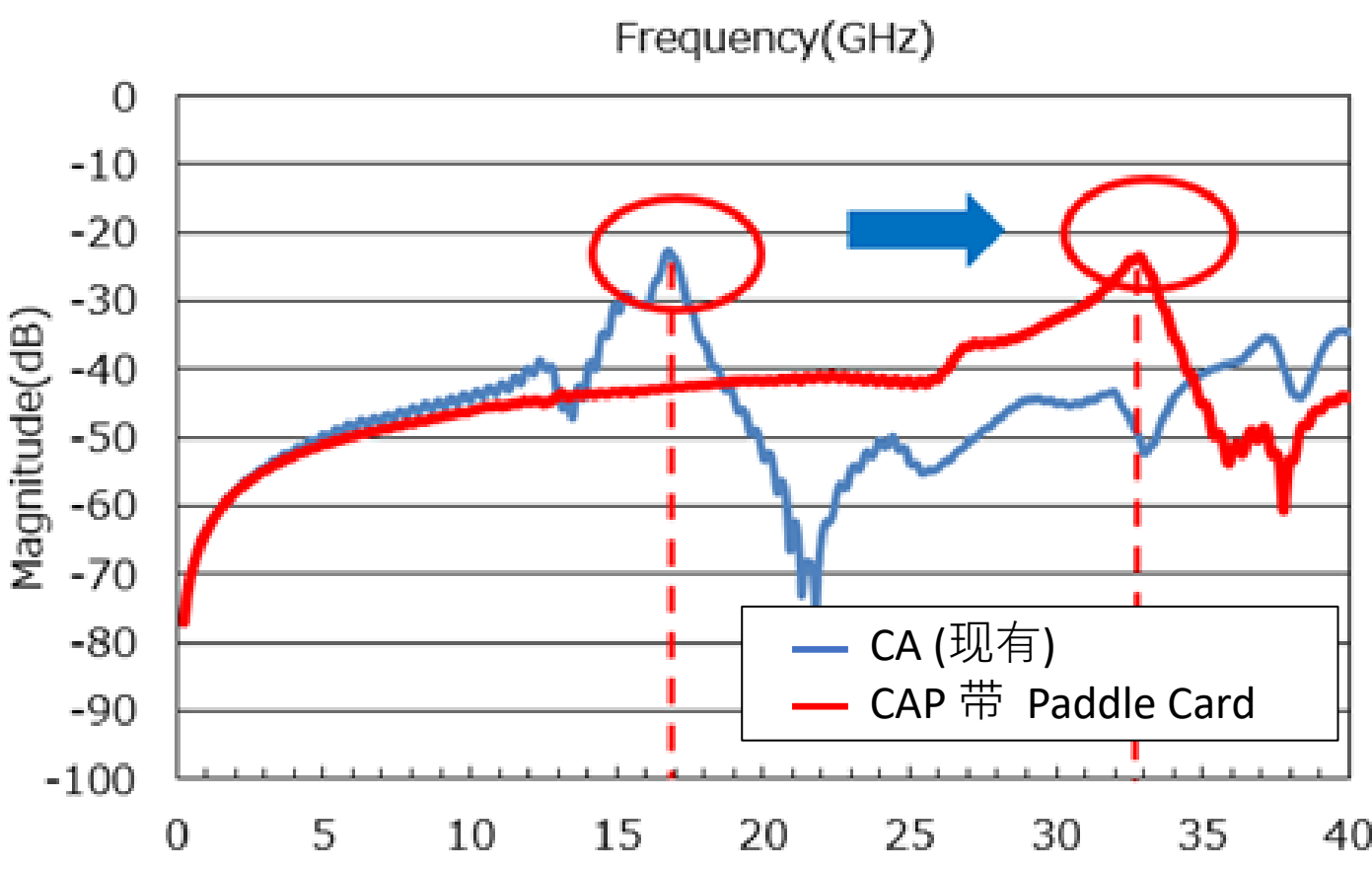
*CABLINE®-CAP 是线束产品的名称。母座为 CABLINE®-CA (PN 20525-#50E-02)。
*未列出的或超出上述范围的pin数, 请您联系我们咨询。
*PLUG 作为线束产品提供。电缆长度可根据需要定制。

高速传输 64Gbps/通道 PAM4, 采用Paddle Card技术

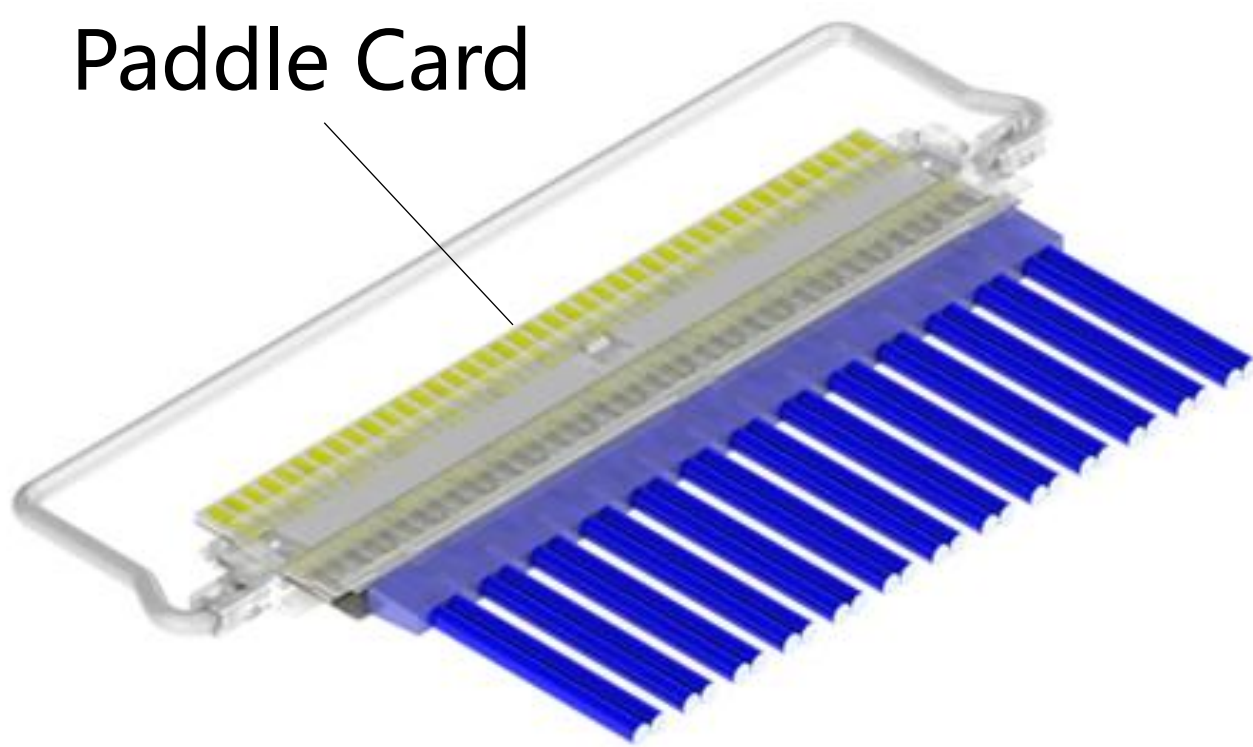
通过在电缆公头部分采用paddle card来提高信号质量。
这使得现有 CABLINE 系列的传输速度更快。



近端串扰



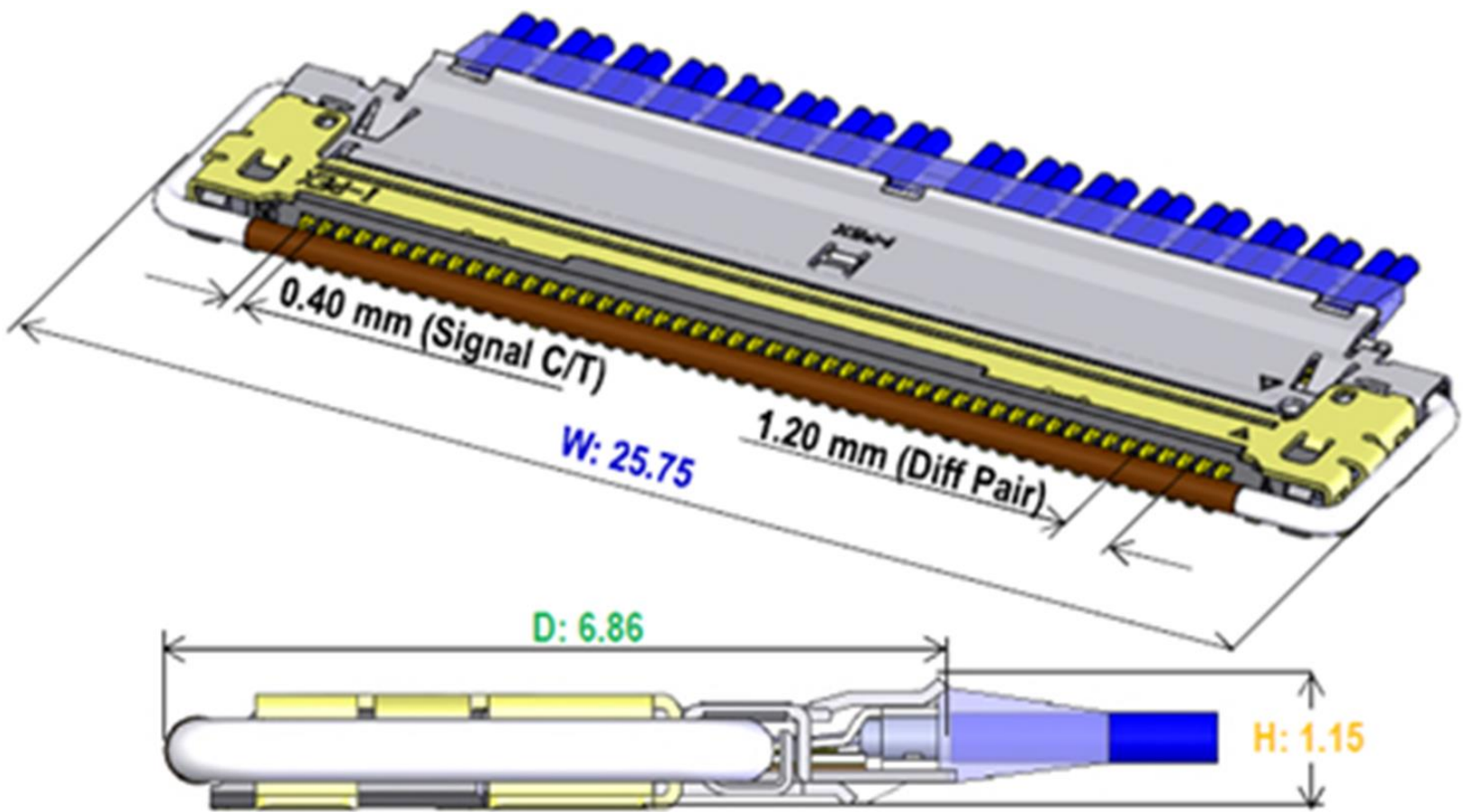
远端串扰



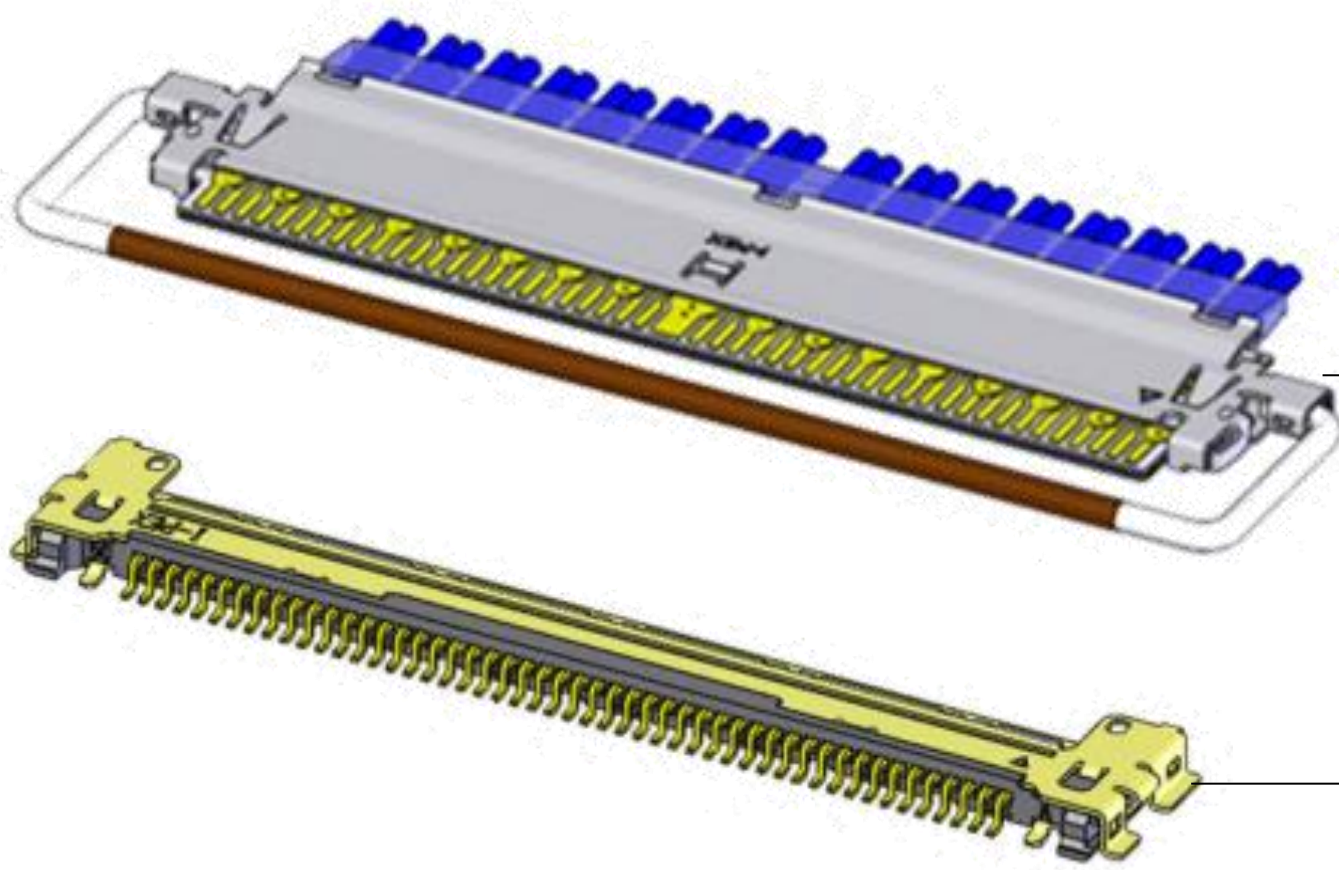
Paddle card技术信息页面

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

薄款 (低背) 设计 H=1.15mm , 非常适合空间受限的应用



Mating condition



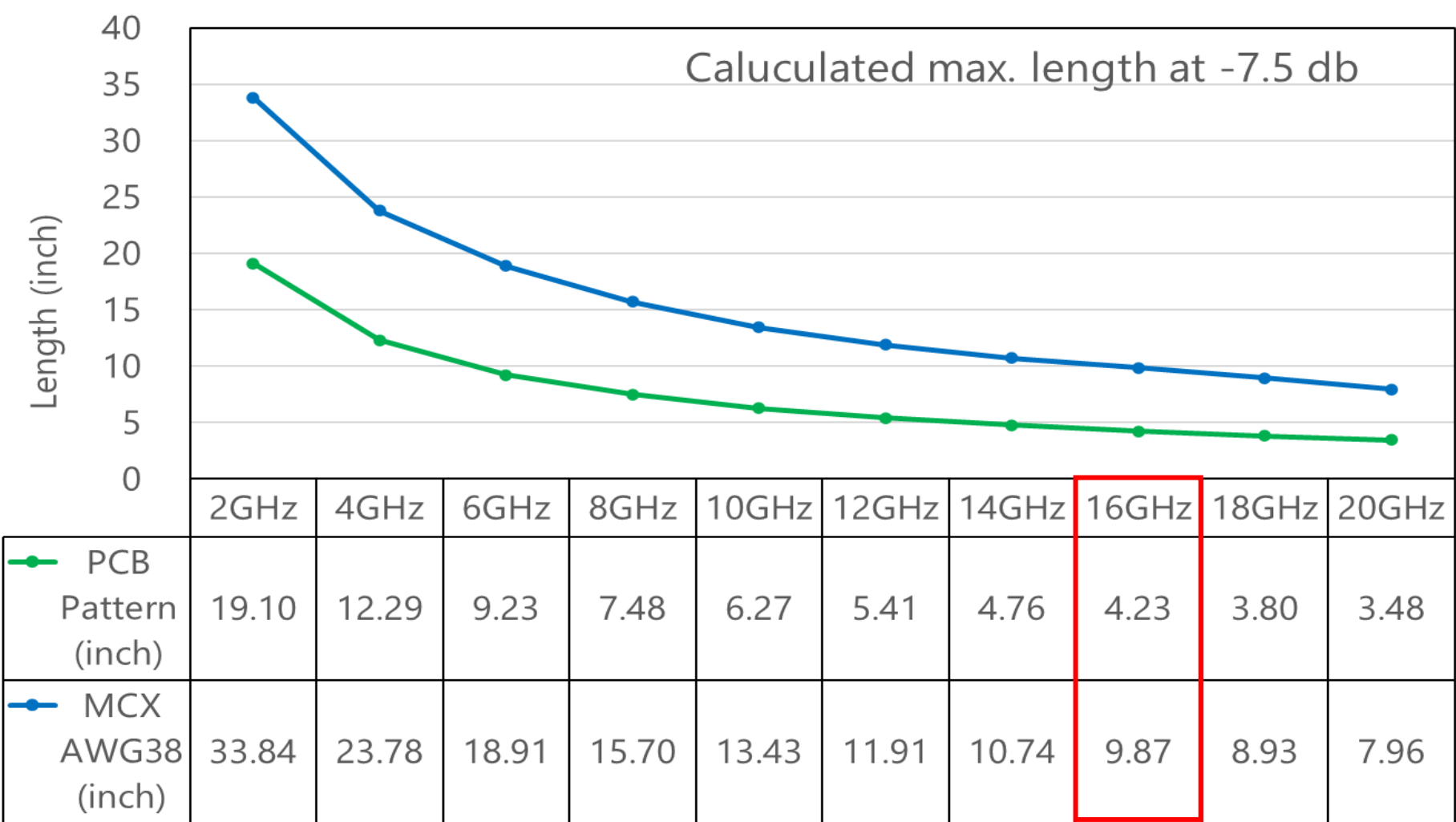
Un-Mating condition

公座:
CABLINE®-CAP线束

母座:
CABLINE®-CA 母座
(PN 20525-#50E-02)

极细同轴电缆的LEAPWIRE®跳线解决方案

电缆跳线线束在传输方面比PCB更具优势。
低损耗 PCB (Dk3.7) 与 CABLINE-CAP® 线束 (极细同轴电缆) 的传输距离比较
极细同轴电缆在 16GHz 频段的传输距离约为低损耗 PCB (Dk3.7) 传输的 2.3 倍。



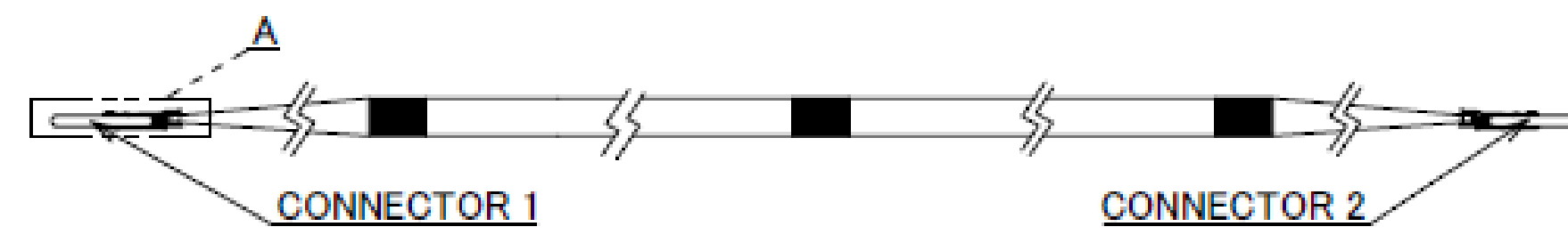
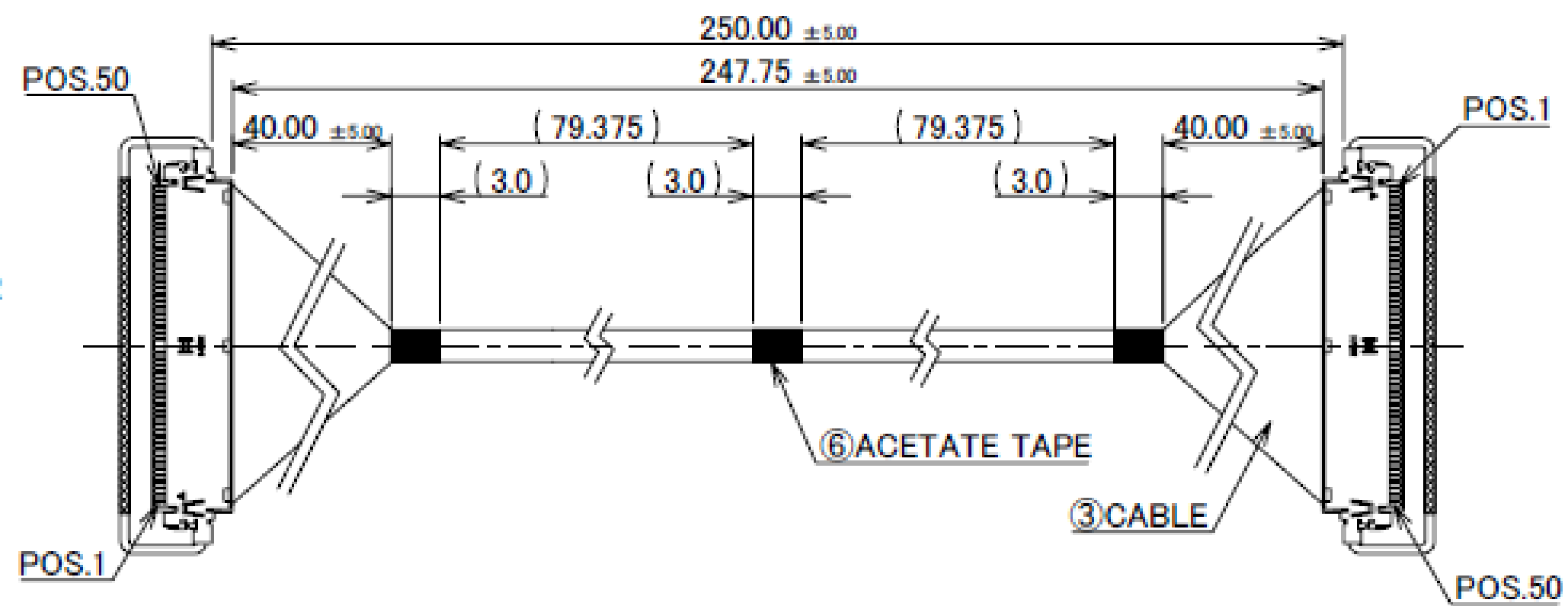
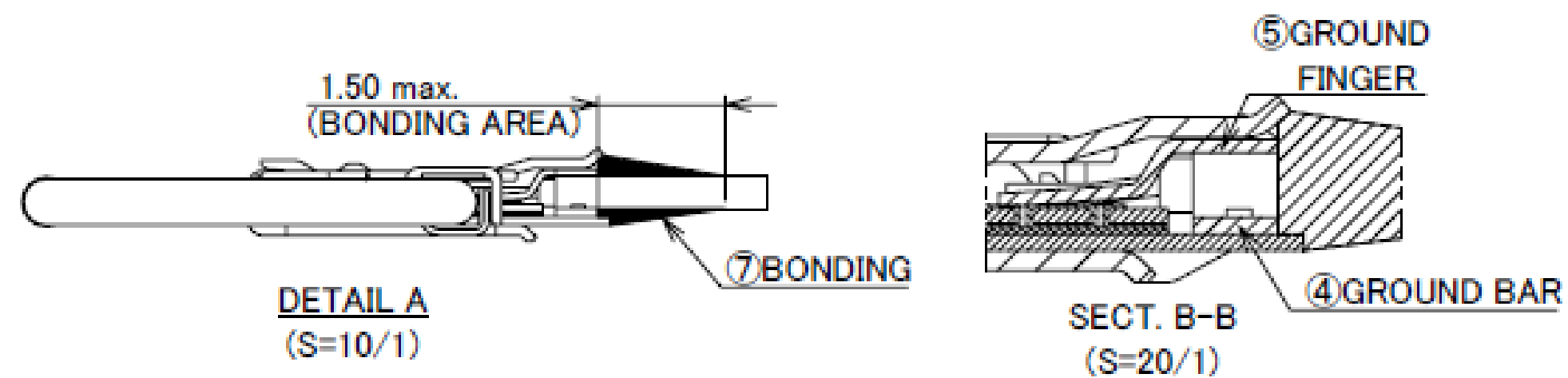
Component Parts Details

Component Parts

Connector parts	
	
PLUG Harness	RECEPTACLE

Plug Harness Assembly

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



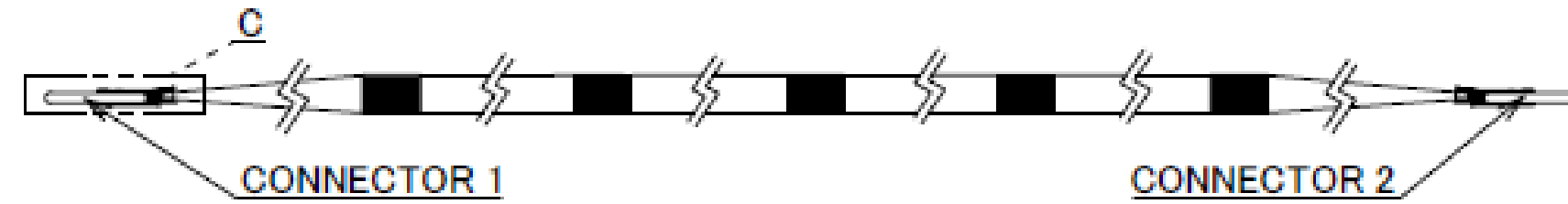
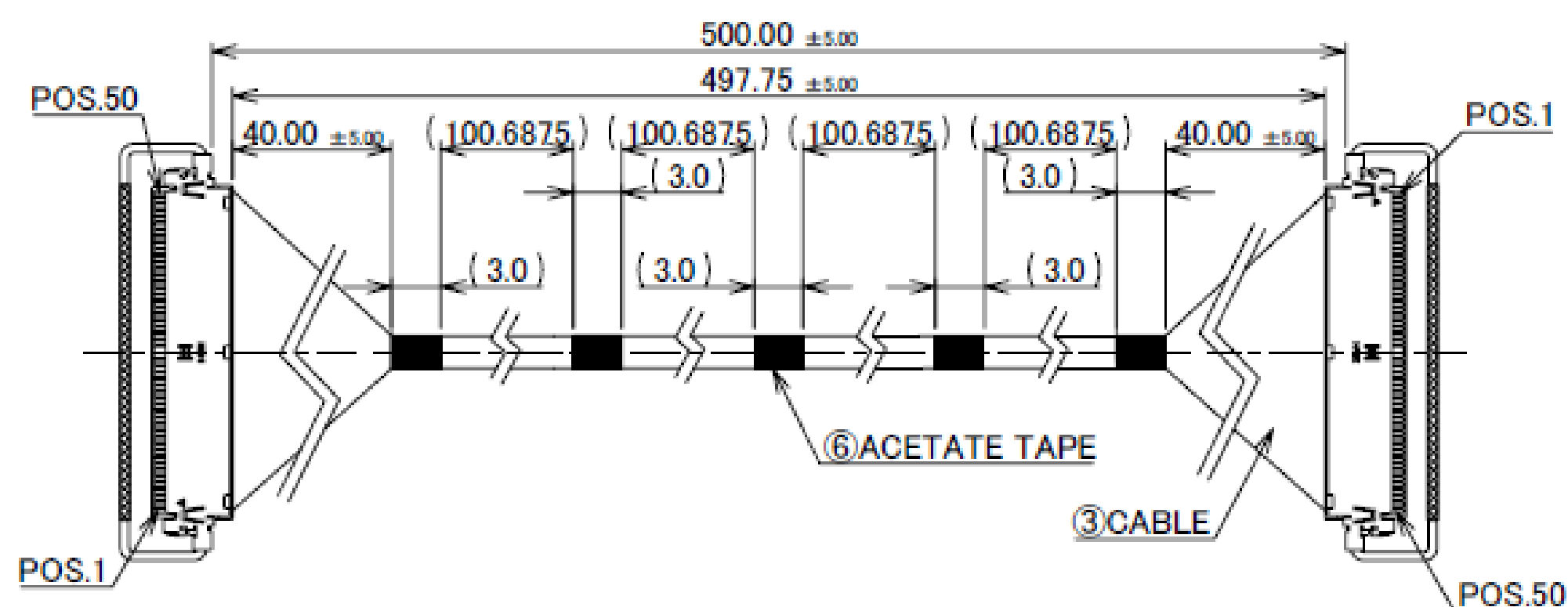
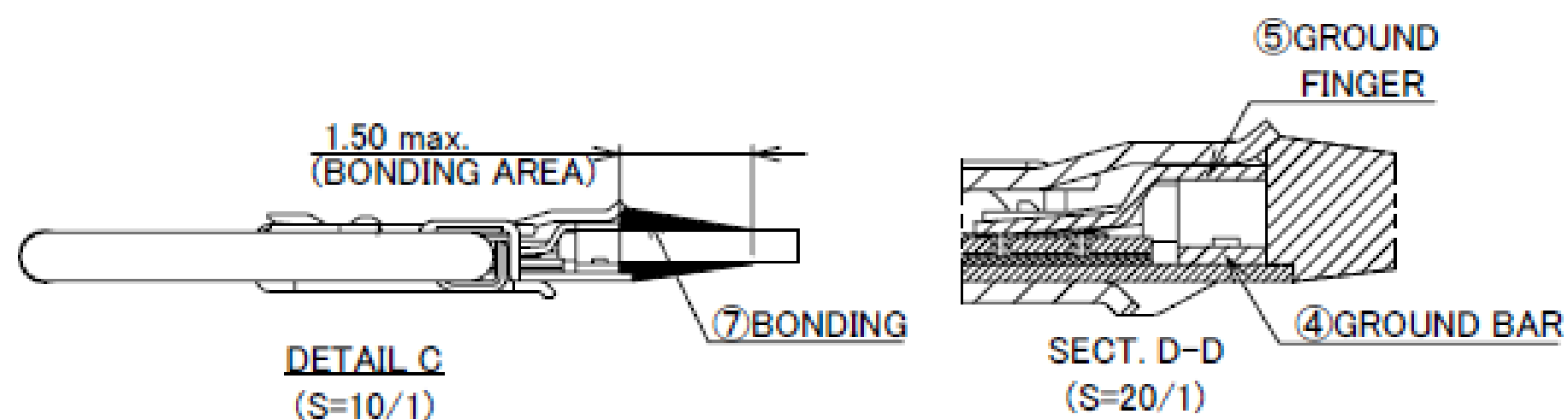
NOTE.

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: 50M Ω 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



NOTE.

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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

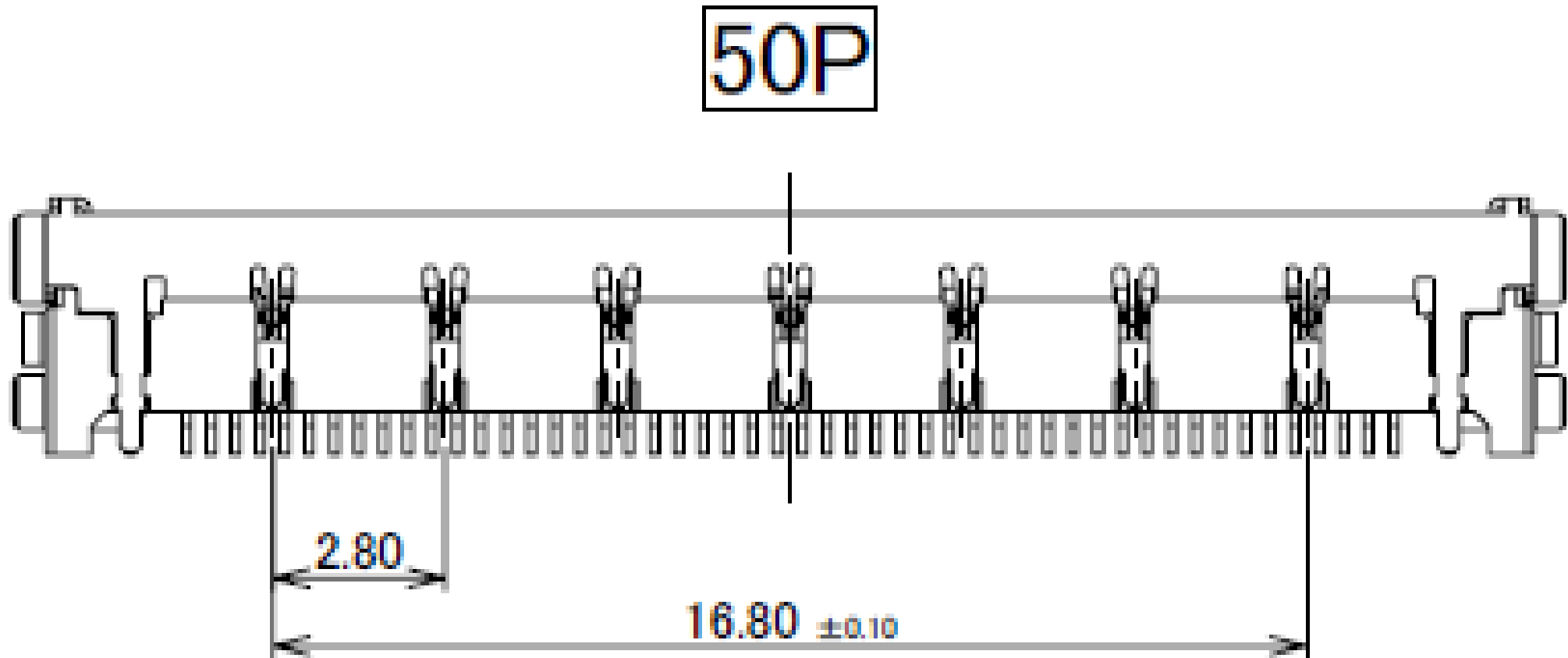
ITEMS	SPECIFICATION
APPLICABLE CABLE	Micro Coaxial: AWG#38 Diff 90ohm
RATING AMPERAGE (FOR CONTACT)	0.4A AC/DC (AWG#38)
RATING VOLTAGE	100V AC (PER CONTACT PIN)
OPERATING TEMPERATURE	233~358K (-40℃~85℃)
OPERATING HUMIDITY	85℃ MAX. (NON-CONDENDING)
CONTACT RESISTANCE	INITIAL: 270mohm MAX.(AWG#38) / AFTER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

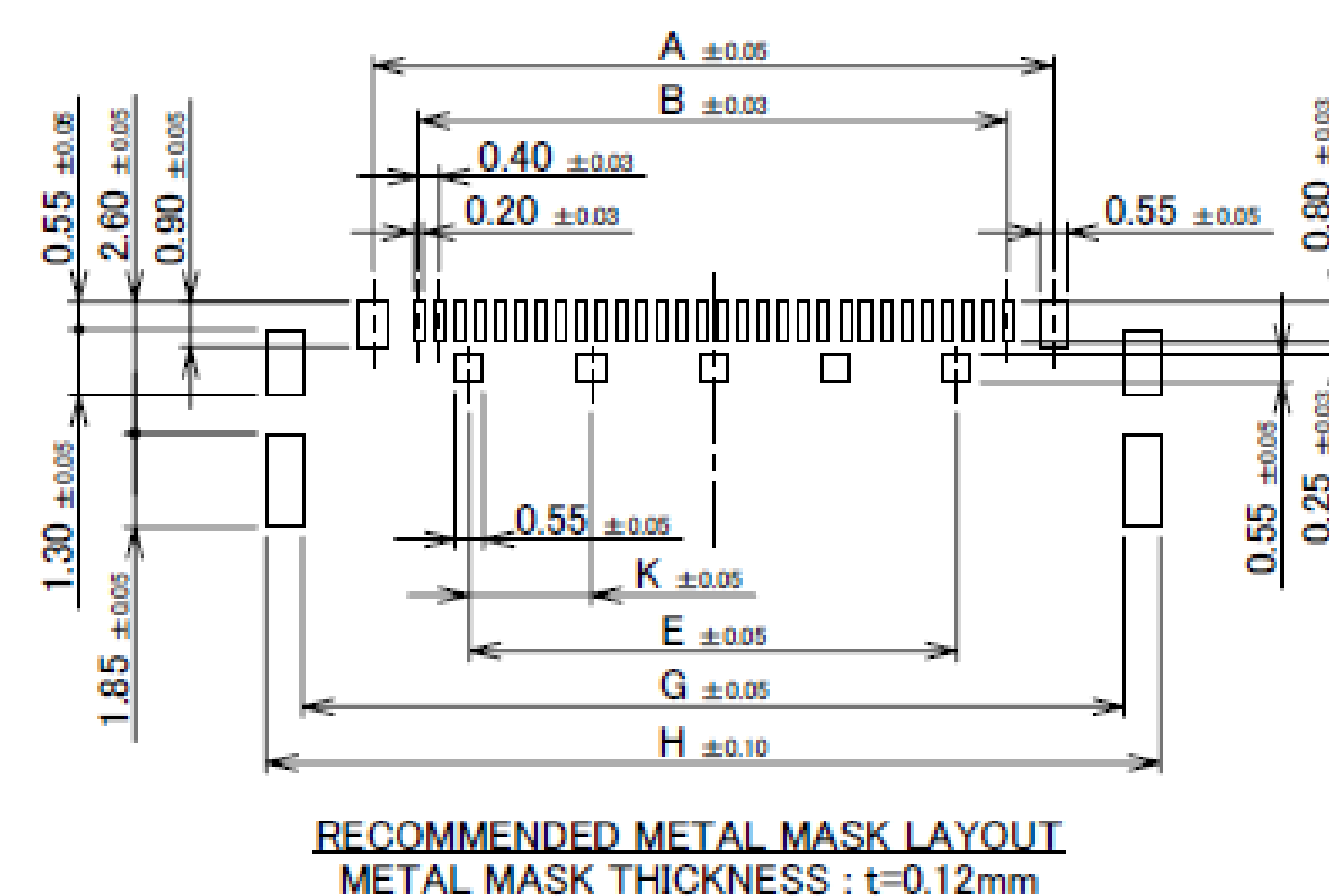
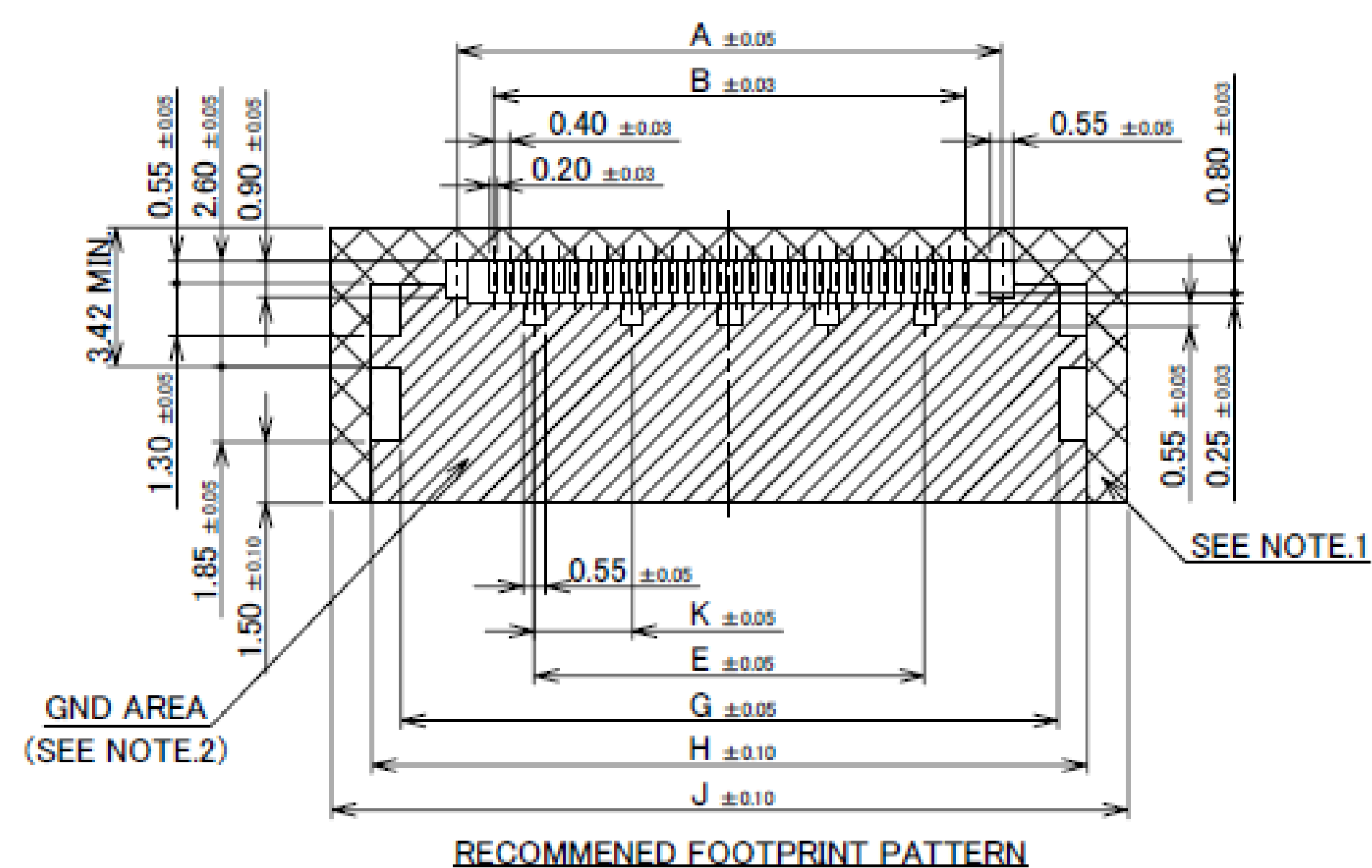
BOTTOM VIEW



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

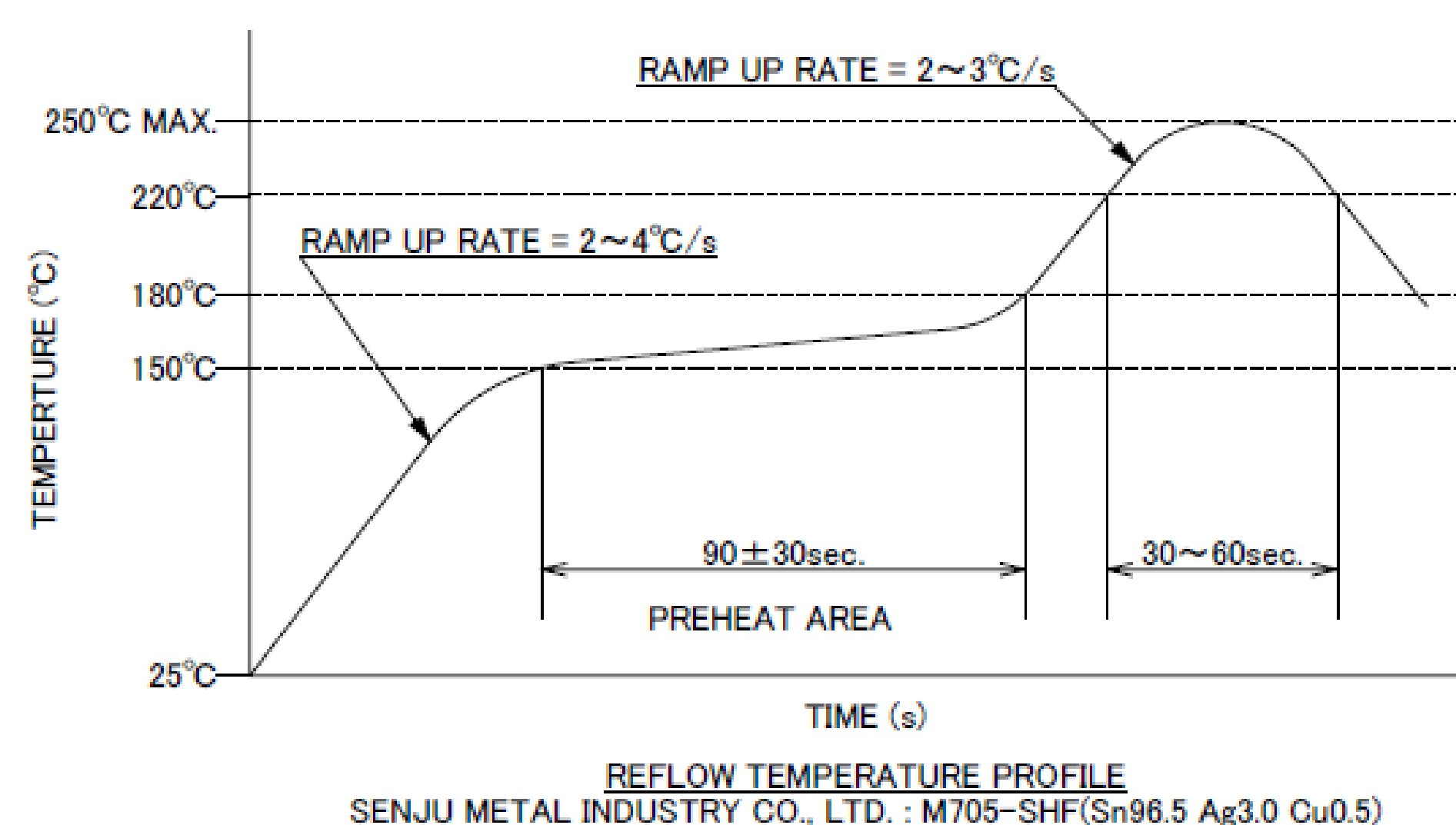
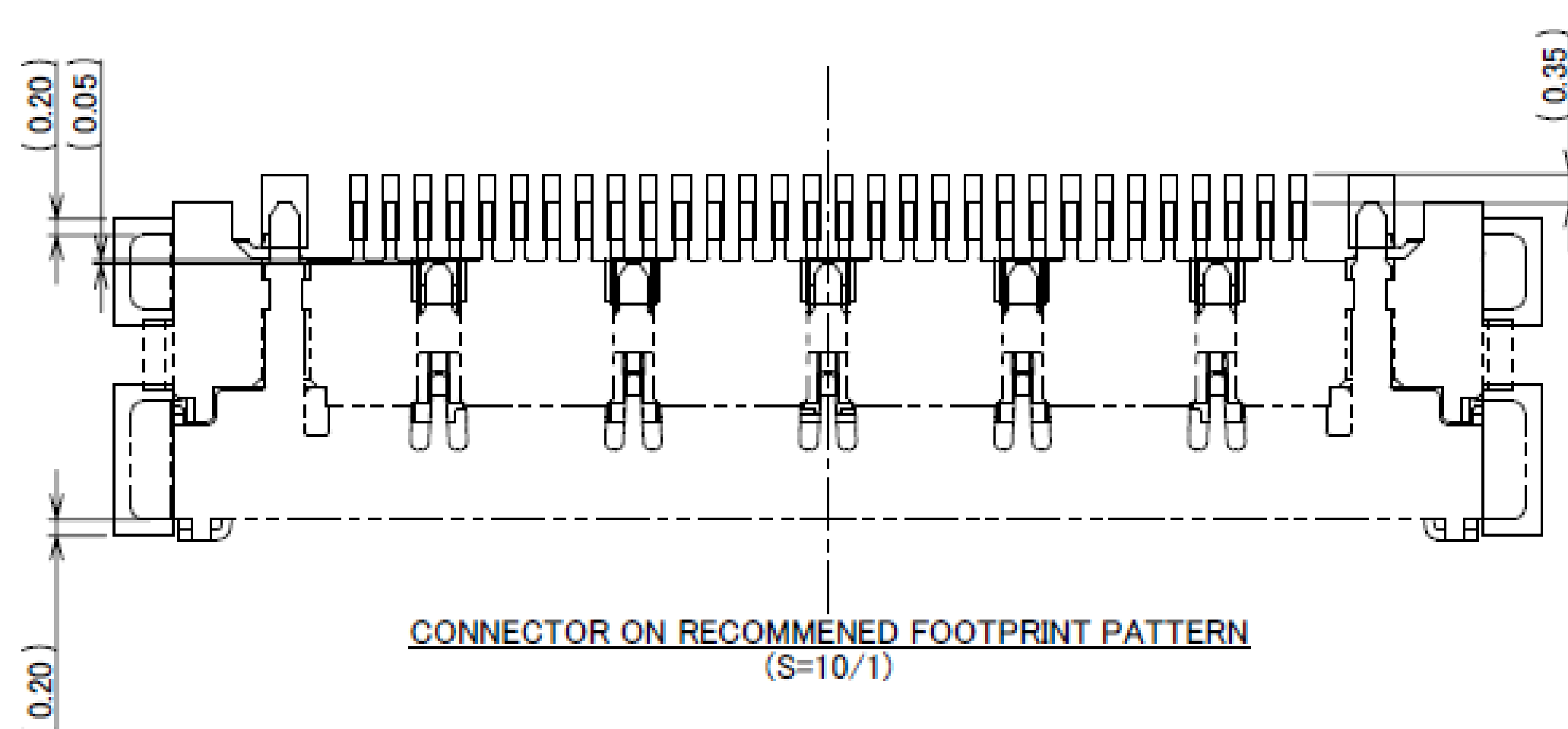


NOTES.

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***

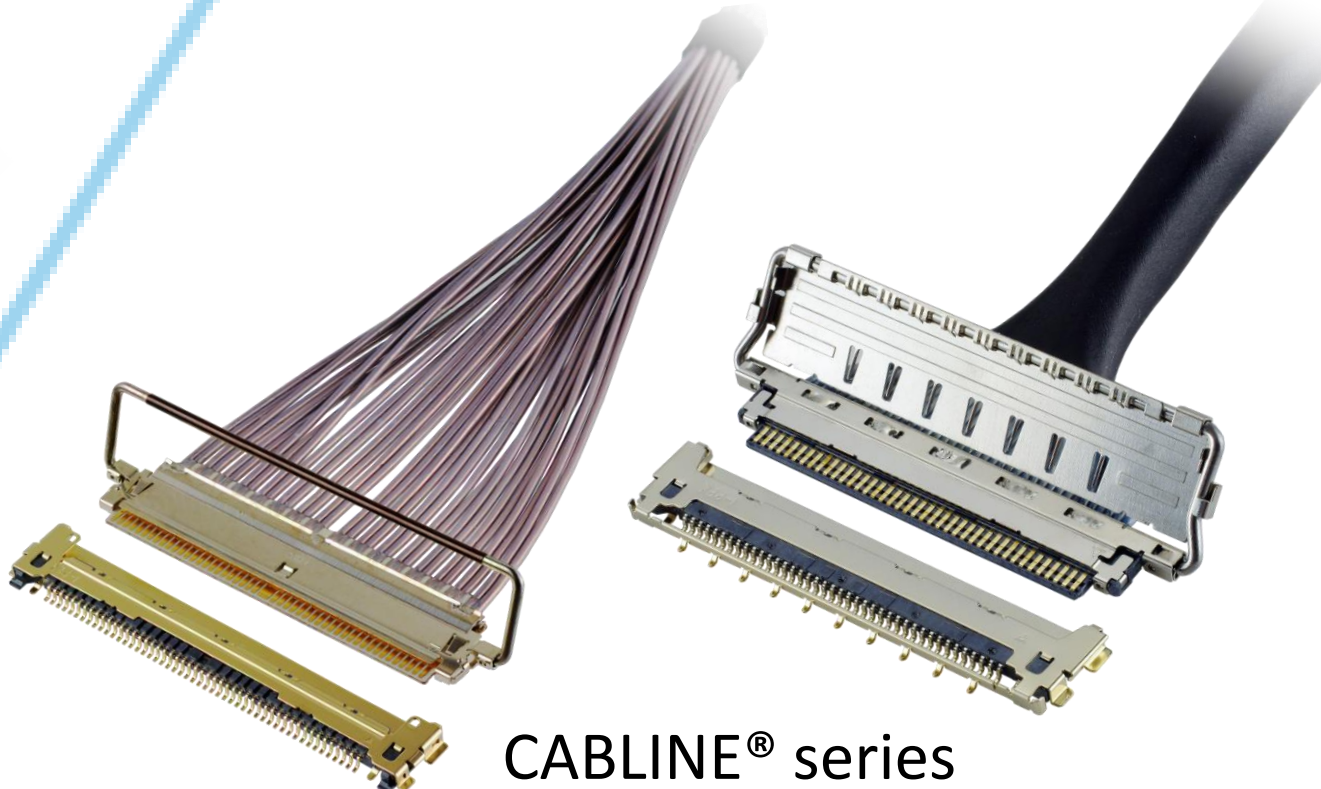
Custom Connectors Available

 RF
Connectors

MHF® series



CABLINE® series



Micro-Coaxial/Twinax
Connectors



Wire-to-Board
Connectors/
Terminals

AP series



ISH® series



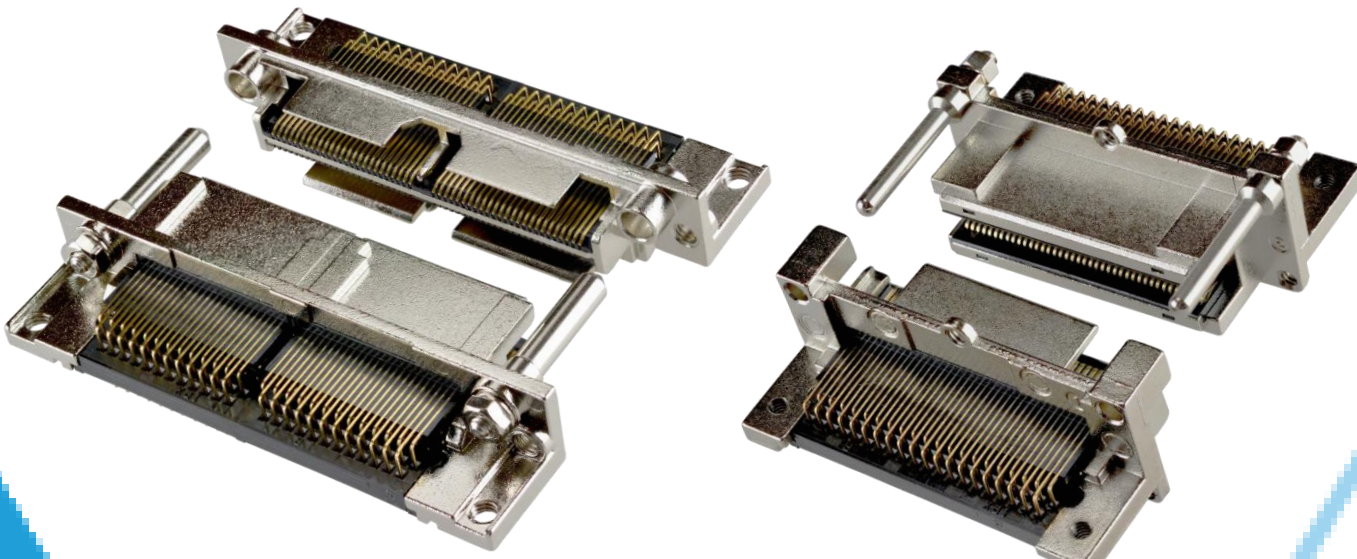
NOVASTACK® series



Board-to-Board
Connectors



I/O
Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC
Connectors



Inquiry



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