

CABLINE®-UX II

Slim design suitable for through-hole solution, narrow pitch (0.25 mm), Right angle vertical mating type micro-coaxial connector

Product Specifications:

Mating type	Right angle vertical	
Board Pitch (mm)	0.5	
Wiping Length (mm)	0.2	
Mated size (mm)	Height	1.10 Max
	Width	Formula: 4.1 + (0.25*?p)
	Depth	2.4
Pin Counts	Range	Up to 50
	Available	30, 34, 40, 50

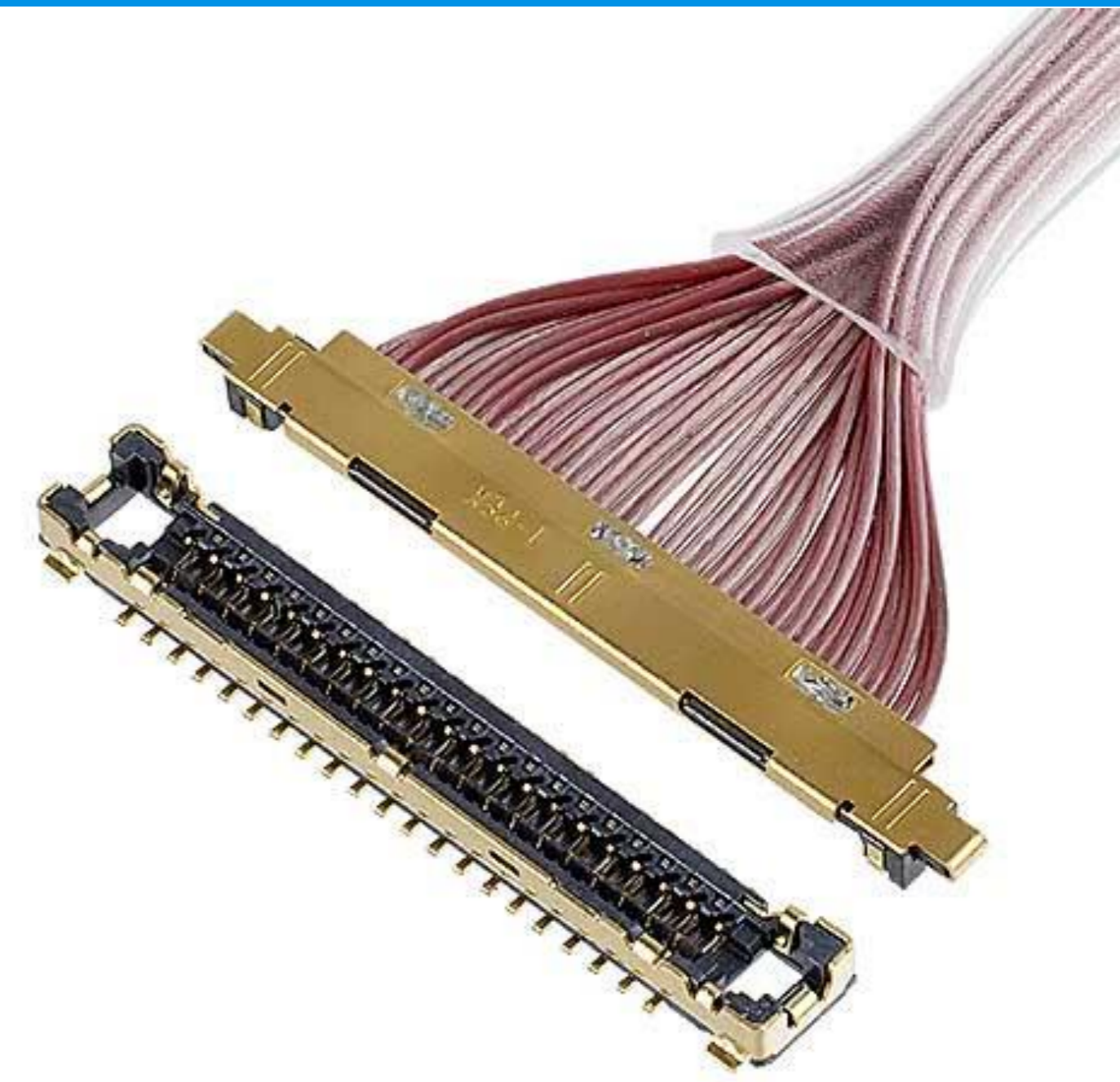
Applicable Cable Size:

Maximum O.D. (mm)	0.25
Micro-Coaxial for Signal (AWG)	45 ohm: #44 or smaller 50 ohm: #46 or smaller
Twinax (AWG)	-
Discrete (AWG)	#39 or smaller

Applicable Standards (Reference Only):

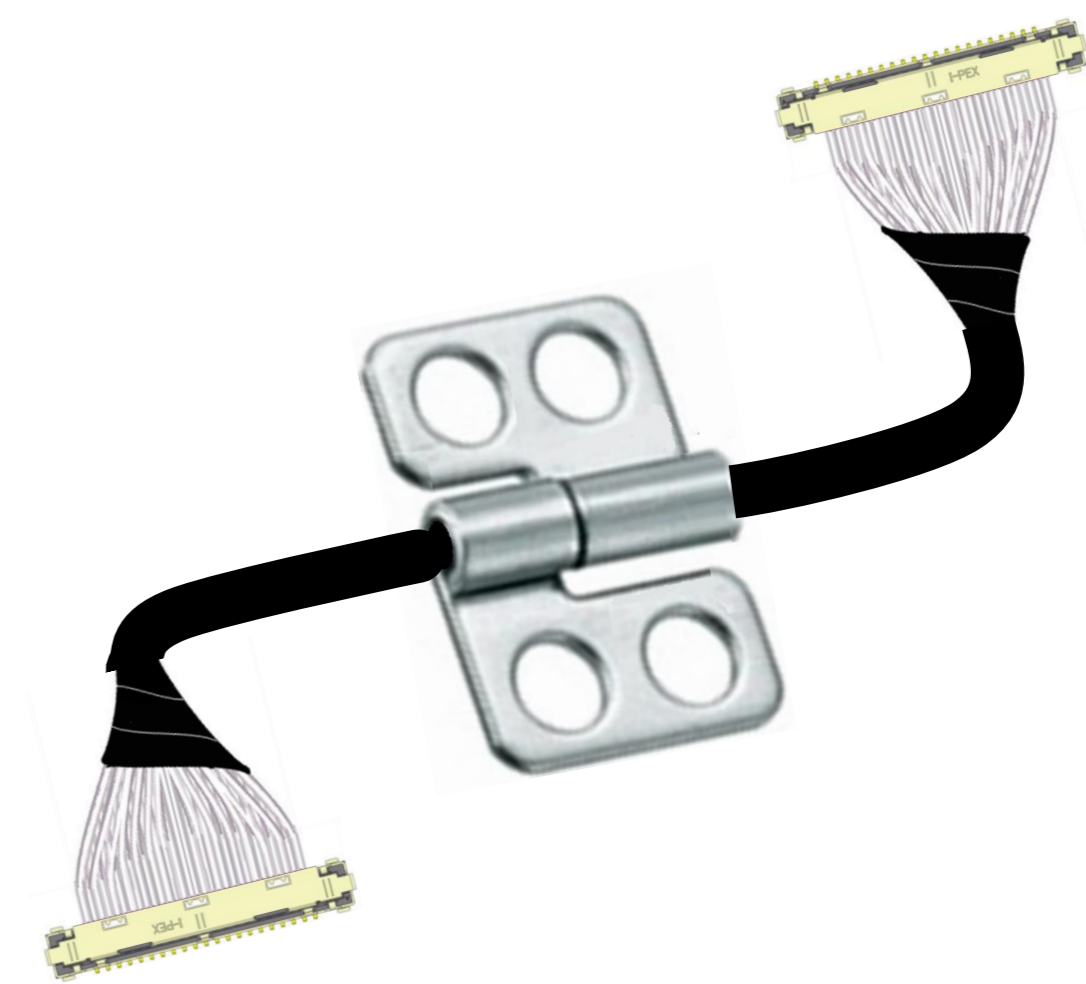
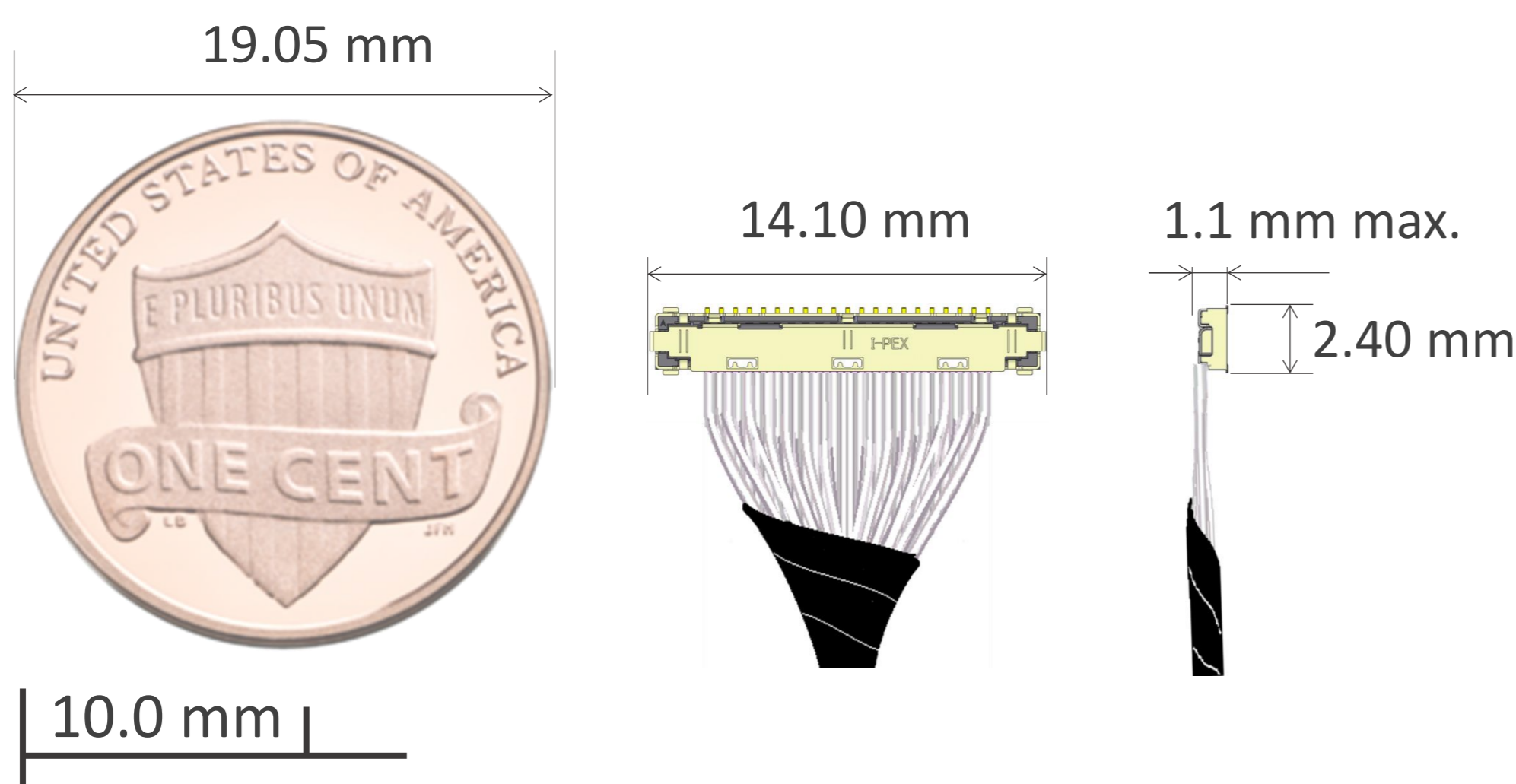
USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps)

* Please inquire for pin counts not listed or outside of the pin count range.



► Suitable for small connector spaces

CABLINE-UX II 40p size is smaller than a one-cent coin.



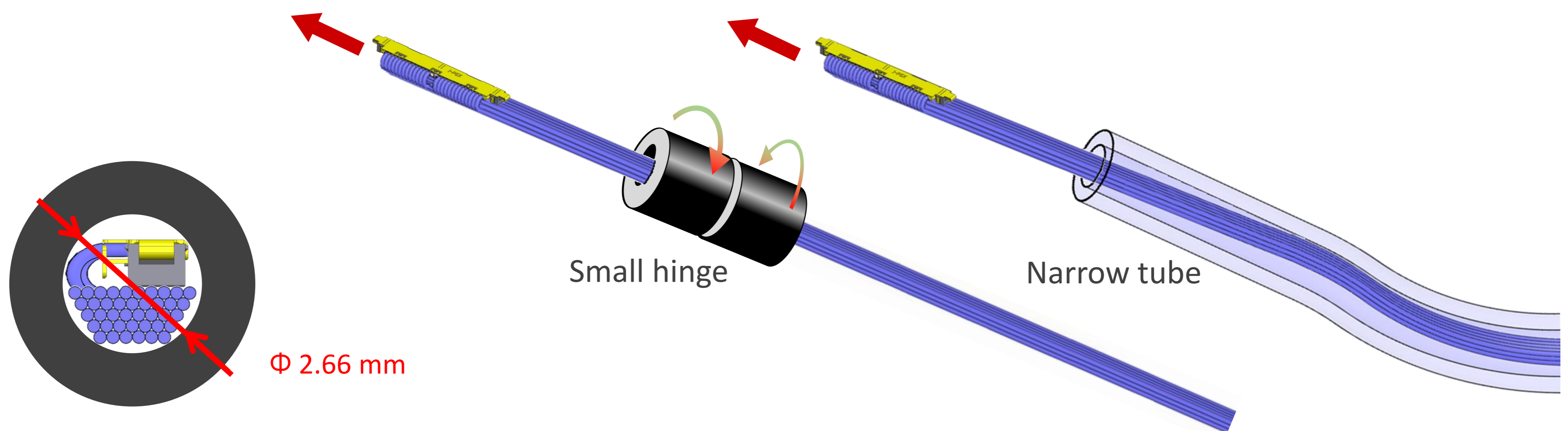
Flexible micro-coaxial cable harness is suitable for small applications with a hinge design.

► Slim plug design, suitable for through-hinge assemblies

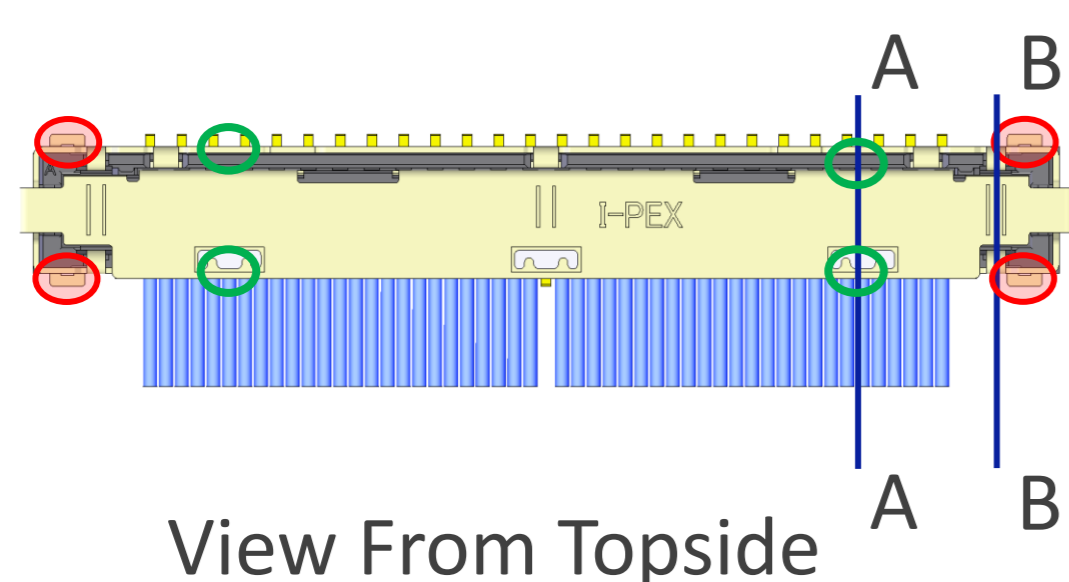
Simulation Reference Example:

[Hinge Component Pass-Through with CABLINE® Harness Assemblies](#)

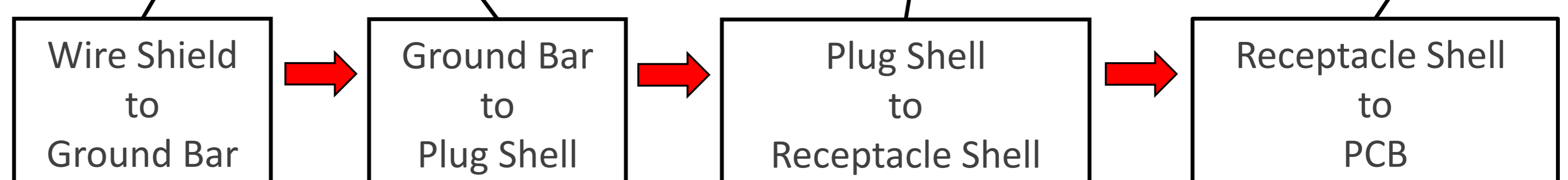
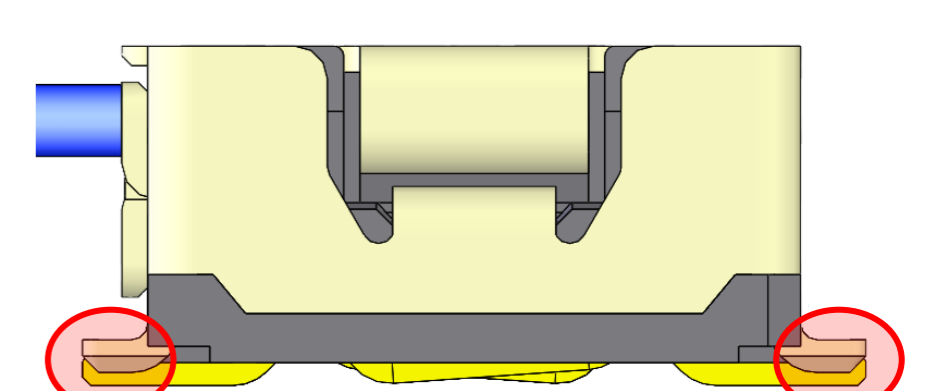
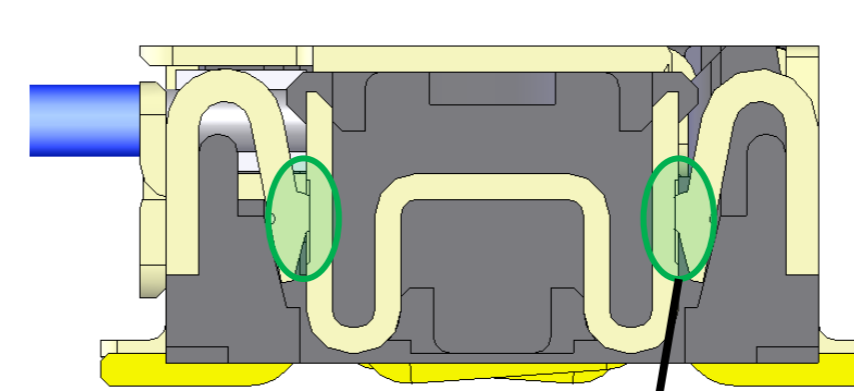
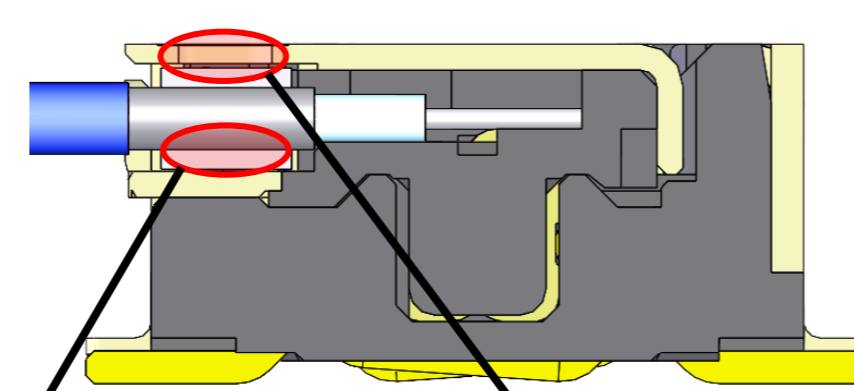
UX II 40p plug with 0.24 mm cable outer diameter harness can go through 2.66 mm inner diameter.



► Multi-point ground contact design for EMC protection

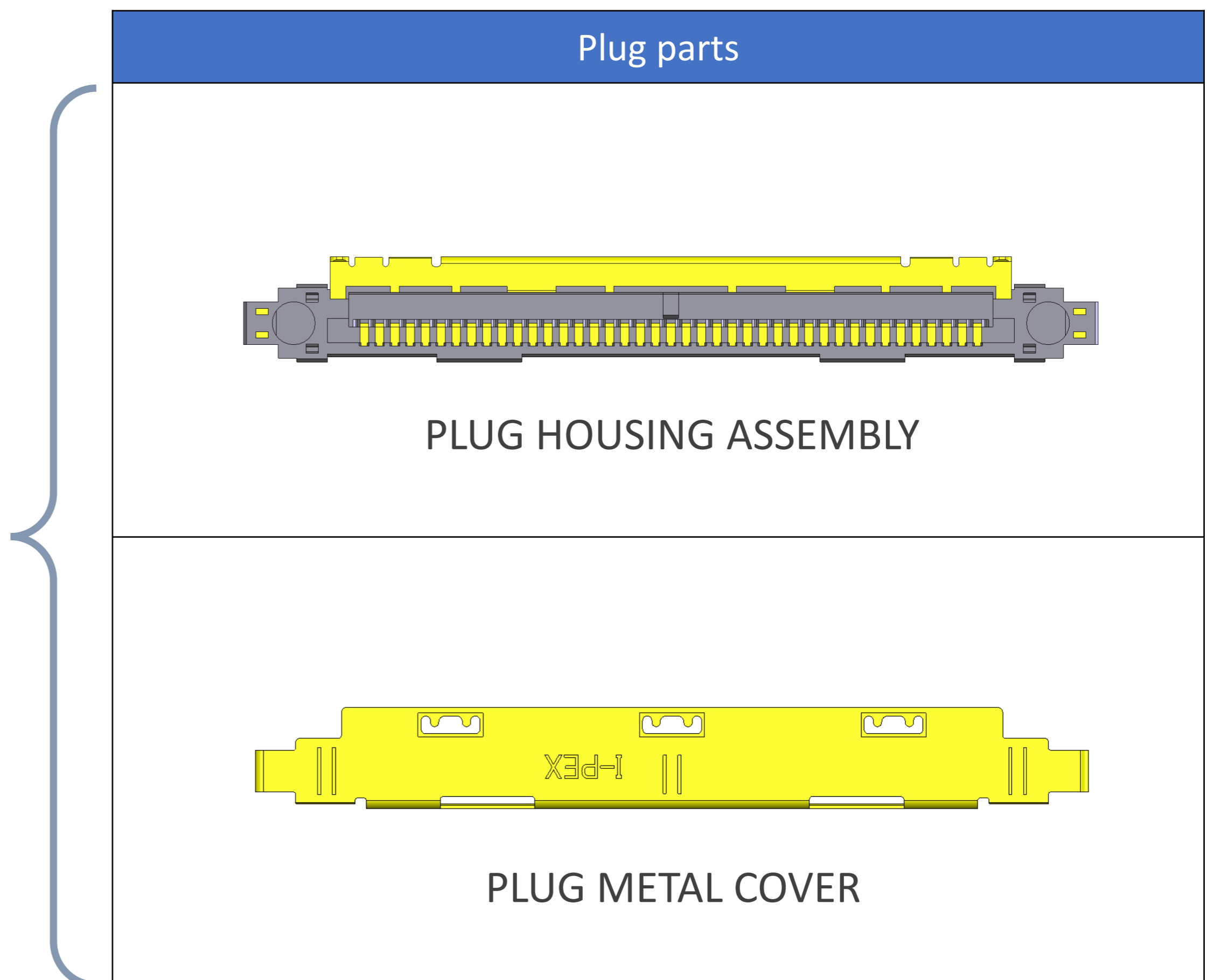
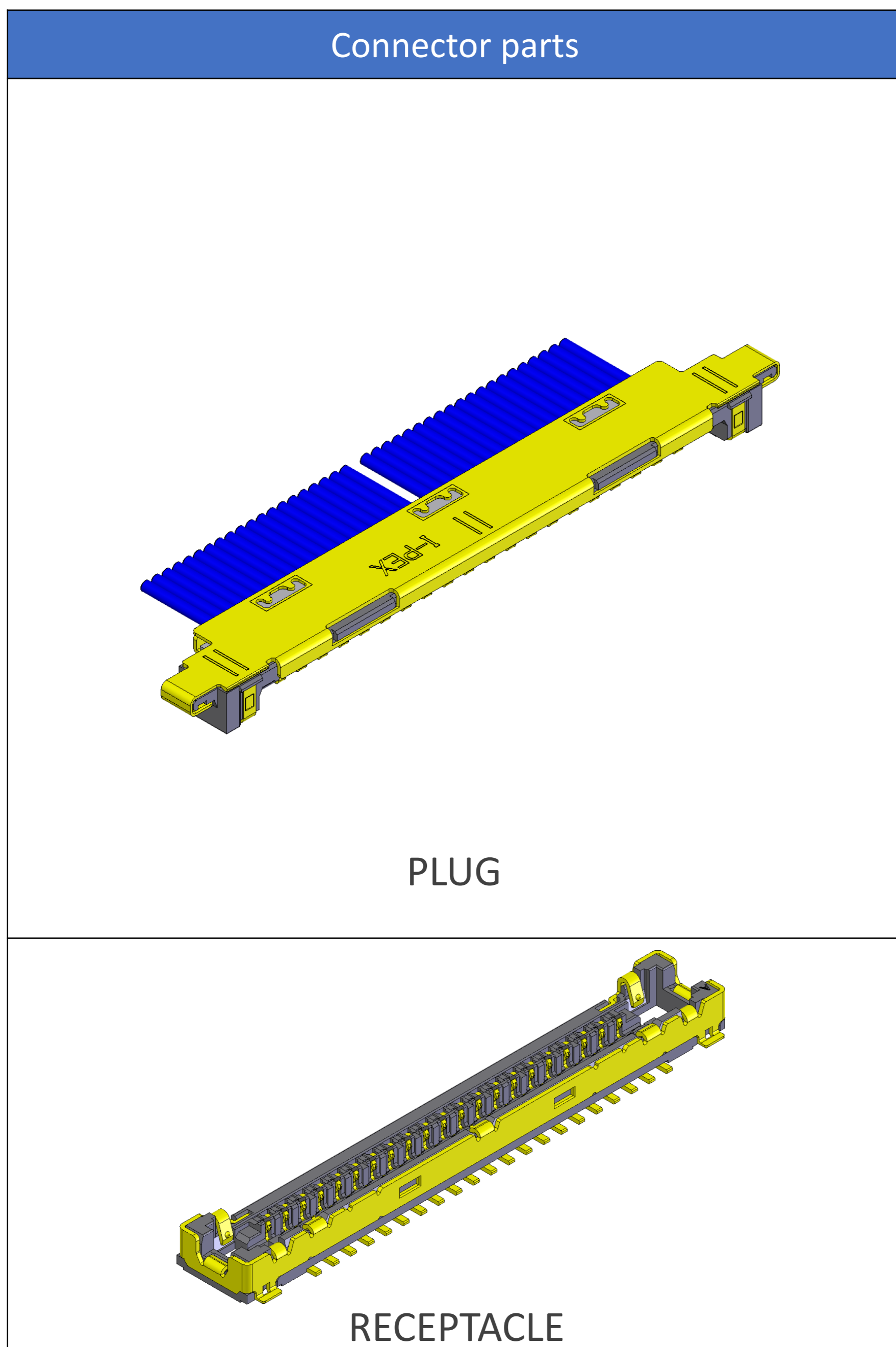


○ Soldered contacts
○ Mechanical contacts



Component Parts Details

Component Parts

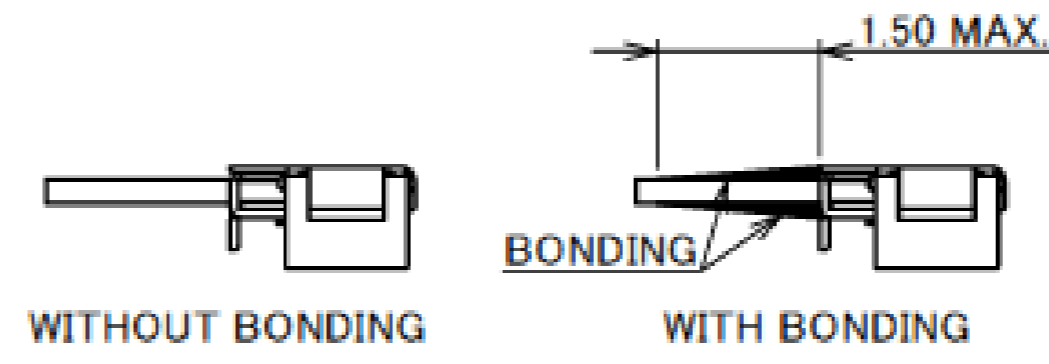


Plug for Cable Assembly

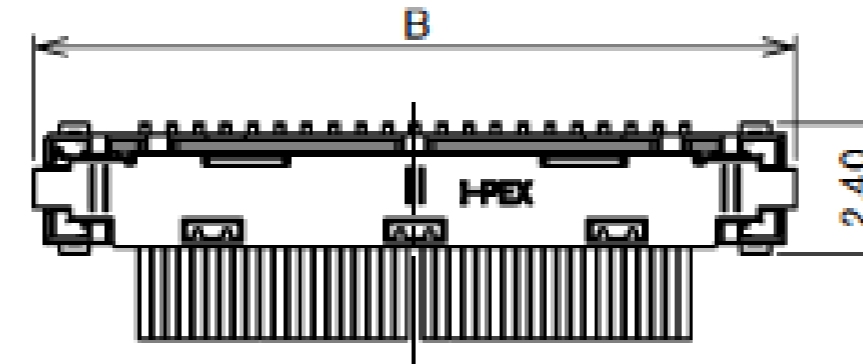
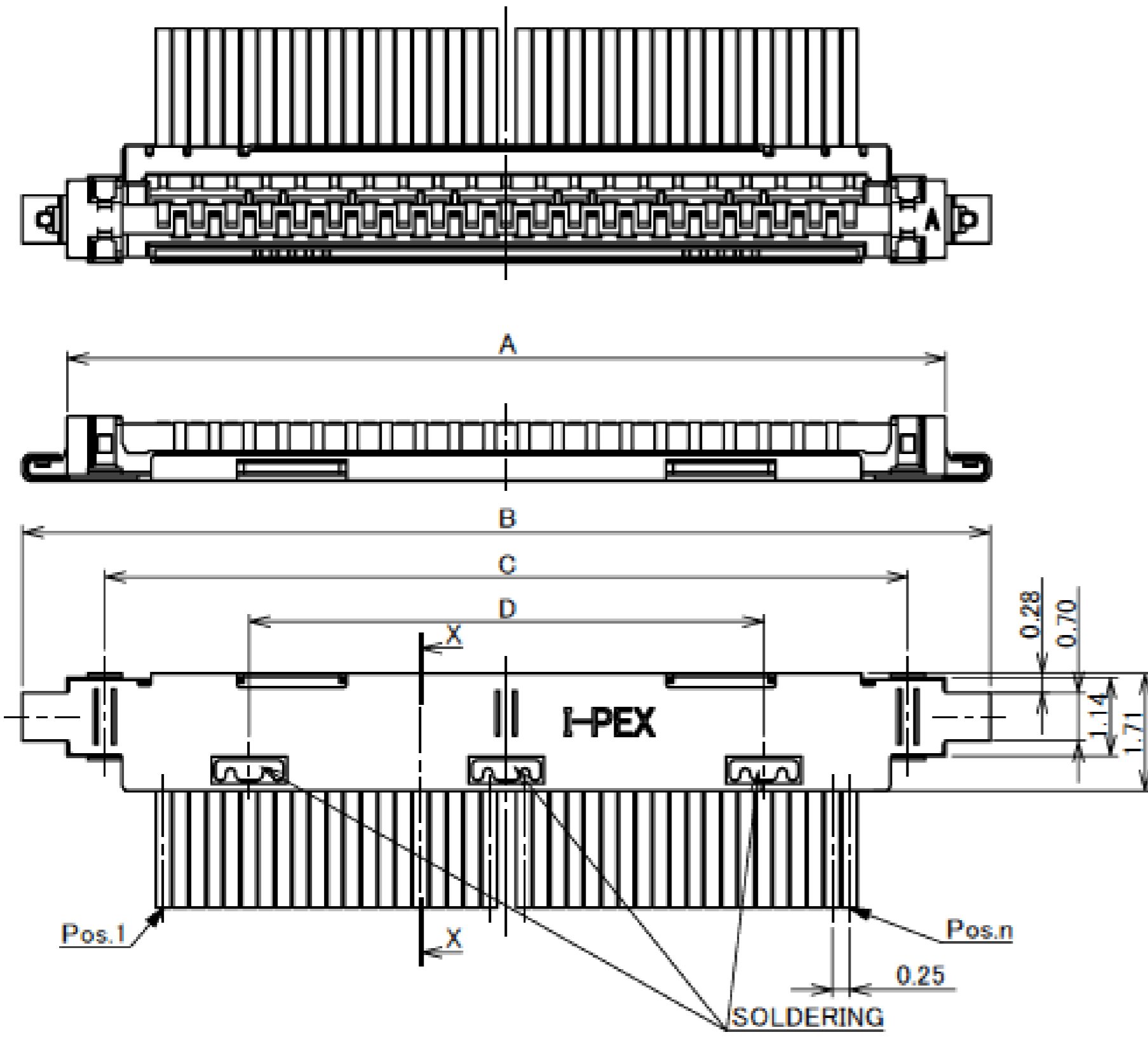
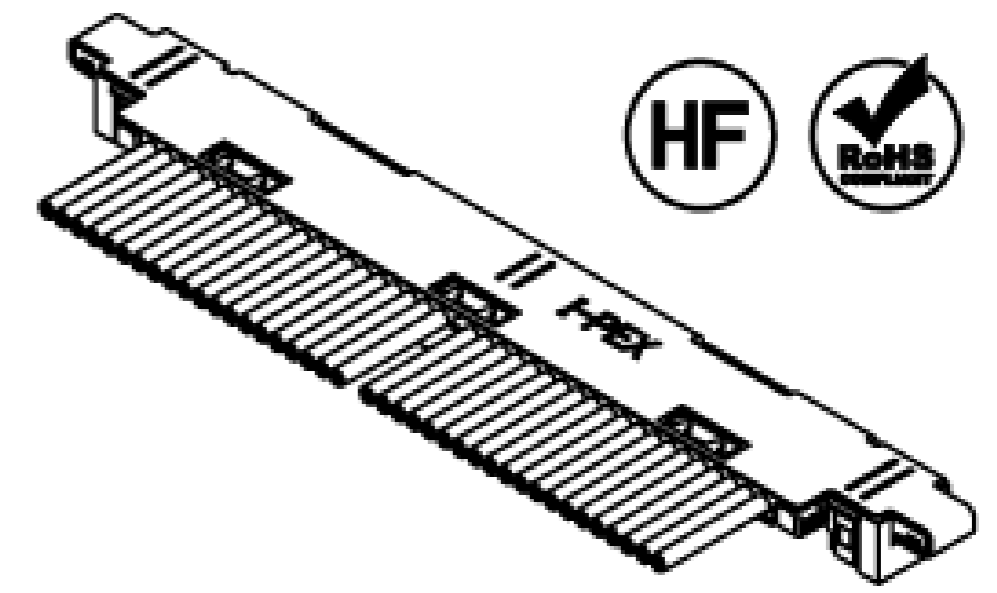
RECOMMENDED PART No. 20531-0**T-02-1

PART No.	A	B	C	D
20531-030T-02-1	10.3	11.6	9.2	5.0
20531-034T-02-1	11.3	12.6	10.2	6.0
20531-040T-02-1	12.8	14.1	11.7	7.5
20531-050T-02-1	15.3	16.6	14.2	10.0

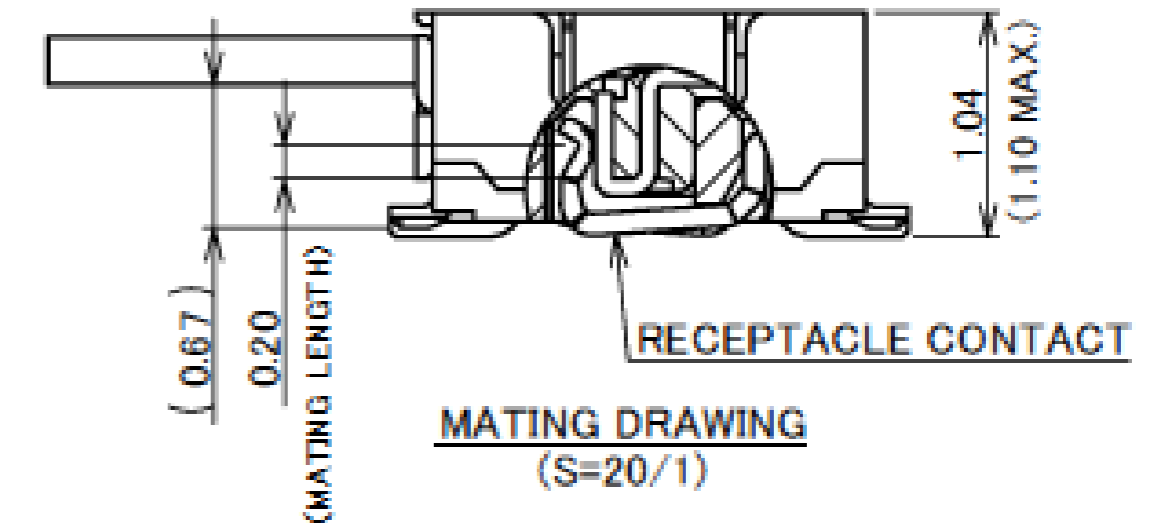
20531-0**T-02-1
Pos.



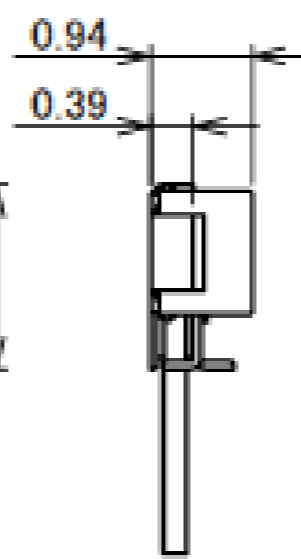
※WE RECOMMEND BONDING THE CABLE AND CONNECTOR TO PROTECT THE CABLE.



MATING SIZE (S=5/1)



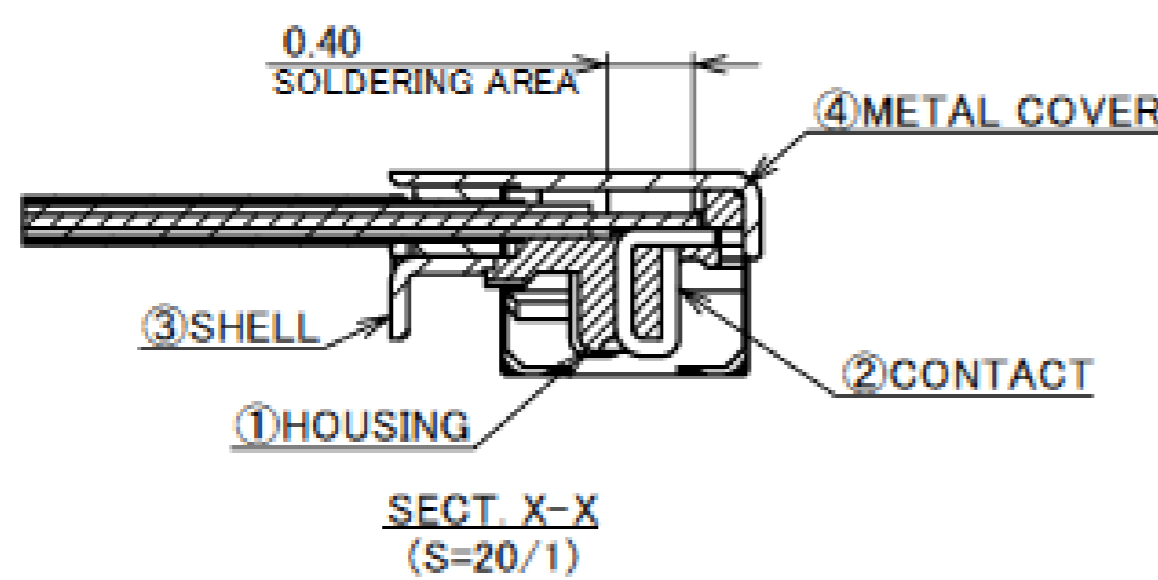
MATING DRAWING (S=20/1)



REFERENCE CABLE BENDING DIMENSIONS

※1: THE BEND DIMENSIONS MAY VARY BASED ON THE SIZE AND QUANTITY OF CABLES. PLEASE CONFIRM THE MINIMUM BENDING RADIUS WITH I-PEX OR THE HARNESS MANUFACTURER.

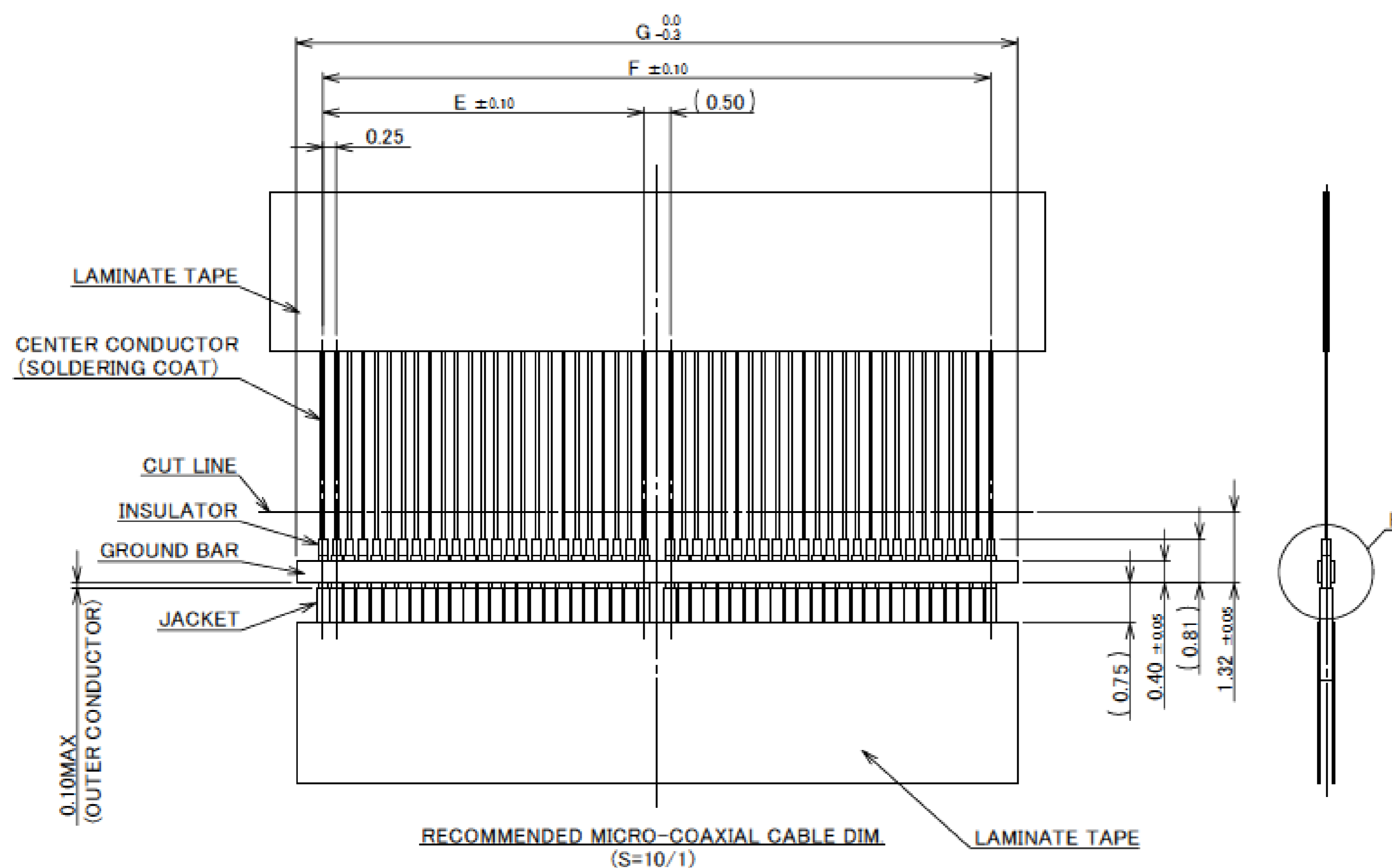
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	METAL COVER	SUS	Au 0.05 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL	PHOSPHOR BRONZE	Au 0.05 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	Au 0.1 μm MIN. OVER Ni 1.0 μm MIN.
1	HOUSING	LCP	UL94V-0 .BLACK



SECT. X-X (S=20/1)

Rev.15

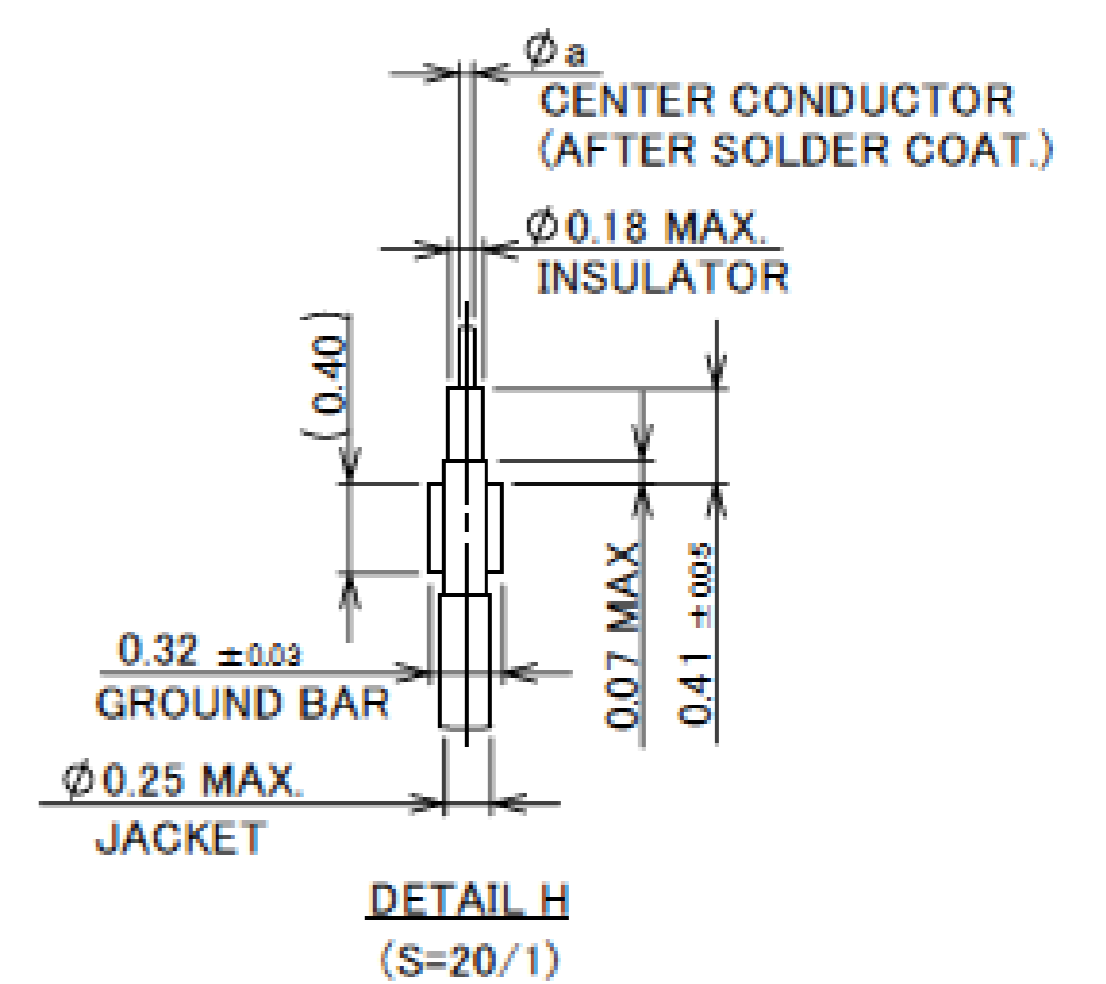
PART No.	E	F	G
20531-030T-02-1	3.5	7.5	8.5
20531-034T-02-1	4.0	8.5	9.5
20531-040T-02-1	4.75	10.0	11.0
20531-050T-02-1	6.0	12.5	13.5



RECOMMENDED MICRO-COAXIAL CABLE DIM. (S=10/1)

MICRO-COAXIAL CABLE DIMENSION

	a
#44	φ 0.063
#46	φ 0.048

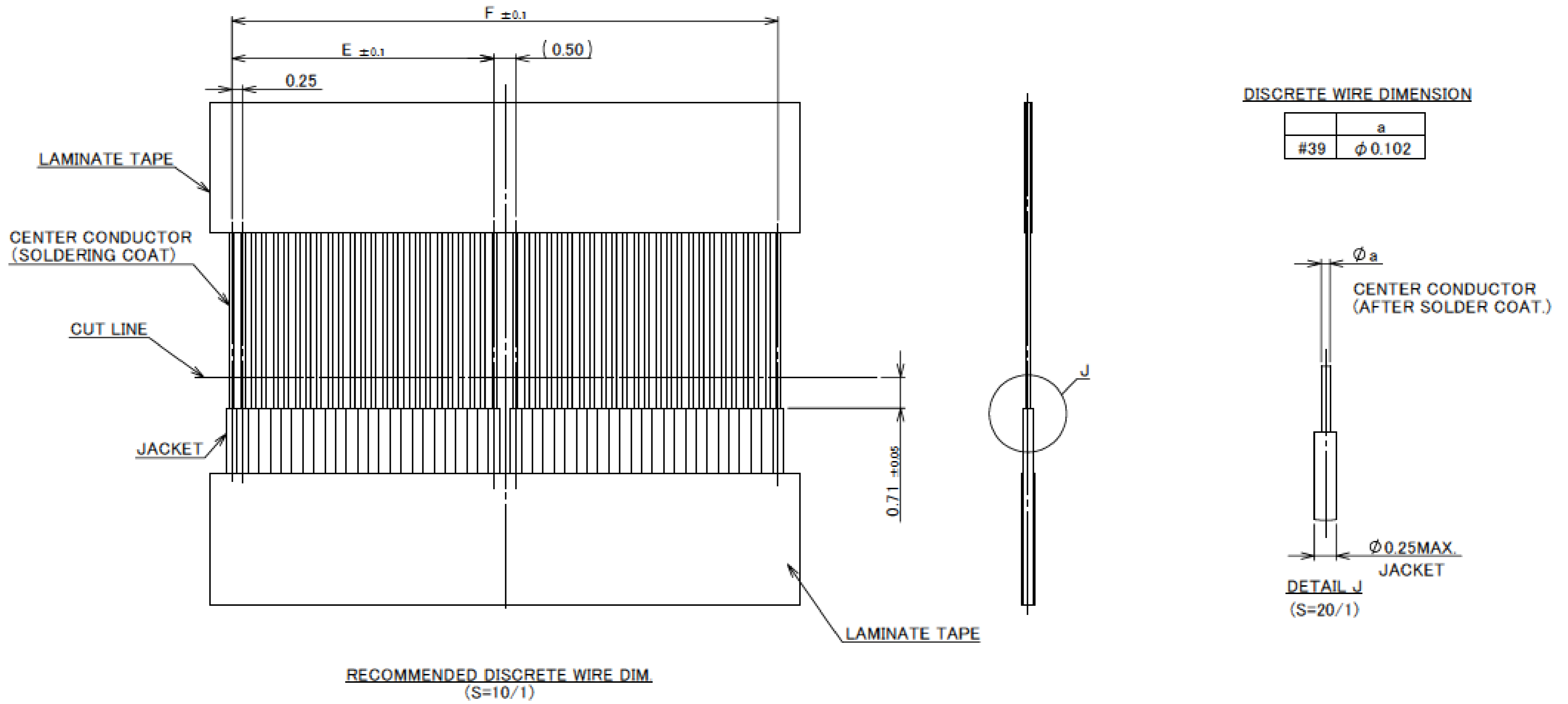


DETAIL H (S=20/1)

Rev.15

Plug for Cable Assembly

PART No.	E	F
20531-030T-02-1	3.5	7.5
20531-034T-02-1	4.0	8.5
20531-040T-02-1	4.75	10.0
20531-050T-02-1	6.0	12.5



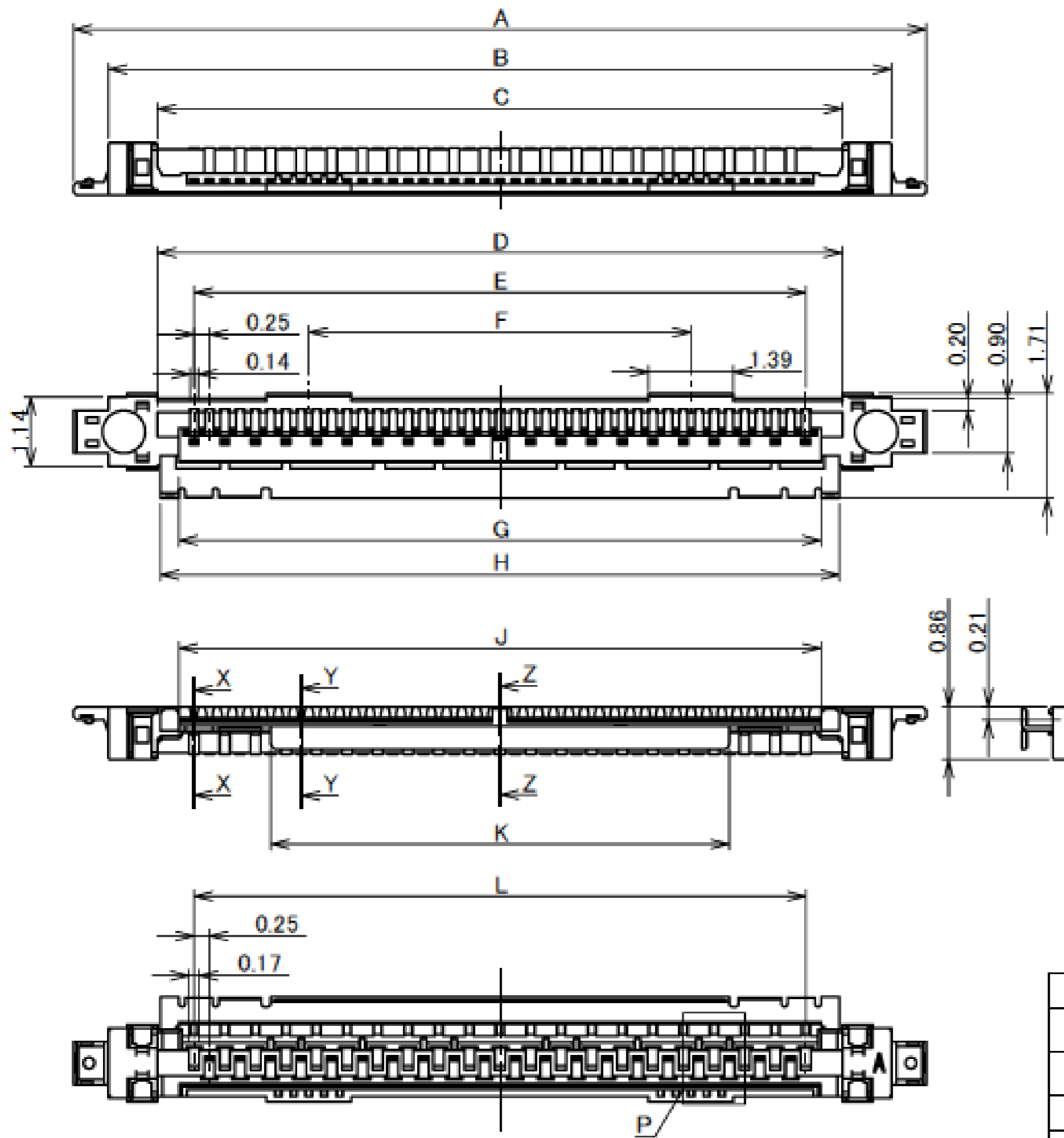
Rev.15

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 ,46 DISCRETE WIRE : AWG#39
RATING VOLTAGE	50V 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)	0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 6 CONTACTS) 0.15A AC/DC [AWG#44] 0.10A AC/DC [AWG#46] ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	75% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 450mohm MAX.(AWG#39) 1080mohm MAX.(AWG#44) 1880mohm MAX.(AWG#46) AFTER TEST : \triangleleft 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \triangleleft 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 100Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC100V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 26.4N MAX. 34P : 27.6N MAX. 40P : 29.4N MAX. 50P : 32.4N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 1.5N MIN. 34P : 1.9N MIN. 40P : 2.5N MIN. 50P : 3.5N MIN.
CABLE RETENTION FORCE	30P : 15.0N MIN. 34P : 17.0N MIN. 40P : 20.0N MIN. 50P : 25.0N MIN.
PRODUCT SPECIFICATION	PRS-2887
TEST REPORT	TR-24028
INSTRUCTION MANUAL	HIM-10001
ASSEMBLY MANUAL	ASM-10001
APPEARANCE CRITERIA No.	QLS-A***

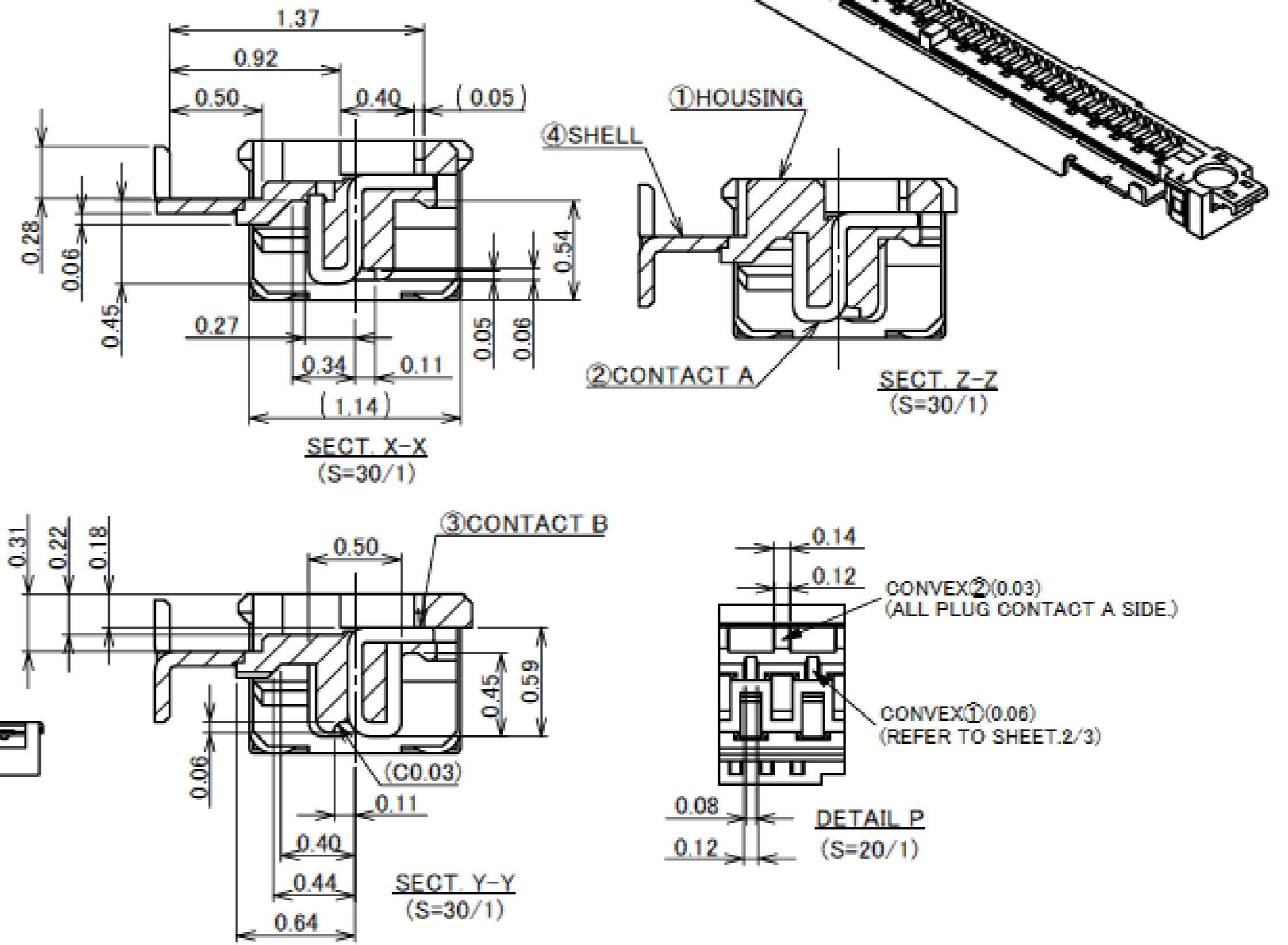
Rev.15

Plug Housing Assembly

RECOMMENDED PART No.		20532-0**T-02-1										
PART No.	Pos	A	B	C	D	E	F	G	H	J	K	L
20532-030T-02-1	30	11.44	10.30	8.70	8.70	7.50	3.75	8.00	8.60	8.00	5.00	7.50
20532-034T-02-1	34	12.44	11.30	9.70	9.70	8.50	4.75	9.00	9.60	9.00	6.00	8.50
20532-040T-02-1	40	13.94	12.80	11.20	11.20	10.00	6.25	10.50	11.10	10.50	7.50	10.00
20532-050T-02-1	50	16.44	15.30	13.70	13.70	12.50	6.25	13.00	13.60	13.00	10.00	12.50

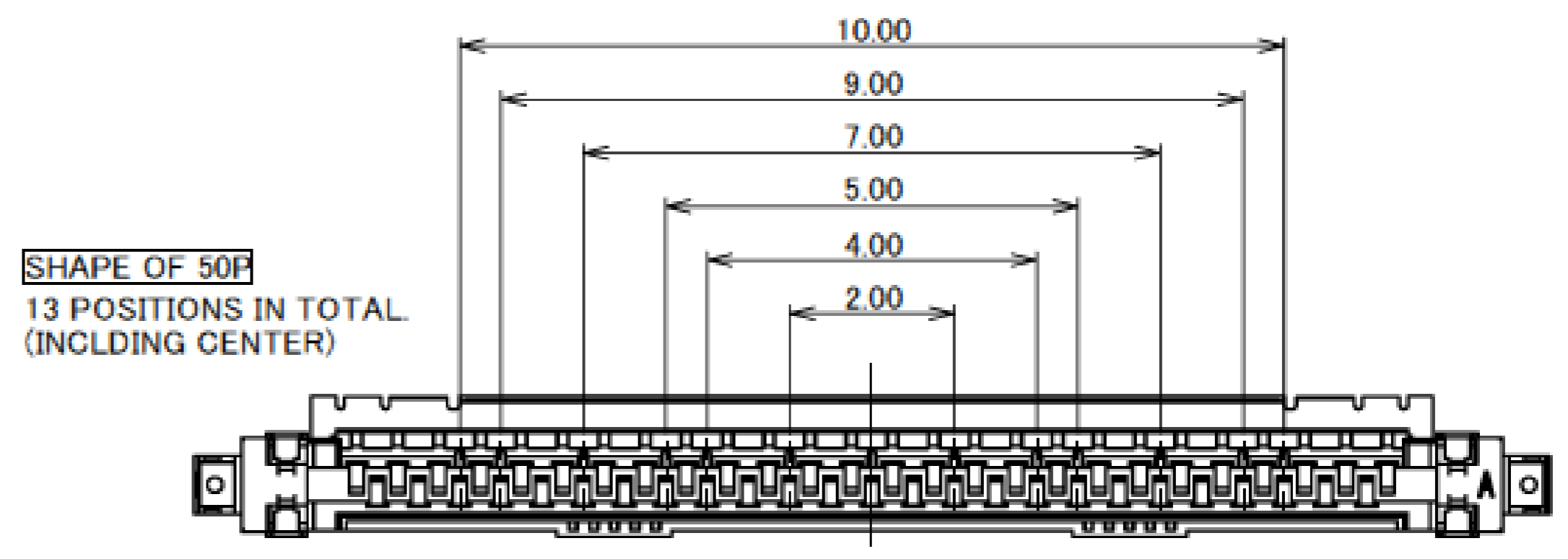
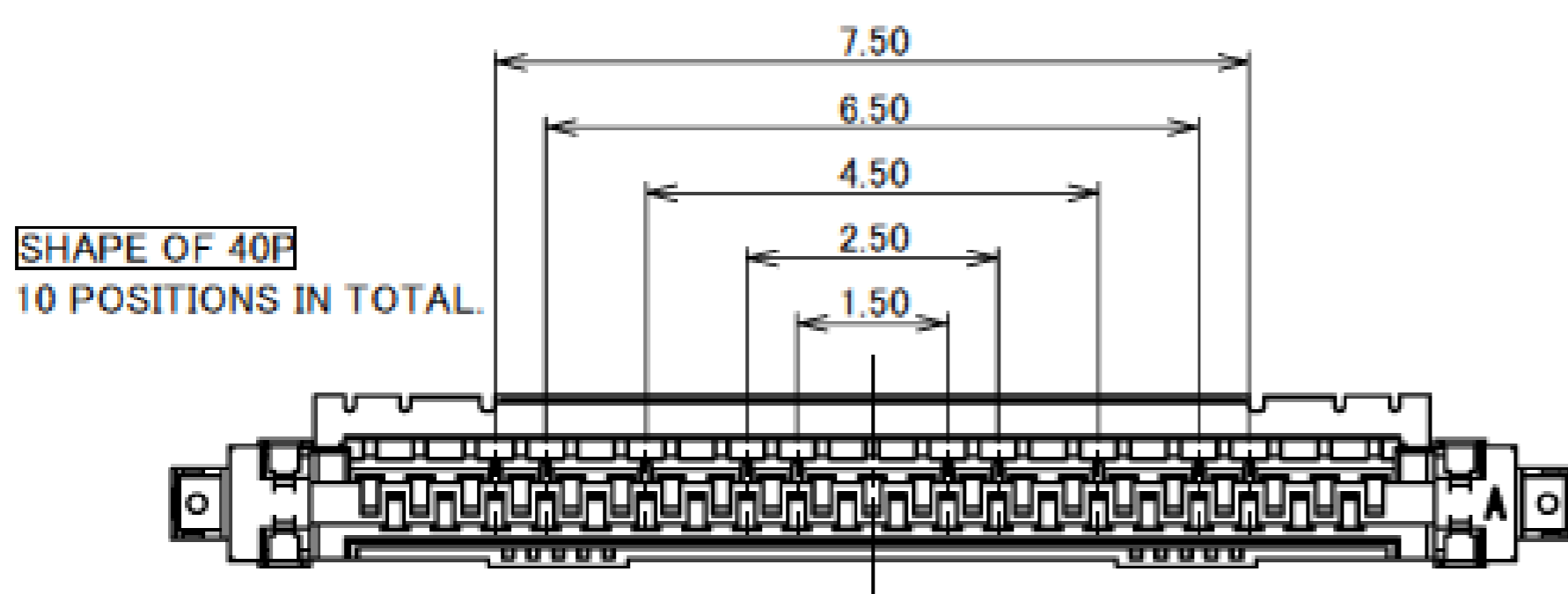
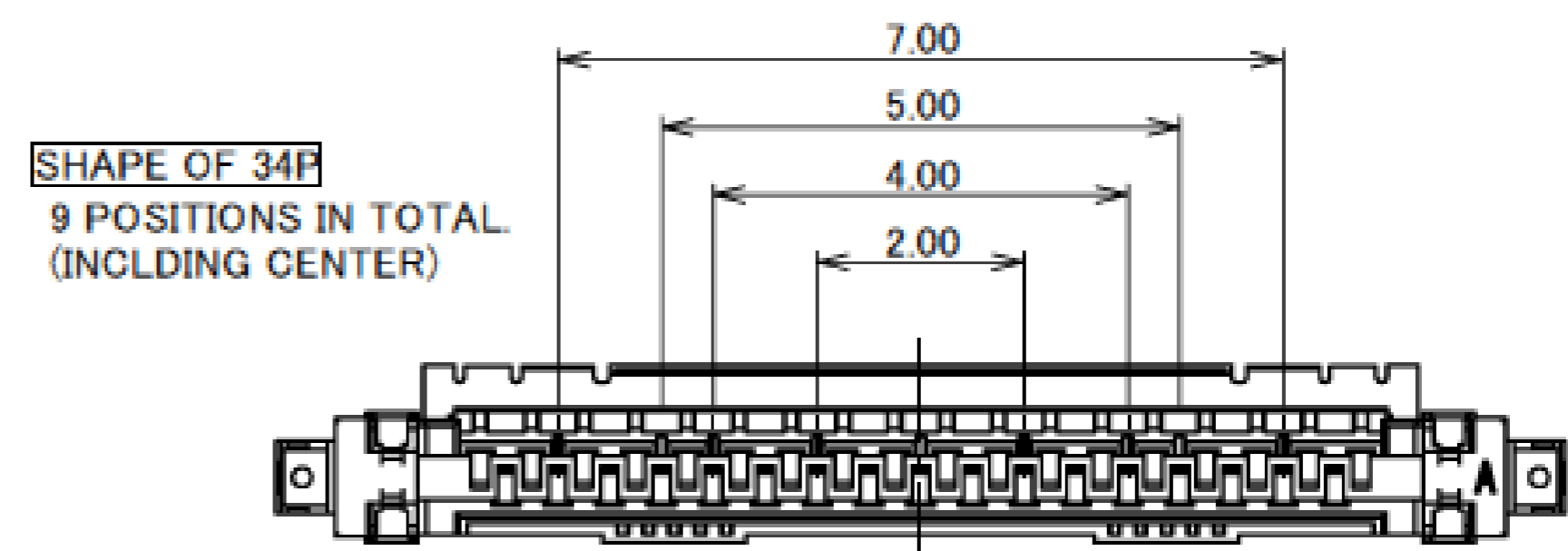
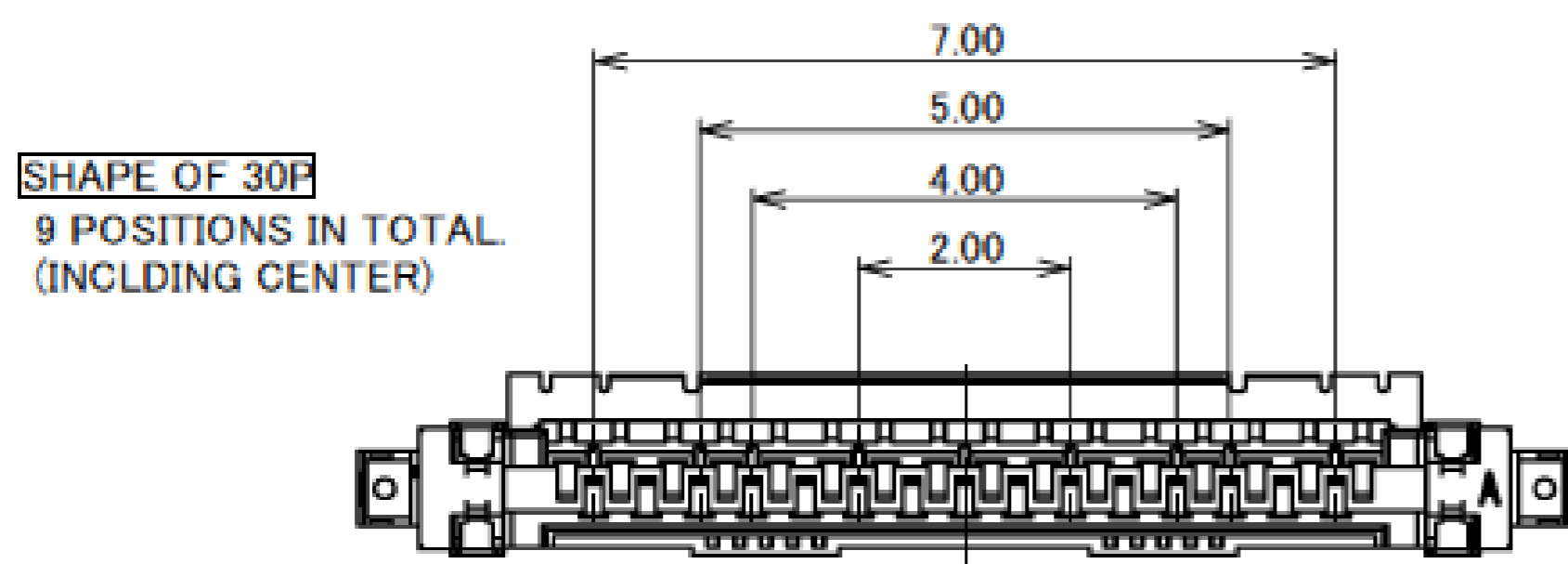


20532-0**T-02-1
Pos.



NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL	PHOSPHOR BRONZE	Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	PHOSPHOR BRONZE	Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	PHOSPHOR BRONZE	Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0_BLACK

Rev.9

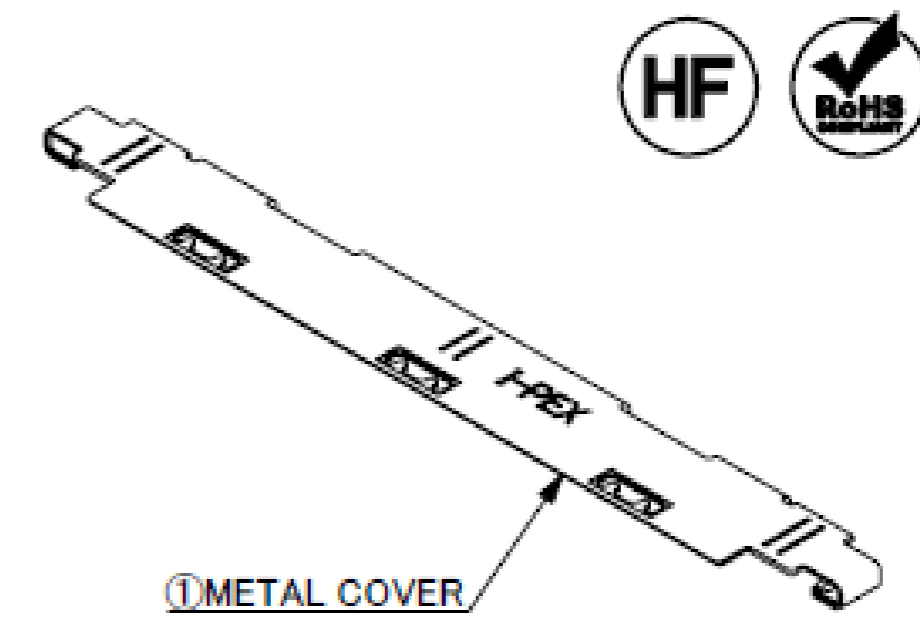
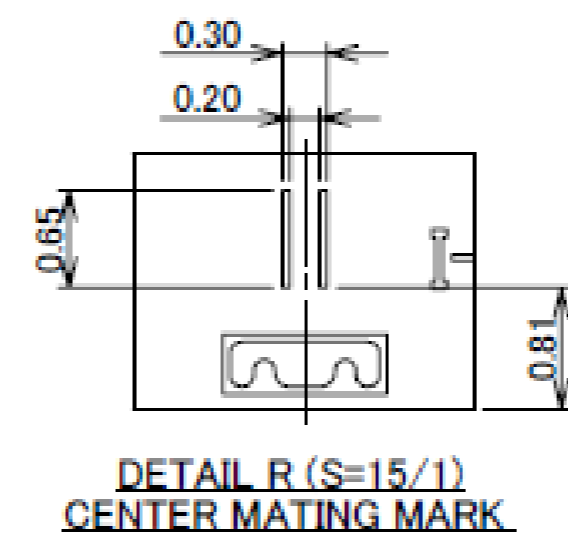
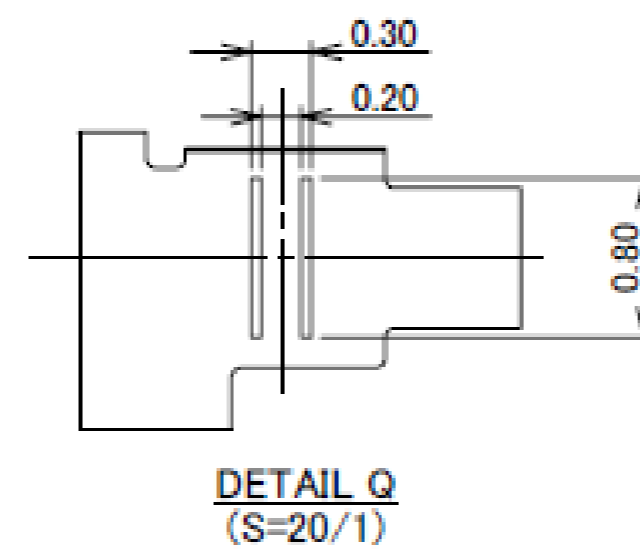
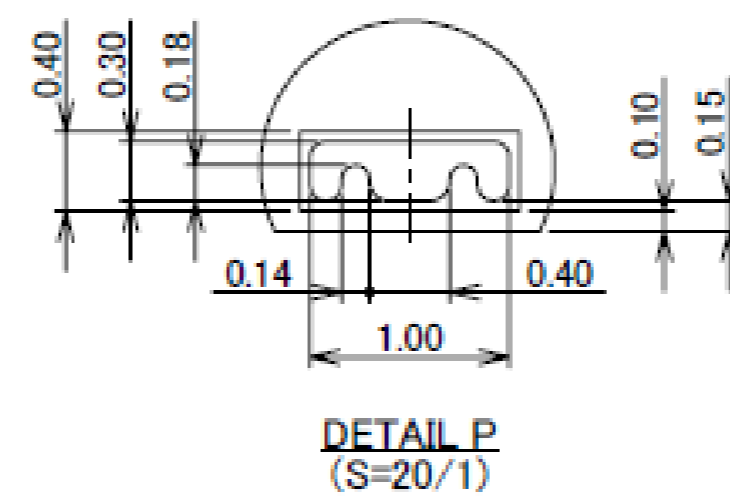
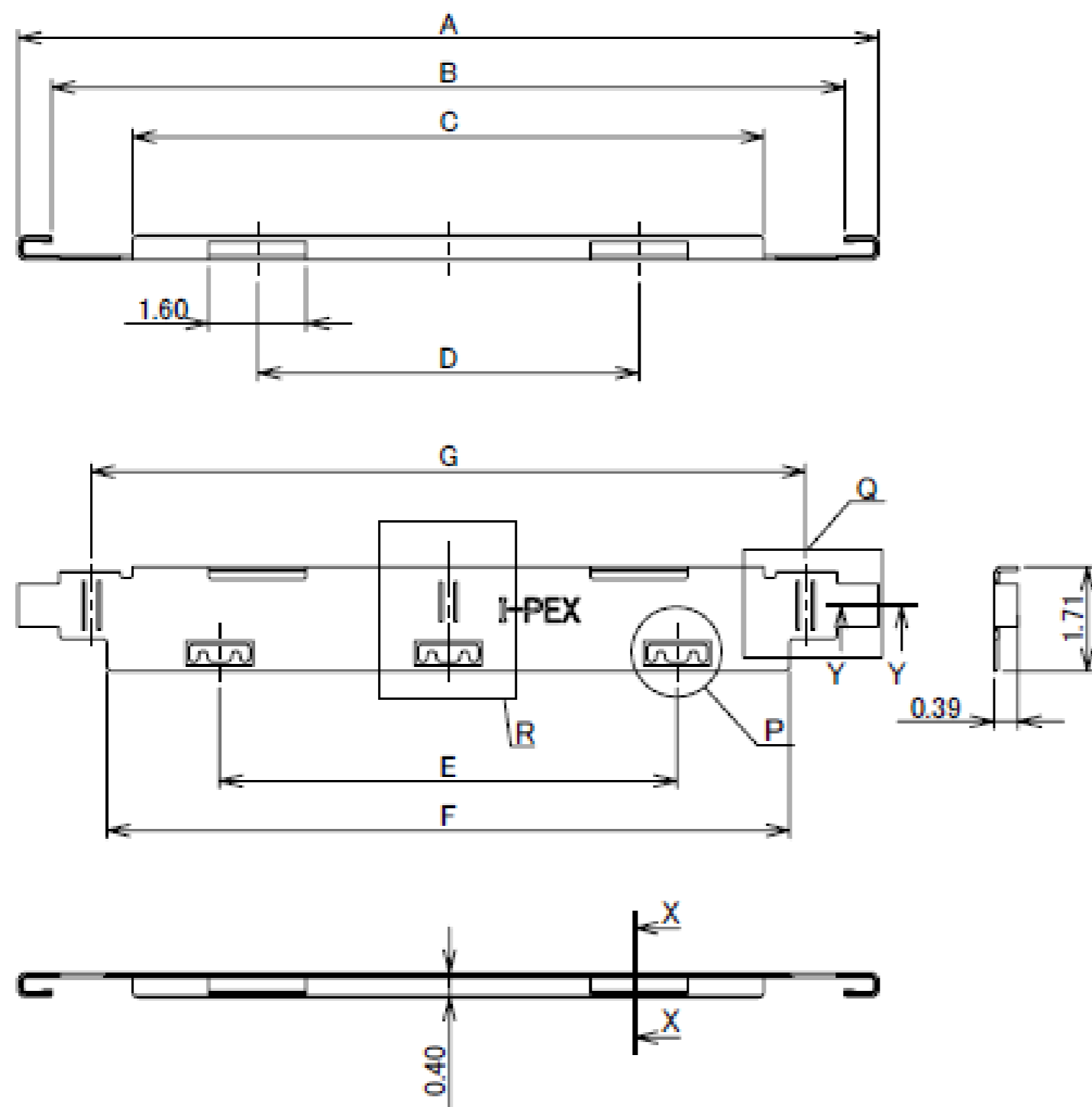


POSITION OF CONVEX(1)

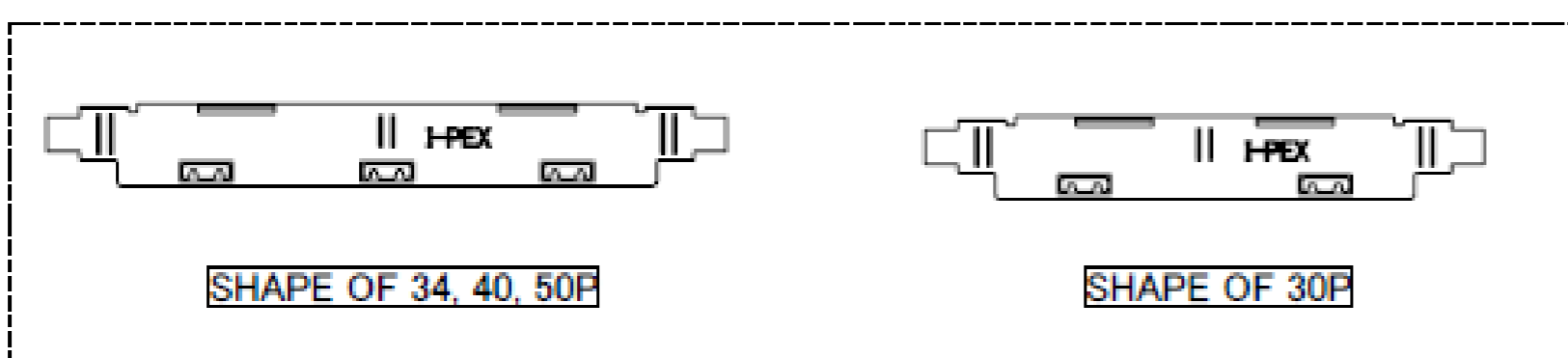
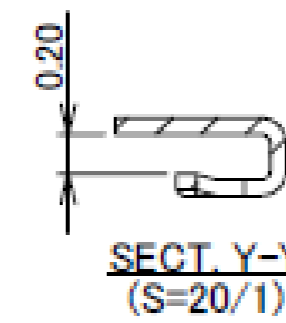
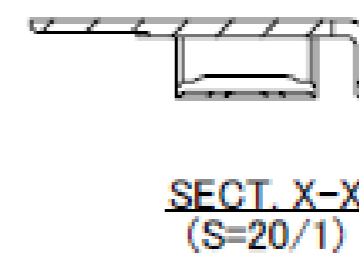
Rev.9

Plug Metal Cover

Recommended P/N	2799-0**1						
PART No.	A	B	C	D	E	F	G
2799-0301	11.60	10.50	7.85	3.75	5.00	8.70	9.20
2799-0341	12.60	11.50	8.85	4.75	6.00	9.70	10.20
2799-0401	14.10	13.00	10.35	6.25	7.50	11.20	11.70
2799-0501	16.60	15.50	12.85	6.25	10.00	13.70	14.20



① METAL COVER

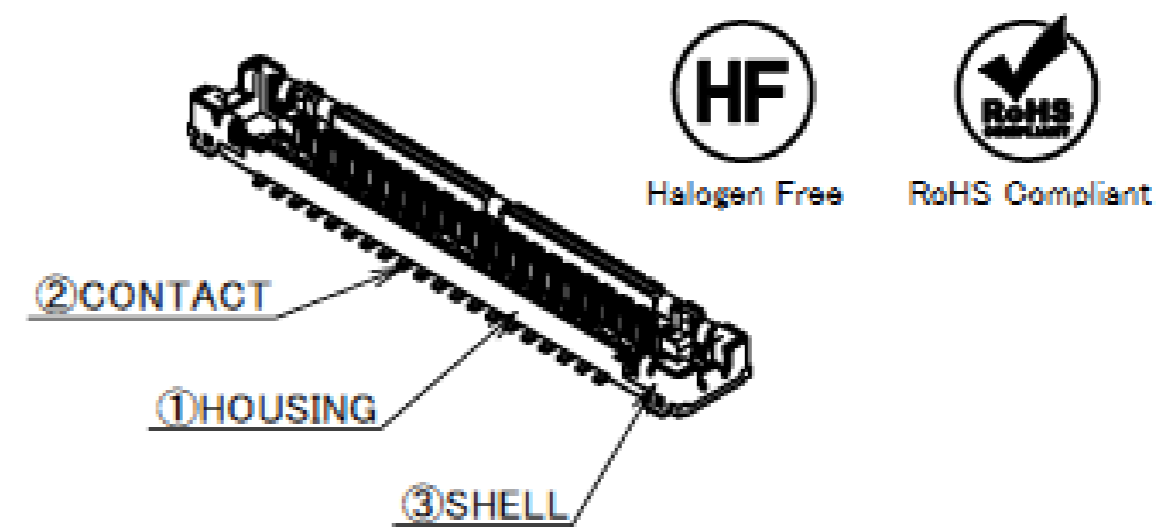
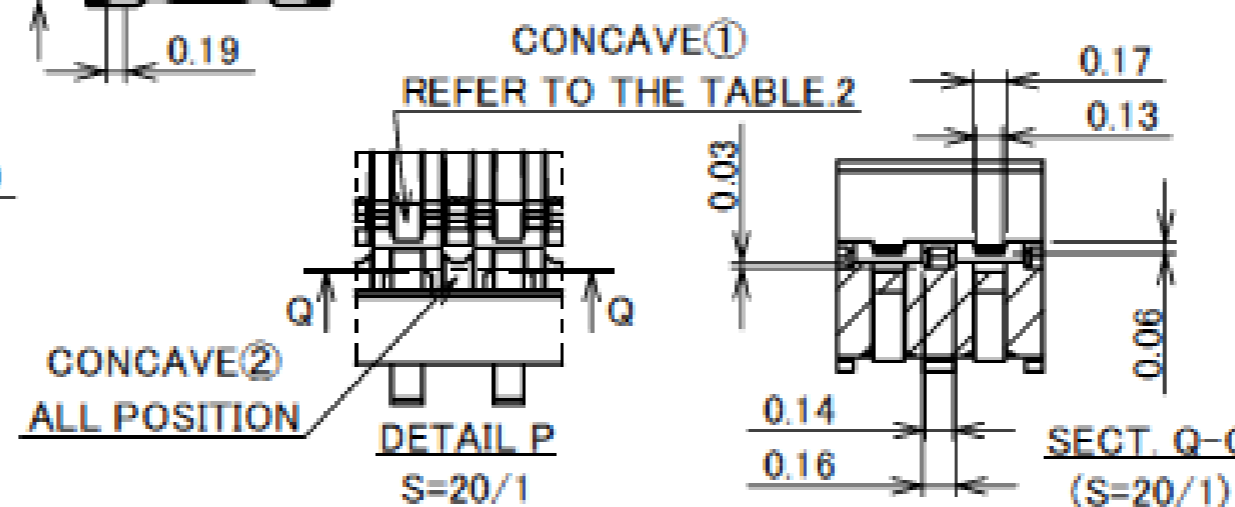
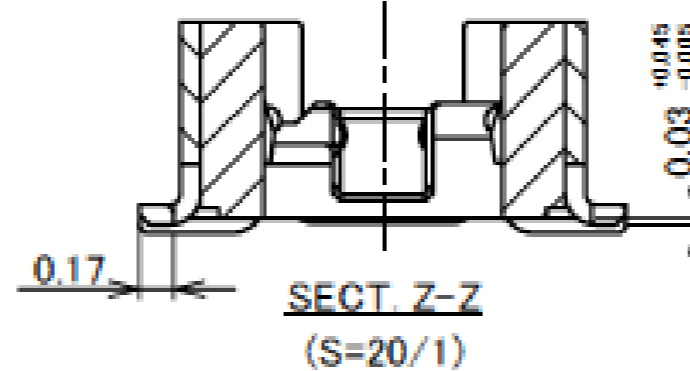
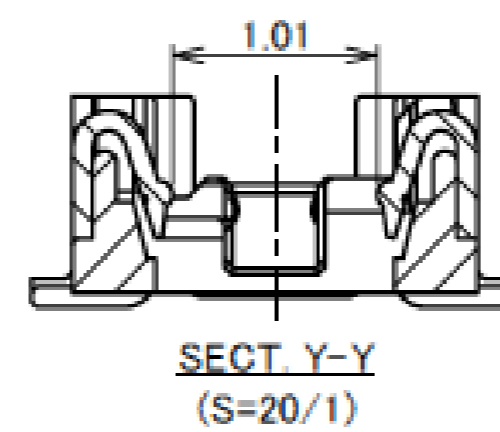
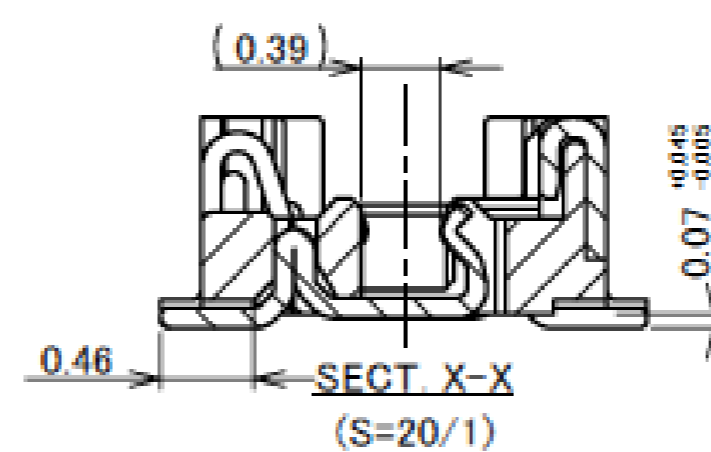
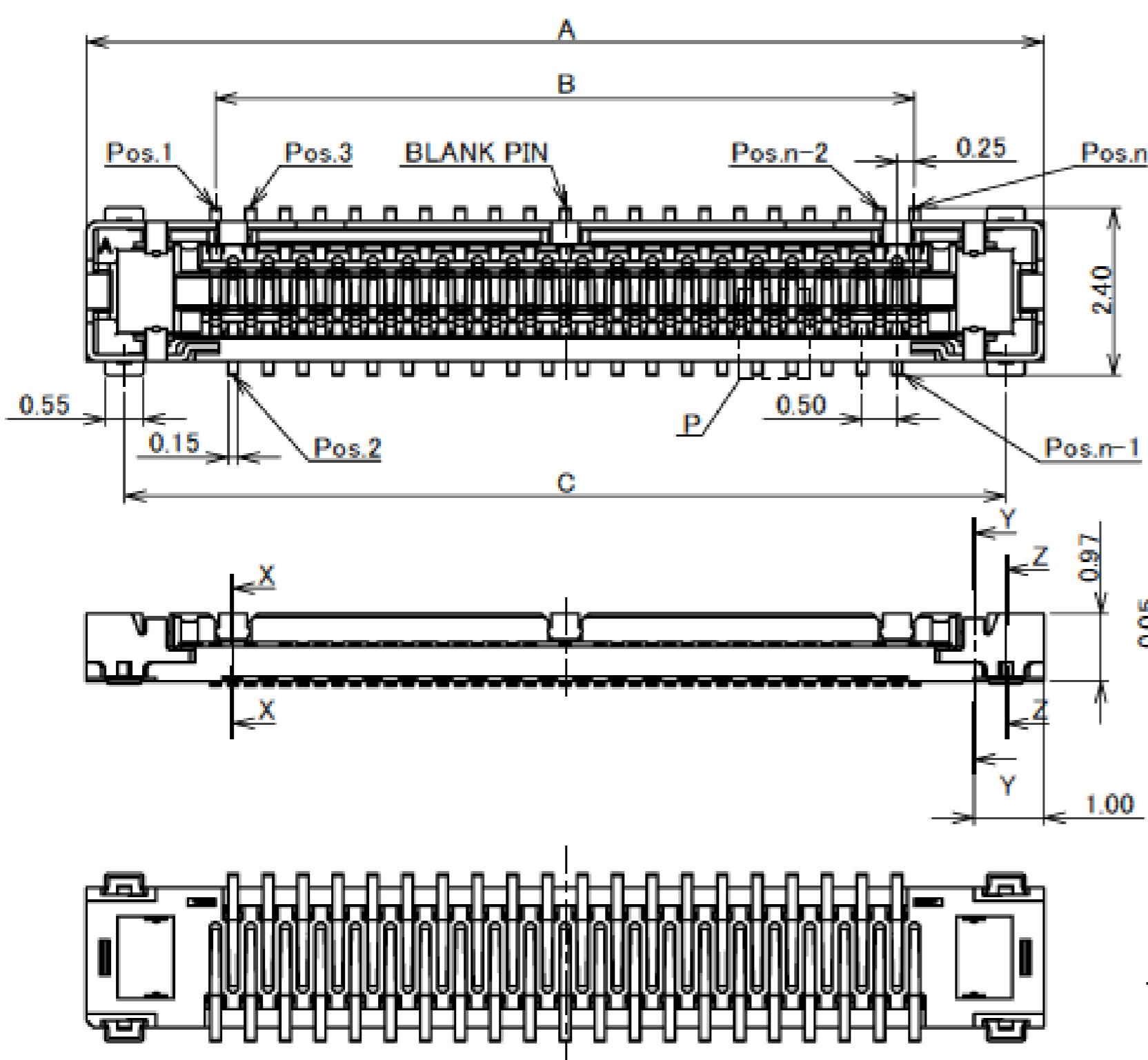


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	METAL COVER	SUS	Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.

Rev.9

Receptacle Assembly

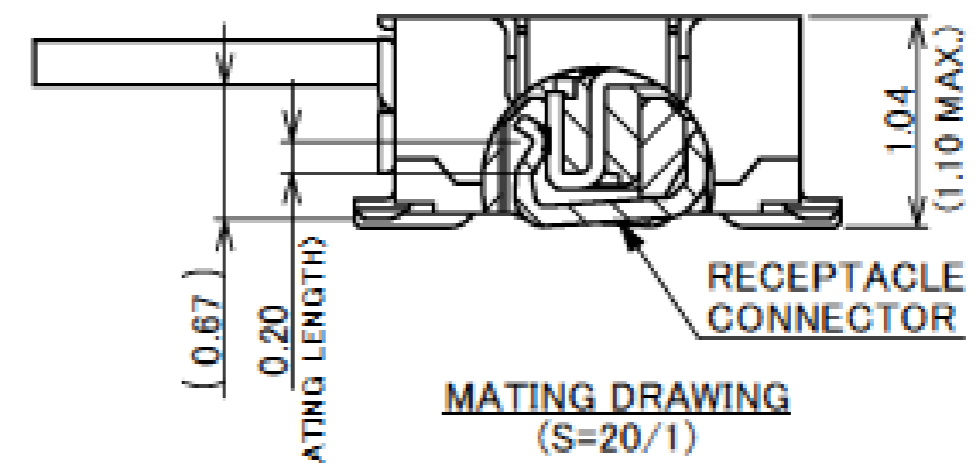
RECOMMENDED PART No.	20533-2**E				
PART NO.	Pos.	A	B	C	D
20533-230E	30	11.20	7.50	10.11	1.60
20533-234E	34	12.20	8.50	11.11	2.10
20533-240E	40	13.70	10.00	12.61	2.85
20533-250E	50	16.20	12.50	15.11	4.10



② CONTACT

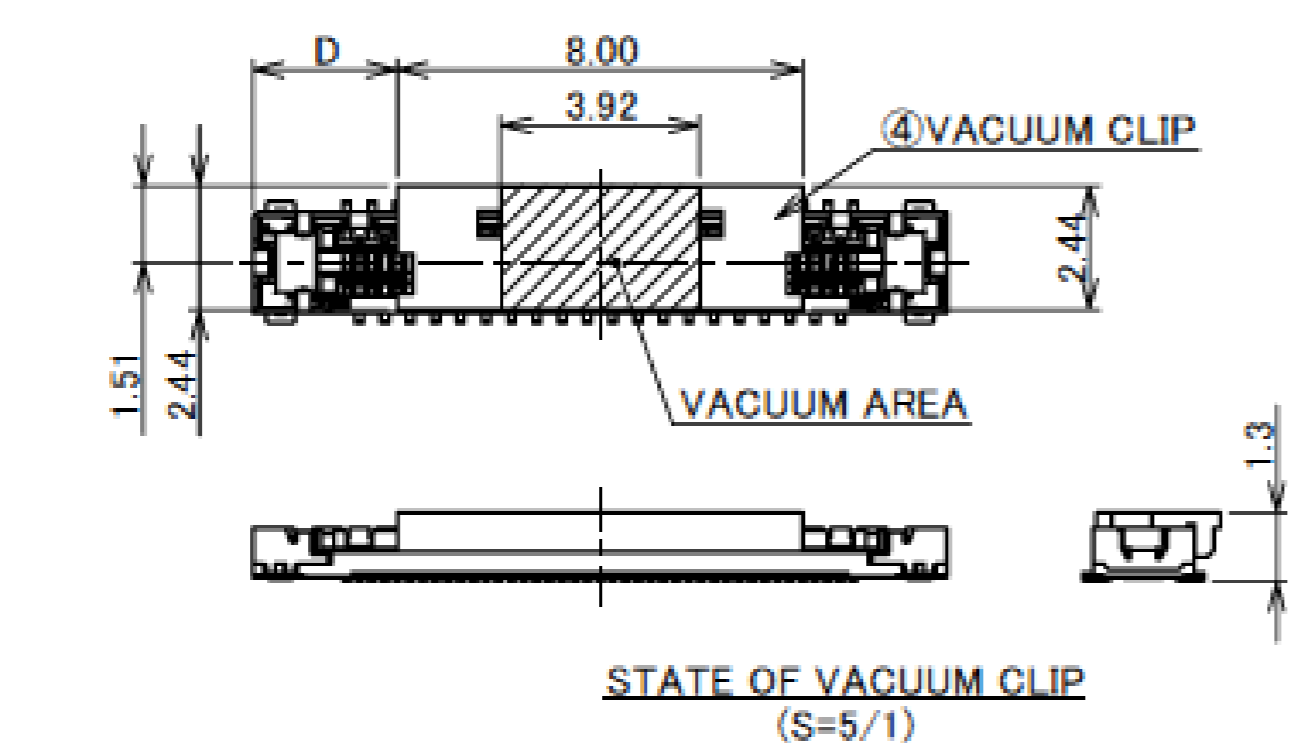
① HOUSING

③ SHELL



POSITION OF CONCAVE ①
30P : 2, 6, 8, 12, BLANK PIN, 19, 23, 25, 29 pos. (9 POSITIONS)
34P : 4, 8, 10, 14, BLANK PIN, 21, 25, 27, 31 pos. (9 POSITIONS)
40P : 6, 8, 12, 14, 18, 23, 25, 29, 33, 35 pos. (10 POSITIONS)
50P : 6, 8, 12, 14, 18, 22, BLANK PIN, 29, 33, 37, 39, 43, 45 pos. (13 POSITIONS)

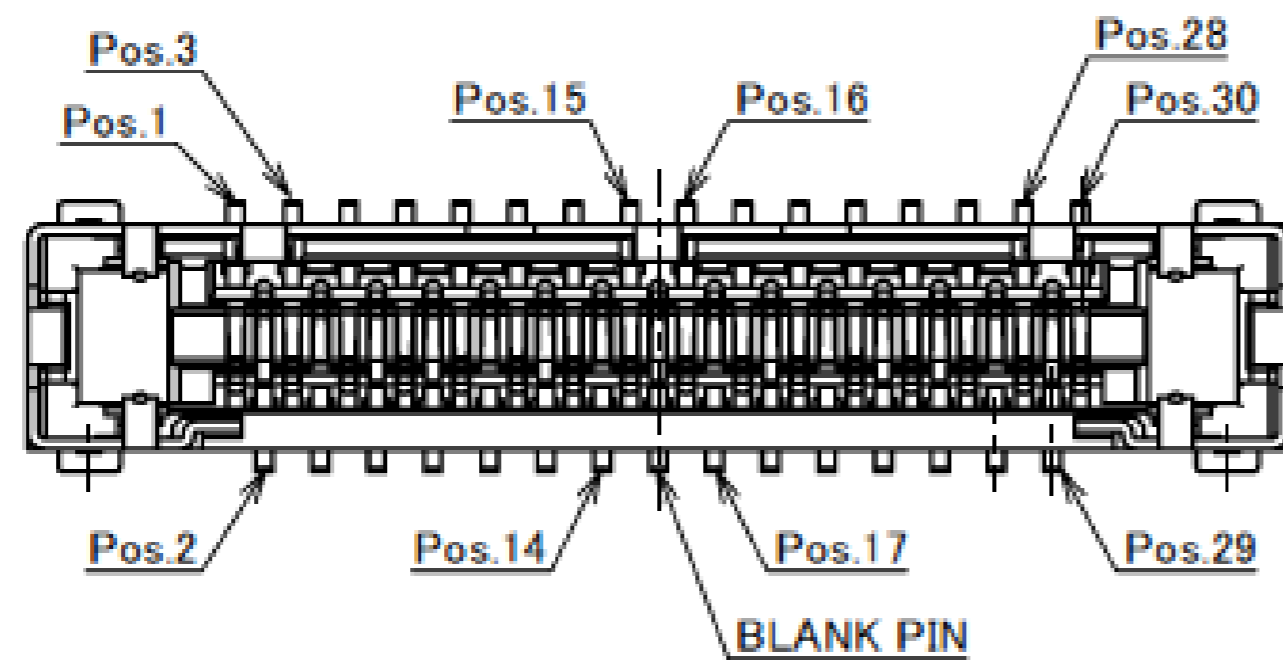
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CLIP	LCP	UL94V-0, BEIGE
3	SHELL	PHOSPHOR BRONZE	Au 0.02 μm MIN. OVER Ni 1.00 μm MIN.
2	COTANCT	PHOSPHOR BRONZE	CONTACT AREA : Au 0.1 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK



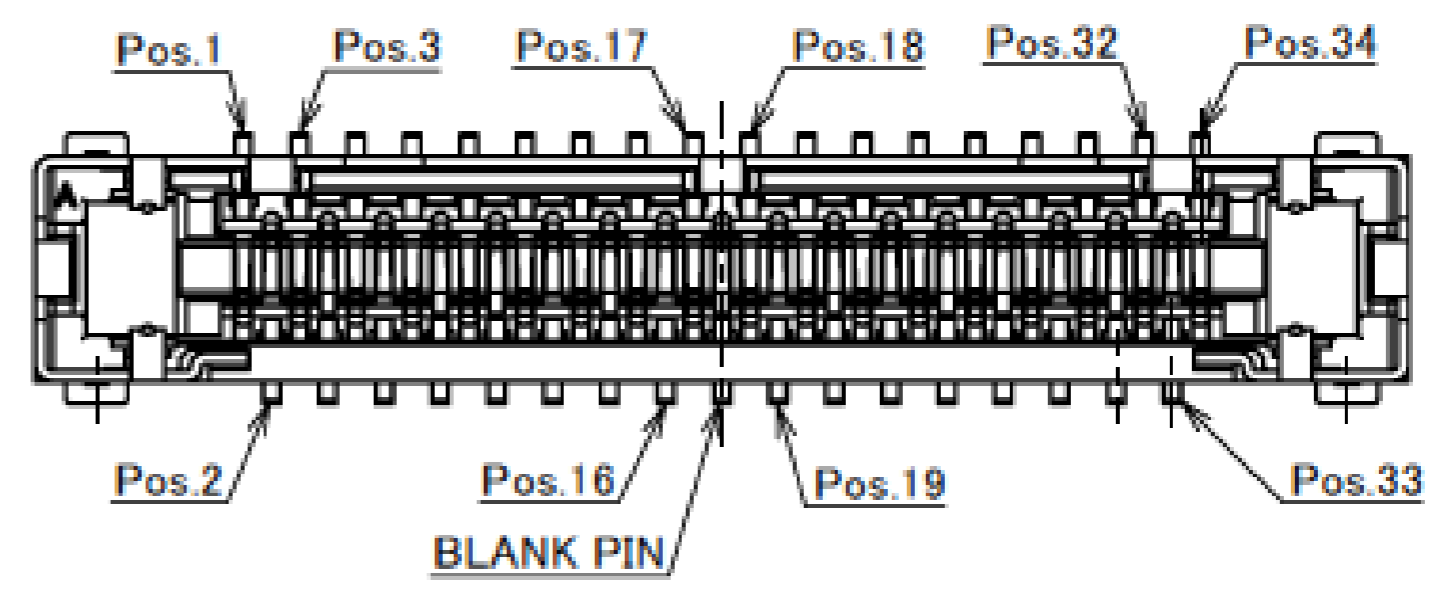
Rev.17

Receptacle Assembly

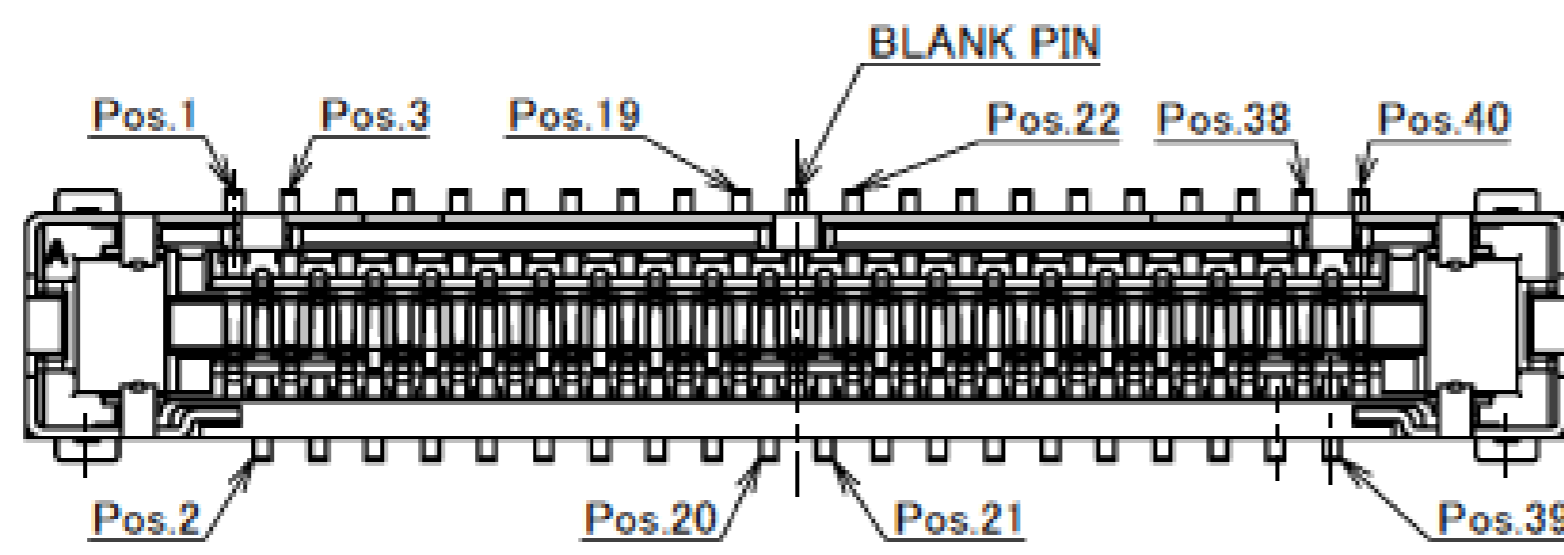
PART No.	Pos
20533-230E	30
20533-234E	34
20533-240E	40
20533-250E	50



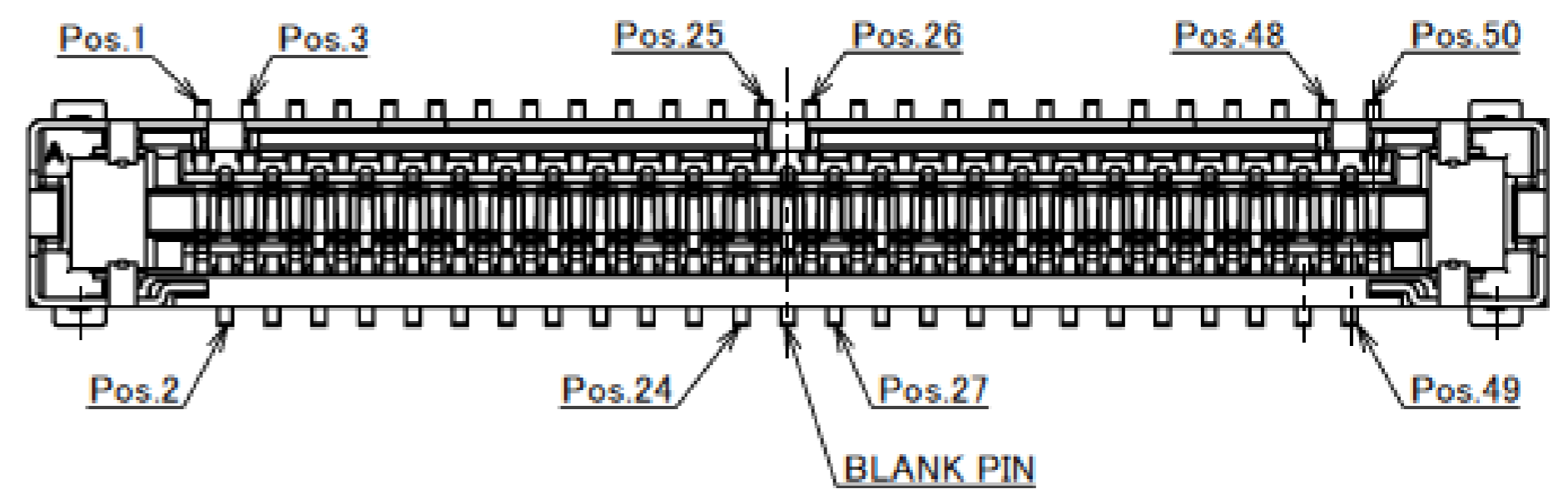
30P CONTACT LAYOUT
(S=10/1)



34P CONTACT LAYOUT
(S=10/1)



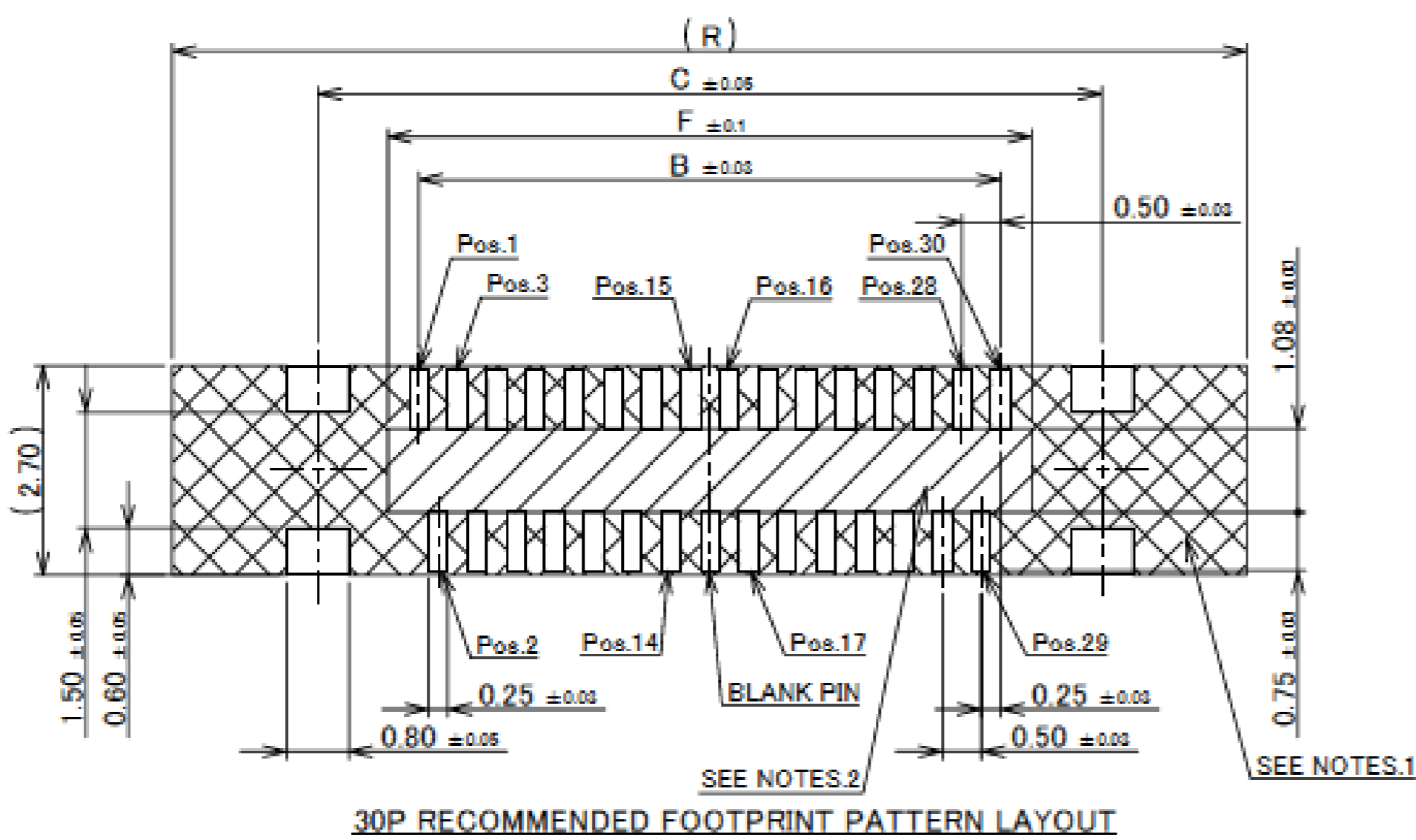
40P CONTACT LAYOUT
(S=10/1)



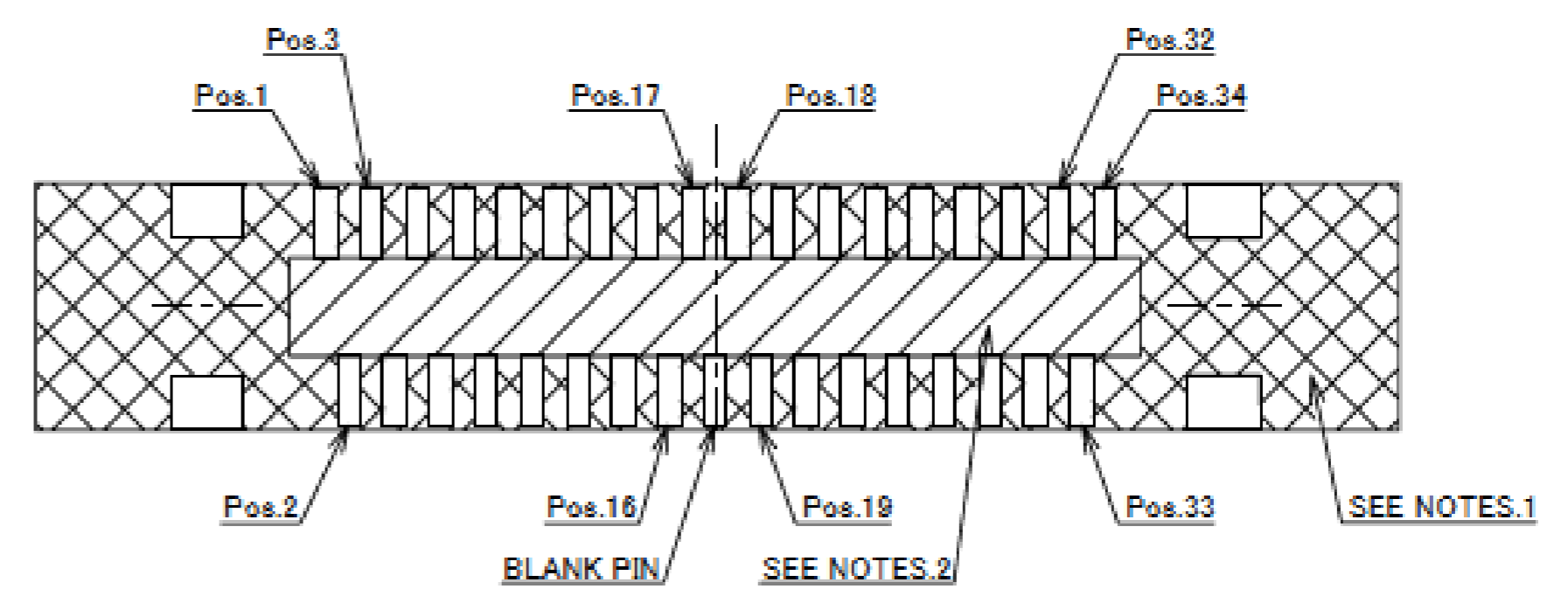
50P CONTACT LAYOUT
(S=10/1)

Rev.17

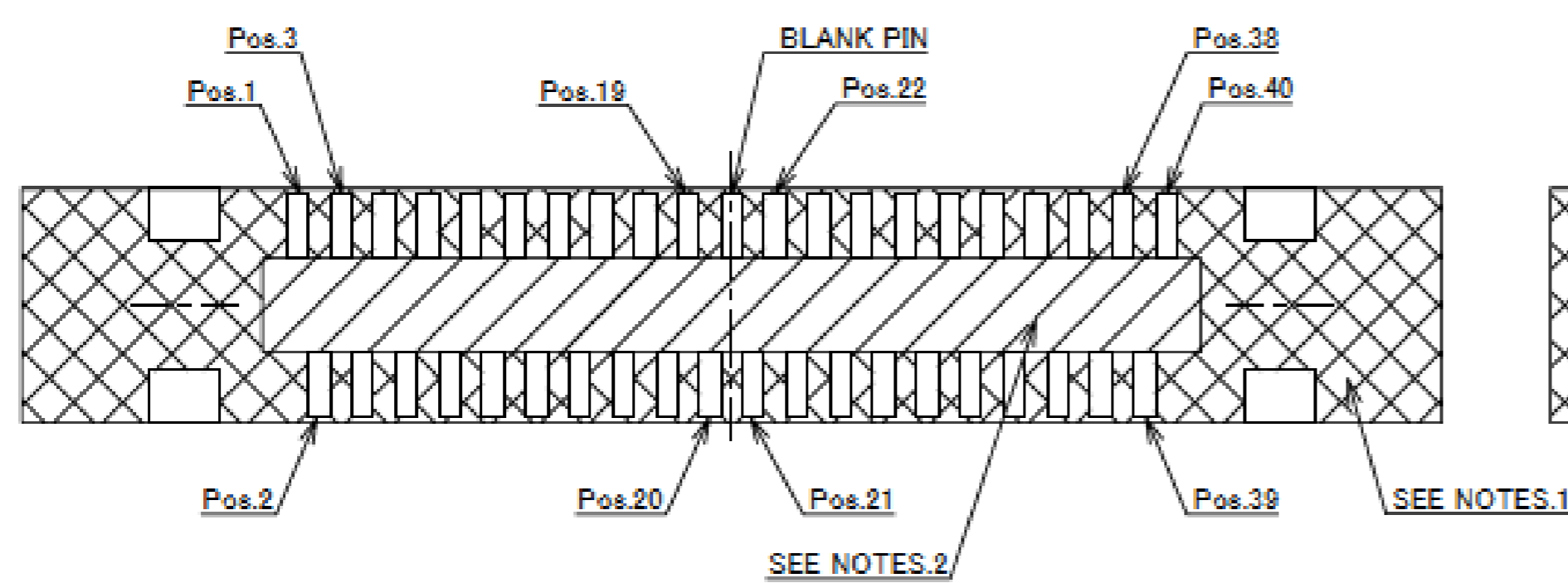
PART No.	Pos	B	C	F	R
20533-230E	30	7.50	10.11	8.30	13.85
20533-234E	34	8.50	11.11	9.30	14.85
20533-240E	40	10.00	12.61	10.80	16.35
20533-250E	50	12.50	15.11	13.30	18.85



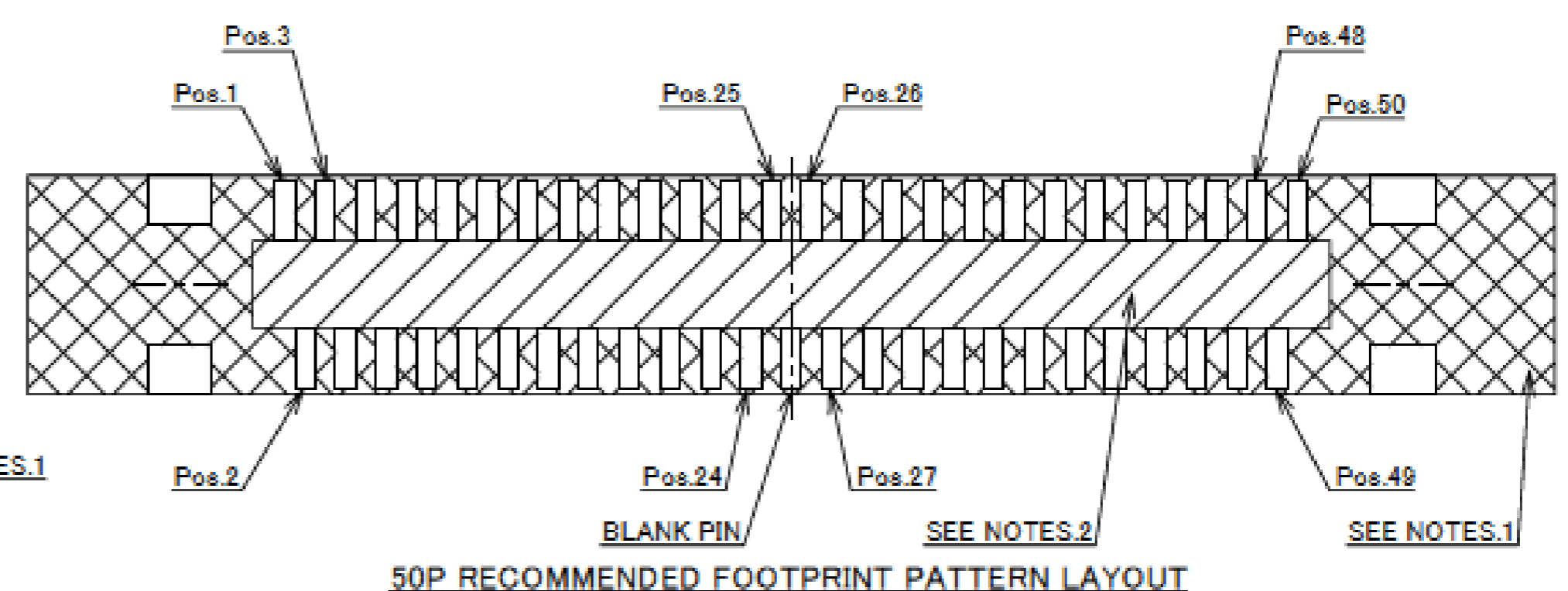
30P RECOMMENDED FOOTPRINT PATTERN LAYOUT



34P RECOMMENDED FOOTPRINT PATTERN LAYOUT



40P RECOMMENDED FOOTPRINT PATTERN LAYOUT



50P RECOMMENDED FOOTPRINT PATTERN LAYOUT

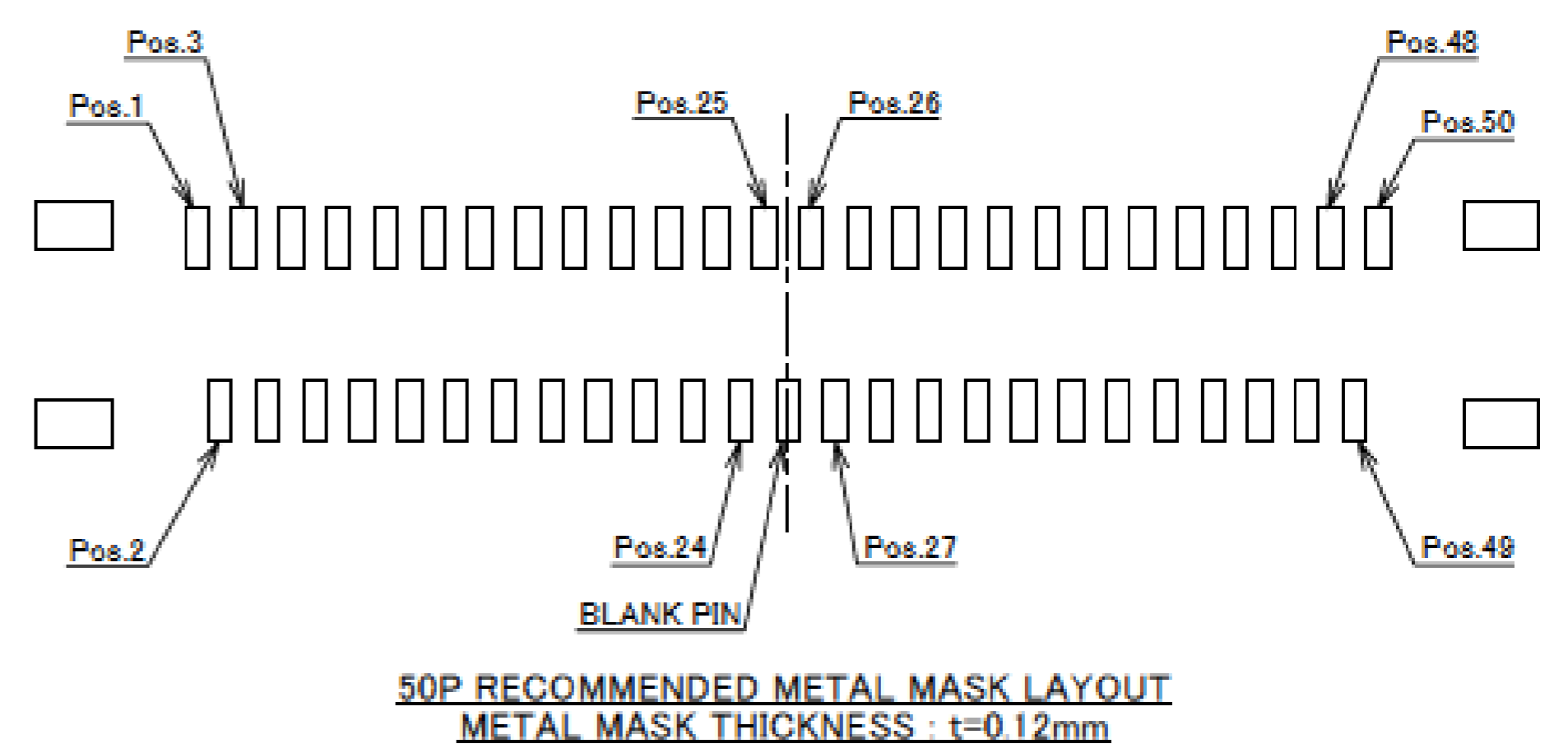
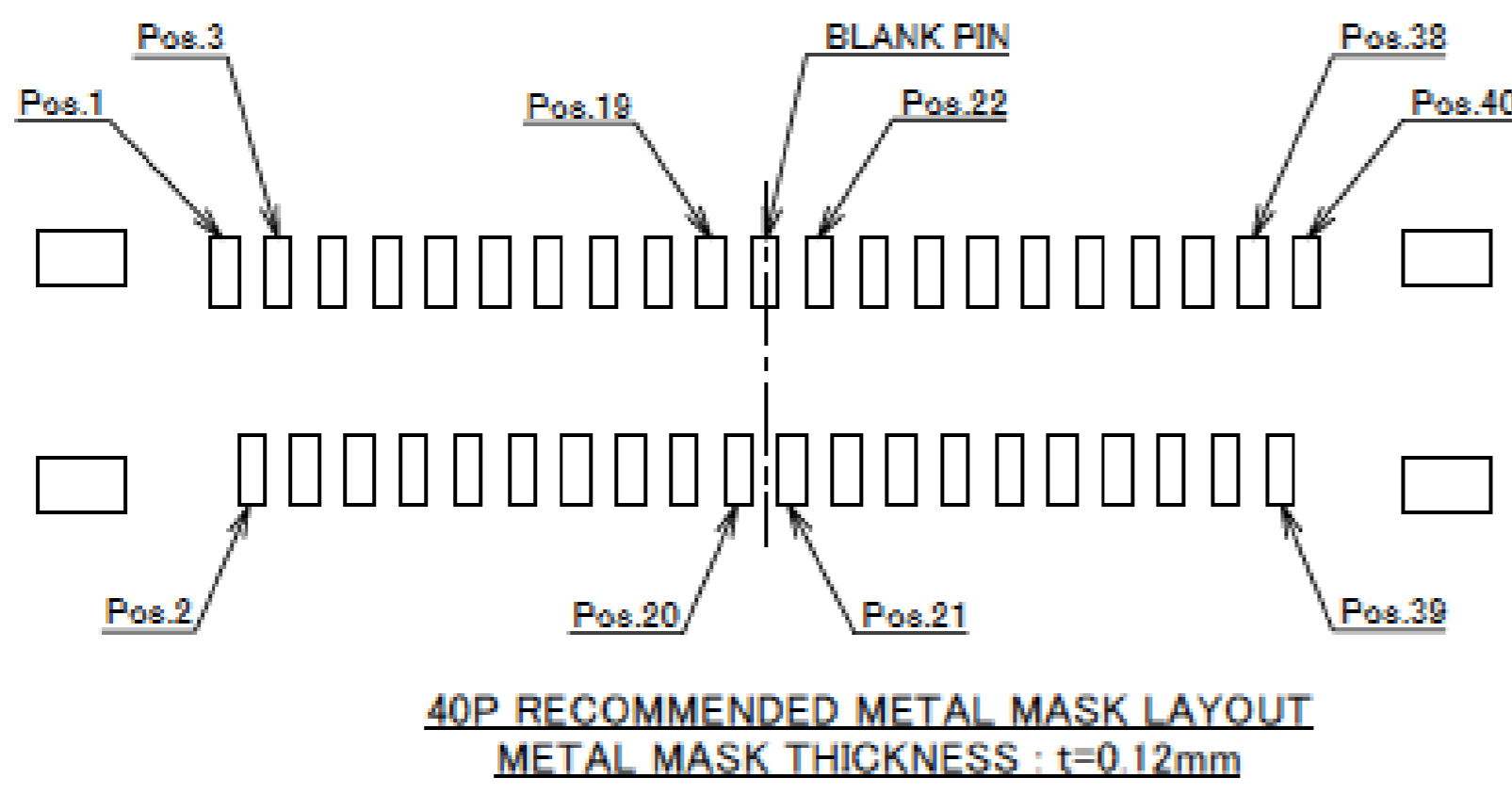
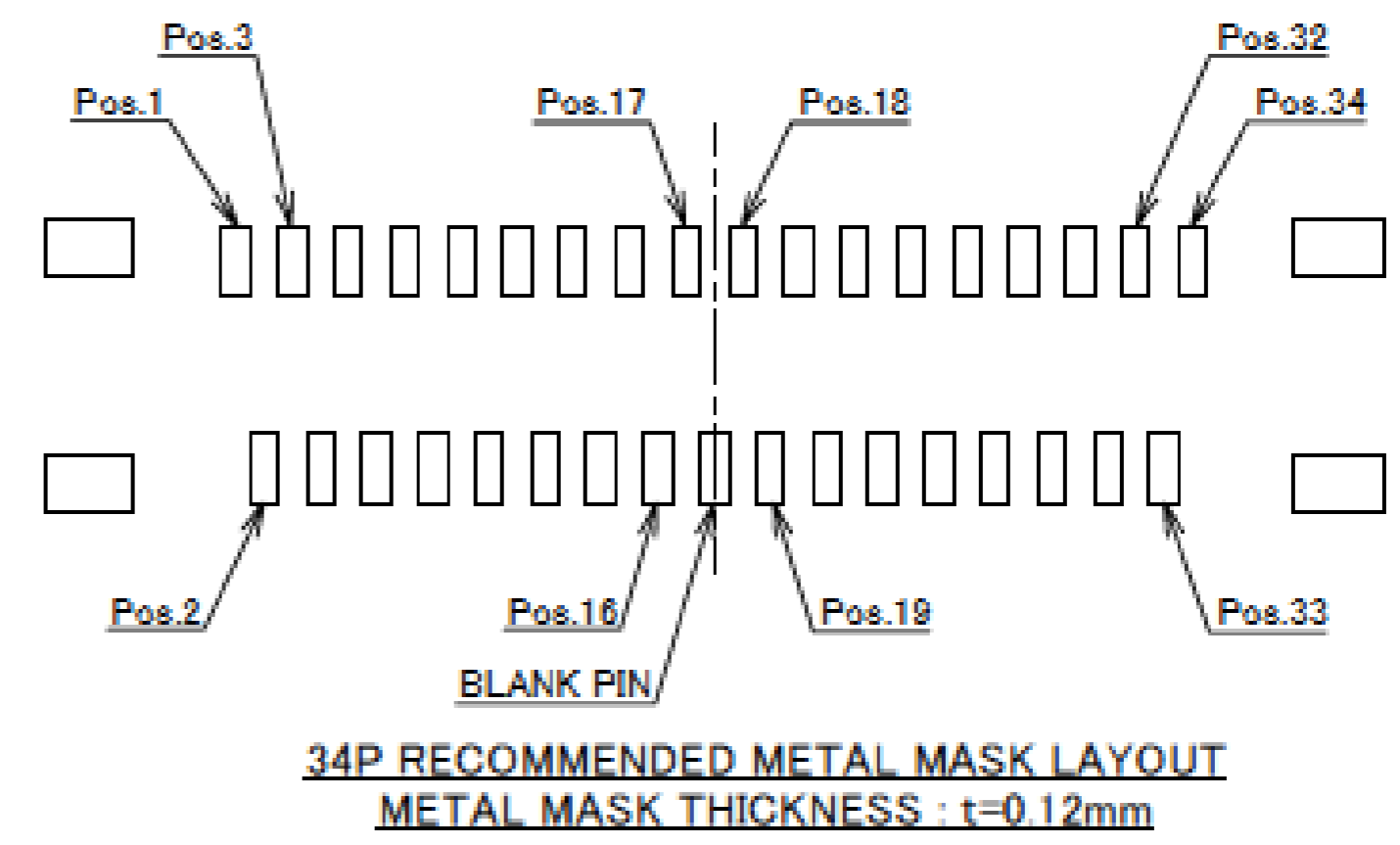
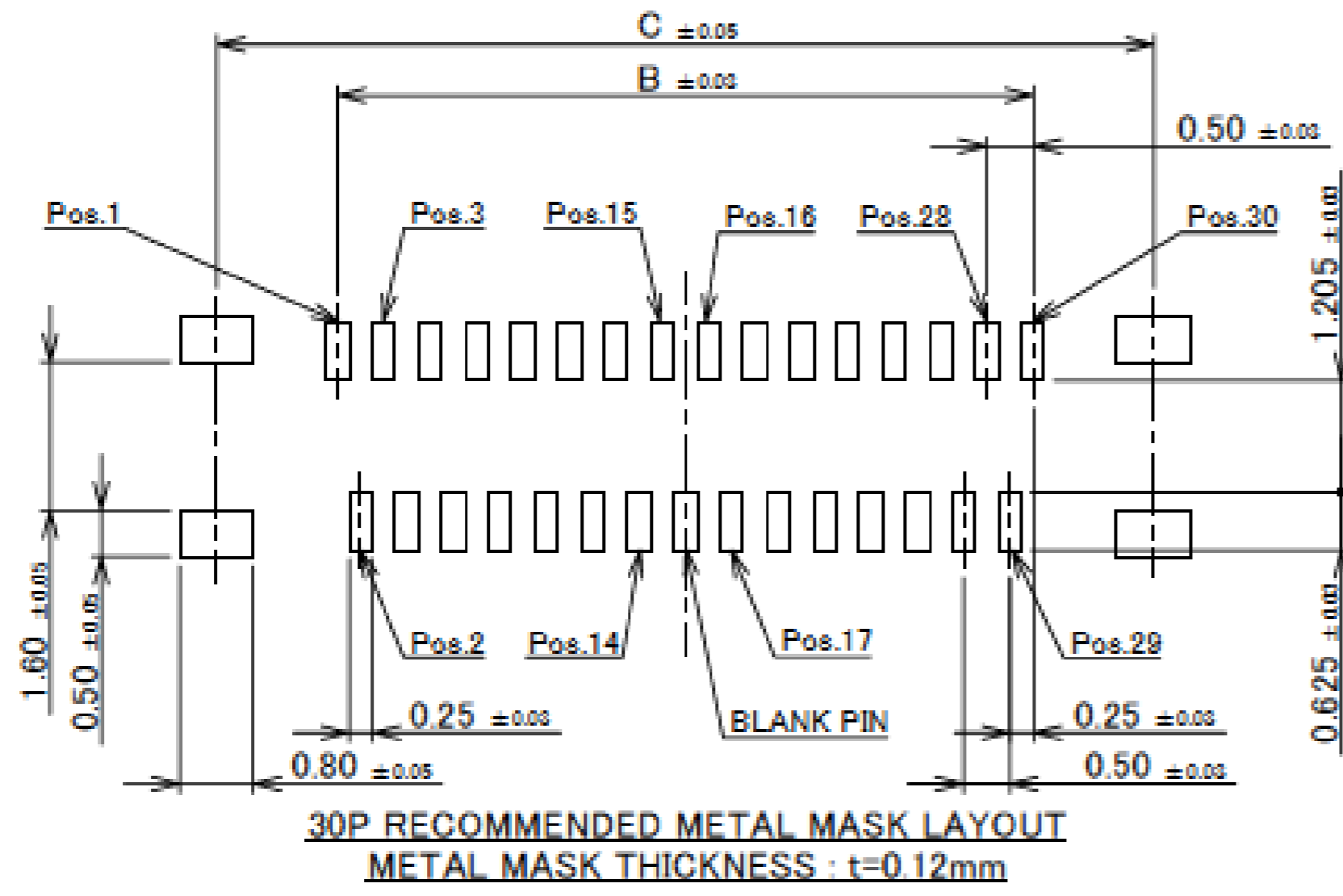
NOTES.

- DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.
- SOLDER RESIST MUST BE APPLIED TO THIS AREA.

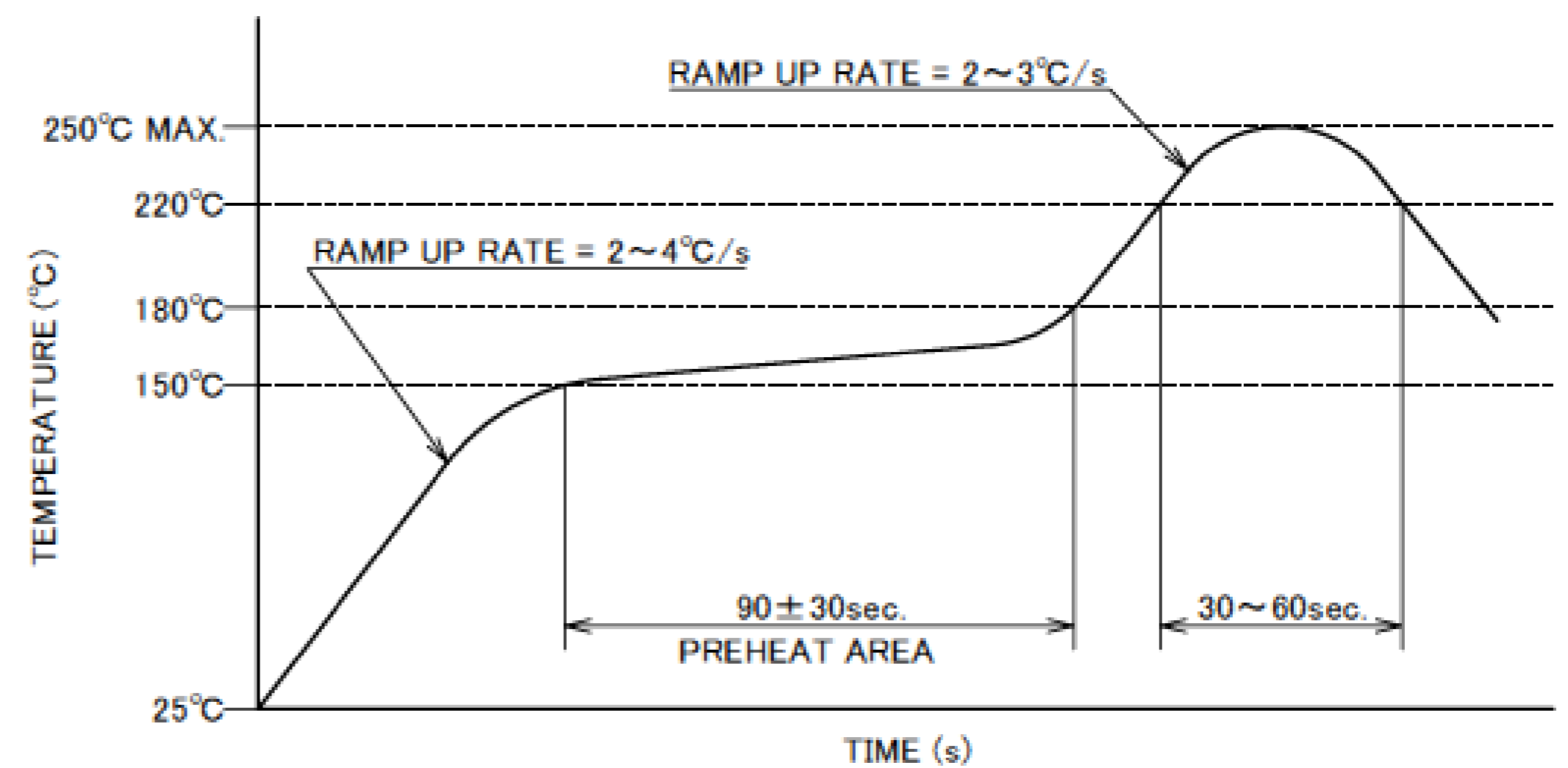
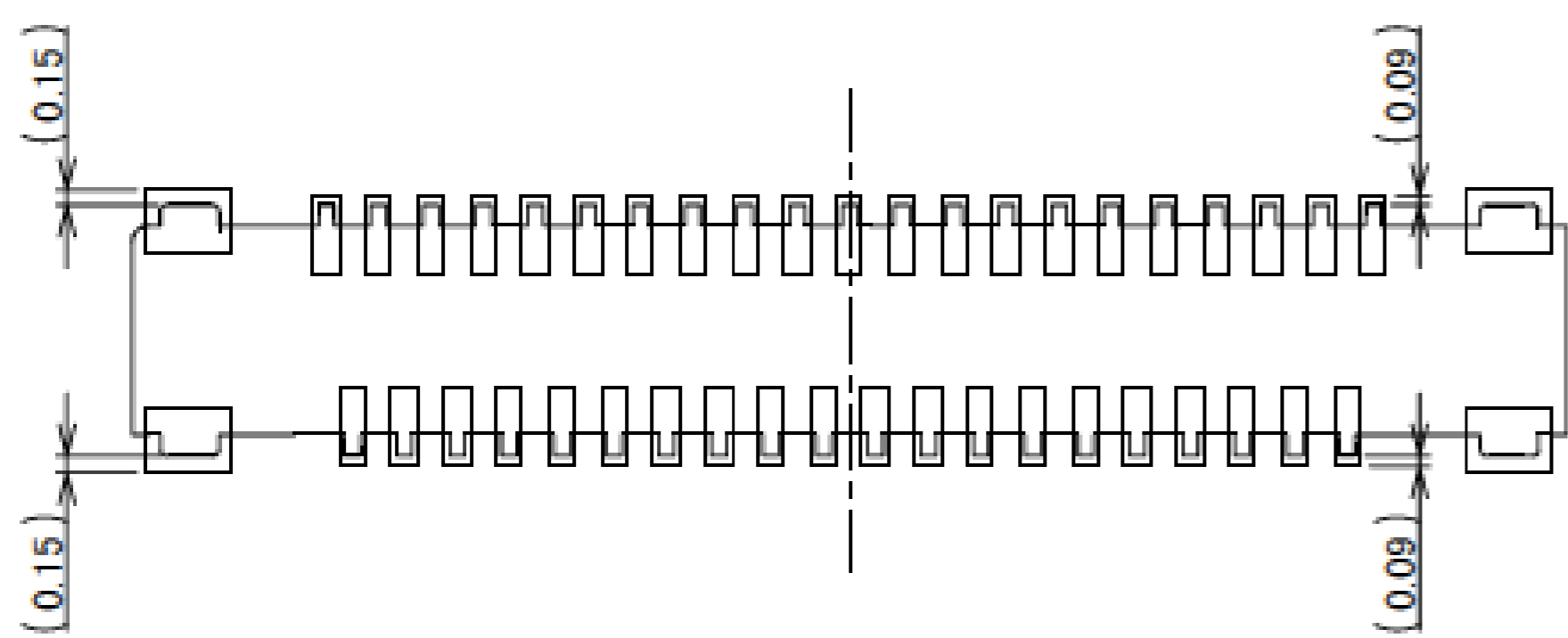
Rev.17

Receptacle Assembly

PART No.	Pos	B	C
20533-230E	30	7.50	10.11
20533-234E	34	8.50	11.11
20533-240E	40	12.61	
20533-250E	50	12.50	15.11



Rev.17



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

Receptacle Assembly

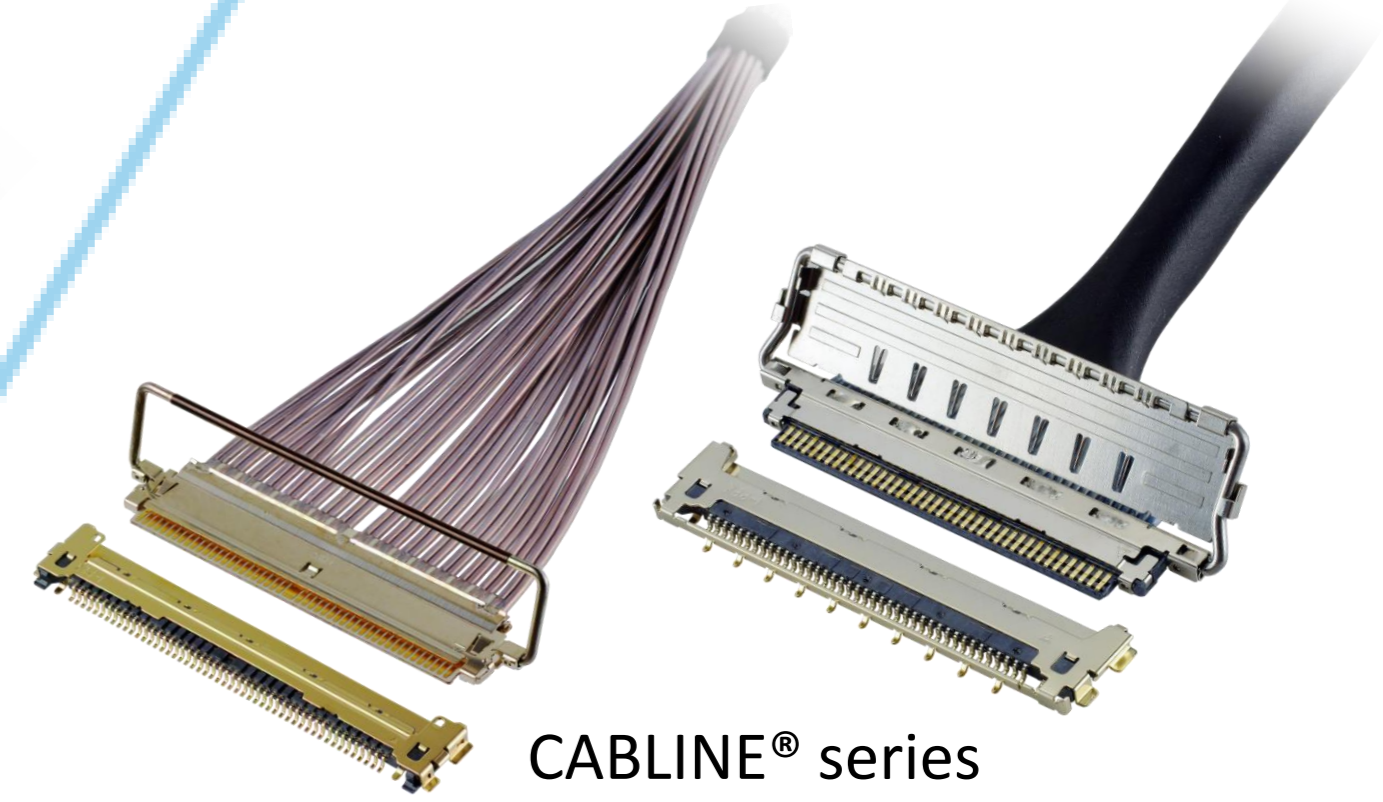
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 ,46 DISCRETE WIRE : AWG#39
RATING VOLTAGE	50V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED.
RATING AMPERAGE (FOR CONTACT)	0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 6 CONTACTS) 0.15A AC/DC [AWG#44] 0.10A AC/DC [AWG#46] ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	75% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 450mohm MAX.(AWG#39) 1080mohm MAX.(AWG#44) 1880mohm MAX.(AWG#46) AFTER TEST : \triangleleft40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \triangleleft40mohm MAX.
INSULATION RESISTANCE	INITIAL : 100Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC100V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 26.4N MAX. 34P : 27.6N MAX. 40P : 29.4N MAX. 50P : 32.4N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 1.5N MIN. 34P : 1.9N MIN. 40P : 2.5N MIN. 50P : 3.5N MIN.
CABLE RETENTION FORCE	30P : 15.0N MIN. 34P : 17.0N MIN. 40P : 20.0N MIN. 50P : 25.0N MIN.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-2887
TEST REPORT	TR-24028
INSTRUCTION MANUAL	HIM-10001
PACKING STANDARD	300-874
APPEARANCE CRITERIA No.	QLS-A***

Rev.17

Custom Connectors Available

 RF Connectors

MHF® series



CABLINA® series

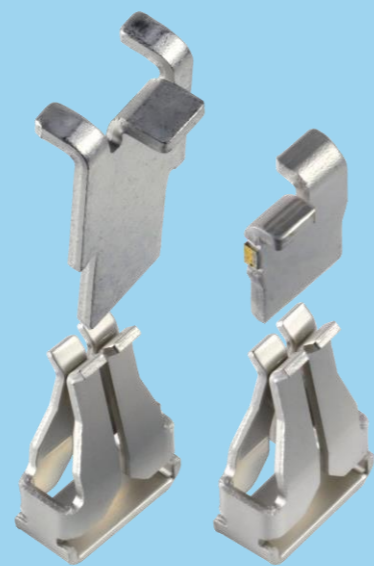


Micro-Coaxial/Twinax Connectors

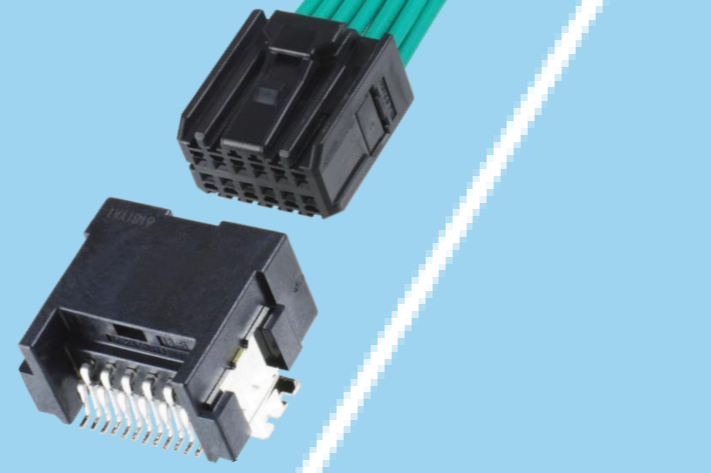


Wire-to-Board Connectors/Terminals

AP series



ISH® series



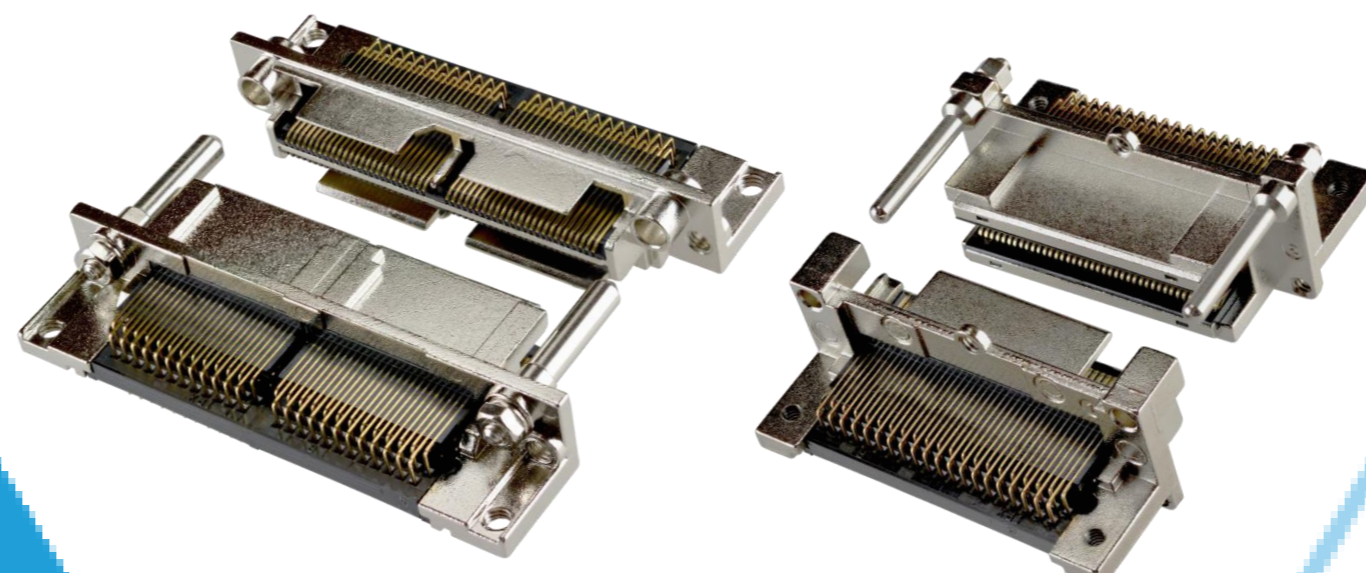
NOVASTACK® series



Board-to-Board Connectors



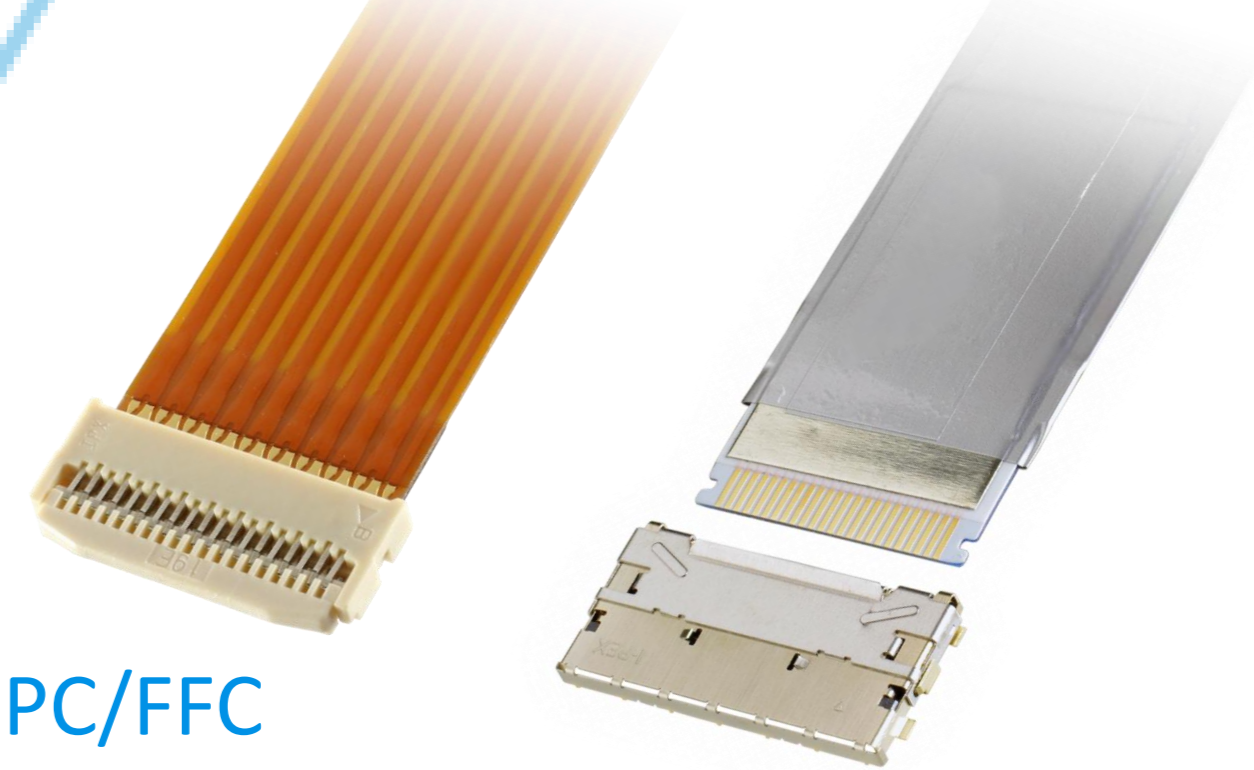
I/O Connectors



MINIDOCK™ series

MINIFLEX® series

EVAFLEX® series



FPC/FFC Connectors



Inquiry



I-PEX, MHF, CABLINE, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCK and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update information on these documents. Please be sure to read and understand the latest "Precautions for Use" and "Instruction Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

www.i-pex.com



I-PEX

© I-PEX Inc. 2025
All rights reserved