

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	1.0 +/- 0.1
	Width	Formula: 4.1 + (0.25*?p)
	Depth	2.4
Pin Counts	Range	Up to 50
	Available	30, 34, 40, 50

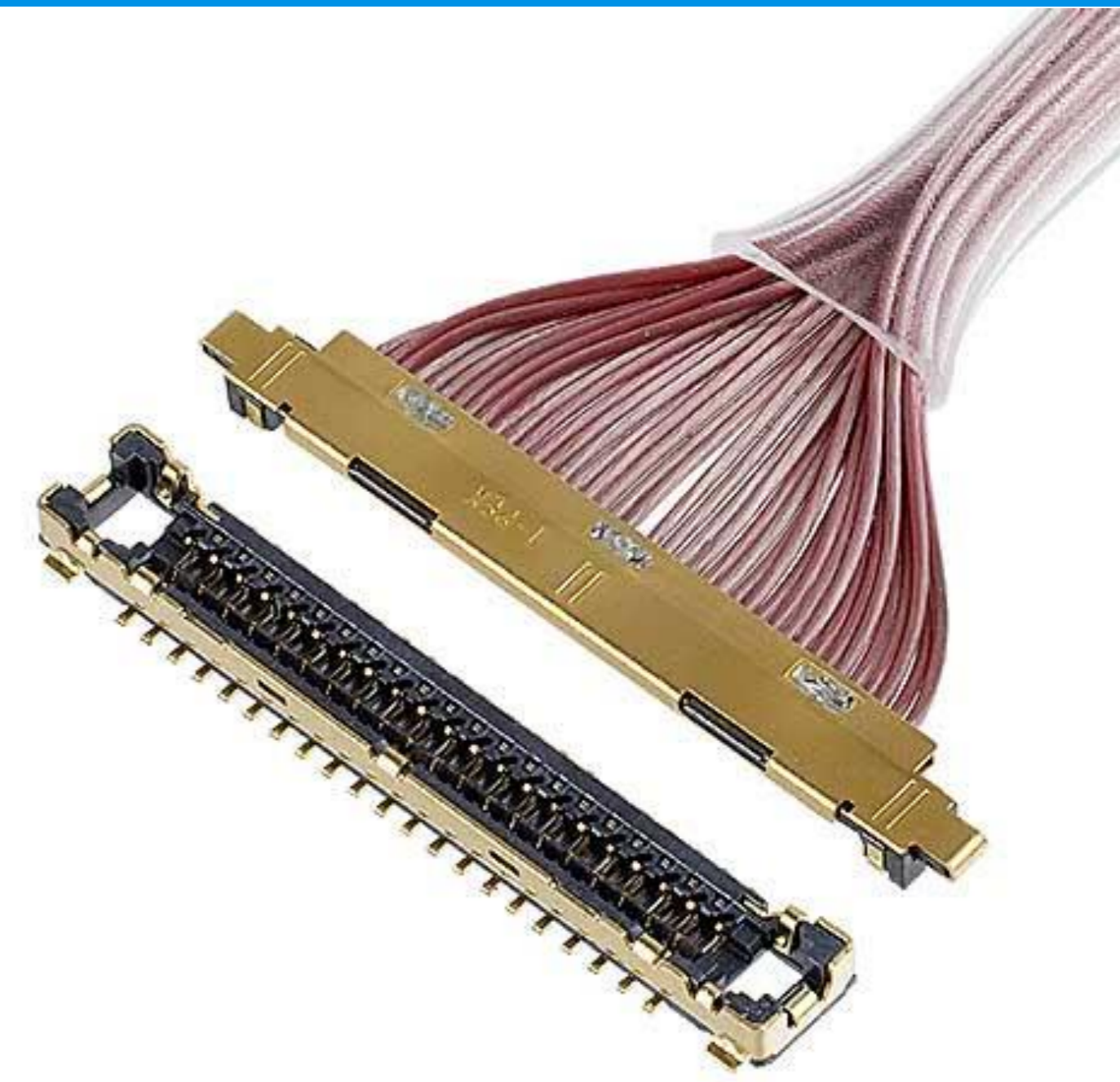
Applicable Cable Size:

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):

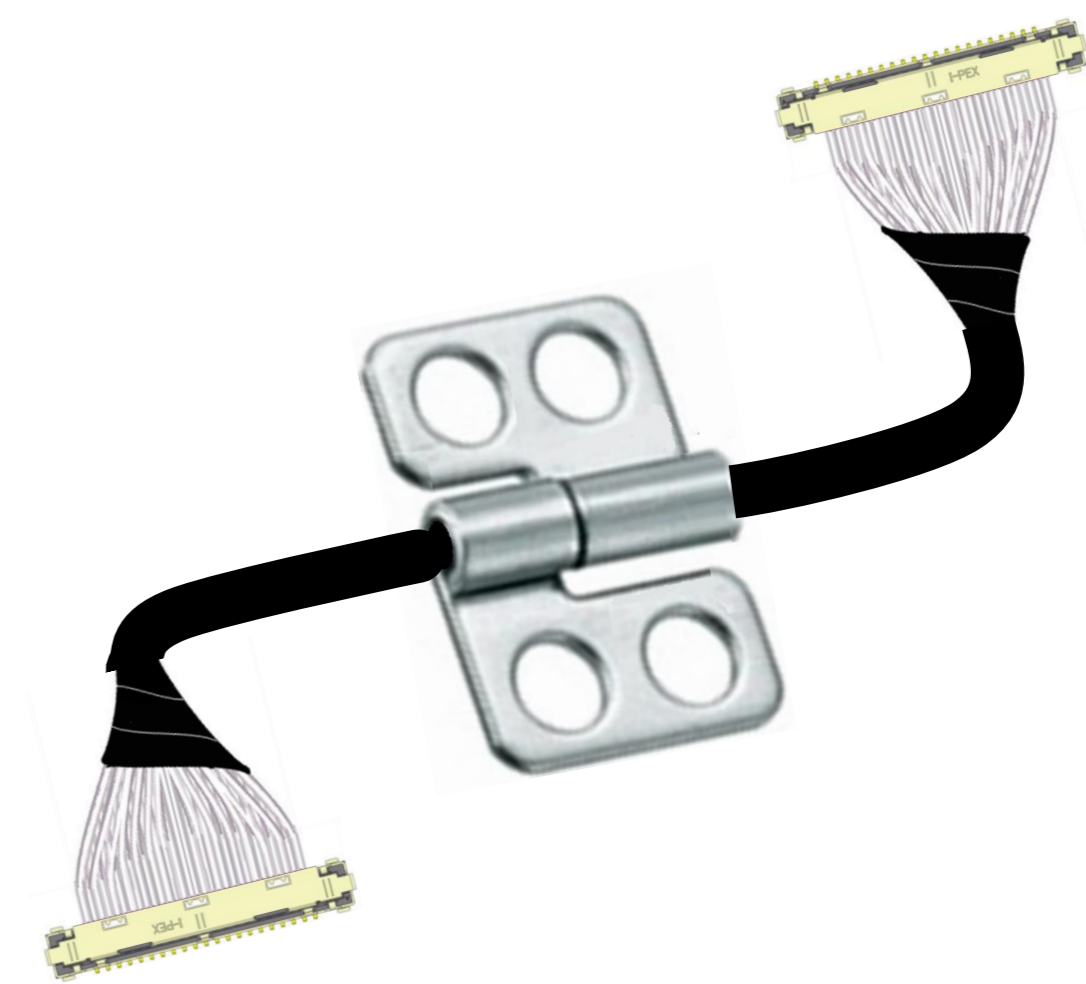
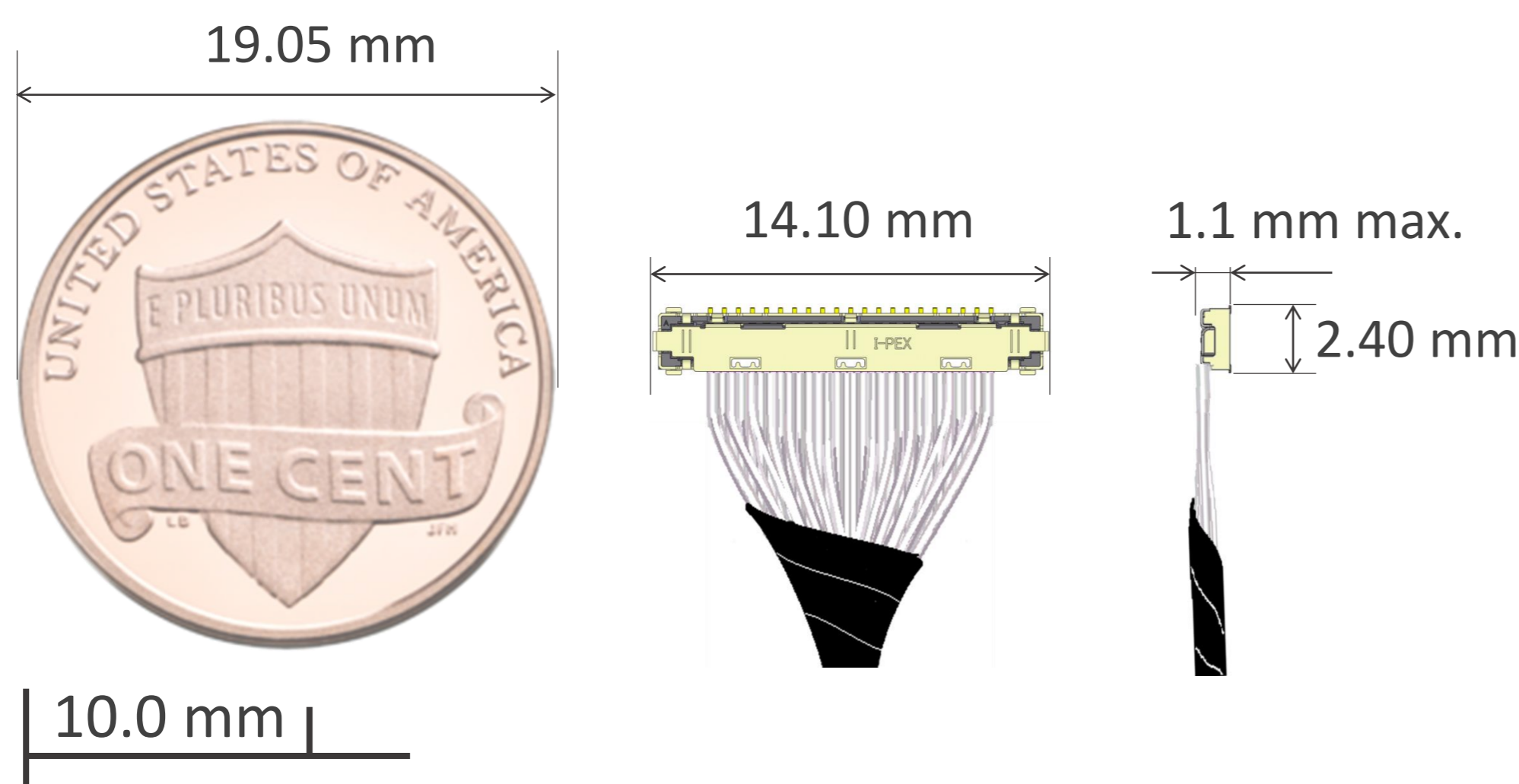
USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps)

* 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.

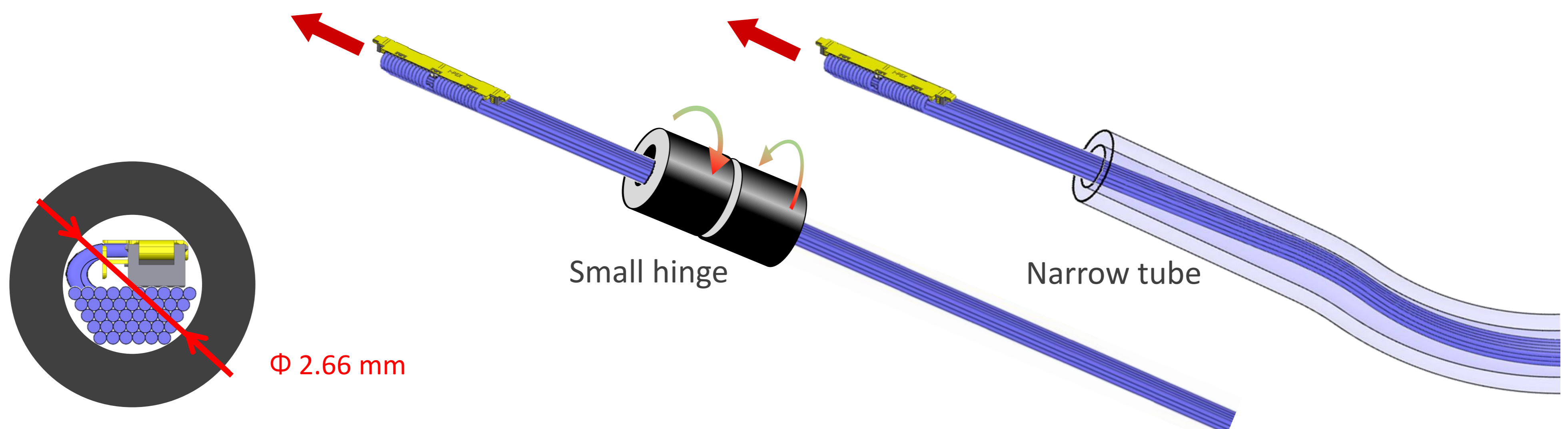


Flexible micro-coaxial cable harness is suitable for small applications with a hinge design.

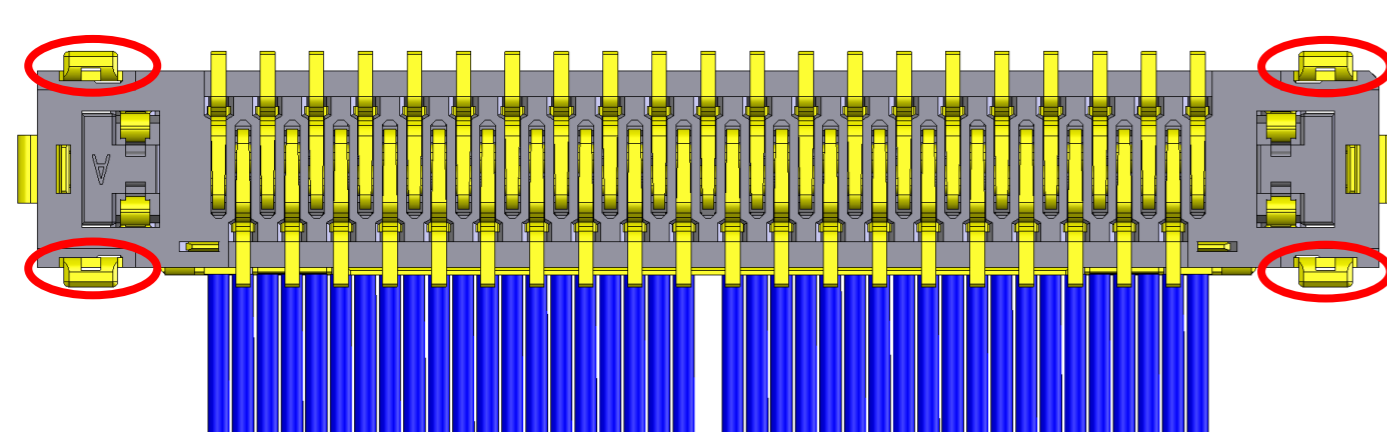
► Slim Plug Design, Suitable for Through-hinge Assemblies

Simulation Reference Example:

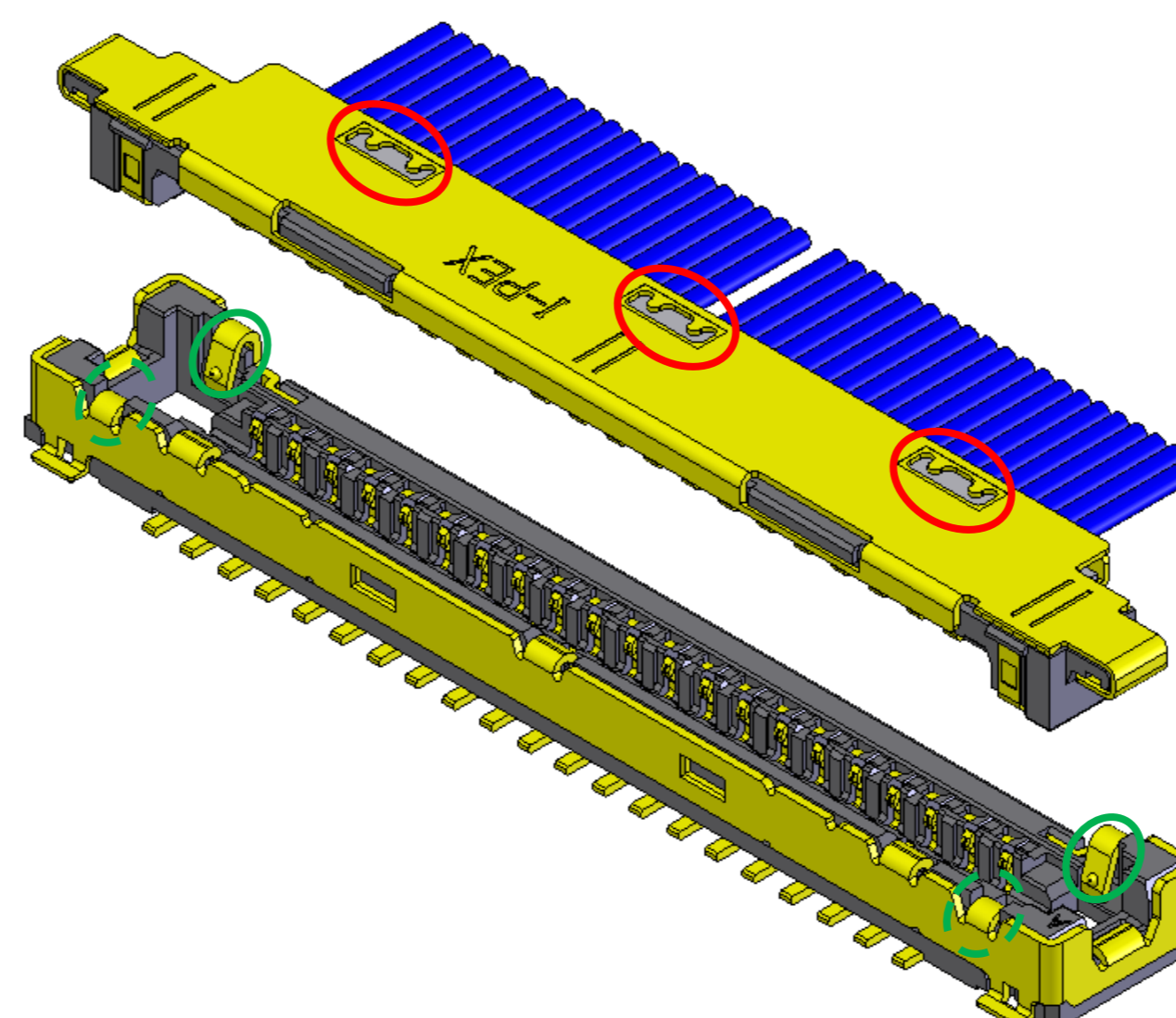
UX II 40p plug with 0.24 mm cable outer diameter harness can go through 2.66 mm inner diameter.



► EMI Shielding and Multi-point Ground Design



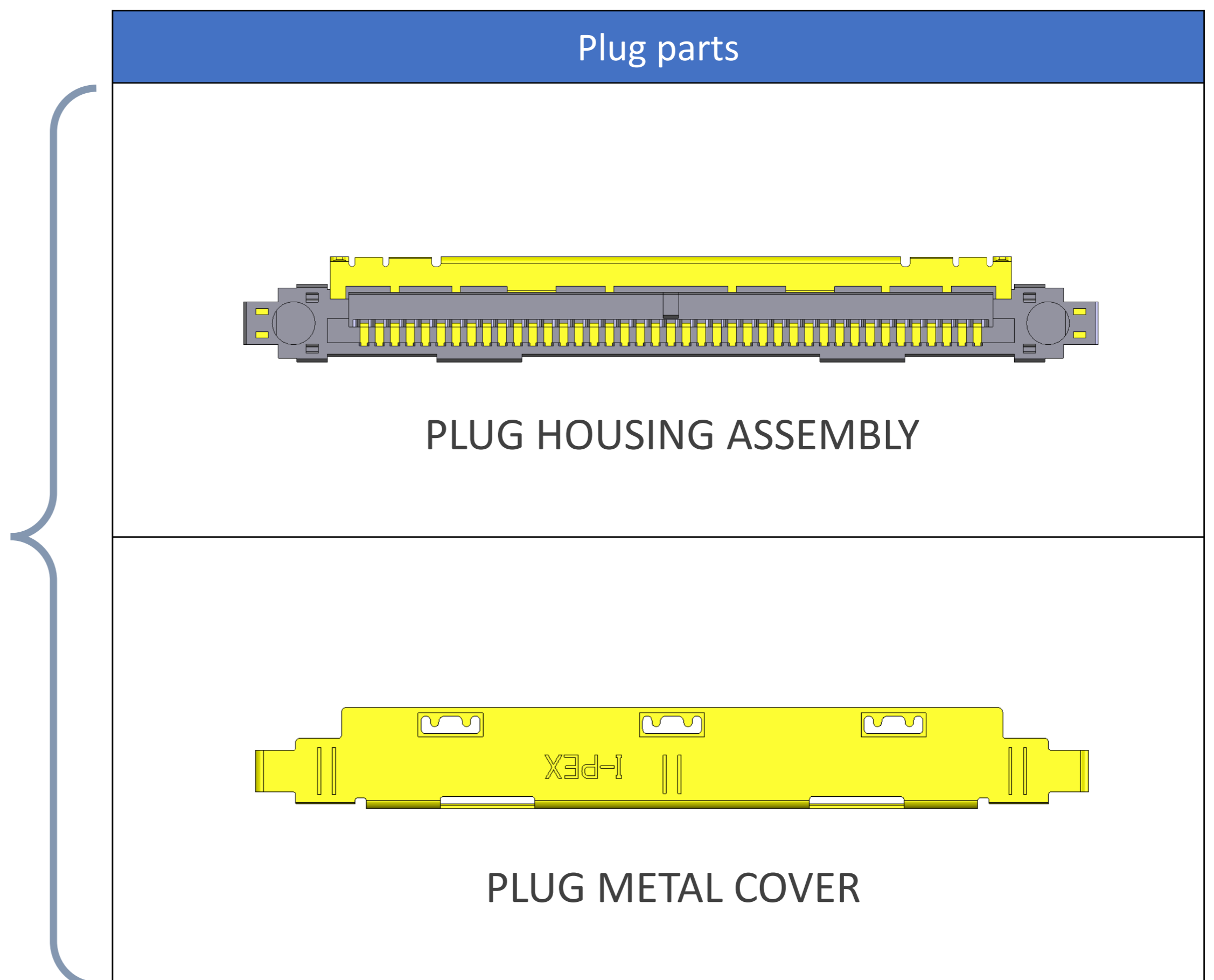
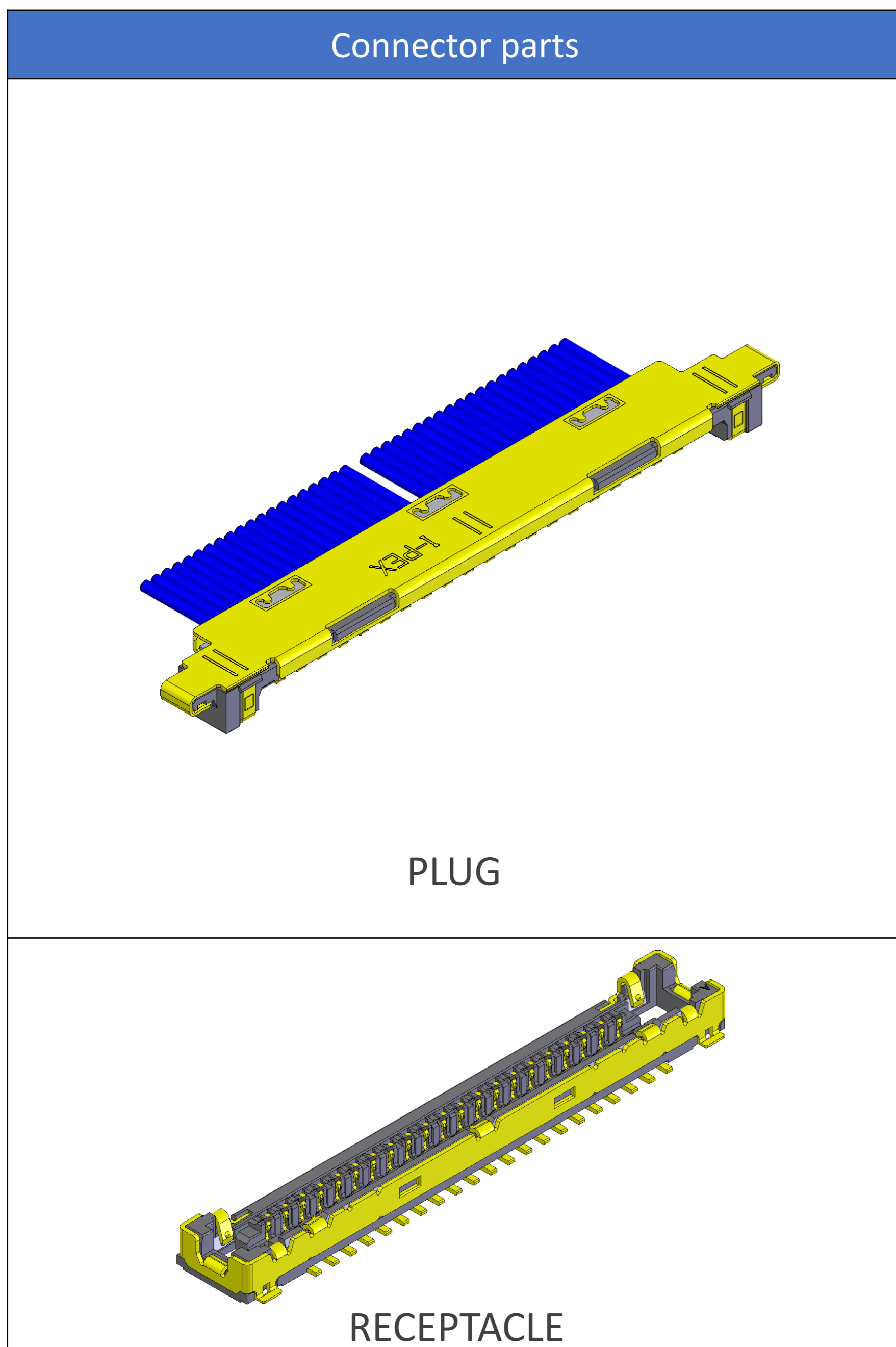
View From Underside



○ Soldered contacts
○ Mechanical contacts

Component Parts Details

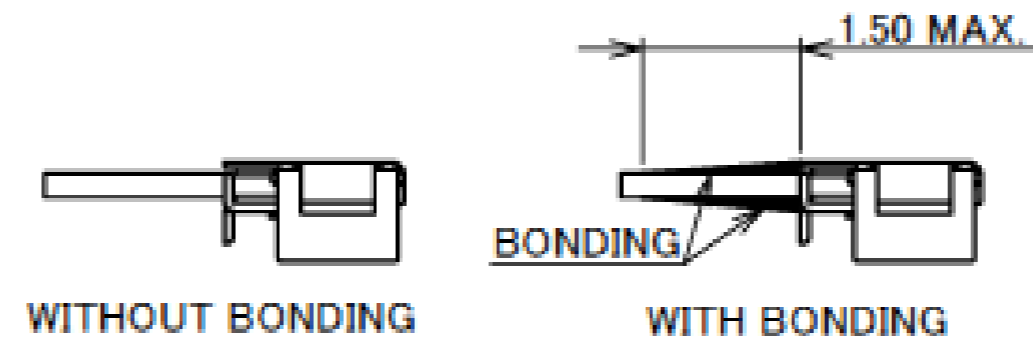
Component Parts



Plug for Cable Assembly

Recommended P/N		20531-0**T-02			
PART No.	A	B	C	D	
20531-030T-#2	10.3	11.6	9.2	5.0	
20531-034T-#2	11.3	12.6	10.2	6.0	
20531-040T-#2	12.8	14.1	11.7	7.5	
20531-050T-#2	15.3	16.6	14.2	10.0	

20531-0**T-#2
SEE TABLE.1
Pos.



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

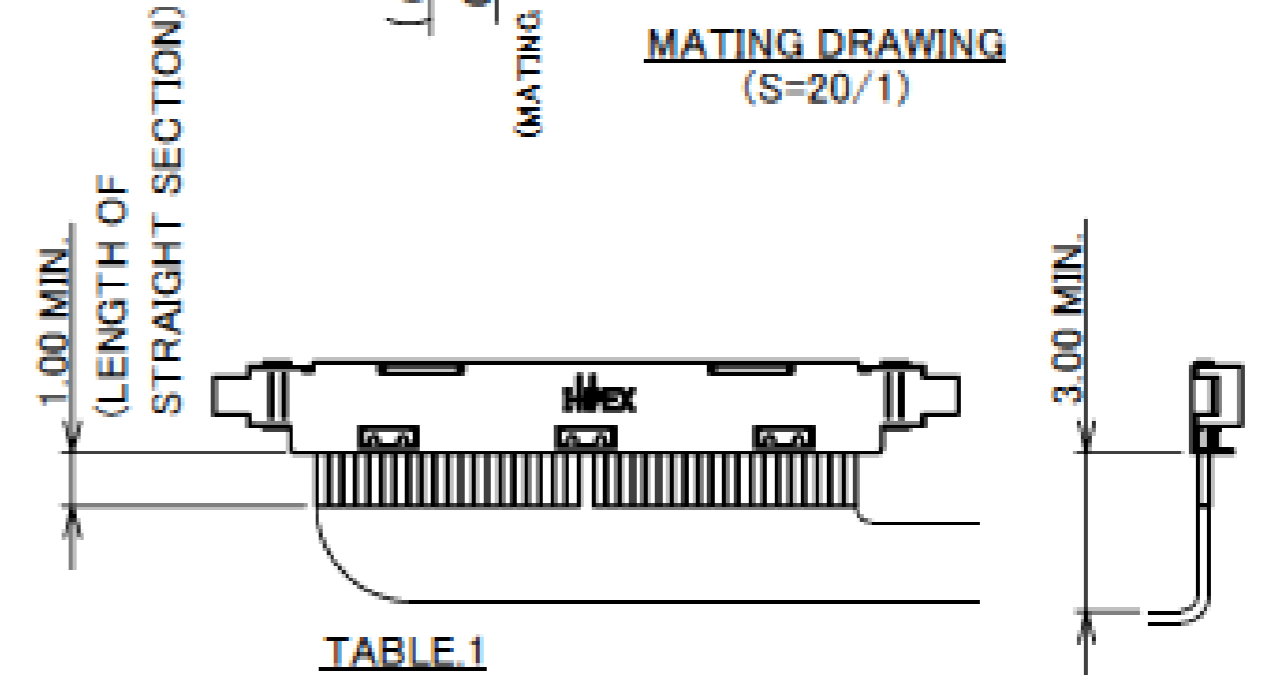
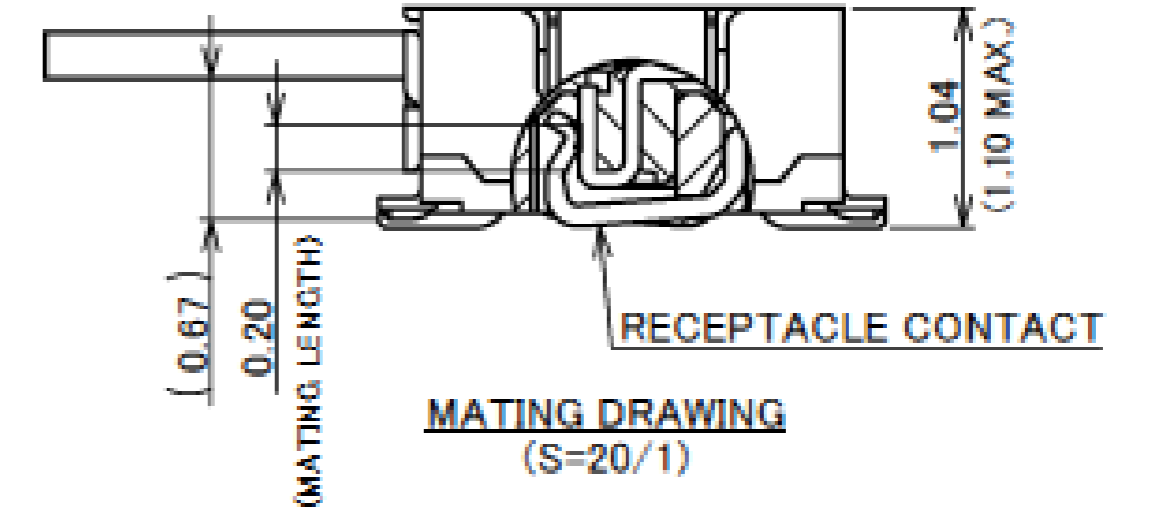
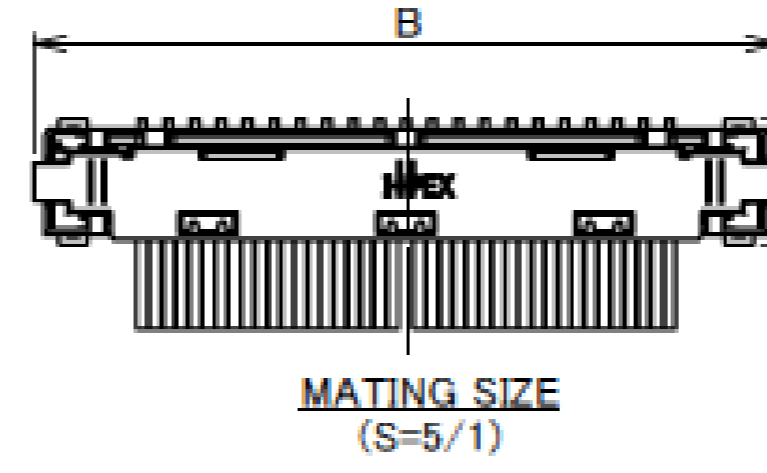
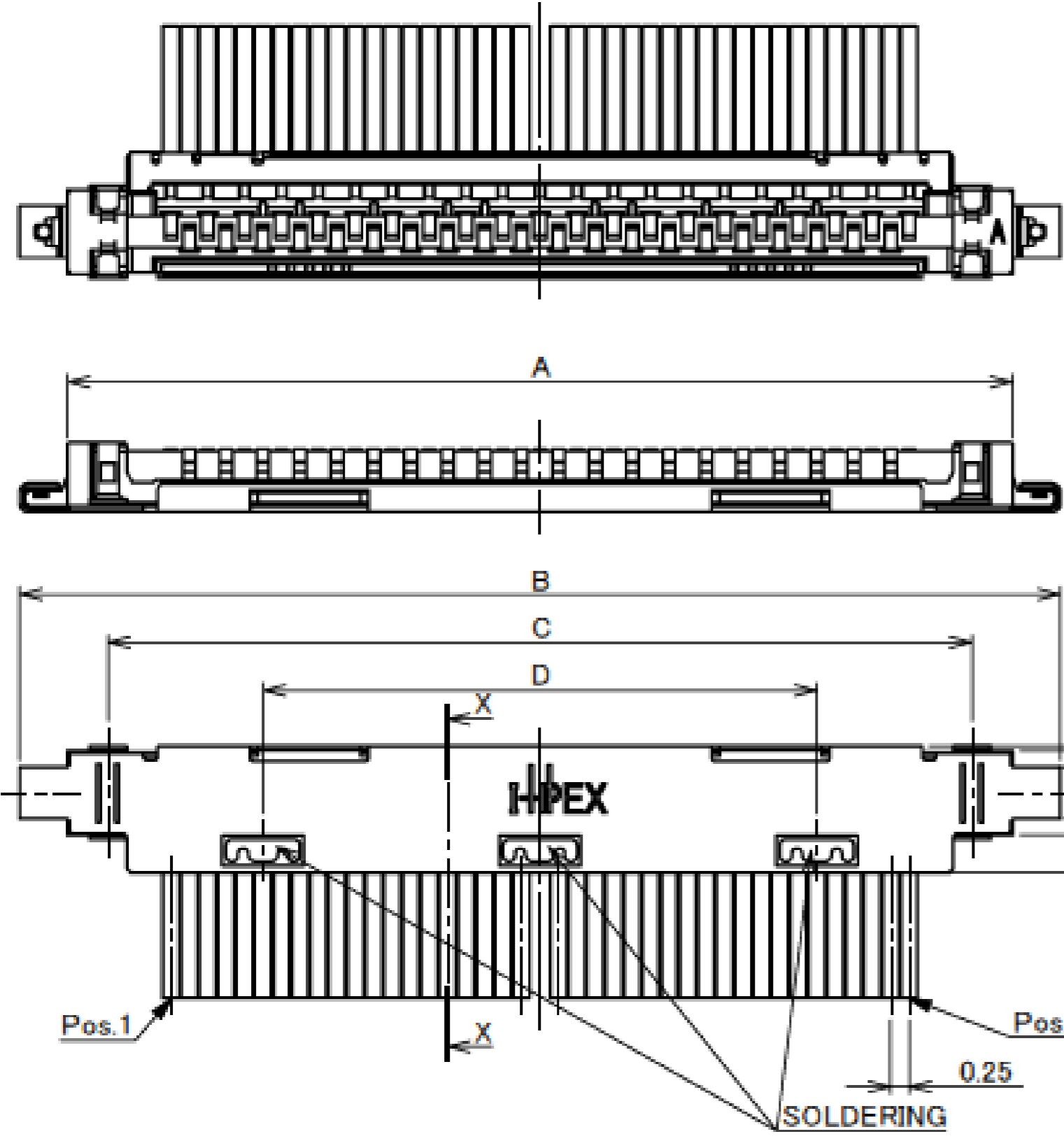
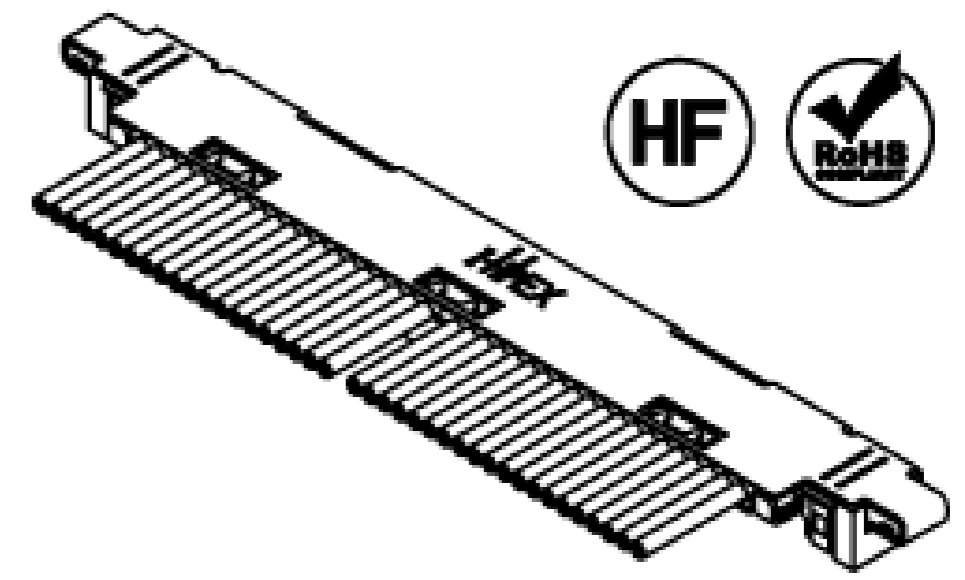
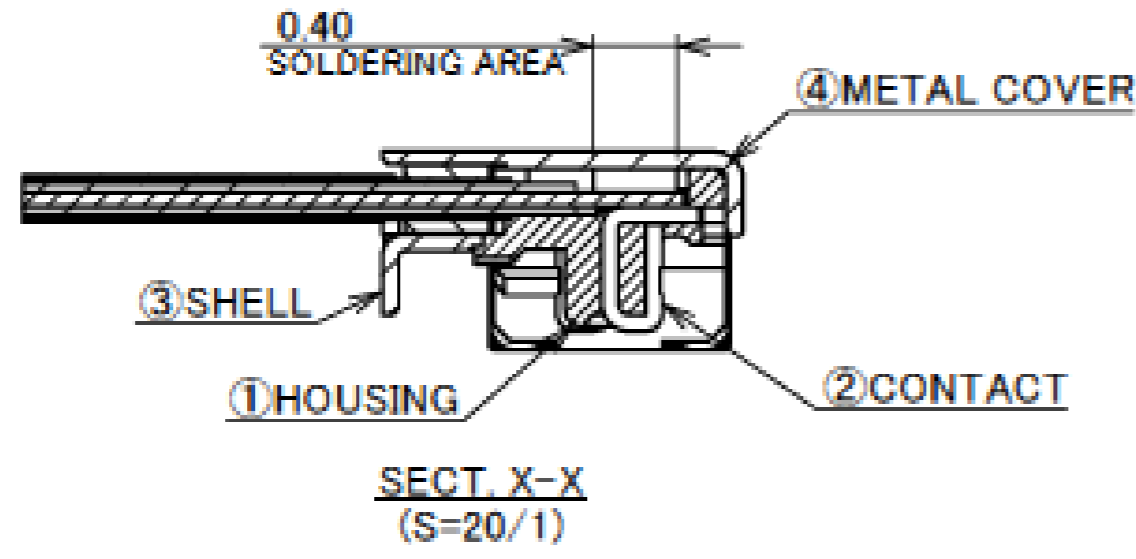


TABLE.1

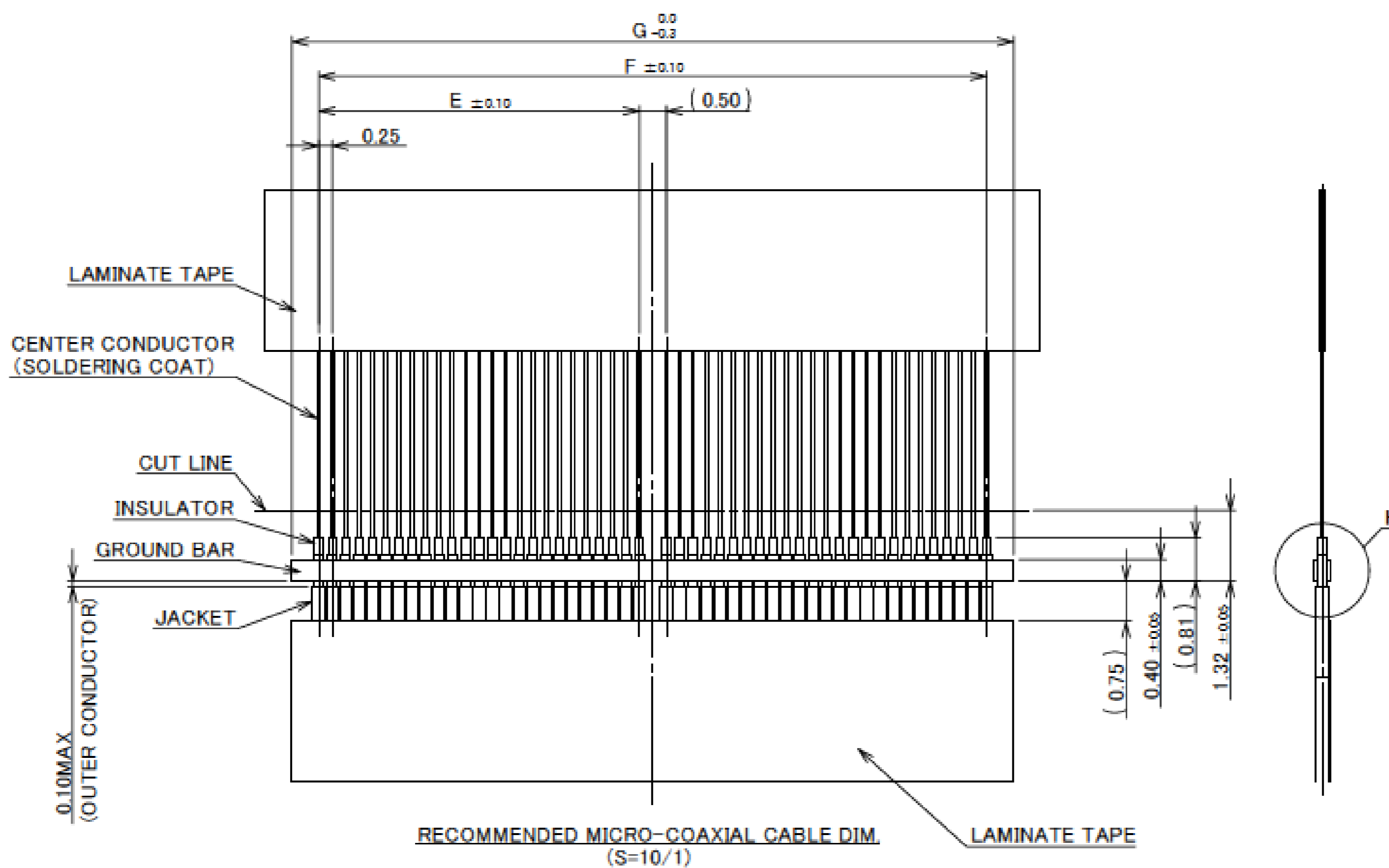
PART NO.	CONTACT MATERIAL
20531-0**T-02	PHOSPHOR BRONZE
20531-0**T-12	CORSON ALLOY

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	SEE ABOVE TABLE.1	Au 0.1 μm MIN. OVER Ni 1.0 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK



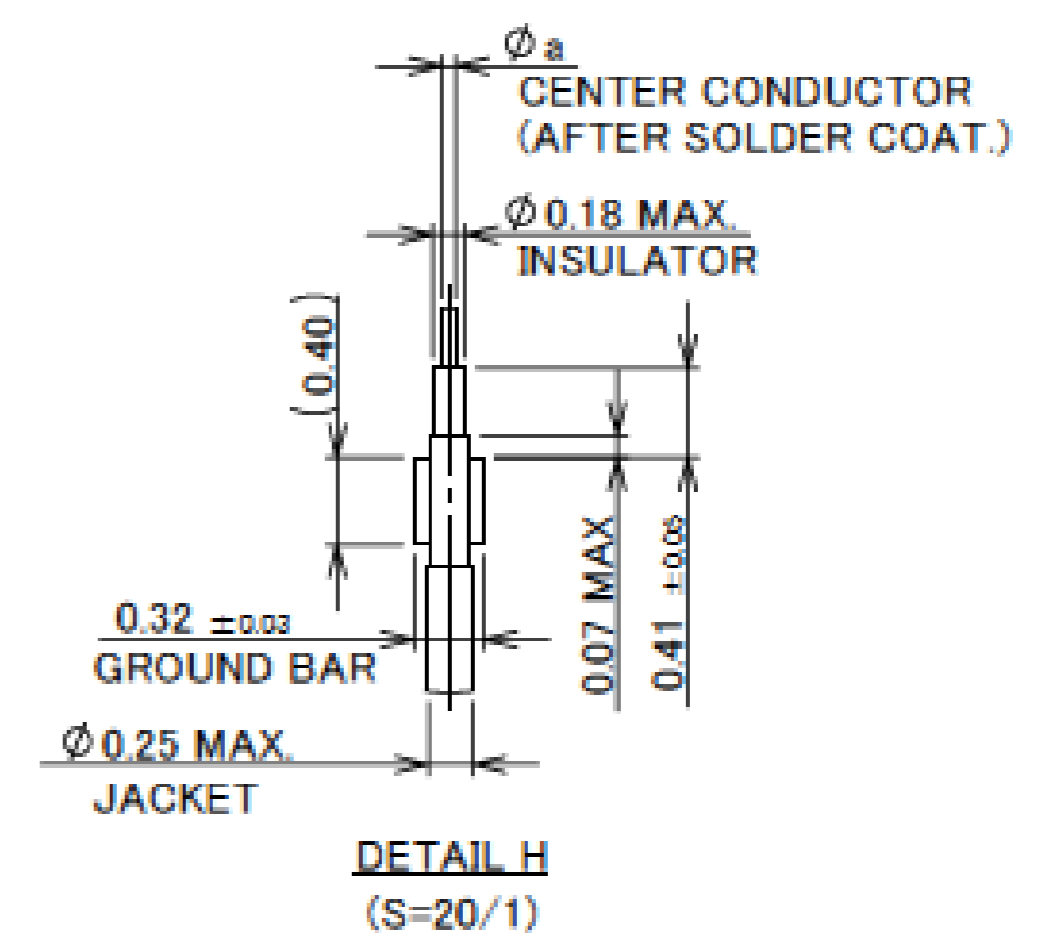
Rev.13

PART No.	E	F	G
20531-030T-#2	3.5	7.5	8.5
20531-034T-#2	4.0	8.5	9.5
20531-040T-#2	4.75	10.0	11.0
20531-050T-#2	6.0	12.5	13.5



MICRO-COAXIAL CABLE DIMENSION

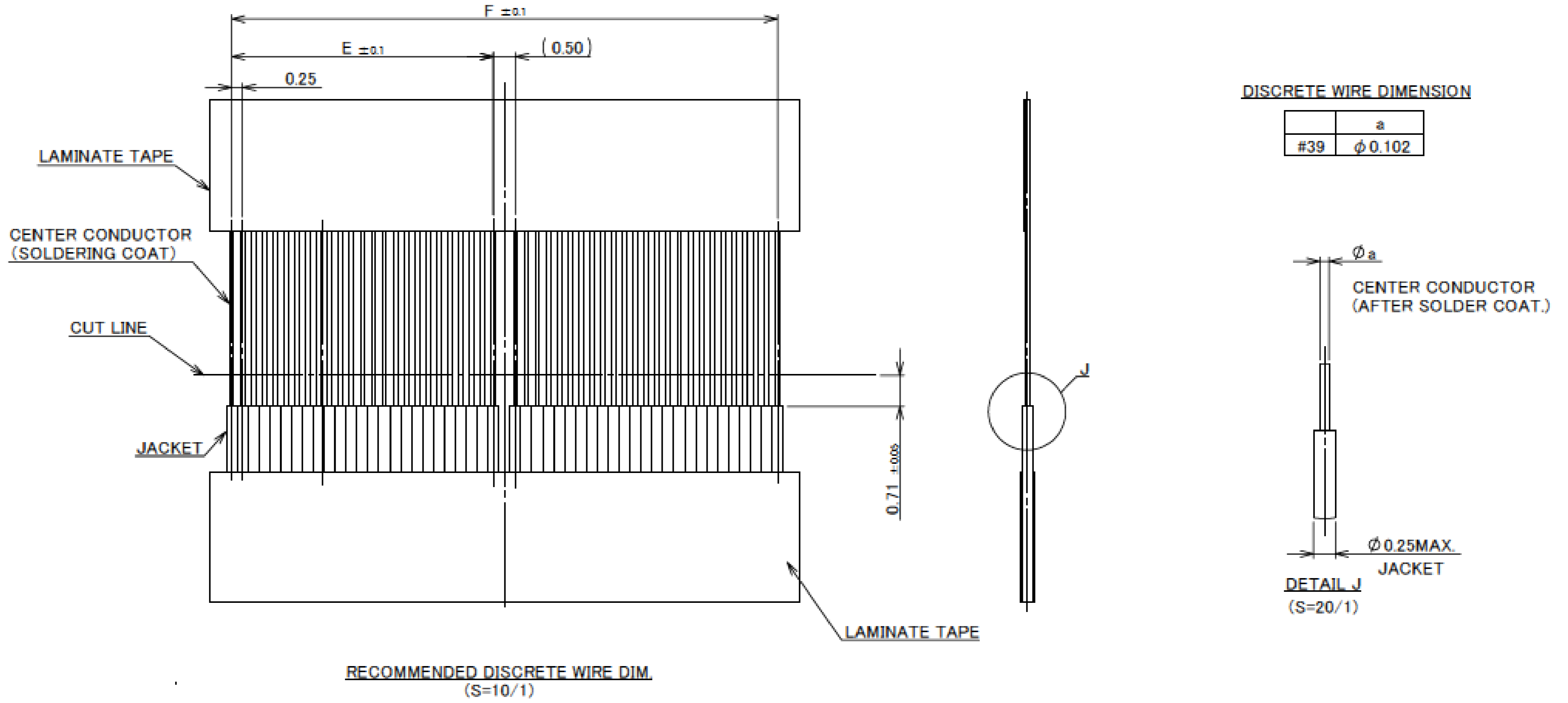
	a
#44	φ 0.063
#46	φ 0.048



Rev.13

Plug for Cable Assembly

PART No.	E	F
20531-030T-#2	3.5	7.5
20531-034T-#2	4.0	8.5
20531-040T-#2	4.75	10.0
20531-050T-#2	6.0	12.5



Rev.13

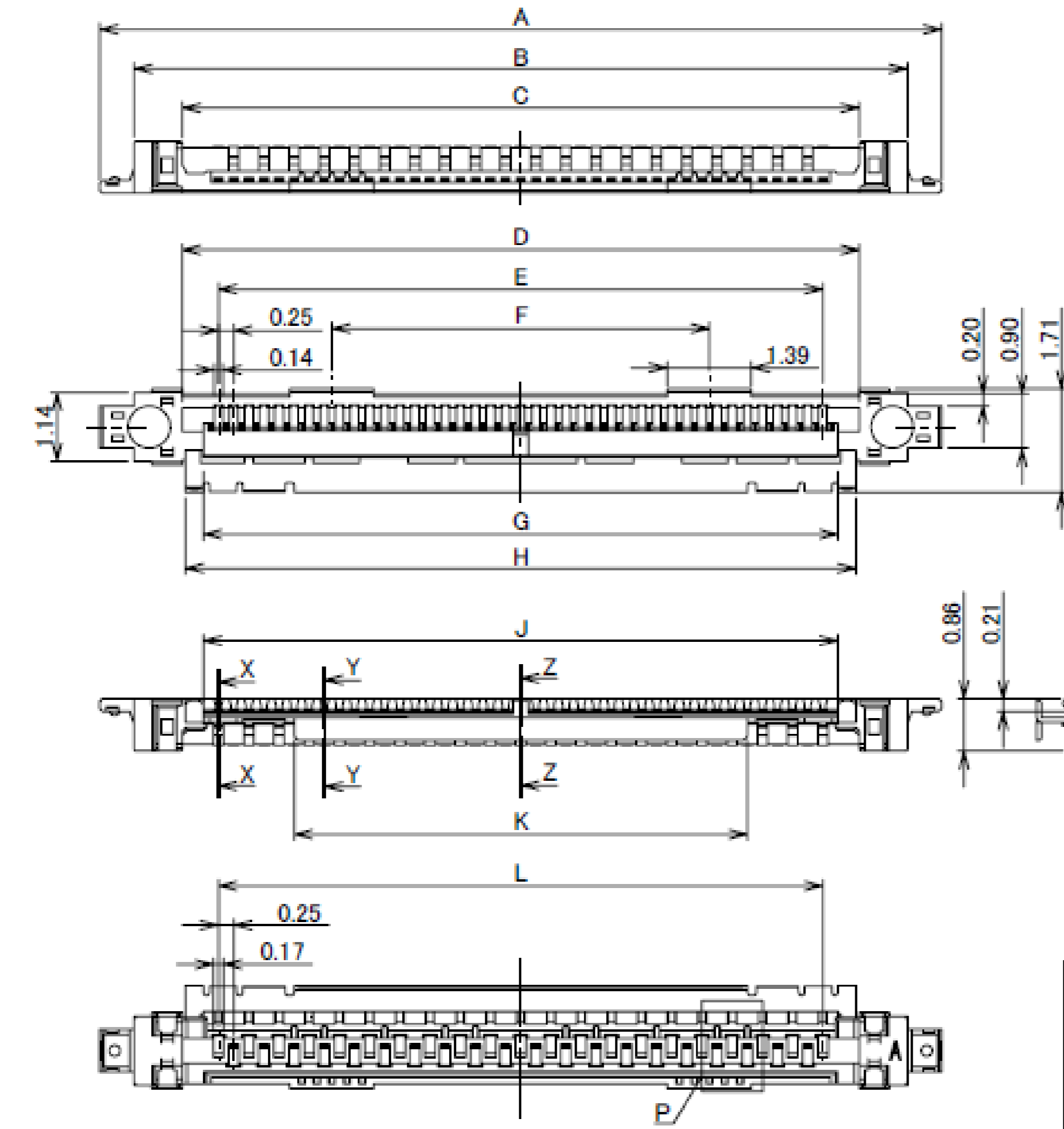
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 ,46 DISCRETE WIRE : AWG#39
RATING VOLTAGE	50V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	CONTACT MATERIAL : PHOSPHOR BRONZE (PLUG : 20531-0**T-02 ,RECEPTACLE : 20533-0**E) 0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 6 CONTACTS) 0.15A AC/DC [AWG#44] 0.10A AC/DC [AWG#46] CONTACT MATERIAL : CORSON ALLOY (PLUG : 20531-0**T-12 ,RECEPTACLE : 20533-0**E-01) 0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 8 CONTACTS) 0.19A AC/DC [AWG#44] 0.14A AC/DC [AWG#46]
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 : 140mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : 140mohm 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-1555
TEST REPORT	TR-10051
INSTRUCTION MANUAL	HIM-10001
ASSEMBLY MANUAL	ASM-10001
APPEARANCE CRITERIA No.	QLS-A***

Rev.13

Plug Housing Assembly

Recommended P/N 20532-0**T-02

PART No.	Pos	A	B	C	D	E	F	G	H	J	K	L
20532-030T-#2	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-#2	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-#2	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-#2	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-#2
SEE TABLE.1
Pos.

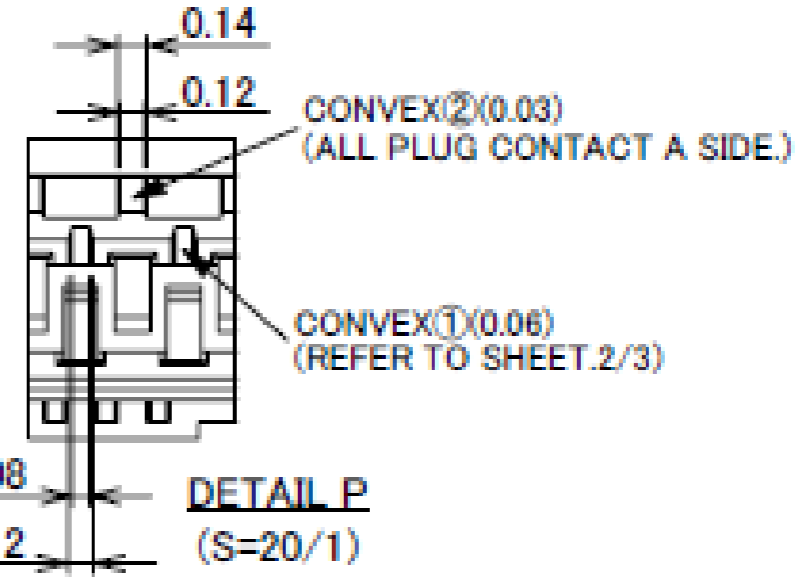
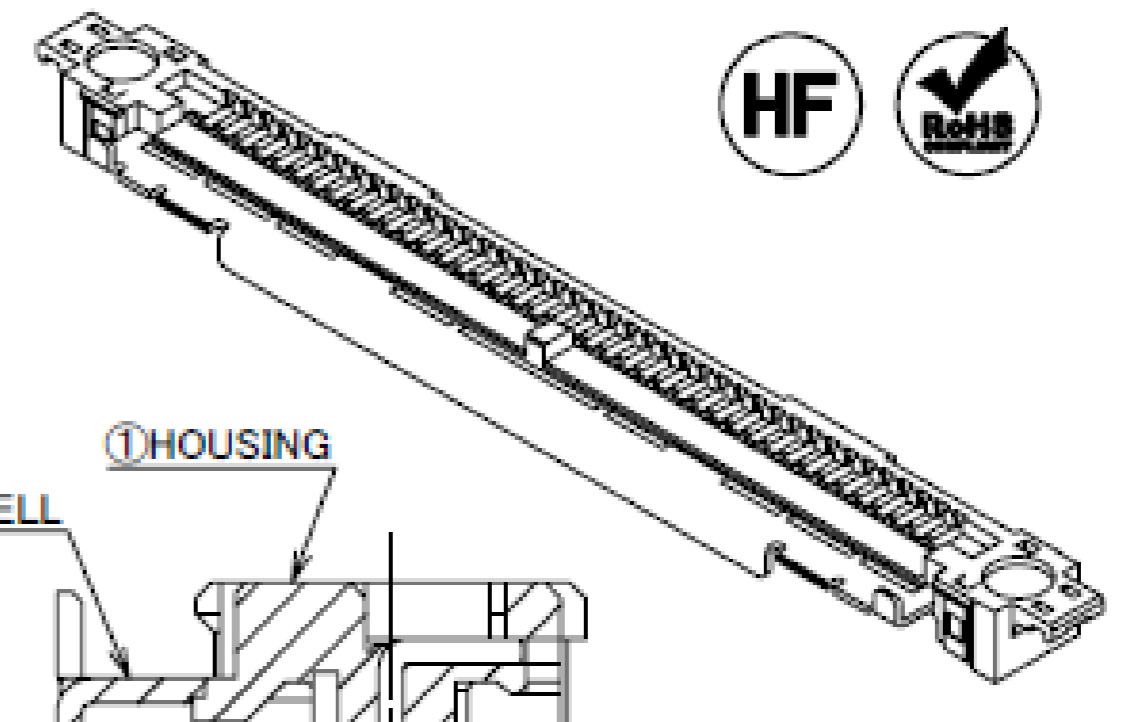
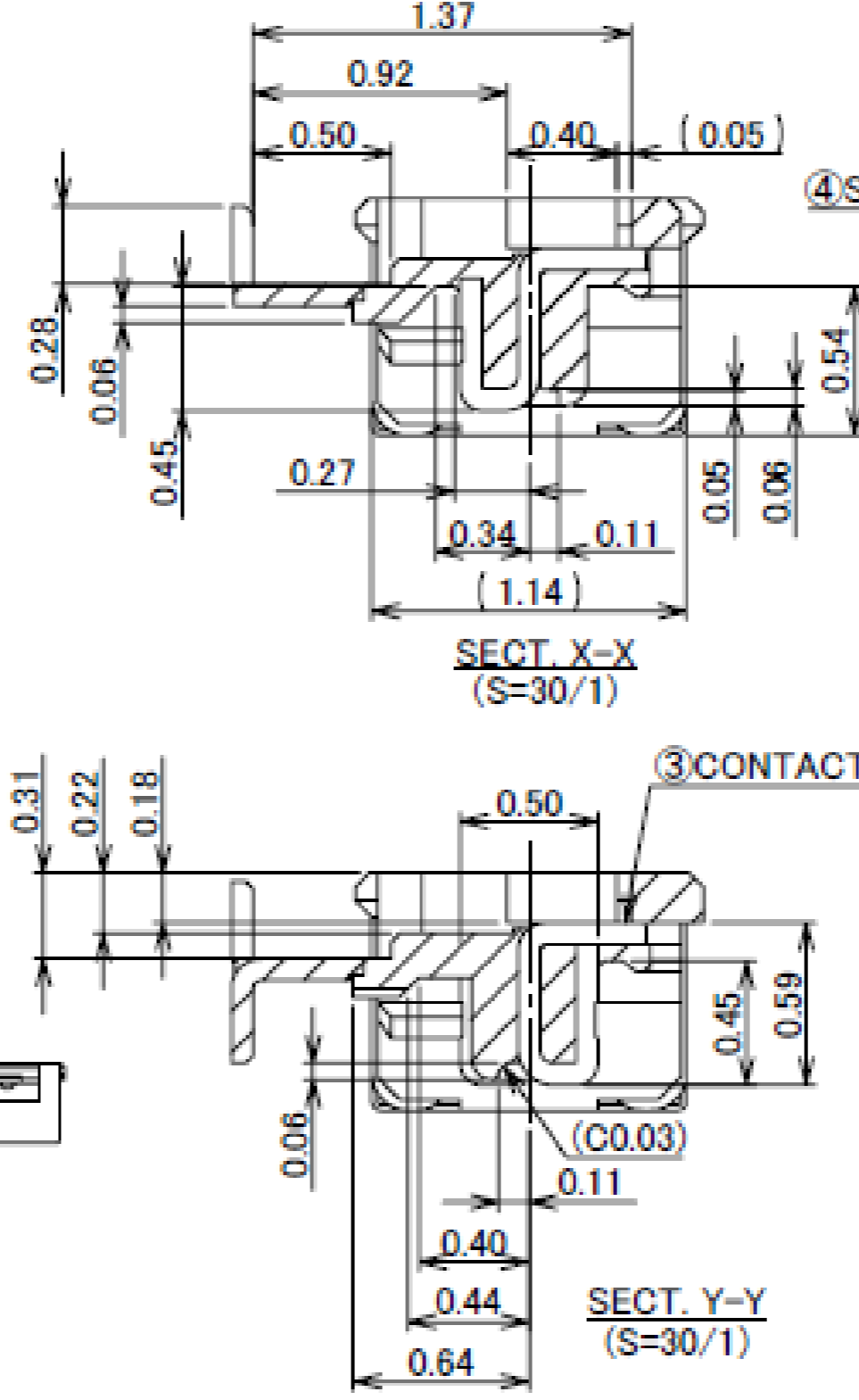
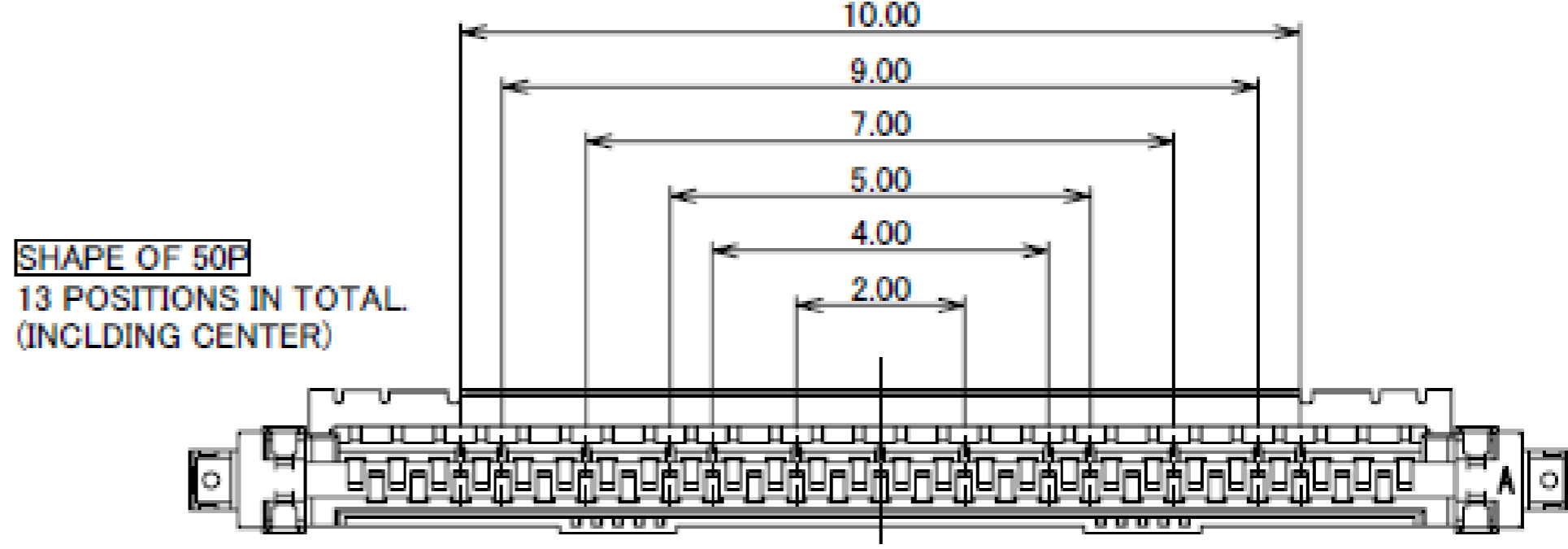
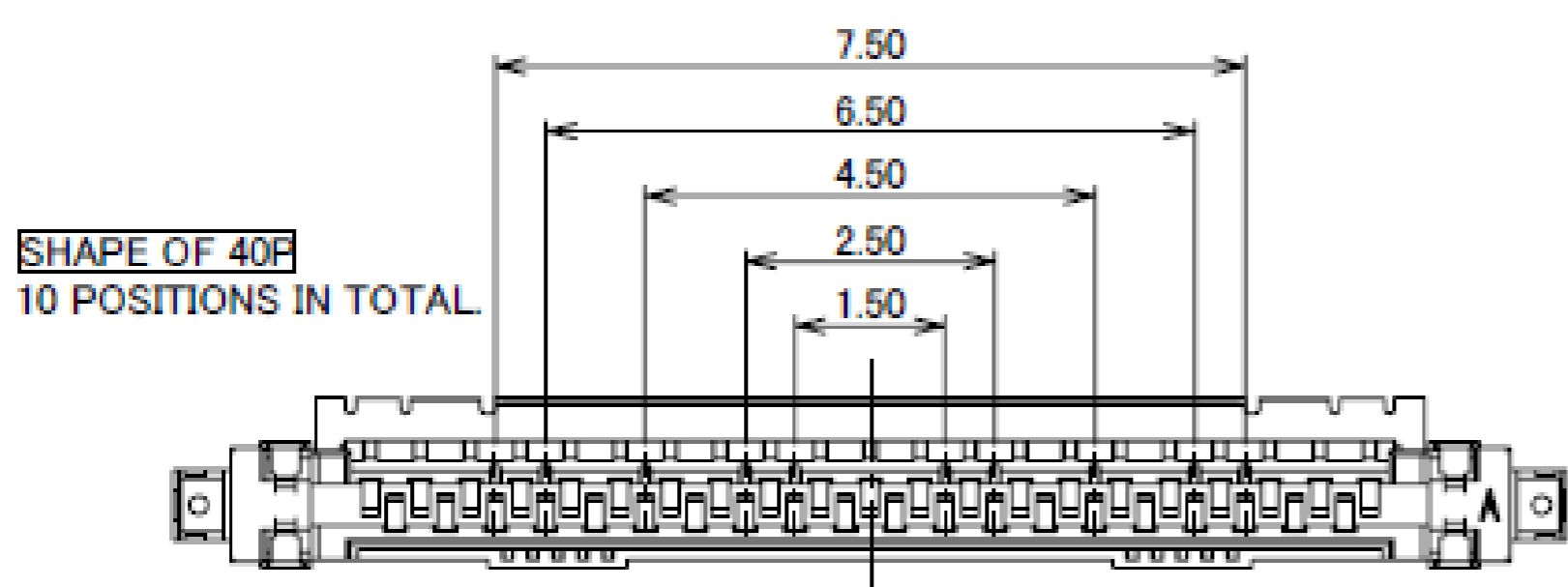
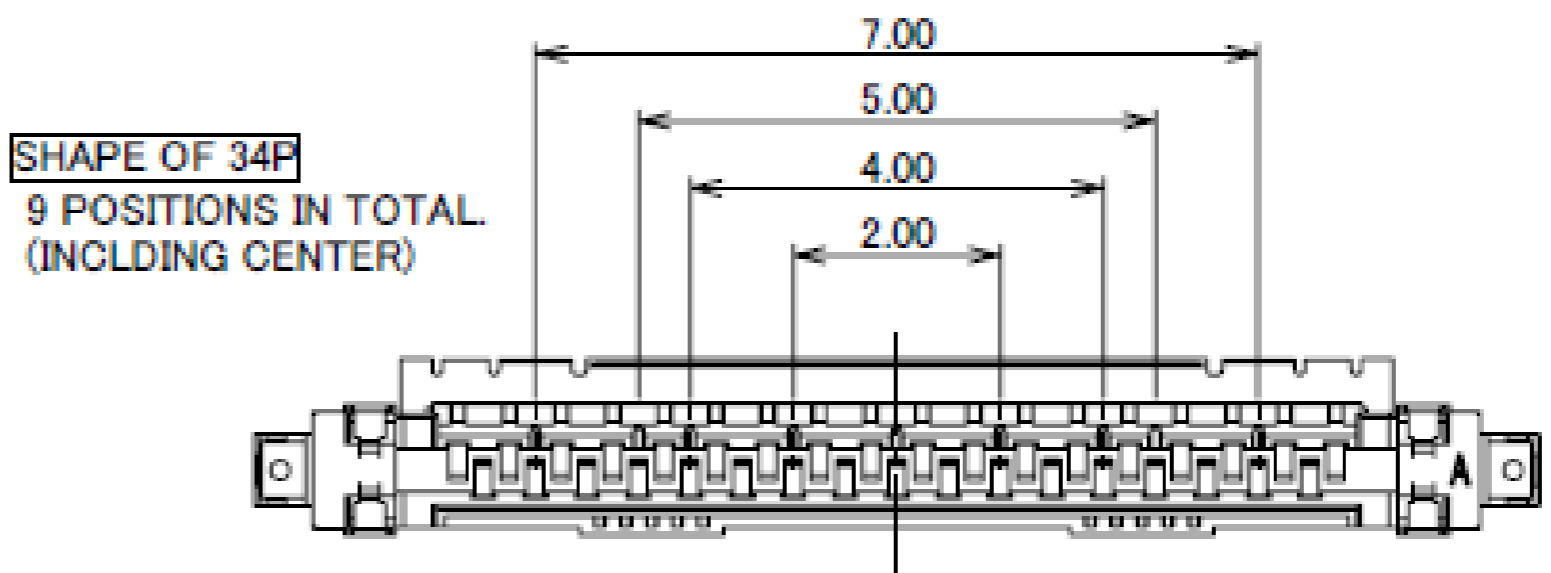
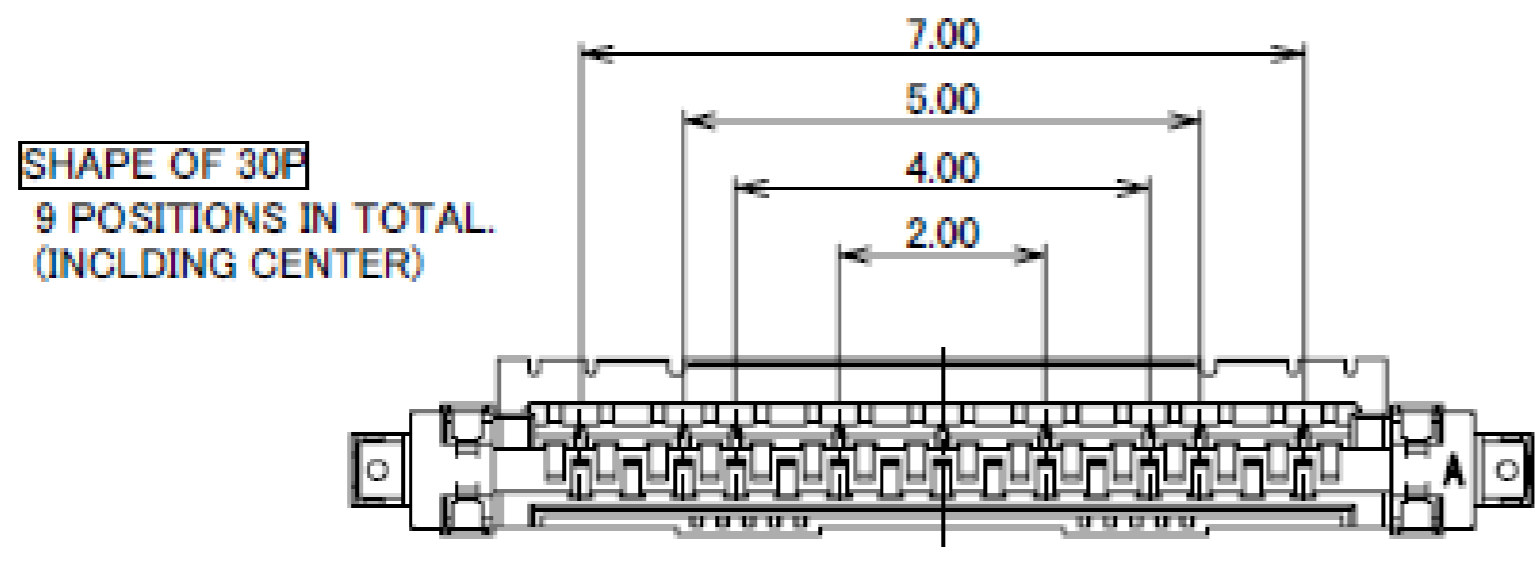


TABLE.1

PART NO.	CONTACT MATERIAL
20532-0**T-02	PHOSPHOR BRONZE
20532-0**T-12	CORSON ALLOY

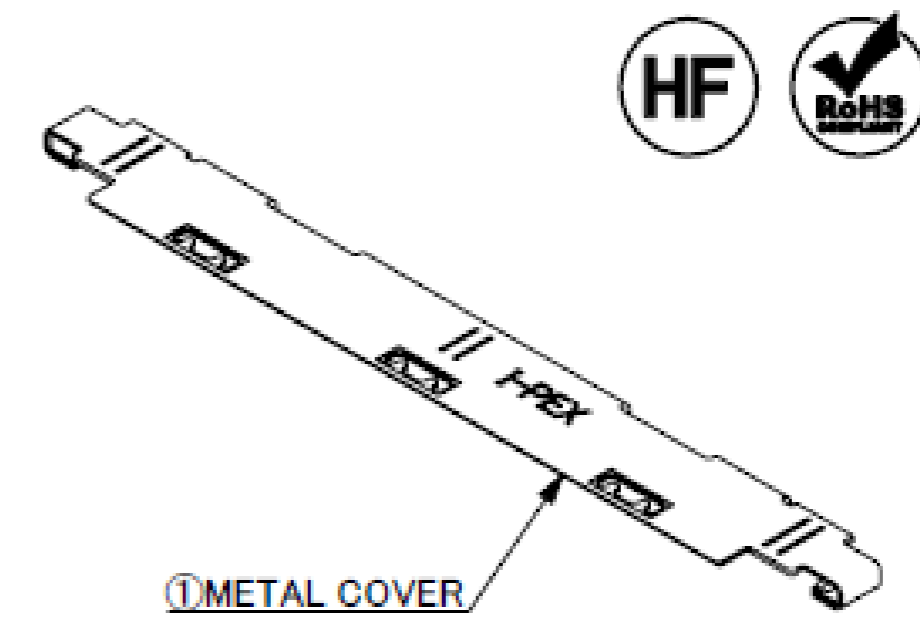
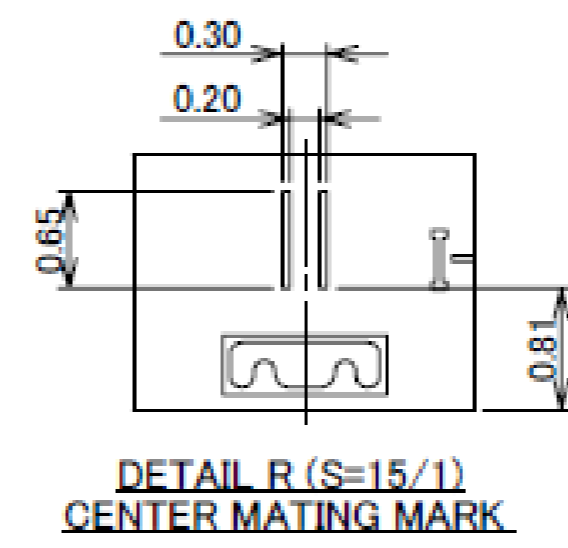
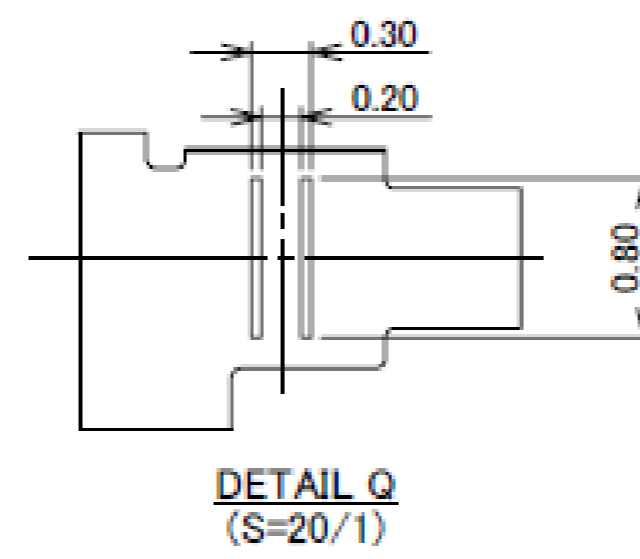
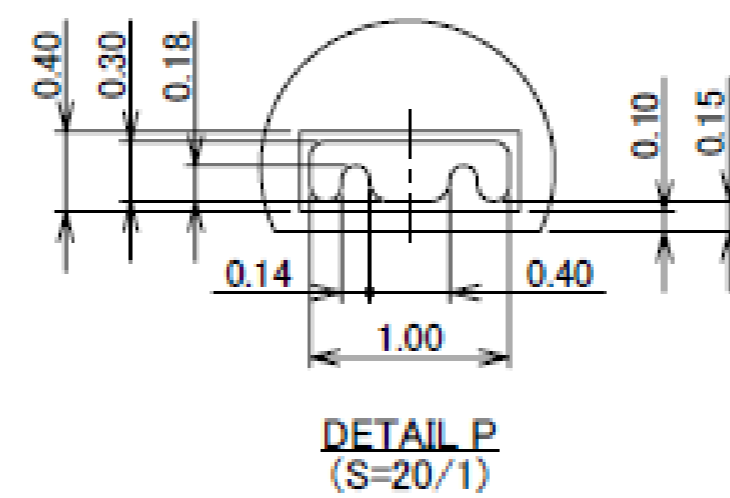
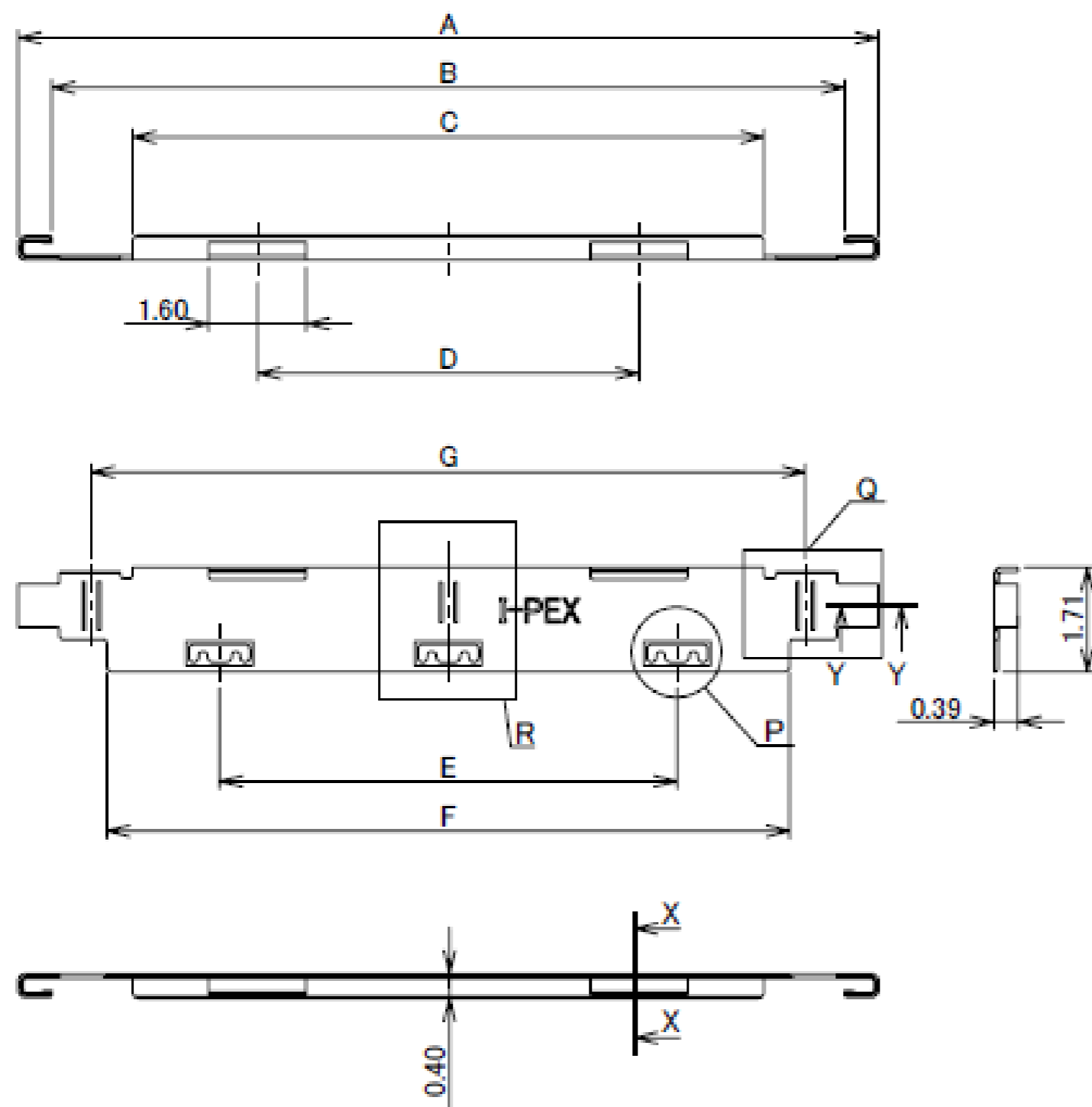
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL	PHOSPHOR BRONZE	Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	SEE ABOVE TABLE.1	Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	SEE ABOVE TABLE.1	Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK



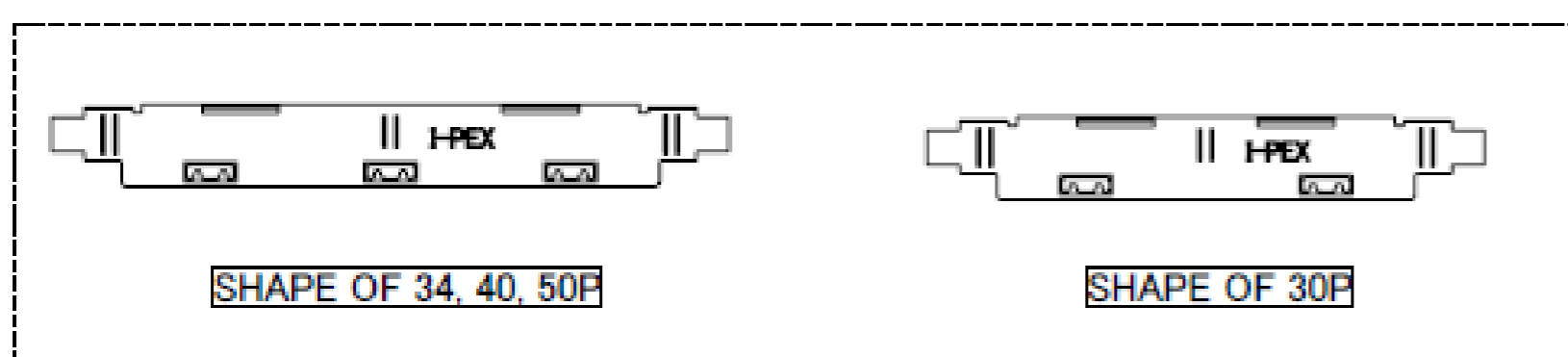
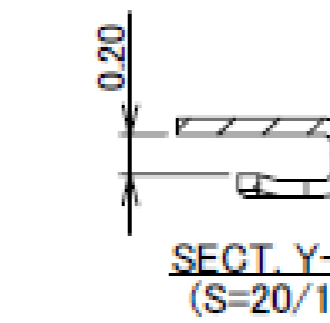
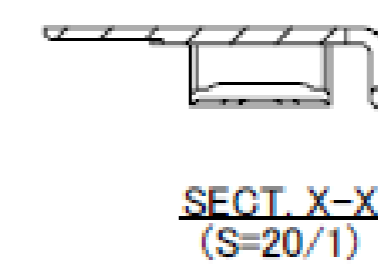
POSITION OF CONVEX(1)

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



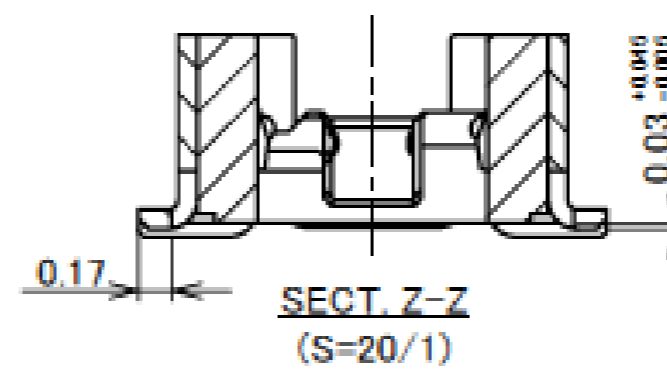
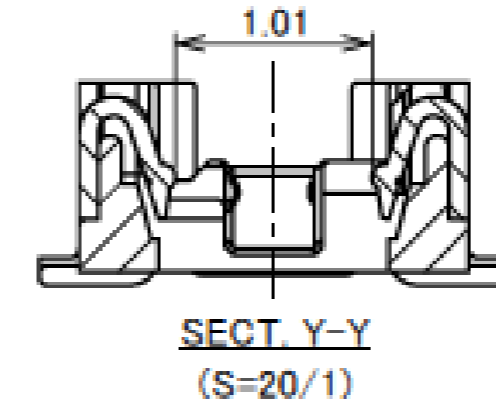
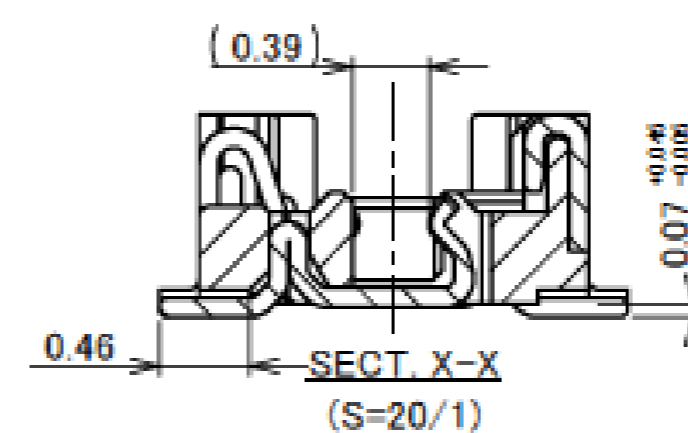
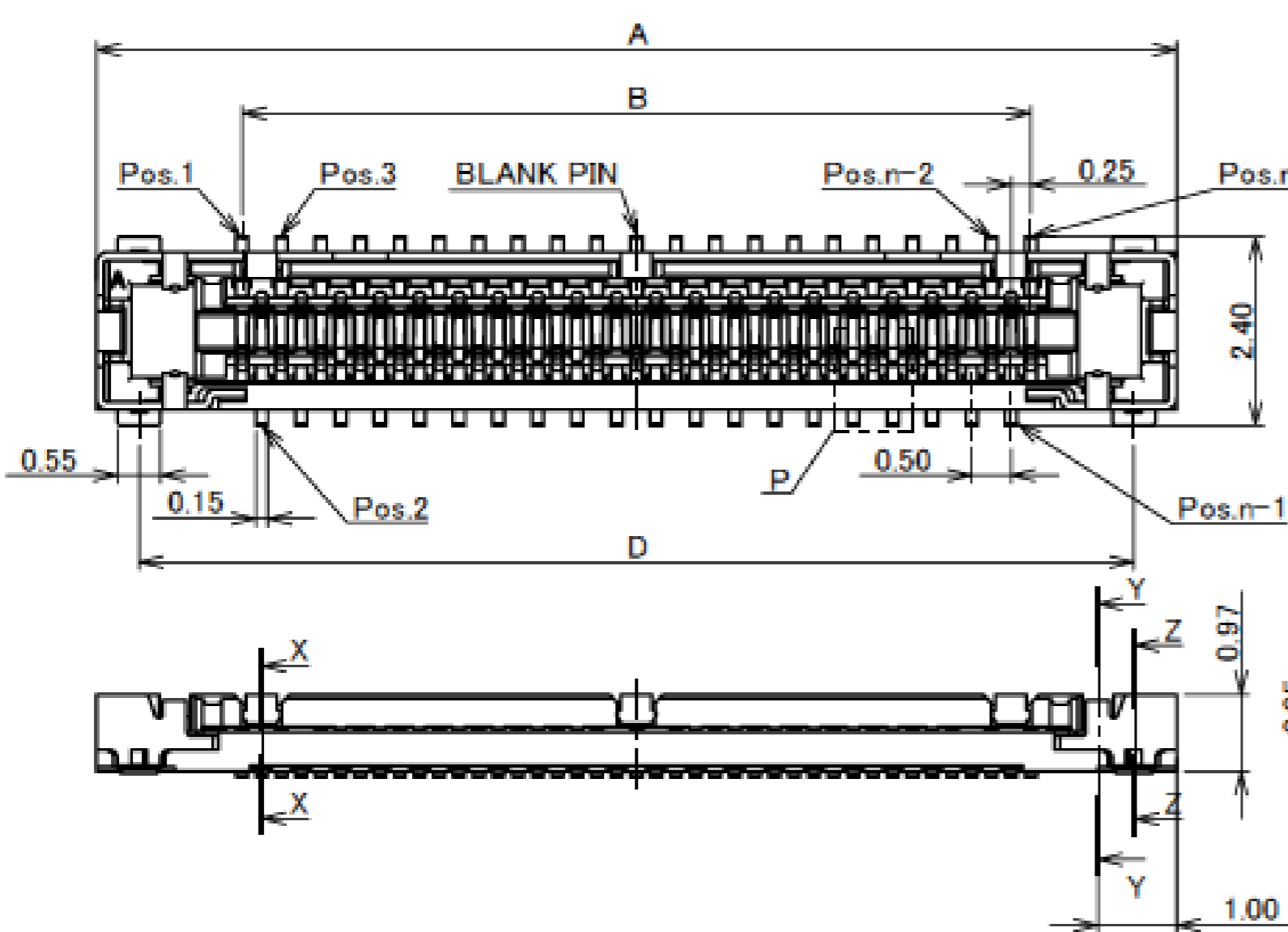
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	METAL COVER	SUS	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.

Rev.9

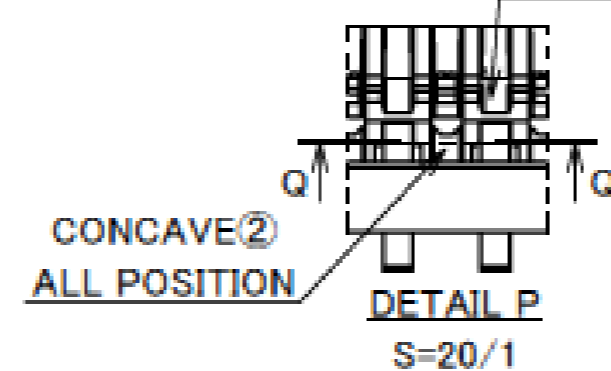
Receptacle Assembly

Recommended P/N	20533-0**E					
PART NO.	Pos.	A	B	C	D	E
20533-030E-**	30	11.20	7.50	8.00	10.11	1.60
20533-034E-**	34	12.20	8.50	8.00	11.11	2.10
20533-040E-**	40	13.70	10.00	10.00	12.61	1.85
20533-050E-**	50	16.20	12.50	12.00	15.11	2.10

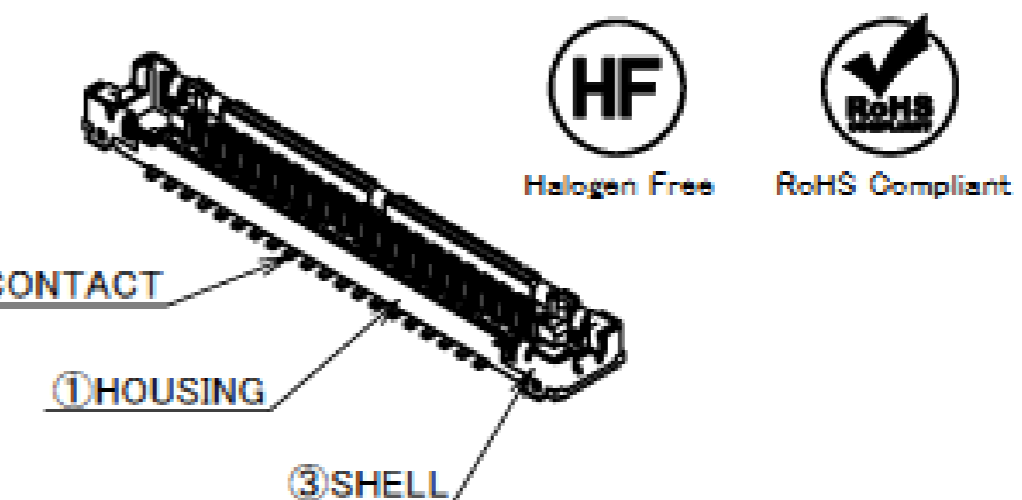
20533-0**E-**
SEE TABLE.1
Pos.



CONCAVE①
REFER TO THE TABLE.2



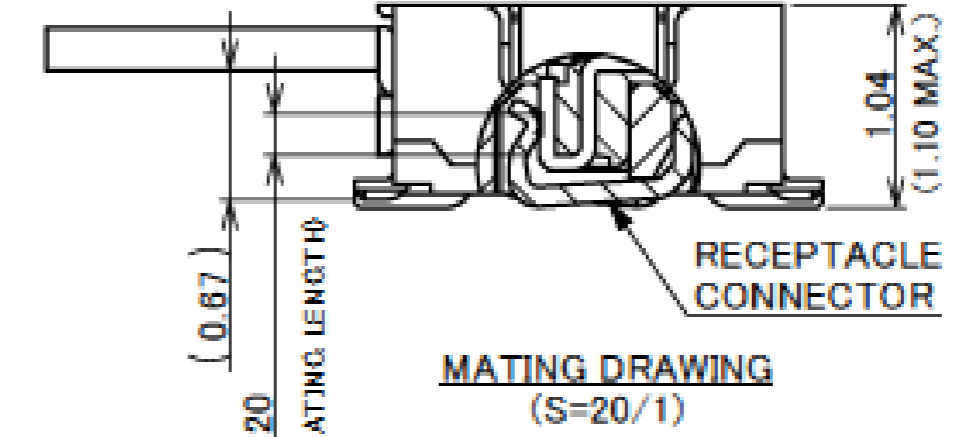
CONCAVE②
ALL POSITION



② CONTACT

① HOUSING

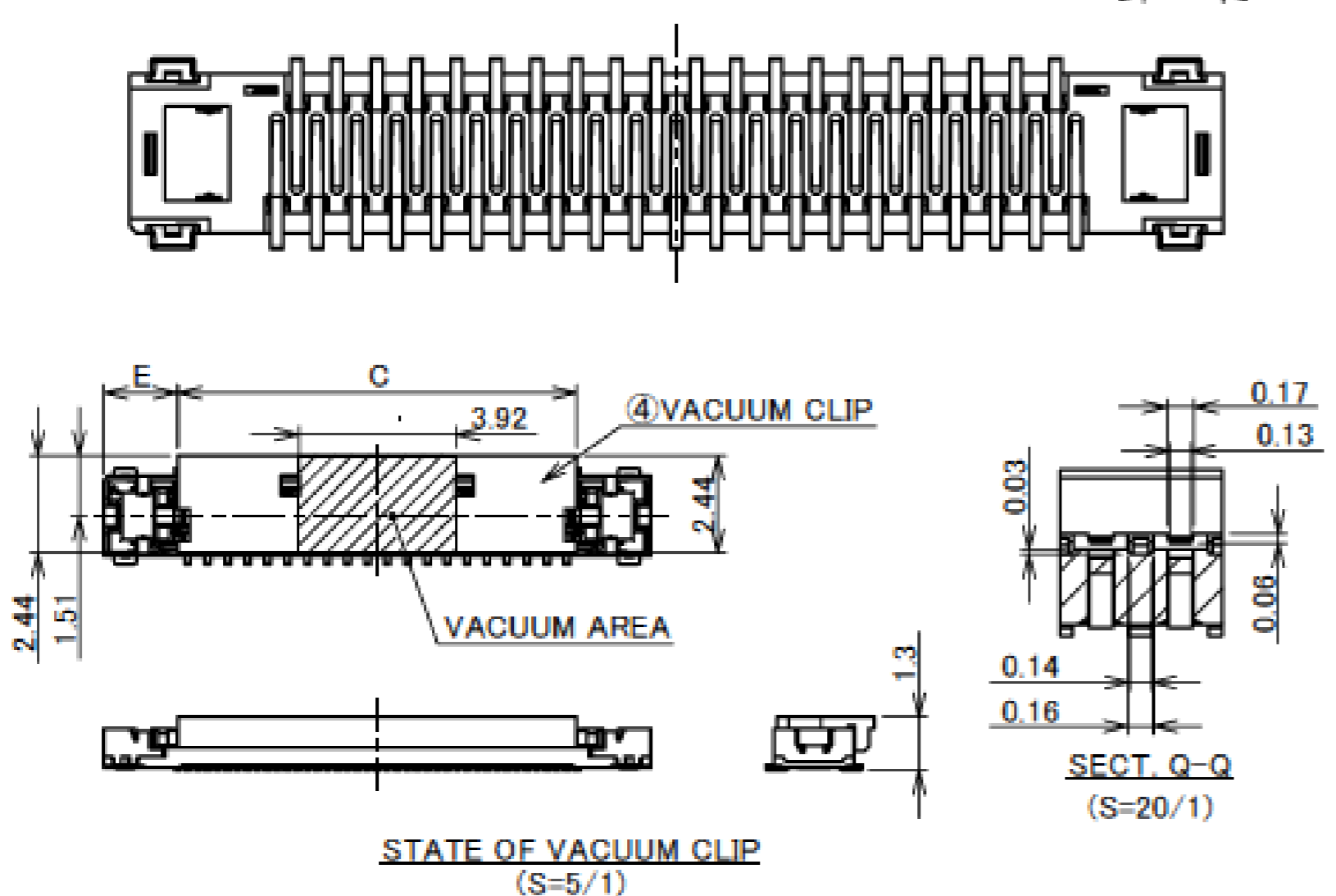
③ SHELL



POSITION OF CONCAVE①
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)

PART NO.	CONTACT MATERIAL
20533-0**E	PHOSPHOR BRONZE
20533-0**E-01	CORSON ALLOY

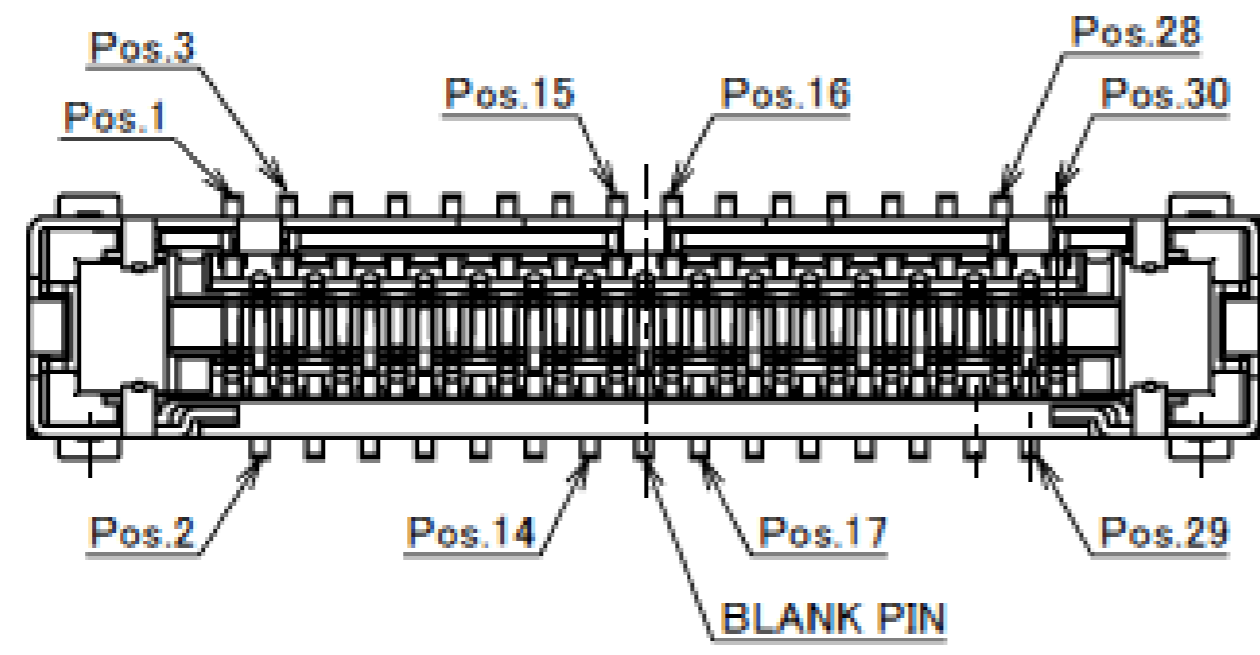
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CLIP	LCP	UL94V-0, BEIGE
3	SHELL	PHOSPHOR BRONZE	Au 0.02 μ m MIN. OVER Ni 1.00 μ m MIN.
2	COTANCT	SEE ABOVE TABLE.1	CONTACT AREA : Au 0.1 μ m MIN. OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
1	HOUSING	LCP	UL94-0, BLACK



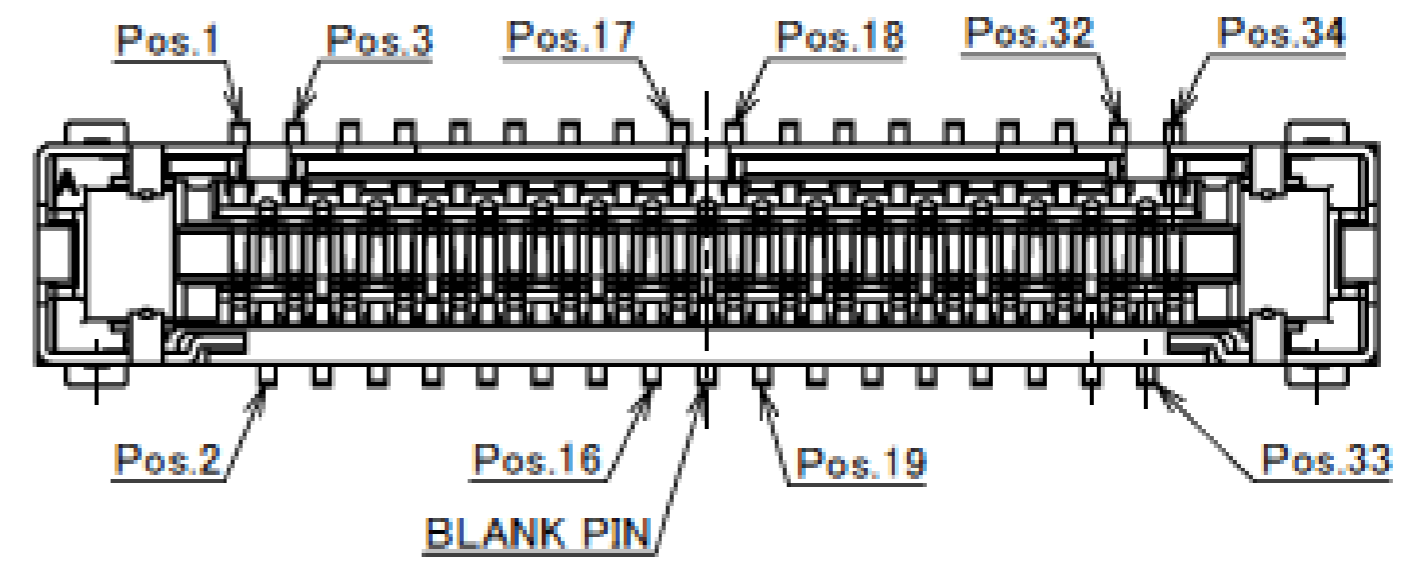
Rev.15

Receptacle Assembly

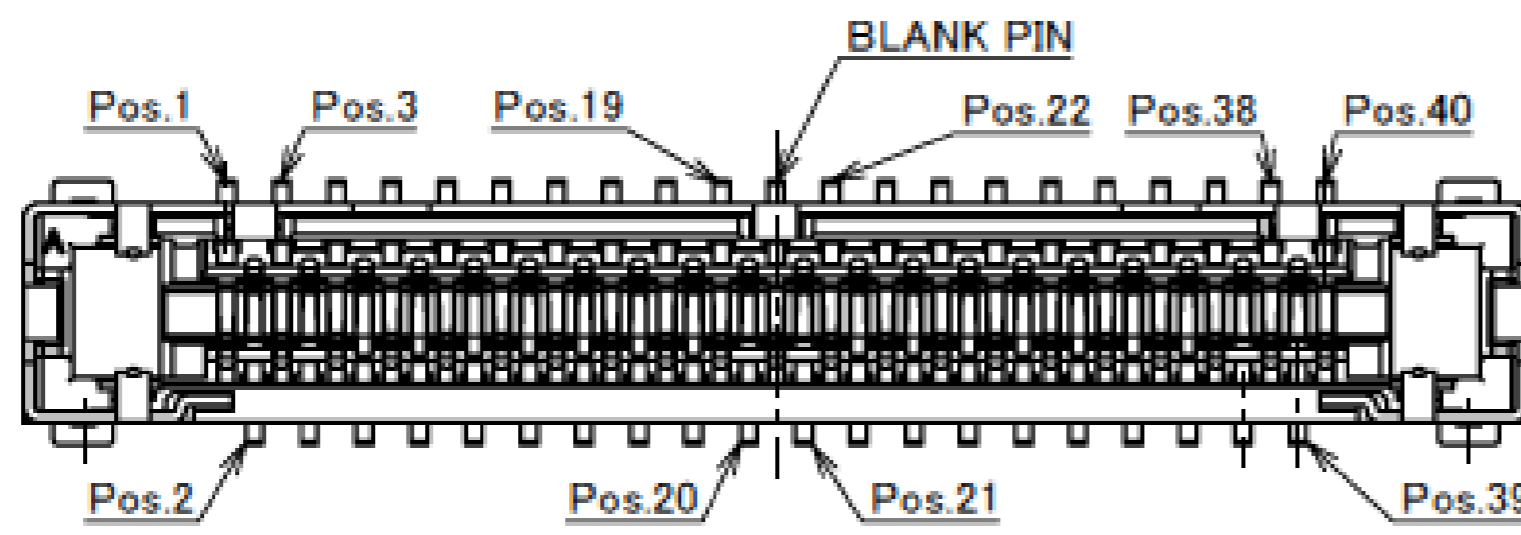
PART No.	Pos
20533-030E-**-**	30
20533-034E-**-**	34
20533-040E-**-**	40
20533-050E-**-**	50



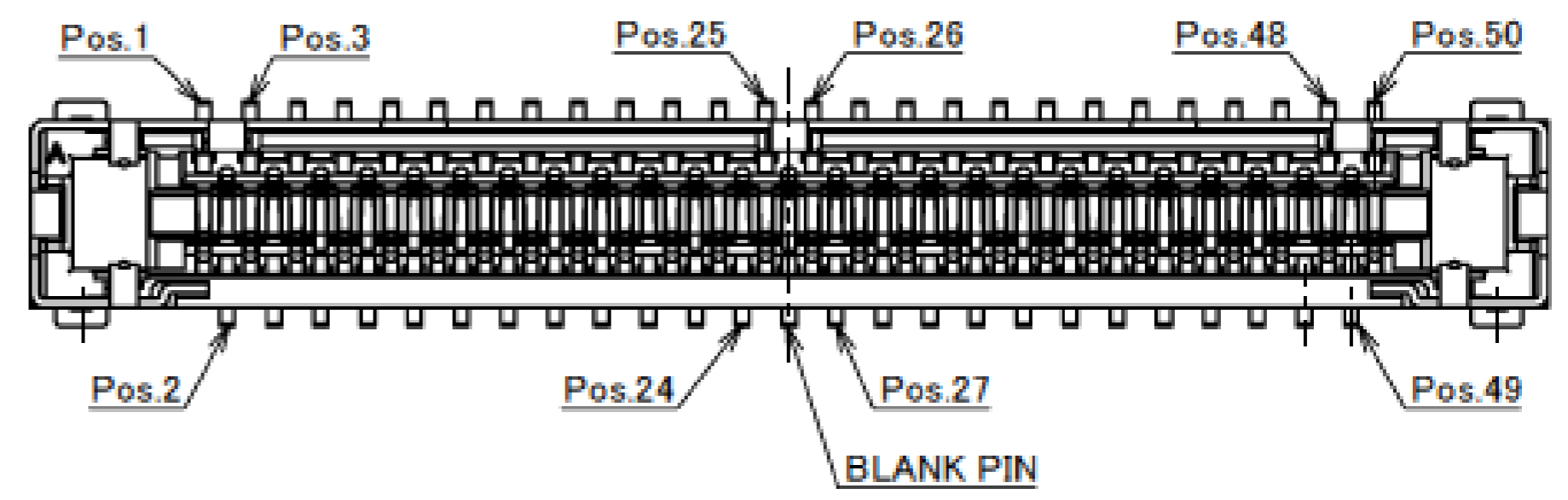
30P CONTACT LAYOUT
(S=10/1)



34P CONTACT LAYOUT
(S=10/1)



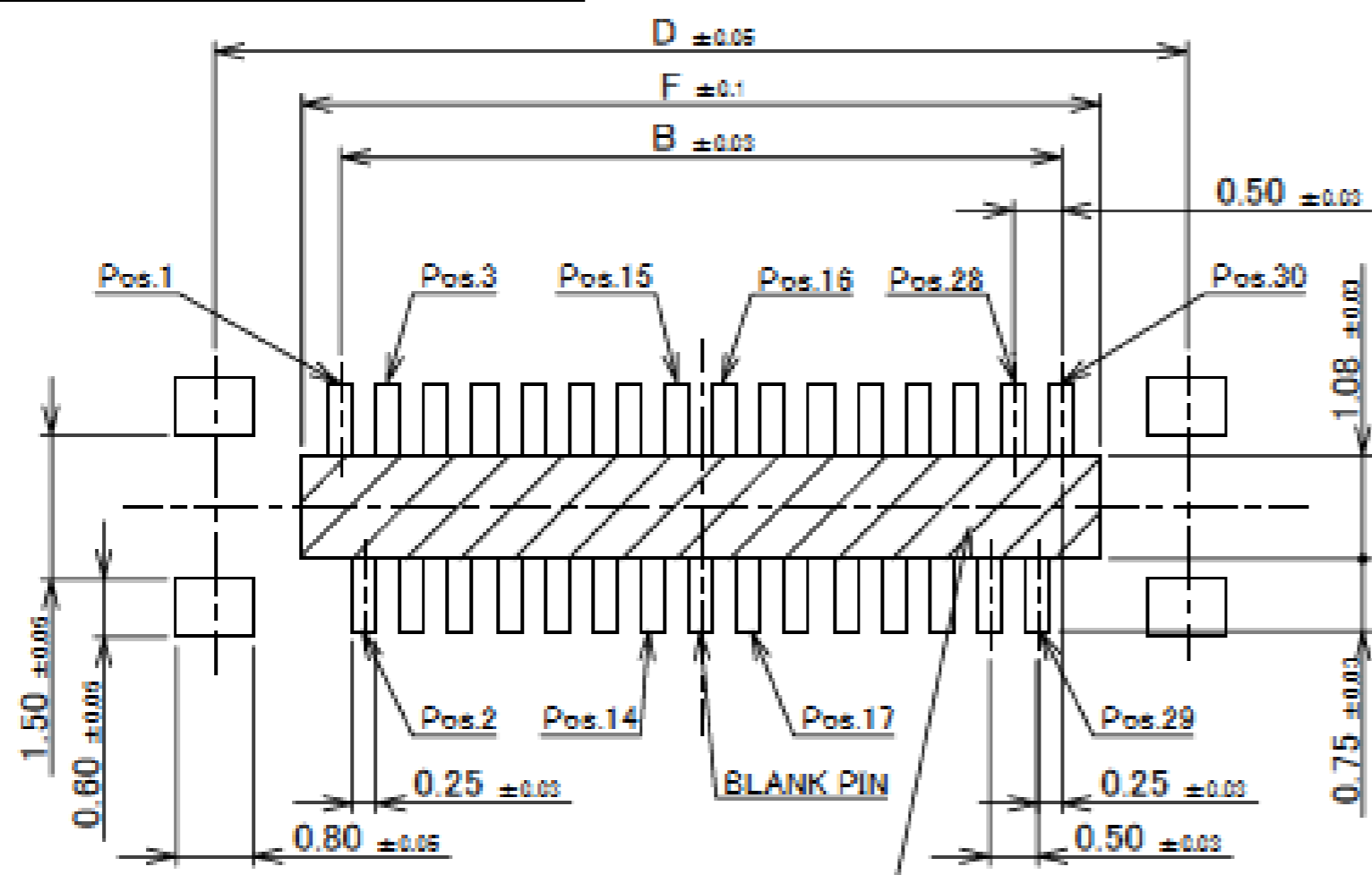
40P CONTACT LAYOUT
(S=10/1)



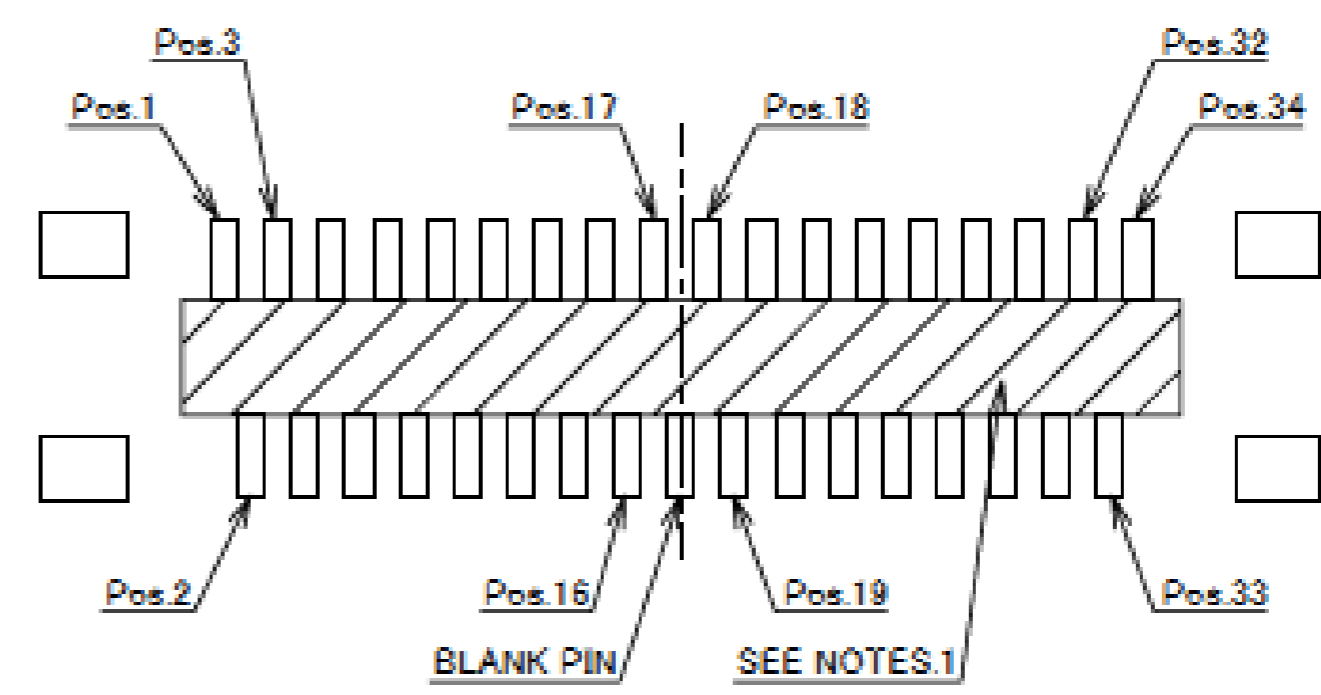
50P CONTACT LAYOUT
(S=10/1)

Rev.15

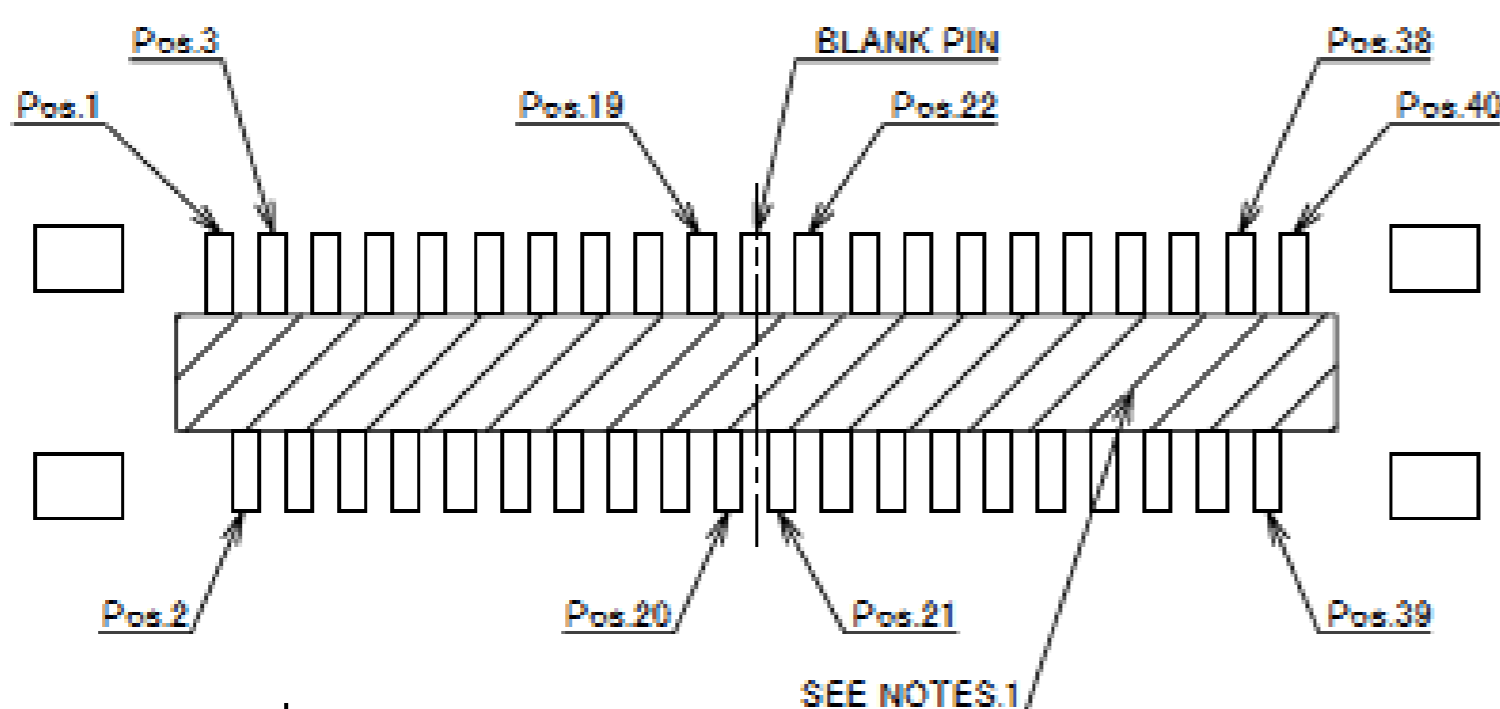
PART No.	Pos	B	D	F
20533-030E-**-**	30	7.50	10.11	8.30
20533-034E-**-**	34	8.50	11.11	9.30
20533-040E-**-**	40	10.00	12.61	10.80
20533-050E-**-**	50	12.50	15.11	13.30



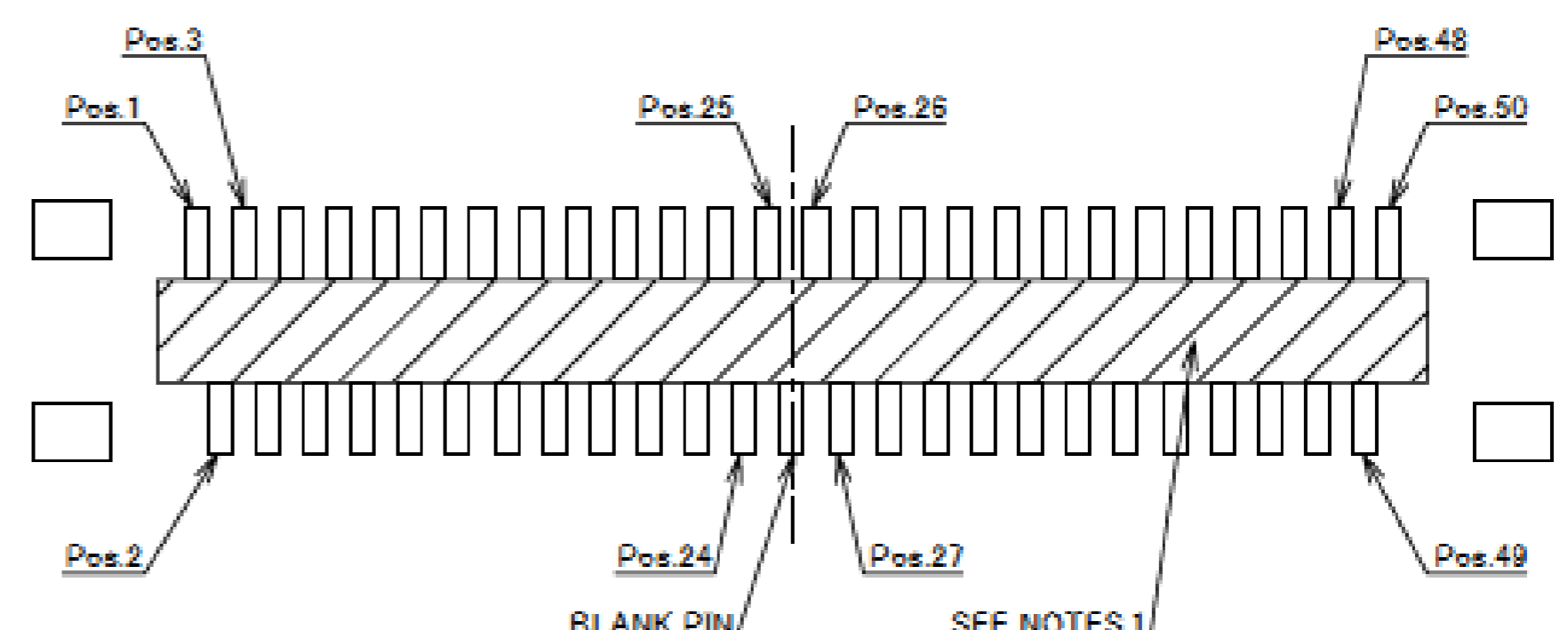
30P RECOMMENDED FOOTPRINT PATTERN LAYOUT



34P RECOMMENDED FOOTPRINT PATTERN LAYOUT



40P RECOMMENDED FOOTPRINT PATTERN LAYOUT



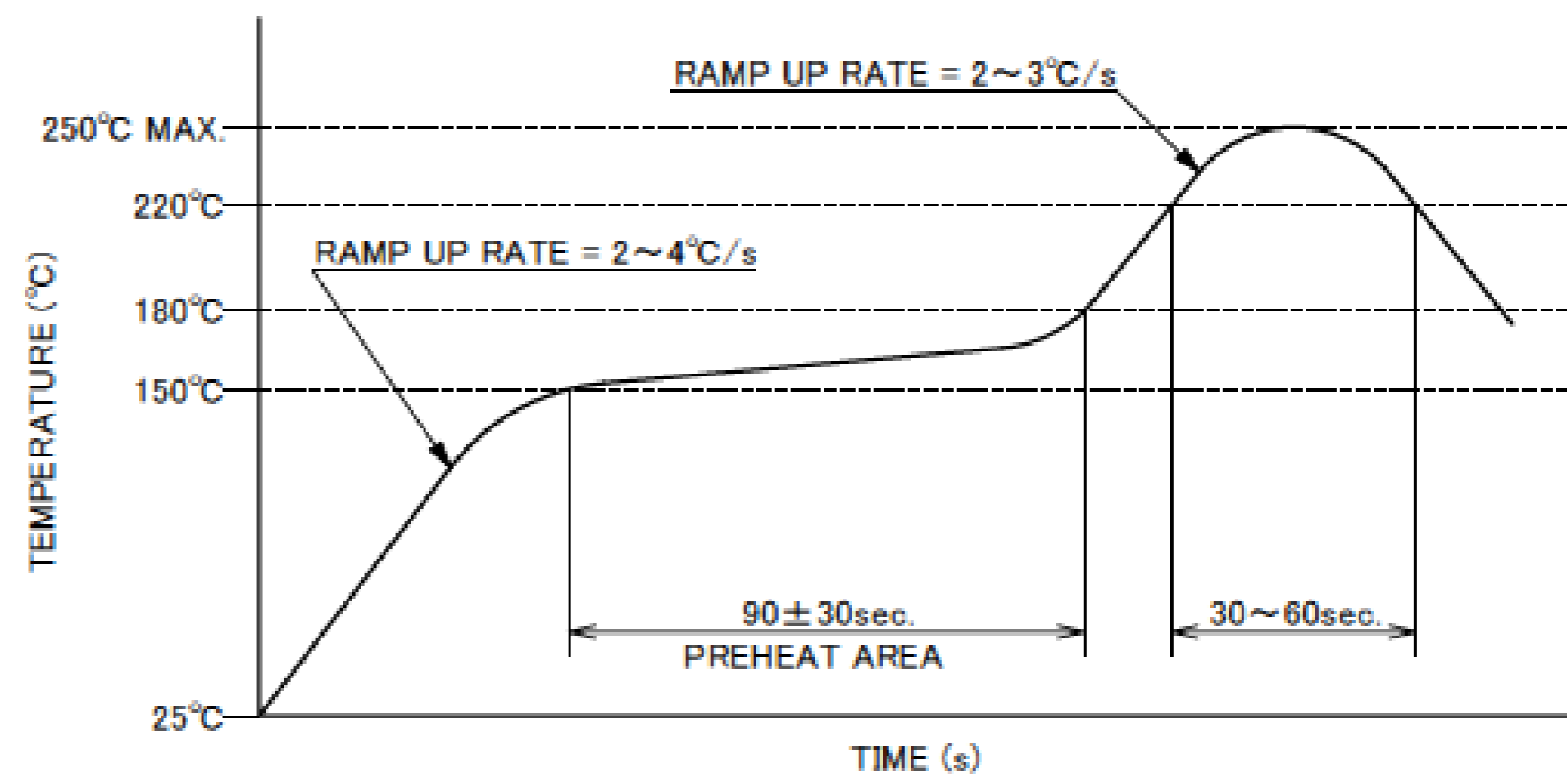
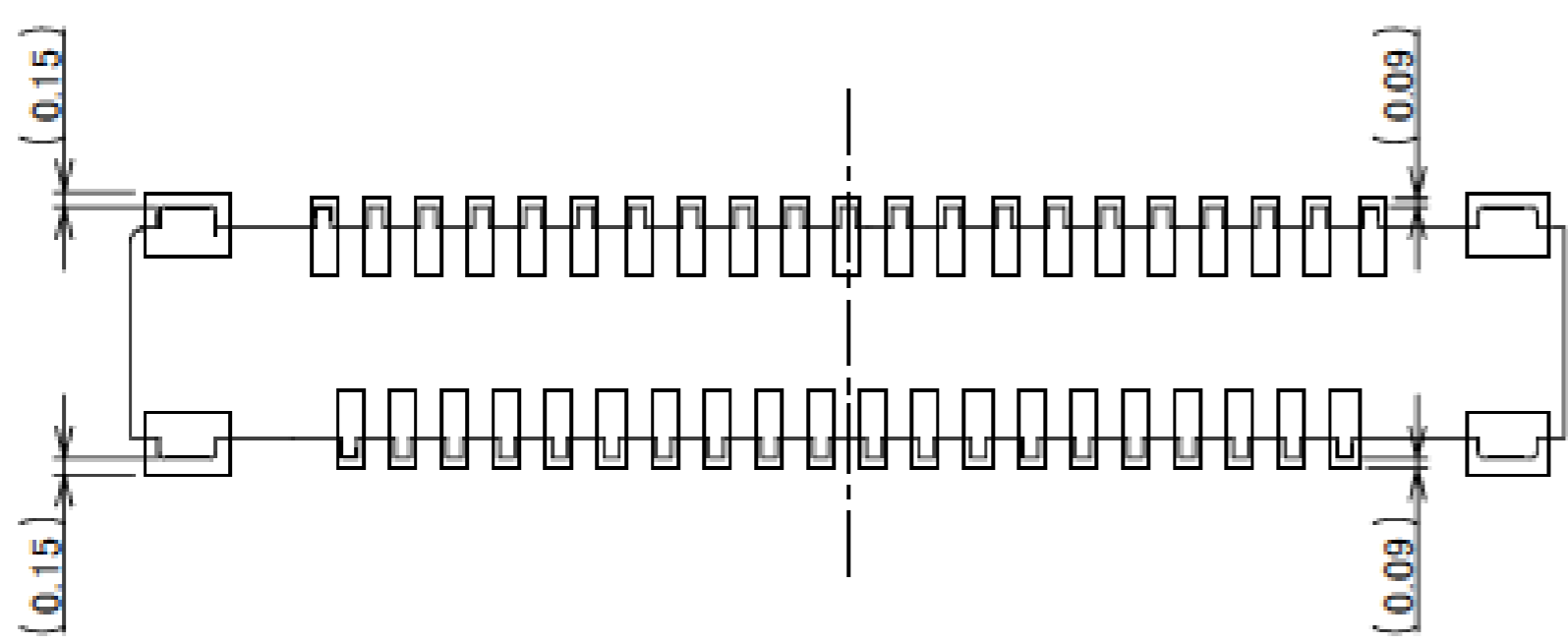
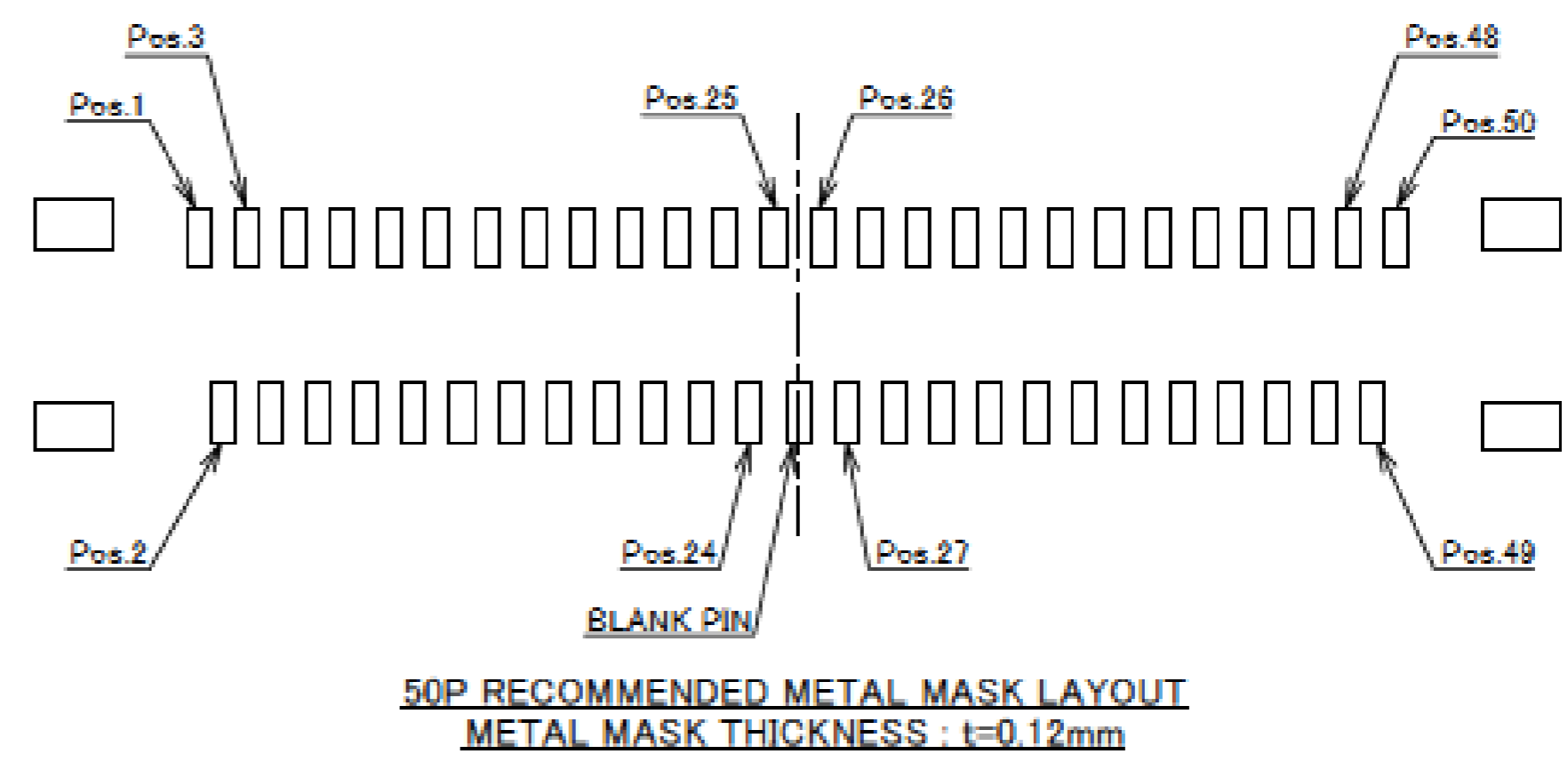
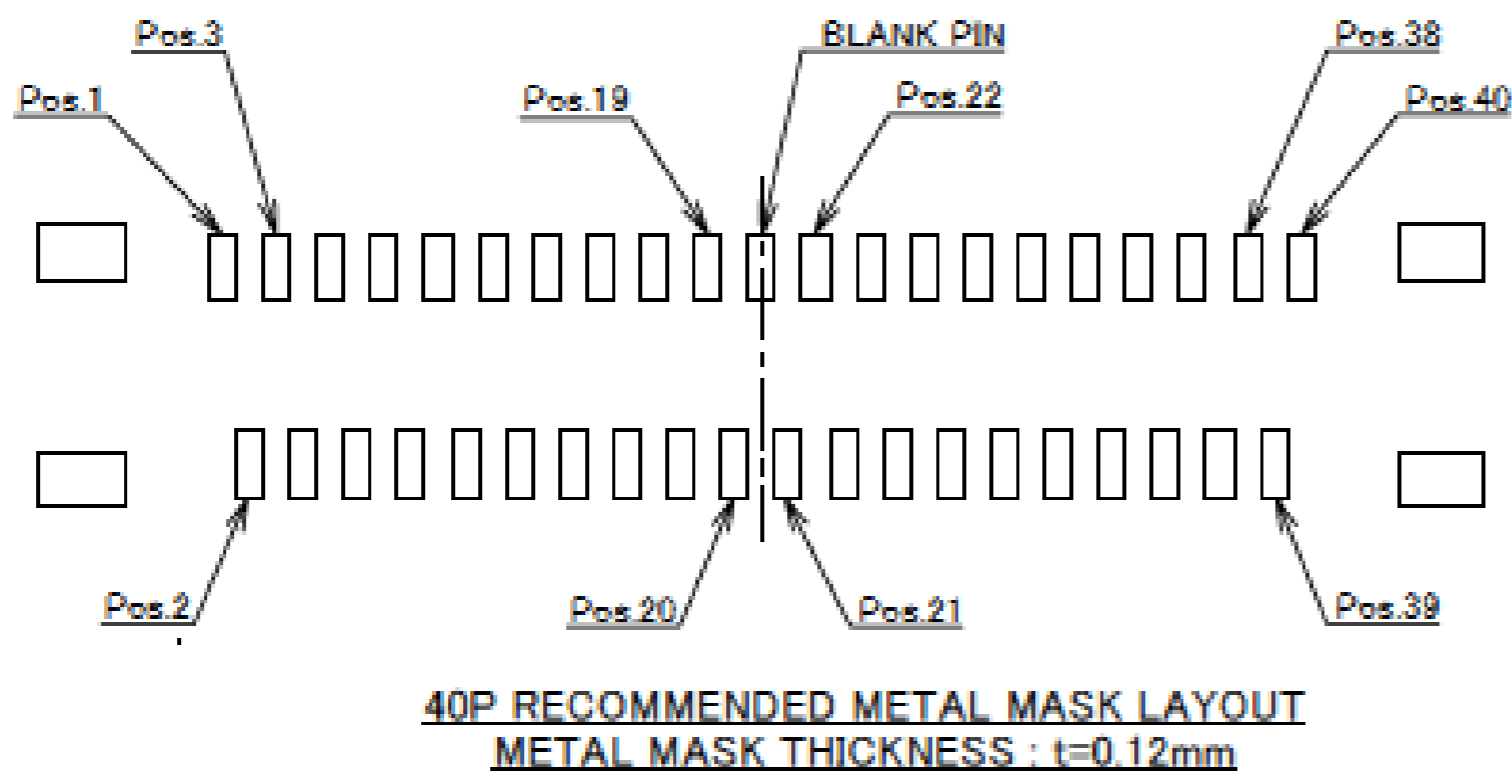
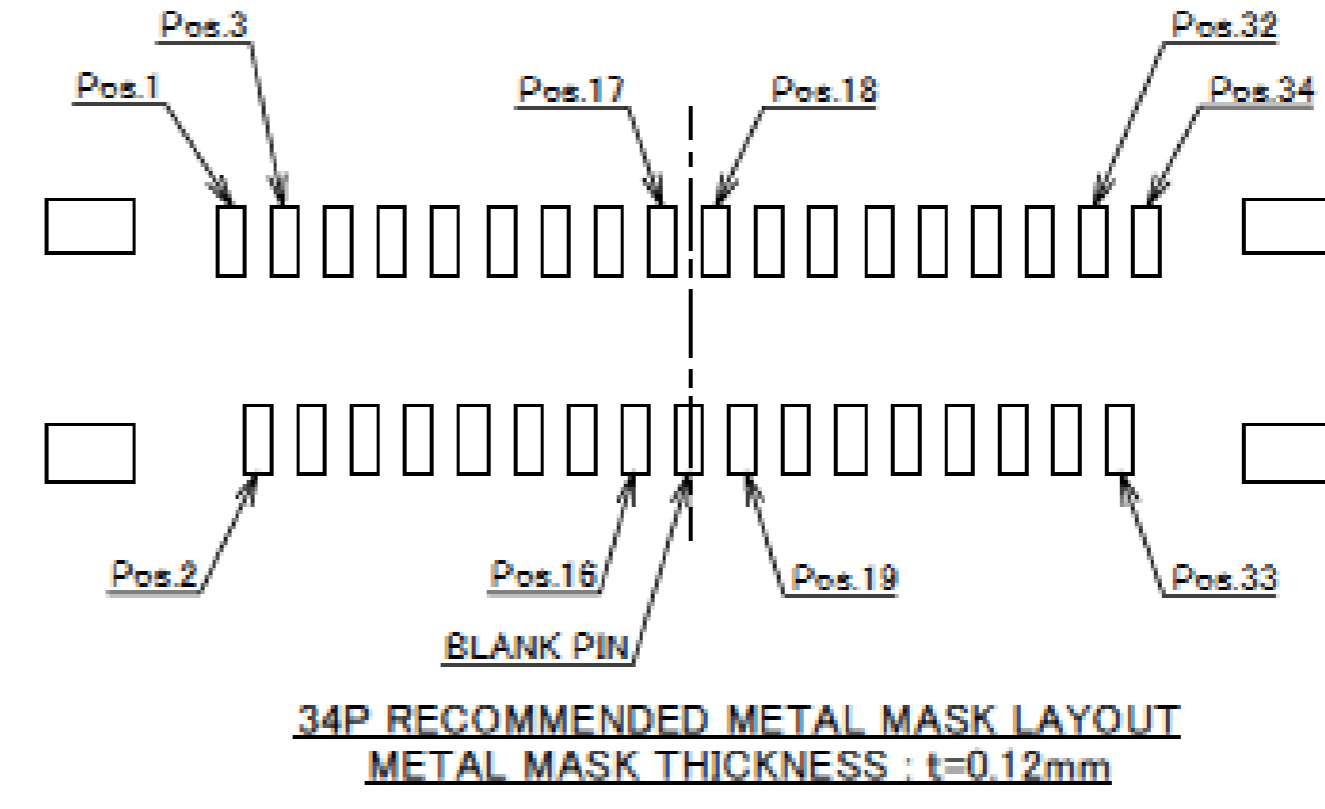
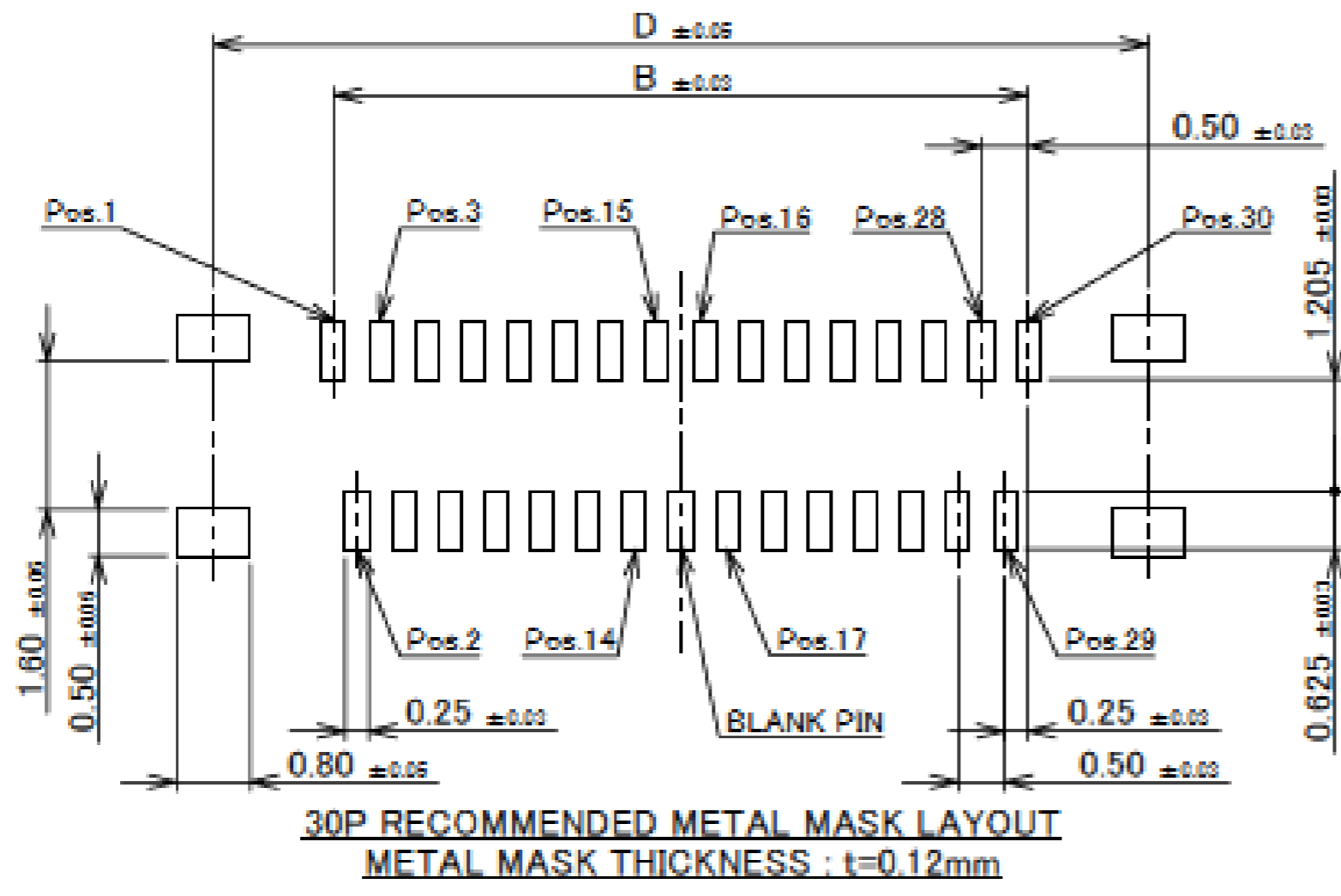
50P RECOMMENDED FOOTPRINT PATTERN LAYOUT

NOTES
1. SOLDER RESIST SHALL BE APPLIED TO THIS AREA.

Rev.15

Receptacle Assembly

PART No.	Pos	B	D
20533-030E-**-	30	7.50	10.11
20533-034E-**-	34	8.50	11.11
20533-040E-**-	40	10.00	12.61
20533-050E-**-	50	12.50	15.11



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)
RATING AMPERAGE (FOR CONTACT)	CONTACT MATERIAL : PHOSPHOR BRONZE (PLUG : 20531-0**T-02 ,RECEPTACLE : 20533-0**E) 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] CONTACT MATERIAL : CORSON ALLOY (PLUG : 20531-0**T-12 ,RECEPTACLE : 20533-0**E-01) 0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 8 CONTACTS) 0.19A AC/DC [AWG#44] 0.14A AC/DC [AWG#46]
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 : \angle 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \angle 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.
COPLANARITY	0.10mm MAX.
PRODUCT SPECIFICATION	PRS-1555
TEST REPORT	TR-10051
INSTRUCTION MANUAL	HIM-10001
PACKING STANDARD	300-874
APPEARANCE CRITERIA No.	QLS-A***

Rev.15

Custom Connectors Available

 RF Connector

MHF® series



 CABLINE® series
Micro-coaxial/Twinax/
Discrete Wire Connector



 Optical Module

LIGHTPASS® series



NOVASTACK® series

 Board-to-Board Connector



 Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series

 FPC FFC Connector

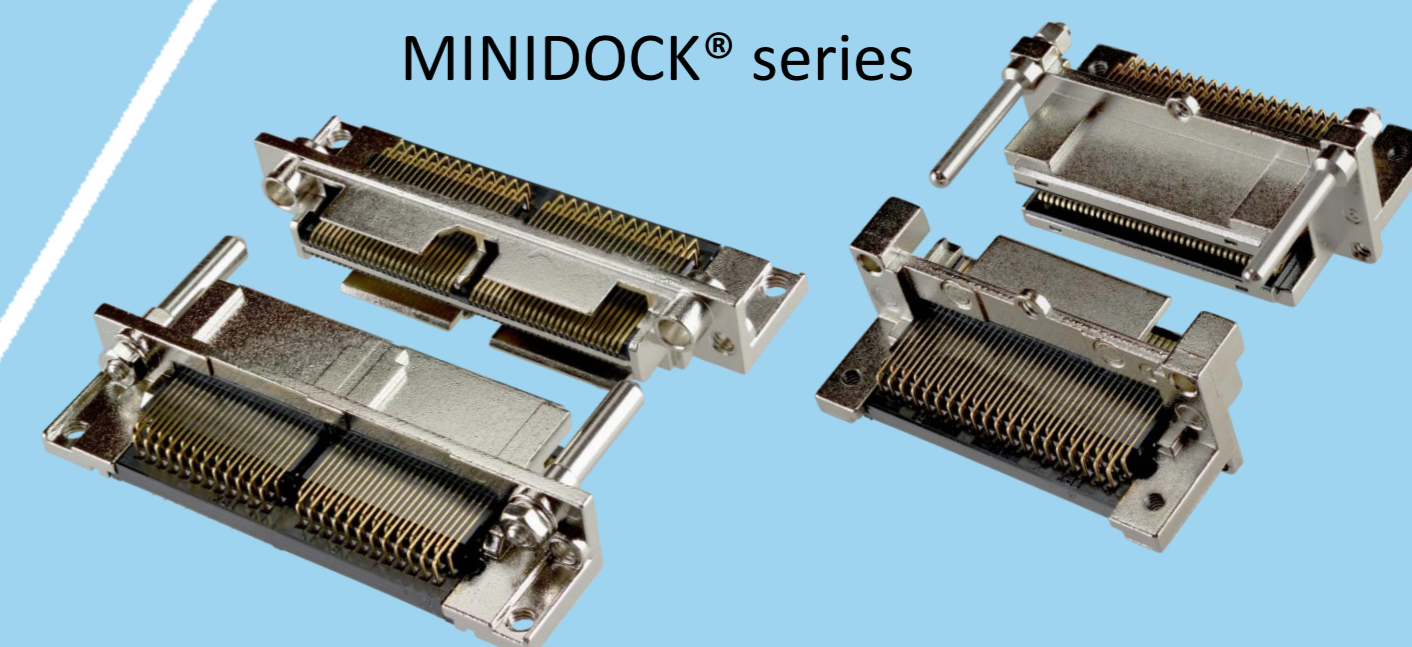


Inquiry



MINIDOCK® series

 I/O Connector



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