

# FPL II

パワー用ケーブルは最大AWG#32結線可能、eDP HBR2 (5.4Gbps/lane)、多点グラウンドでノイズ対策、ライトアングル縦嵌合 (小スペース)、0.5mm ピッチ、細線同軸コネクタ



**Product Specifications:**

Mating type	Right angle vertical	
Board Pitch (mm)	0.5	
Wiping Length (mm)	0.51	
Mated size (mm)	Height	2.2 +/- 0.2
	Width	Formula: 5.8 + (0.5*p)
	Depth	6.1
Pin Counts	Range	Up to 50
	Available	30, 40, 50

**Applicable Cable Size:**

Maximum O.D. (mm)	0.5
Micro-Coaxial for Signal (AWG)	45 ohm: #36 or smaller 50 ohm: #38 or smaller
Twinax (AWG)	#40
Discrete (AWG)	#32 or smaller

**Applicable Standards (Reference Only):**

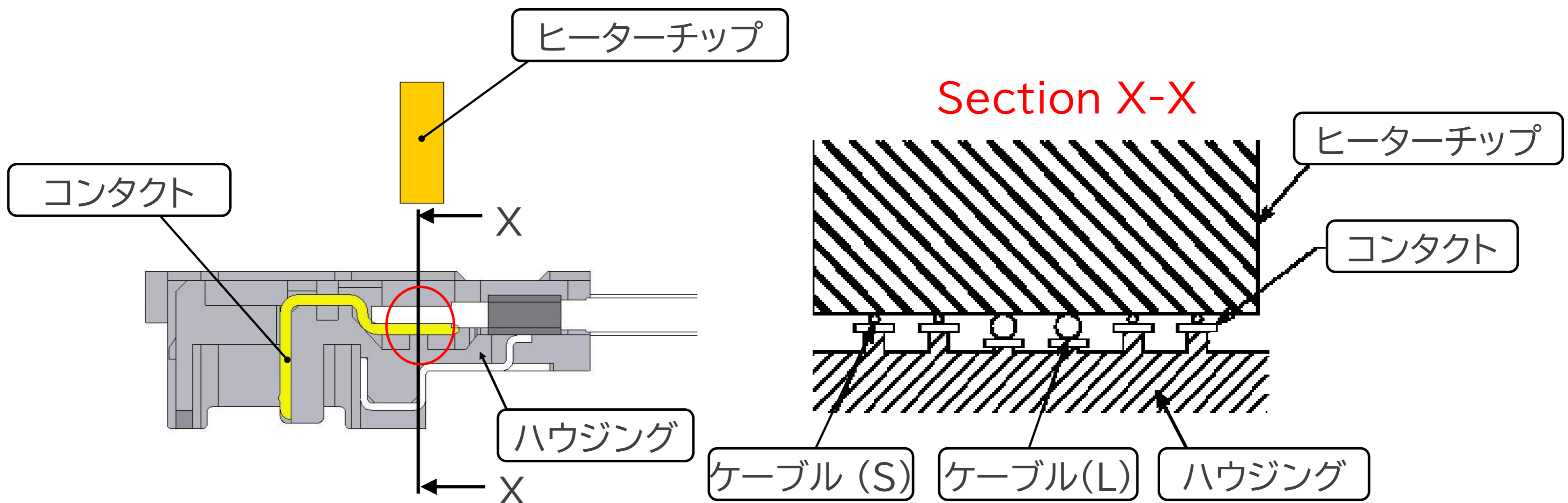
eDP HBR 2 (5.4 Gbps), USB 3.1 Gen 1 (5 Gbps)

\*記載のない極数の対応状況についてはお問い合わせください。

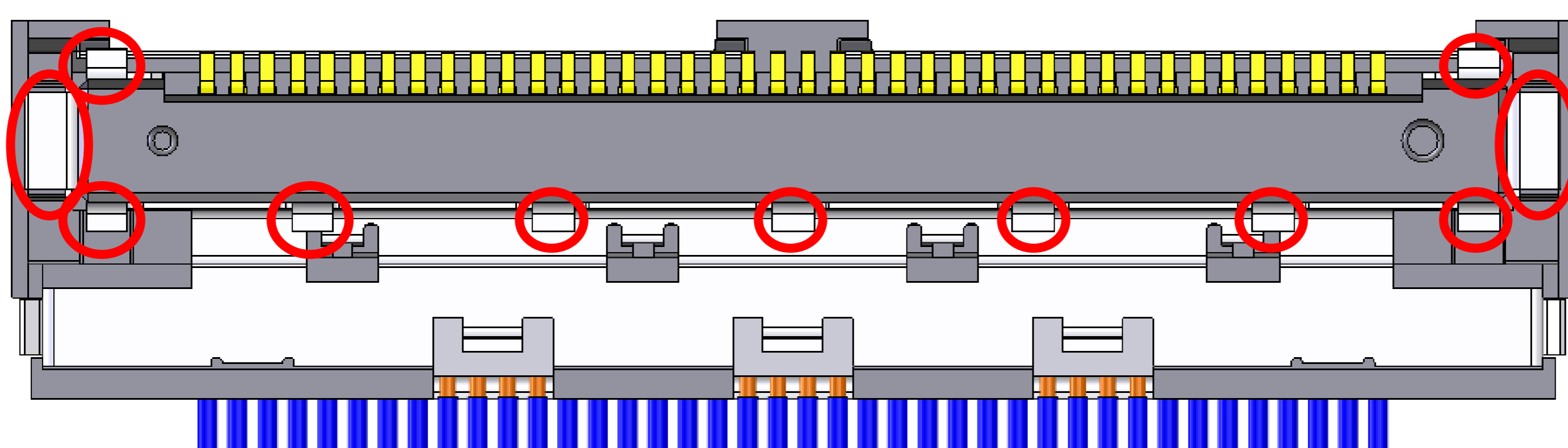
## ▶ パワー用ケーブルは最大AWG#32結線可能



## ▶ サイズの異なる細線同軸とディスクリットケーブルの半田付けによる一括結線が可能



## ▶ グラウンド設置点数が多く、ノイズ対策に有効

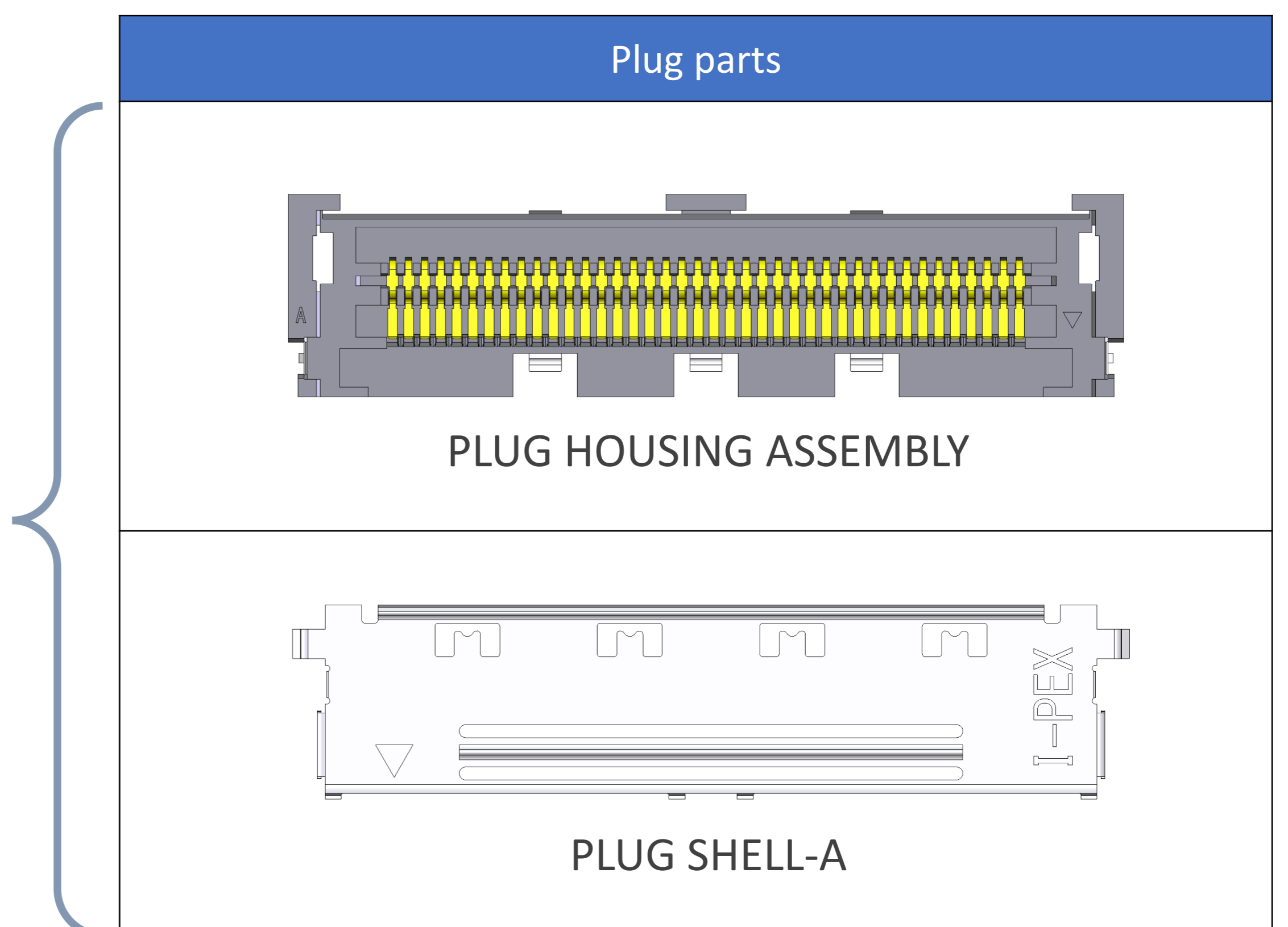
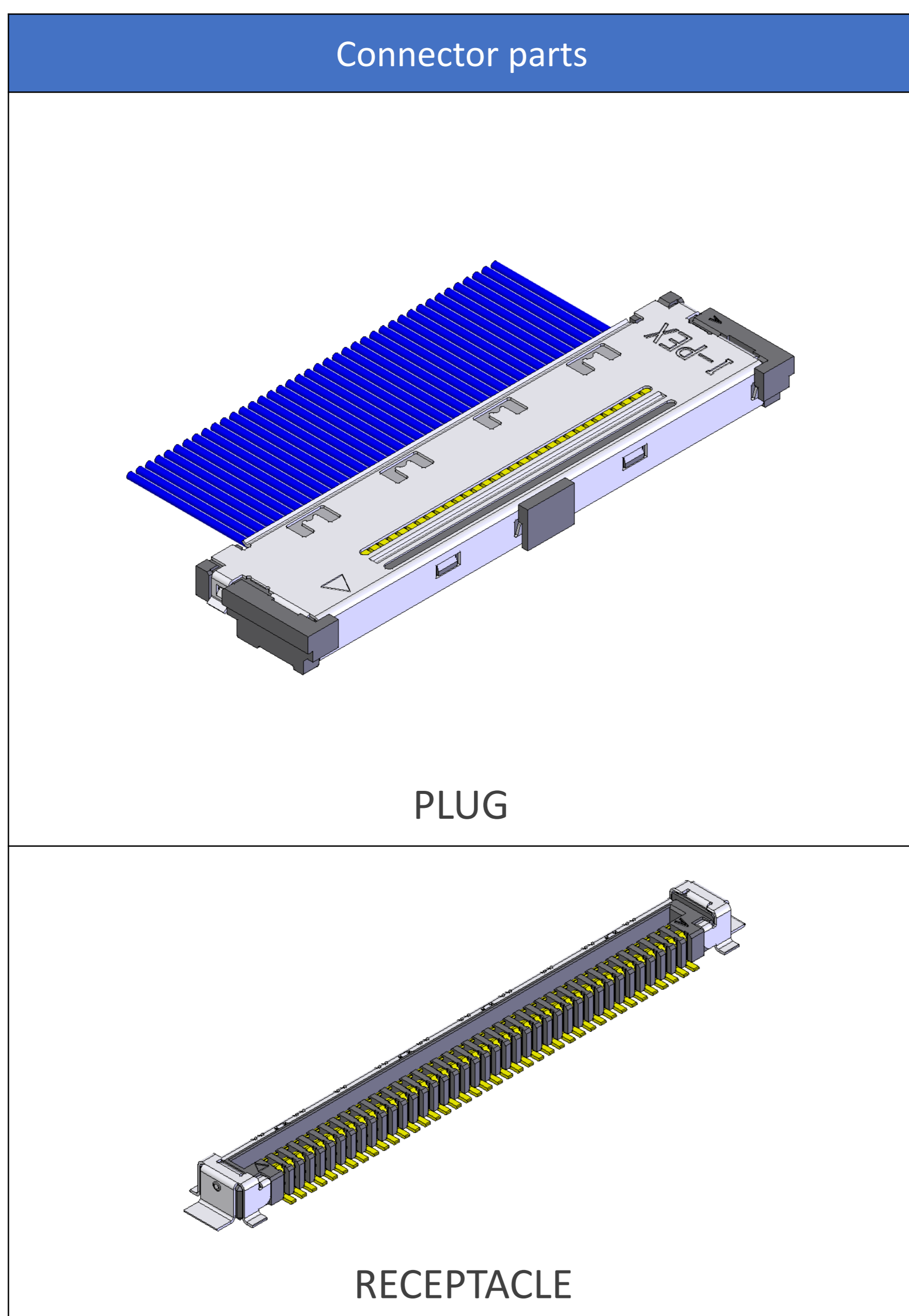


下から見たコネクタ FPL II 30P

○ グラウンド設置箇所

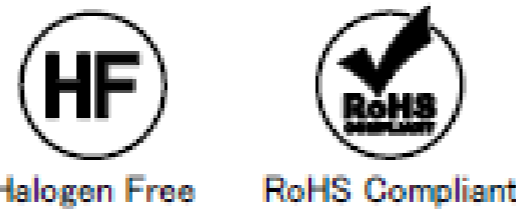
# Component Parts Details

## Component Parts

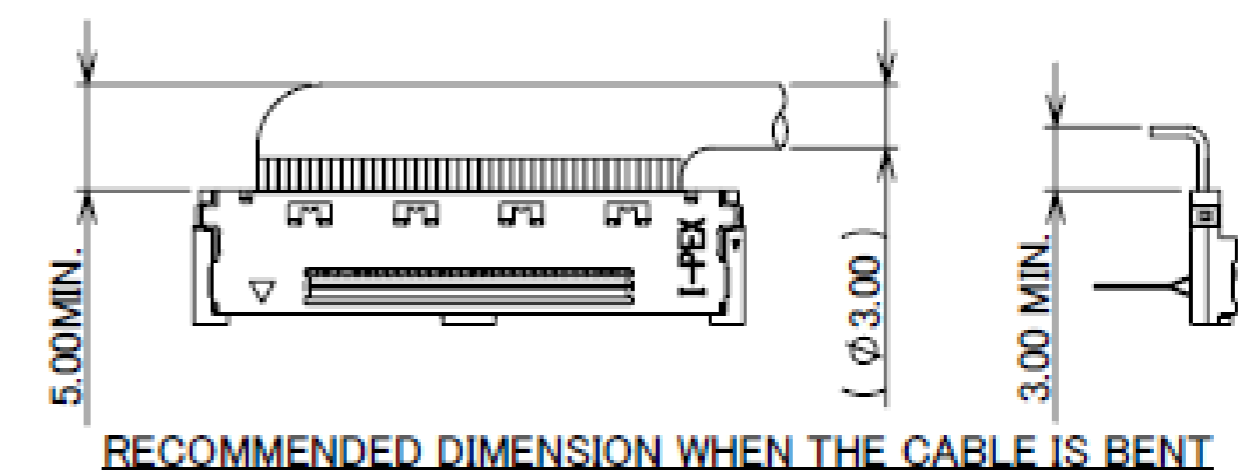
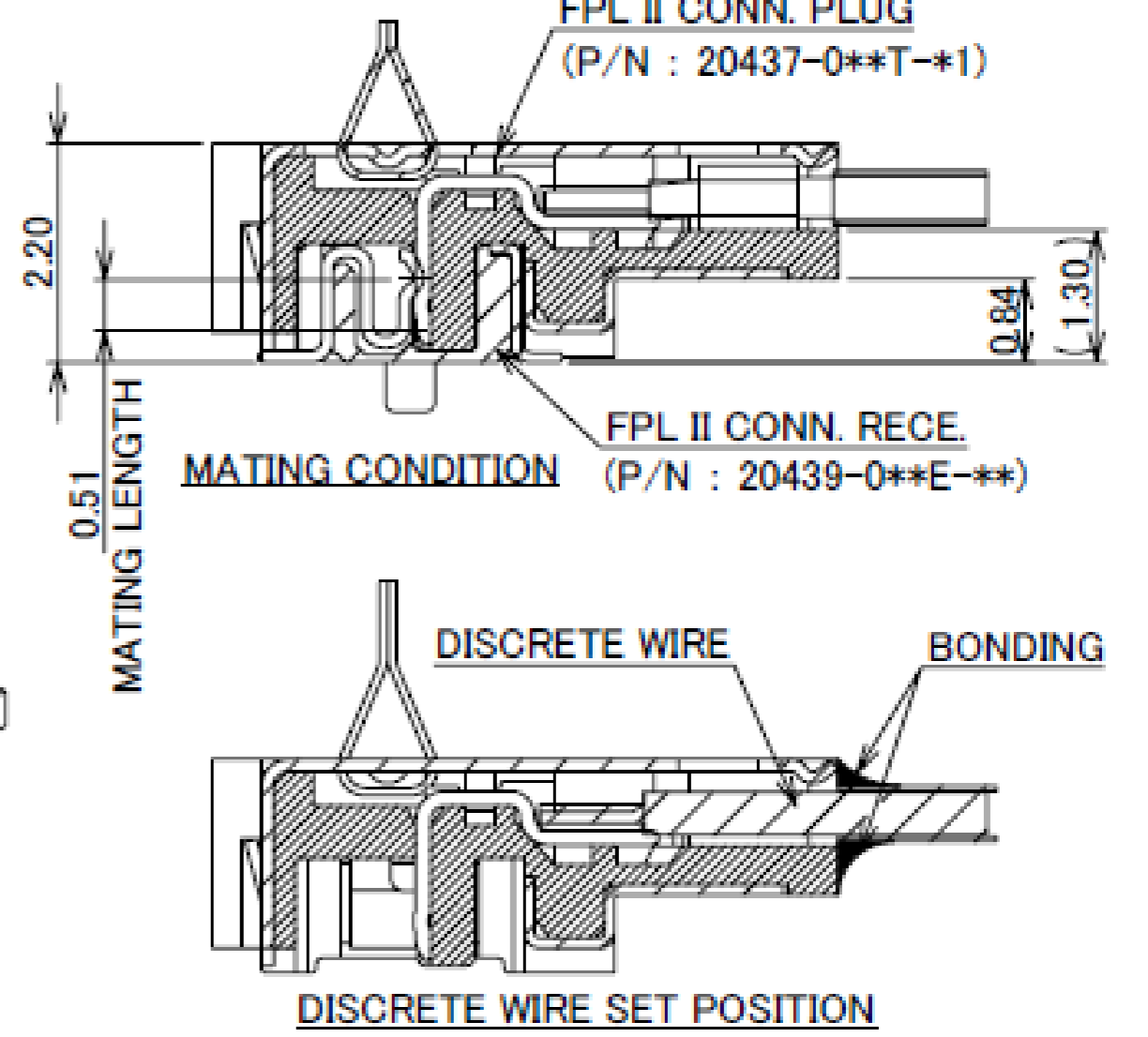
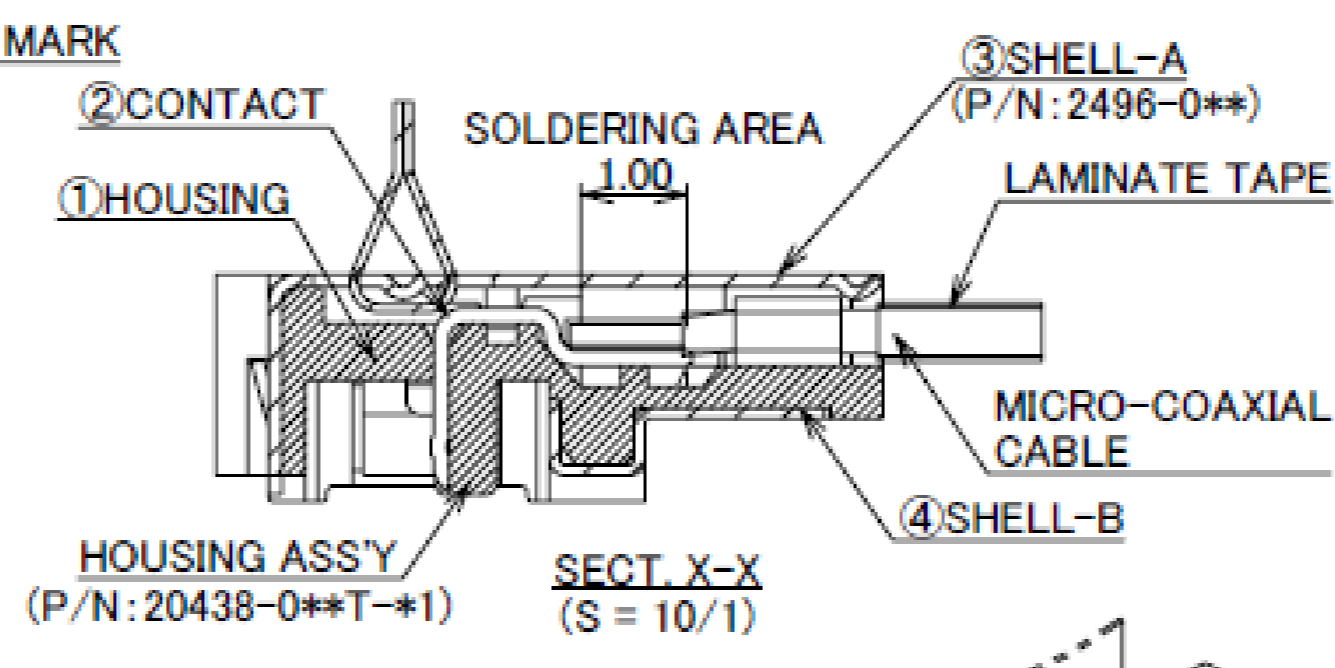
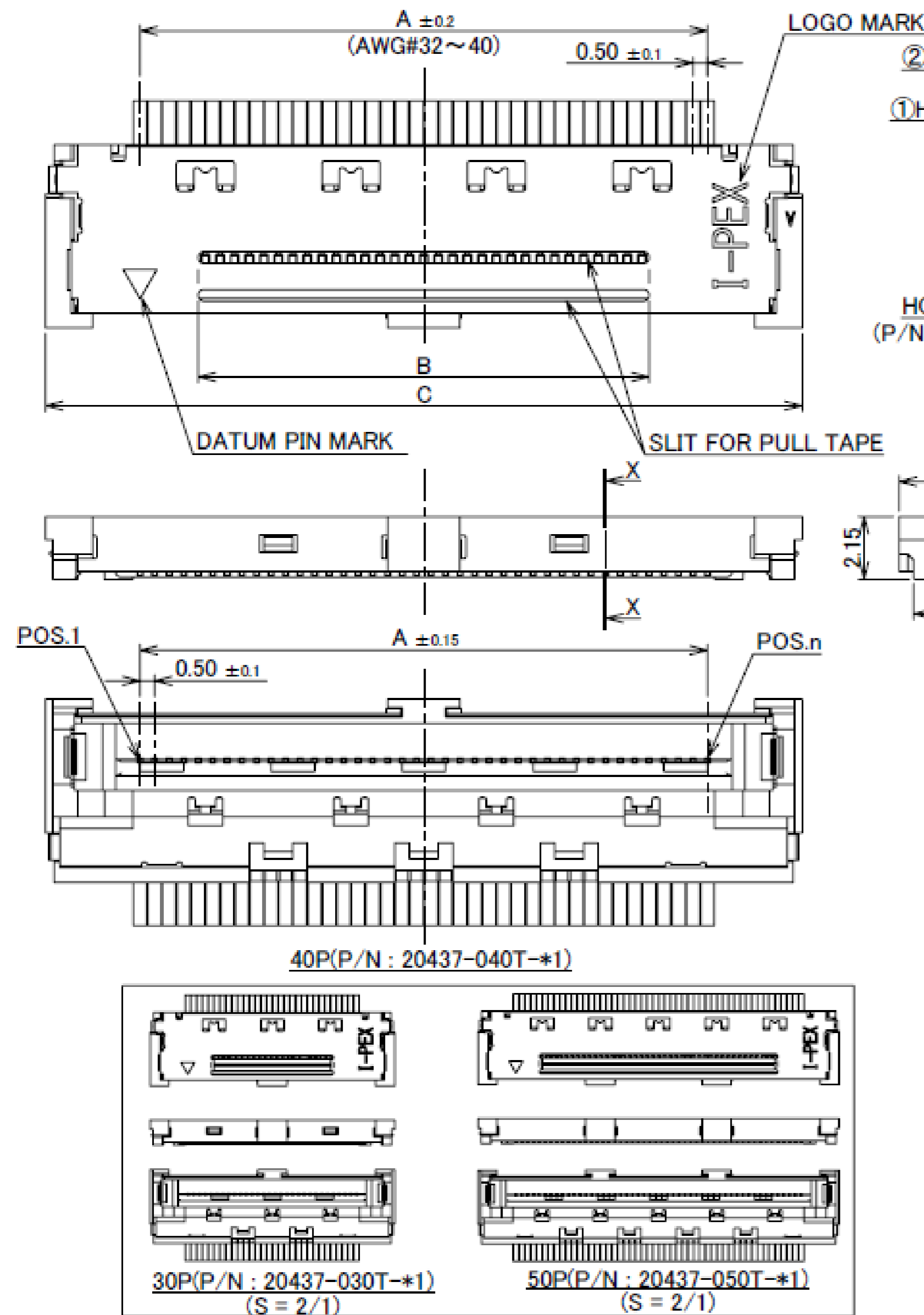


# Plug for Cable Assembly

Recommended P/N		20437-0**T-01		
PART No.	POS.	A	B	C
20437-030T-*1	30	14.50	10.50	20.80
20437-040T-*1	40	19.50	15.50	25.80
20437-050T-*1	50	24.50	20.50	30.80

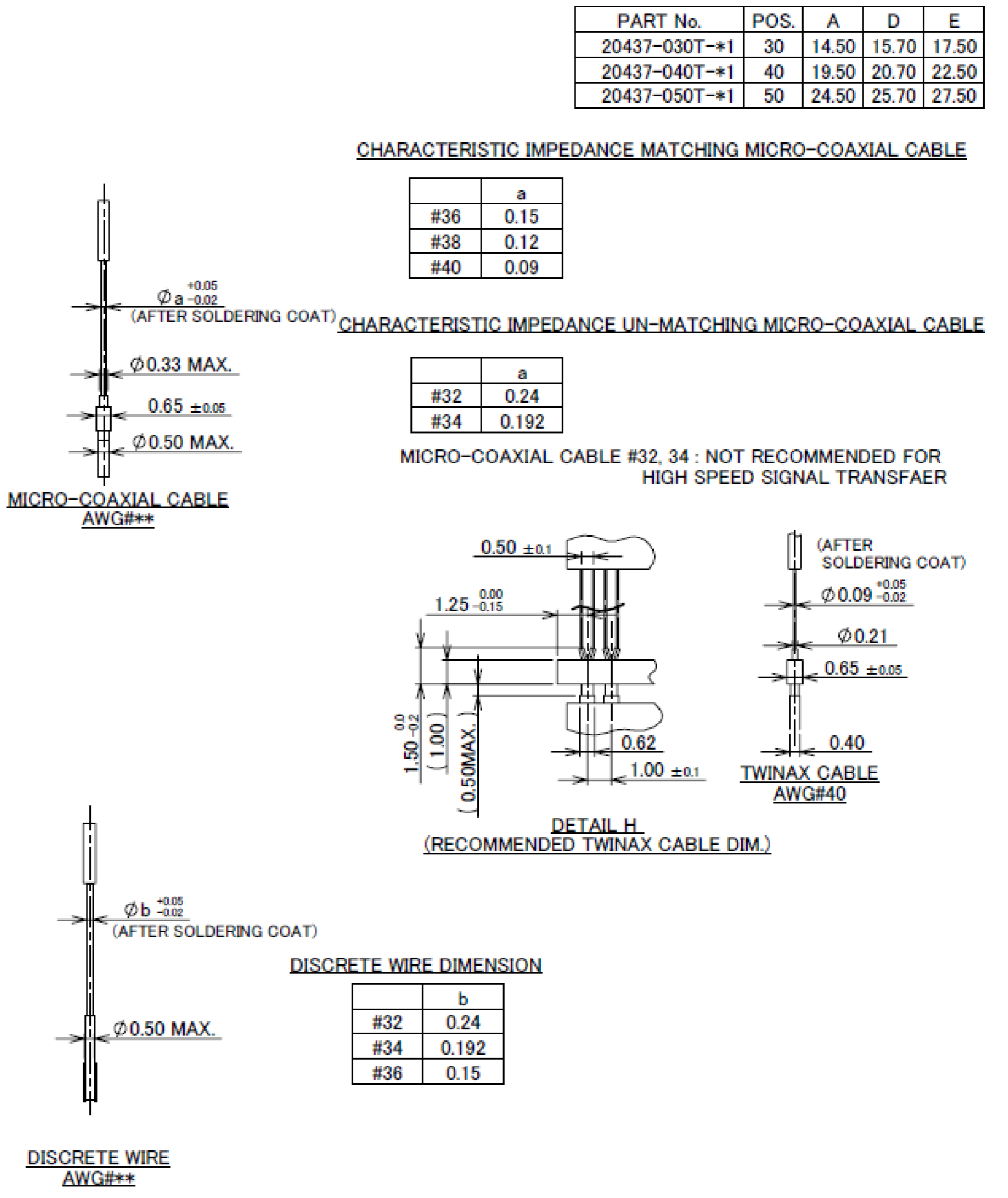
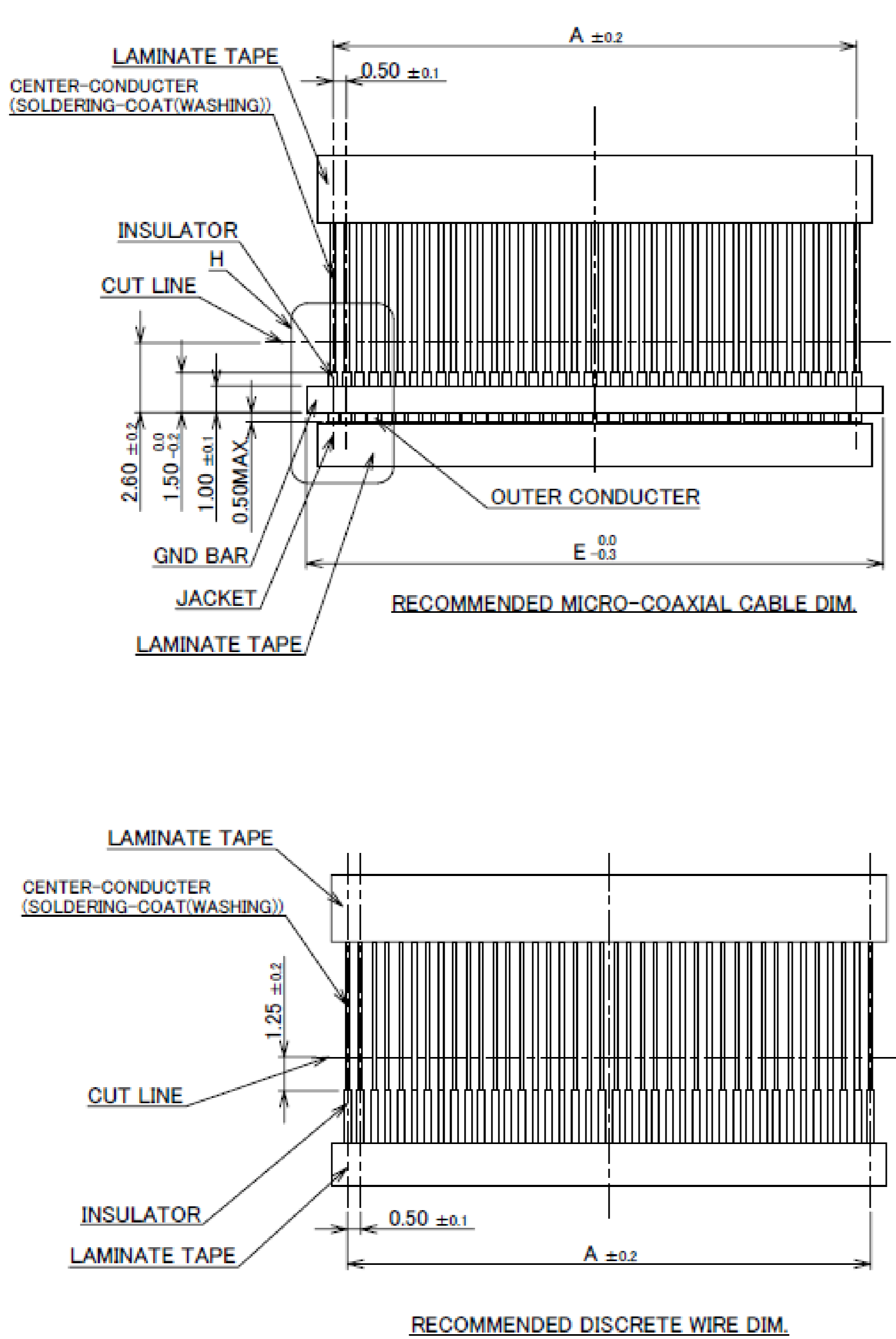


CABLE ASS'Y PART No.	HOUSING ASS'Y PART No.	SHELL-A PART No.	CONTACT FINISH (MATING AREA)
20437-0**T-01	20438-0**T-01	2496-0**	Au 0.10 μm MIN.
20437-0**T-11	20438-0**T-11	2496-0**	Au 0.30 μm MIN.



NO.	DISCRIPTION	MATERIAL	FINISH . REMARKS
4	SHELL-B	PHOSPHOR BRONZE	Sn 2.00 μm MIN. OVER Ni 1.00 μm MIN.
3	SHELL-A	PHOSPHOR BRONZE	Sn 2.00 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	PART NO. 20437-0**T-01 MATING AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN. PART NO. 20437-0**T-11 MATING AREA : Au 0.30 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

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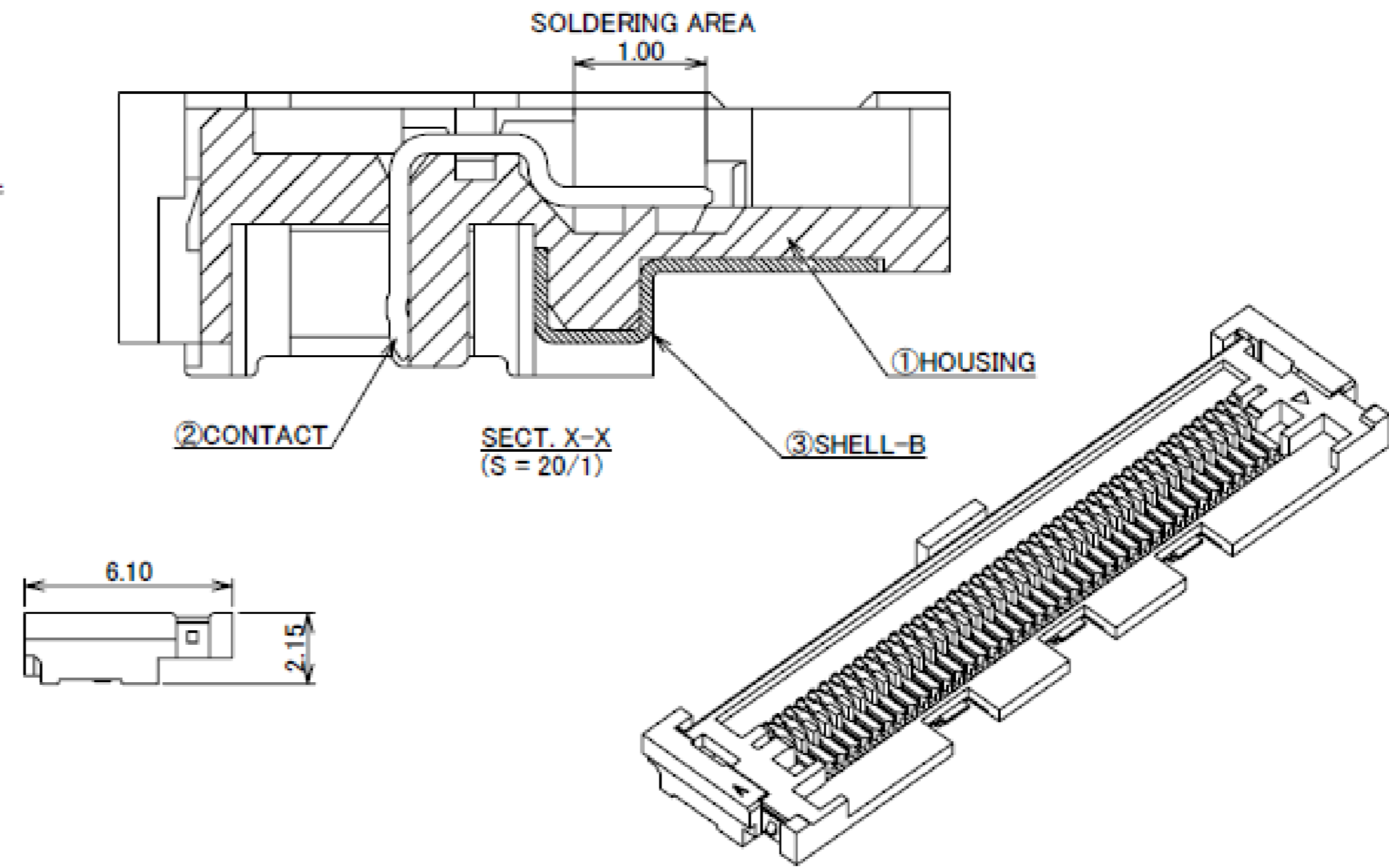
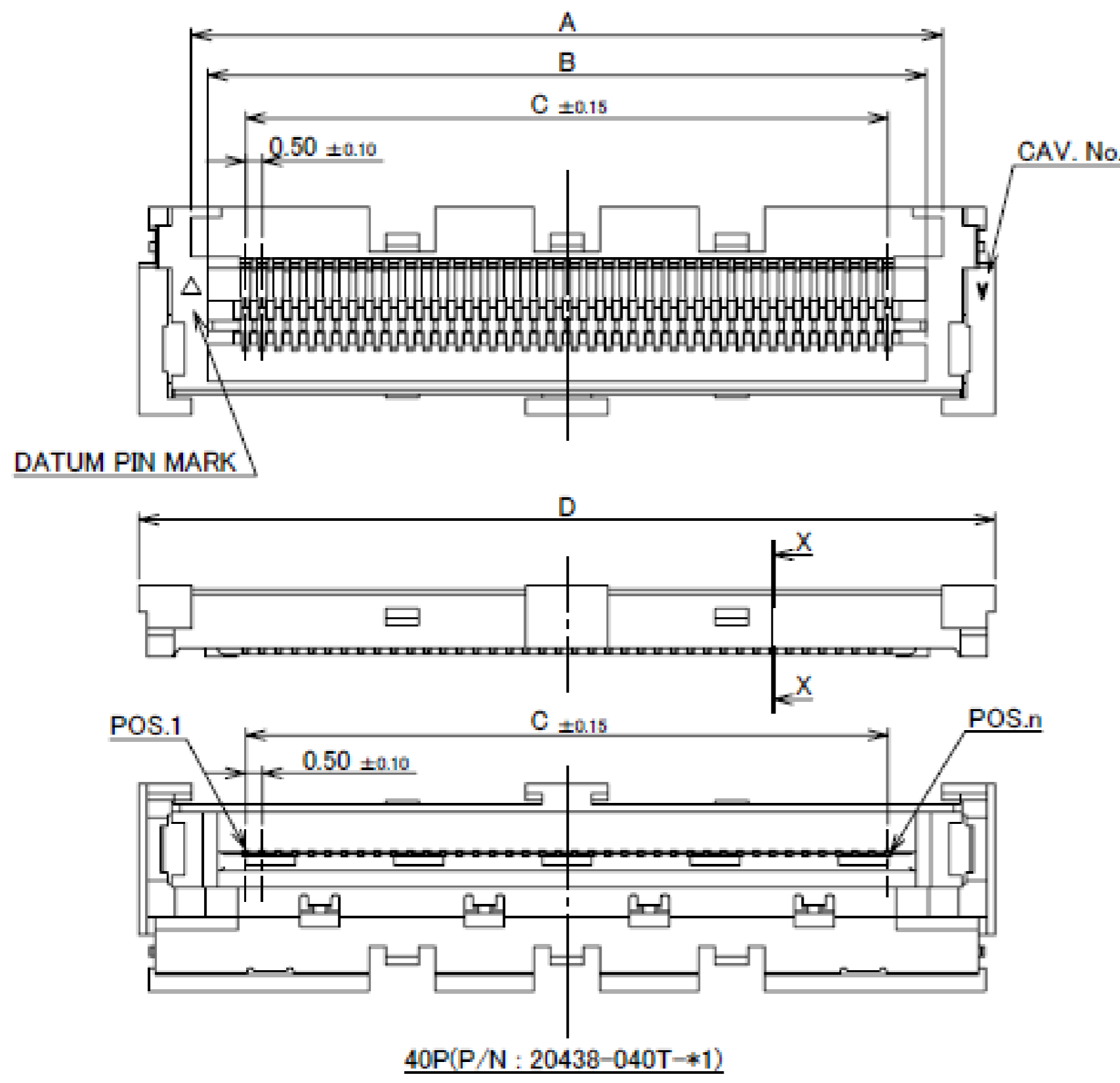
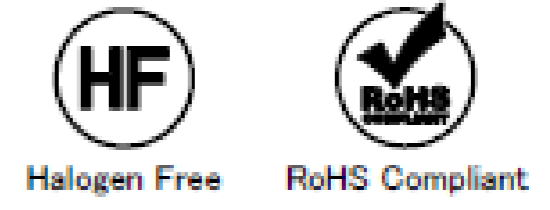
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# Plug Housing Assembly

Recommended P/N		20438-0**T-01			
PART No.	POS.	A	B	C	D
20438-030T-*1	30	17.80	16.80	14.50	20.80
20438-040T-*1	40	22.80	21.80	19.50	25.80
20438-050T-*1	50	27.80	26.80	24.50	30.80

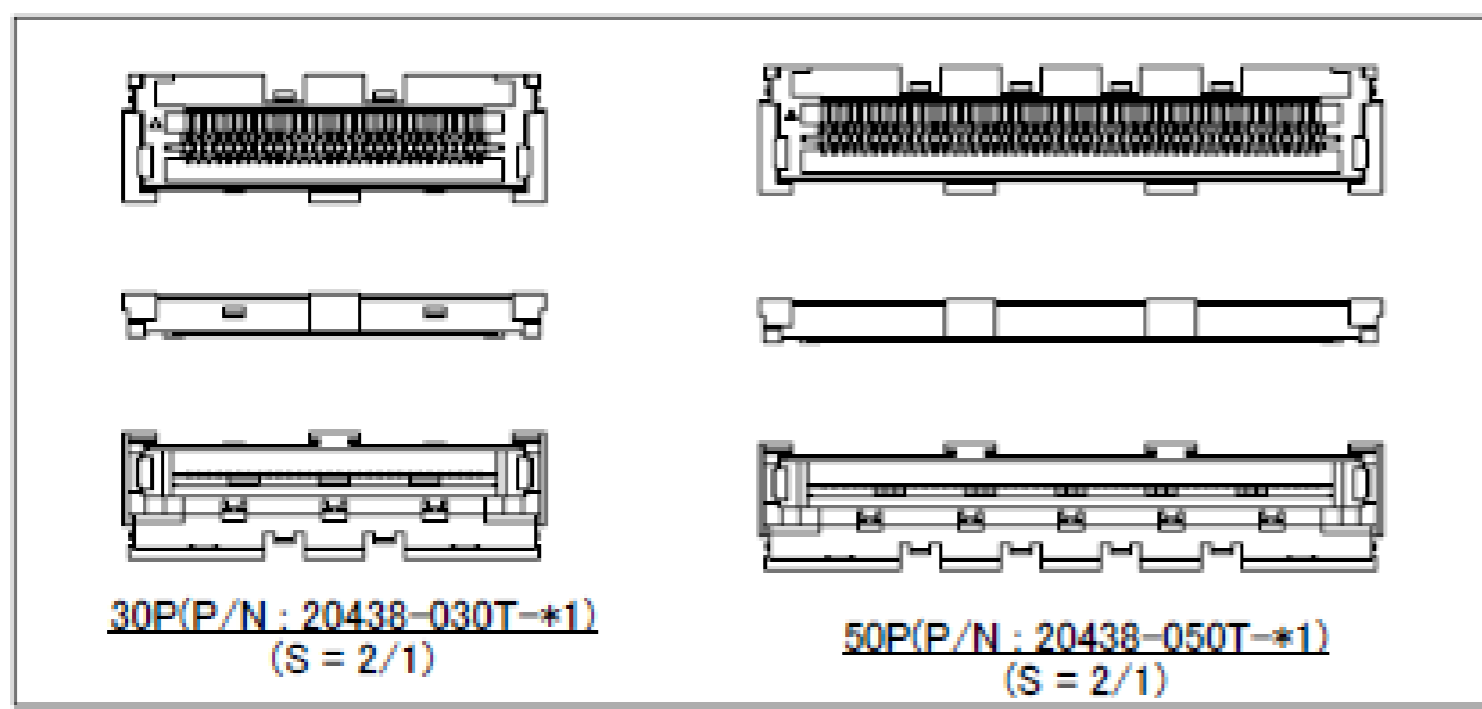
PART NO.	CONTACT FINISH (MATING AREA).
20438-0**T-01	Au 0.10 μm MIN.
20438-0**T-11	Au 0.30 μm MIN.



**NOTES**

- THIS PART IS ASSEMBLY WITH SHELL-A (PART NO. 2496-0\*\*) AFTER SOLDERED THE CABLE. AND IT BECOMES PART NO. 20437-0\*\*T-\*1

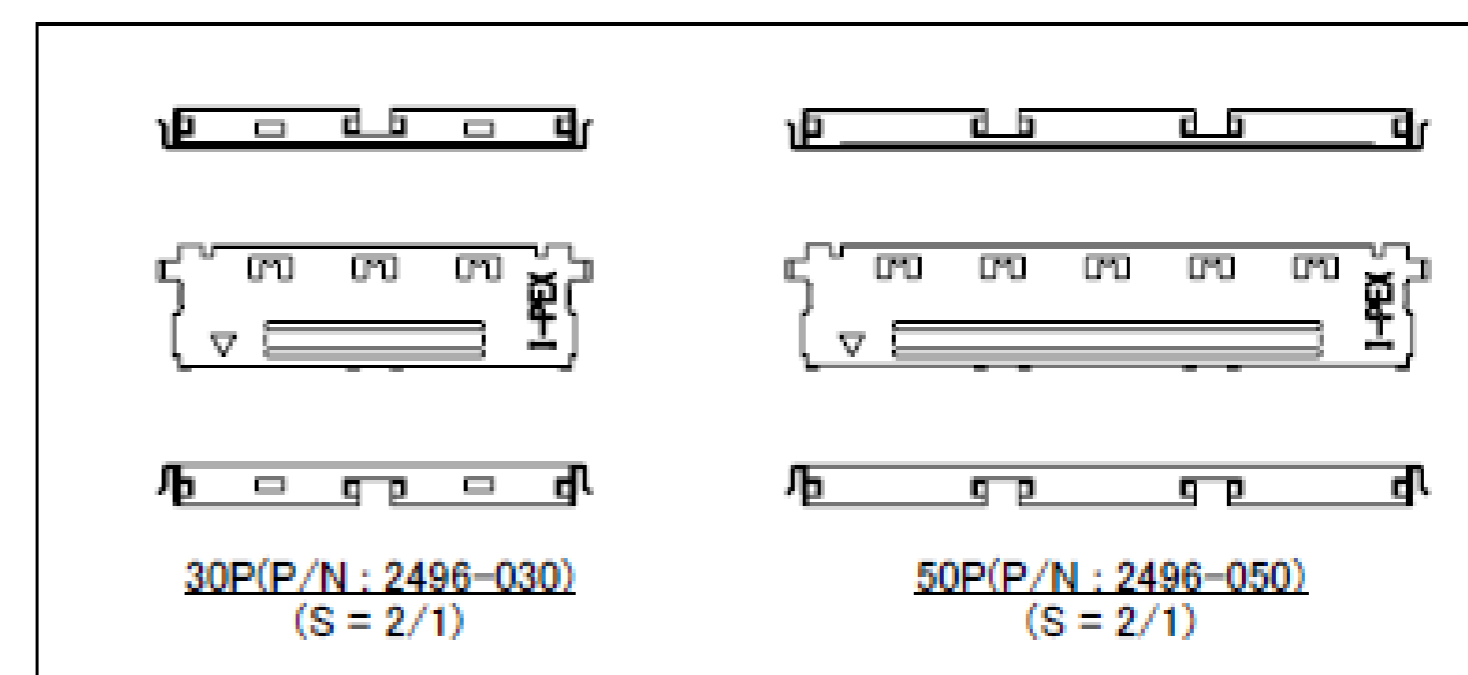
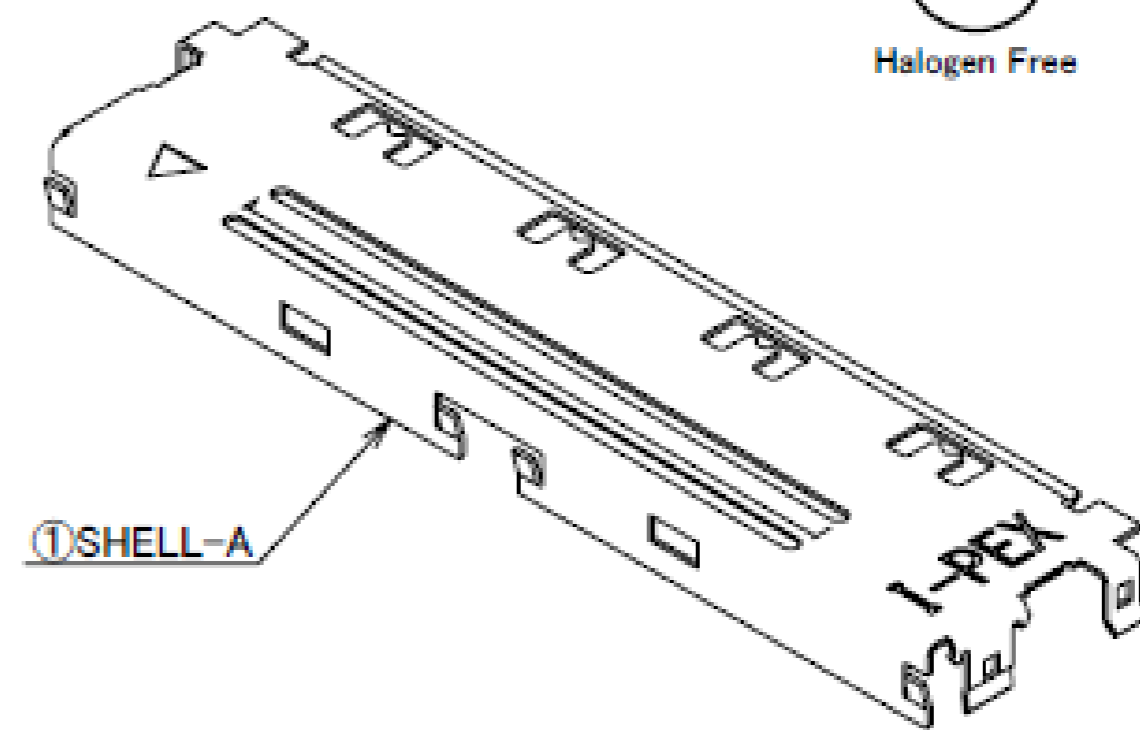
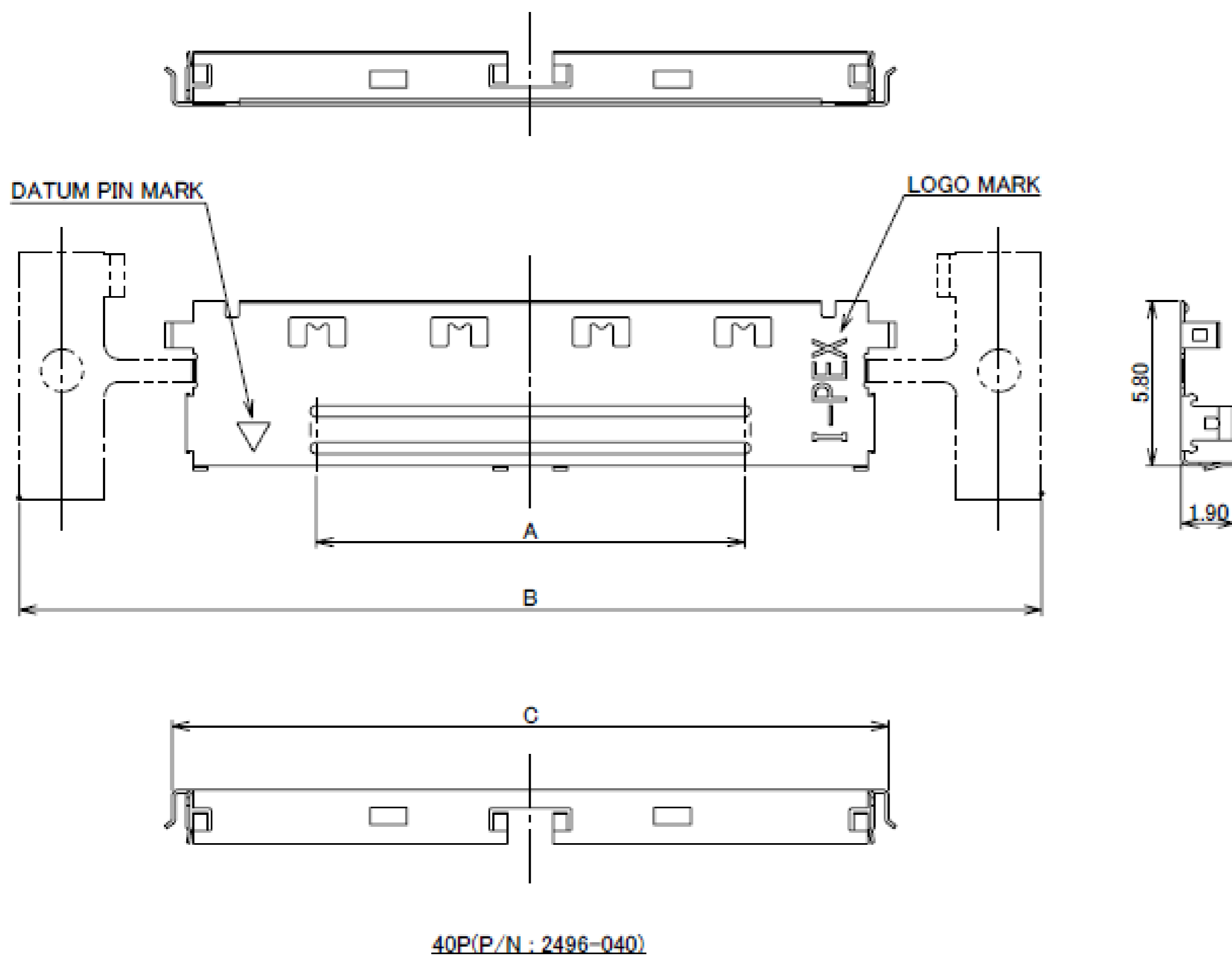
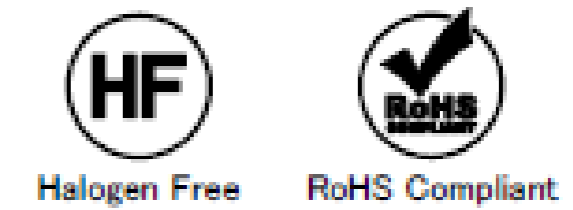
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	SHELL-B	PHOSPHOR BRONZE	Sn 2.00 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	<b>PART NO. 20438-0**T-01</b> MATING AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	<b>PART NO. 20438-0**T-11</b> MATING AREA : Au 0.30 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN. UL94V-0, BLACK



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# Plug Shell-A

Recommended P/N		2496-0**			
PART NO.	Pos.	A	B	C	D
2496-030	30	10.00	30.00	20.24	35.00
2496-040	40	15.00	36.00	25.24	40.00
2496-050	50	20.00	40.00	30.24	45.00



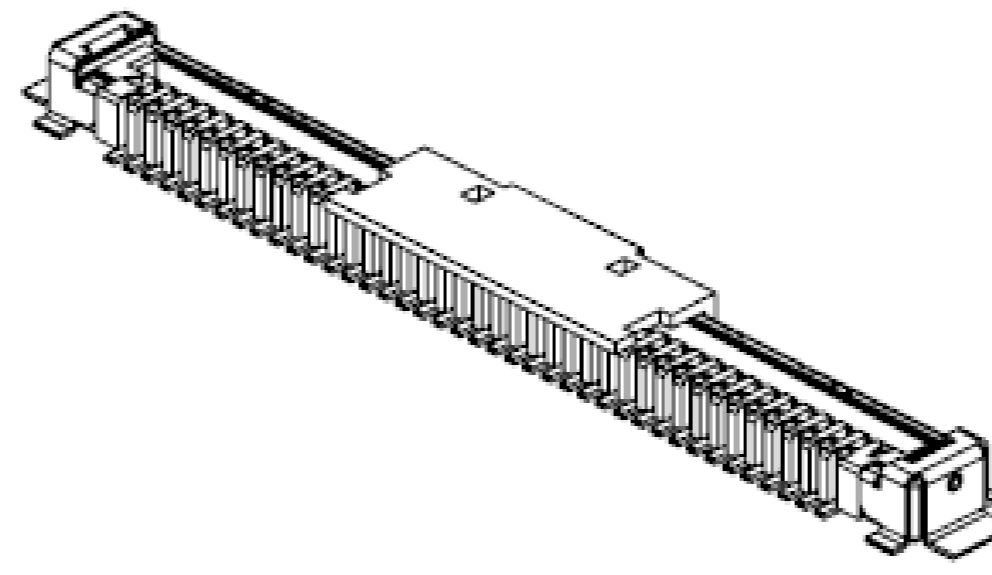
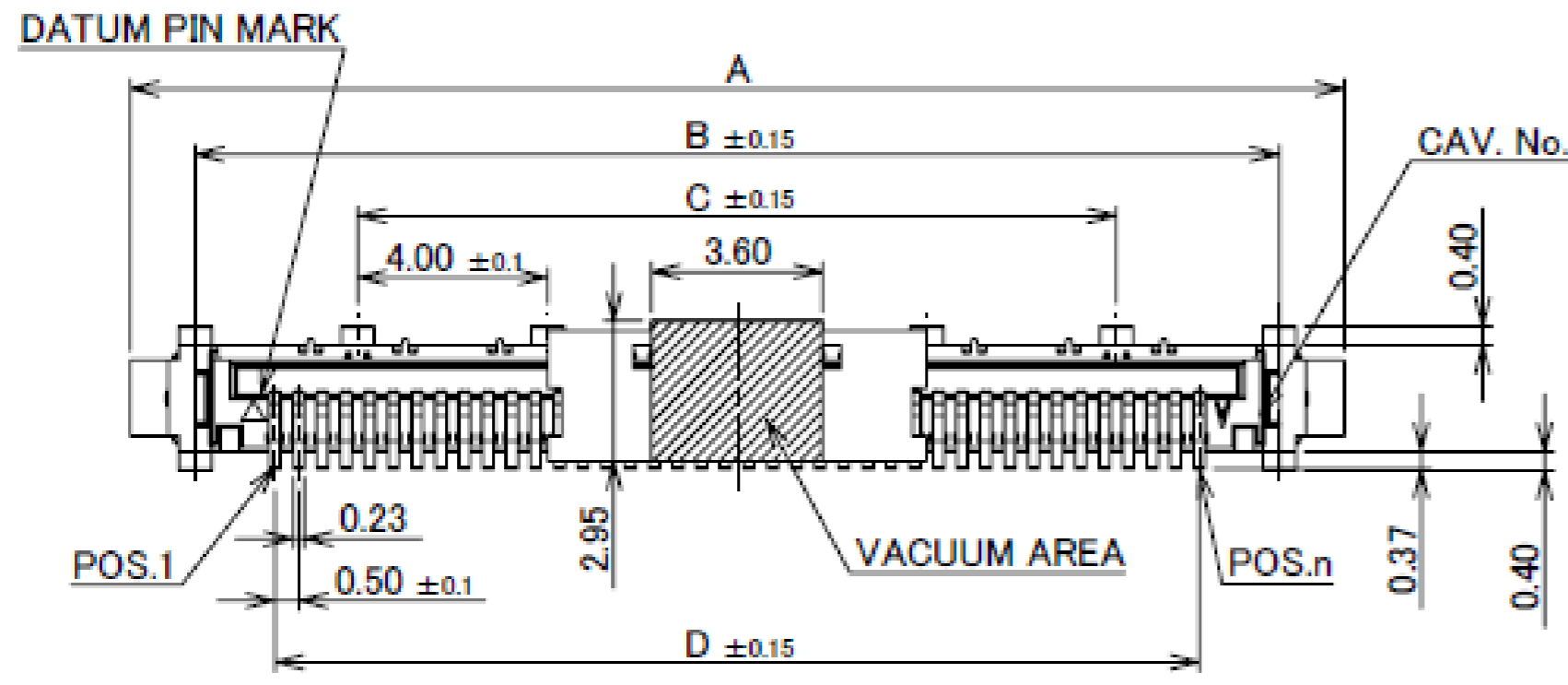
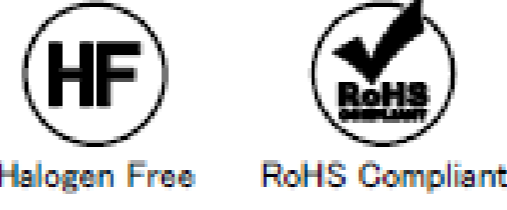
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL-A	PHOSPHOR BRONZE	Sn(NO POLISH) 2.00 μm MIN. OVER Ni 1.00 μm MIN.

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# Receptacle Assembly

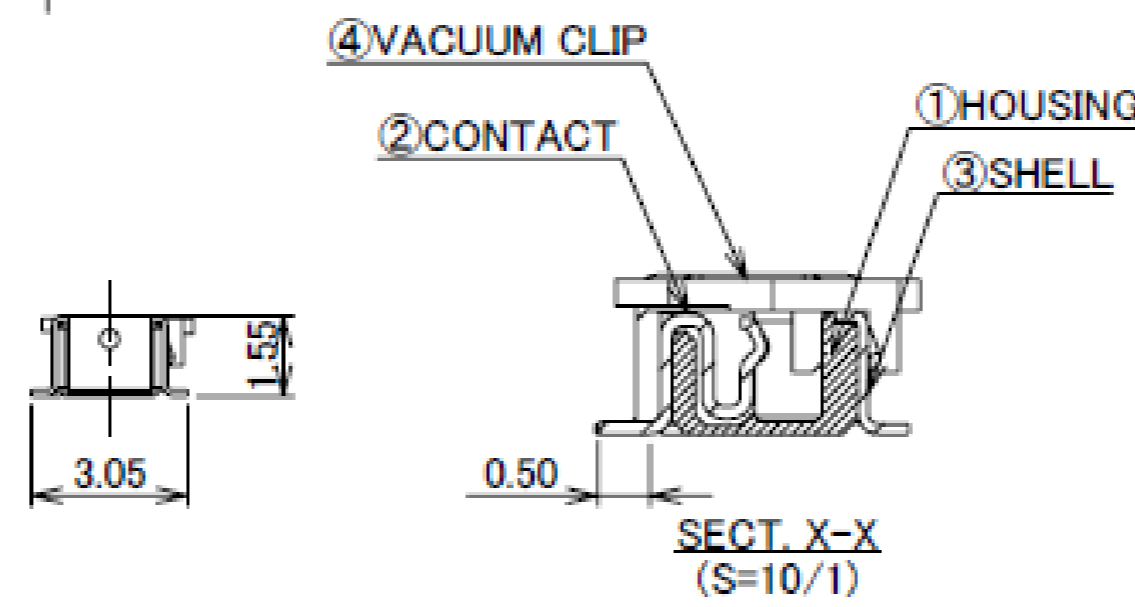
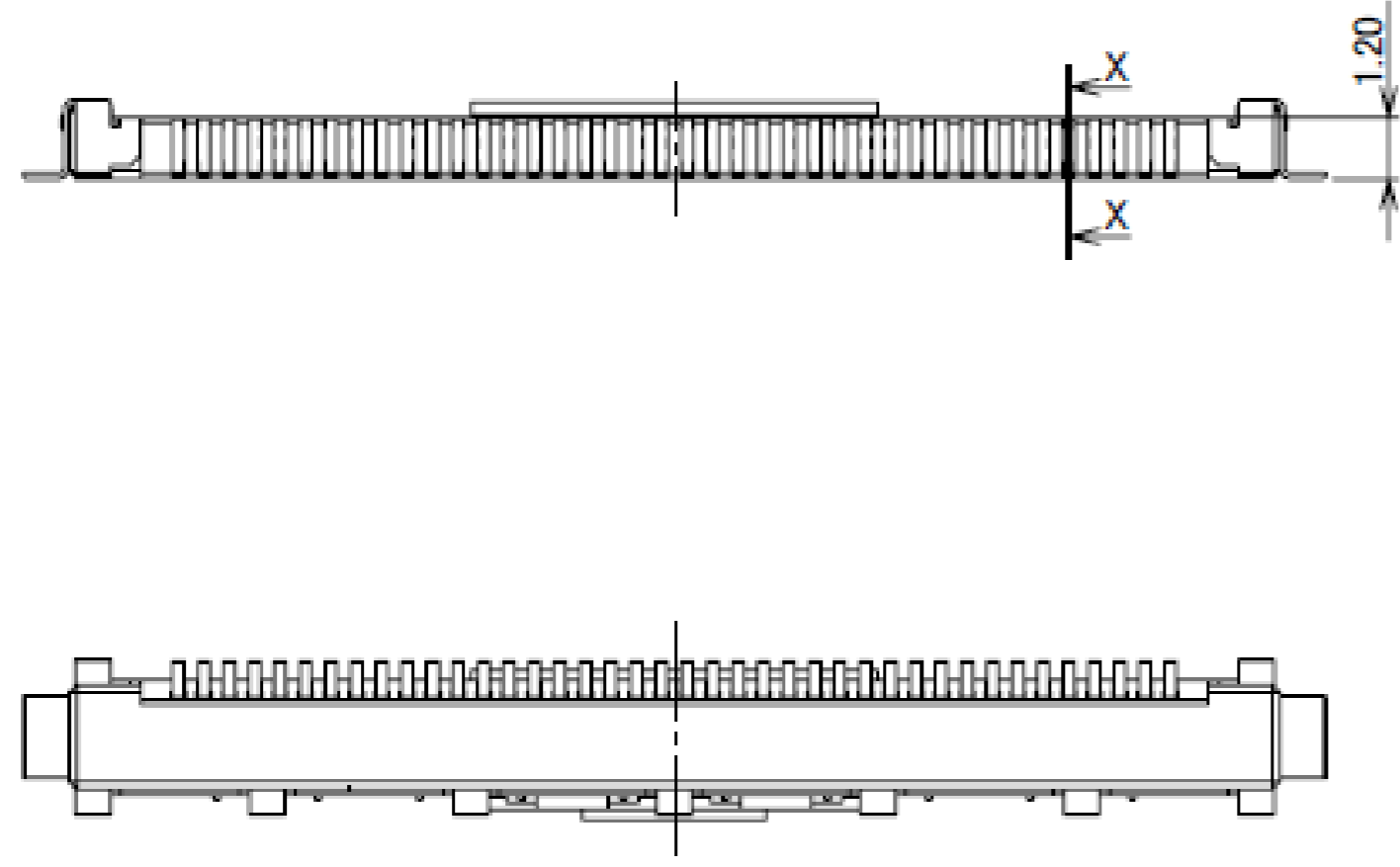
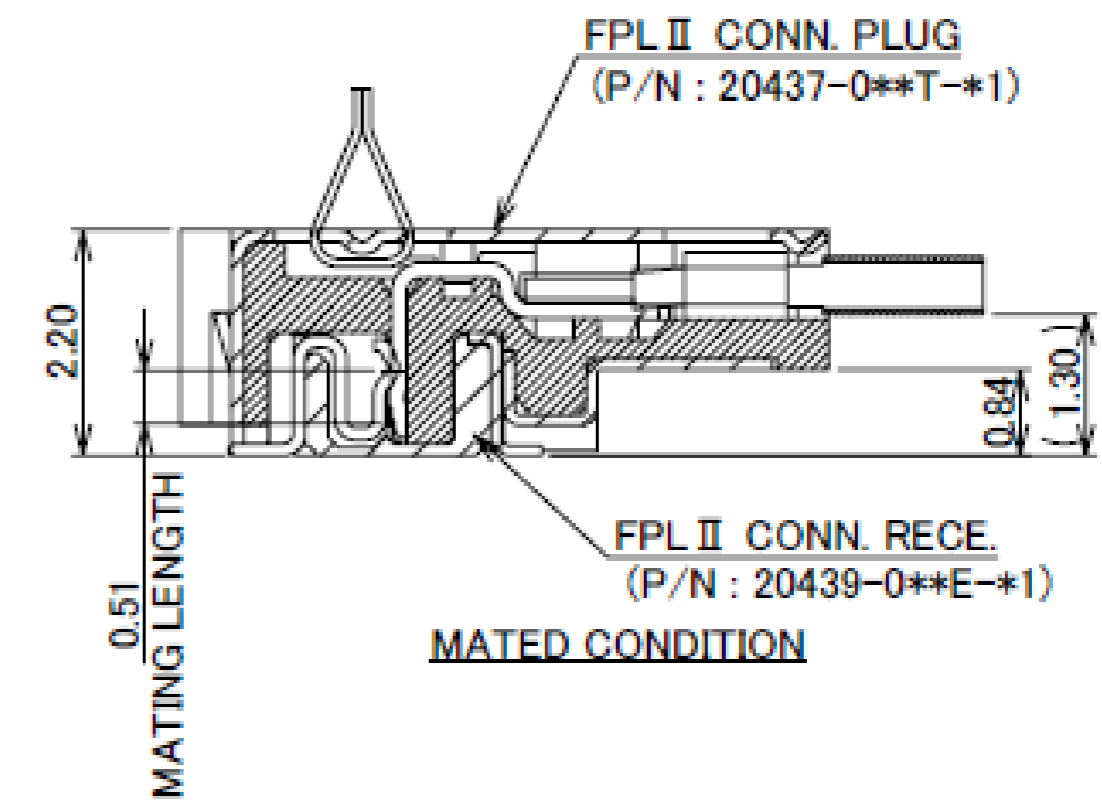
Recommended P/N		20439-0**E-01			
PART NO.	Pos.	A	B	C	D
20439-030E-*1	30	20.60	17.86	12.00	14.50
20439-040E-*1	40	25.60	22.86	16.00	19.50
20439-050E-*1	50	30.60	27.86	20.00	24.50

PART NO.	CONTACT FINISH (MATING SIDE)
20439-0**E-01	Au 0.1 μm MIN.
20439-0**E-11	Au 0.3 μm MIN.



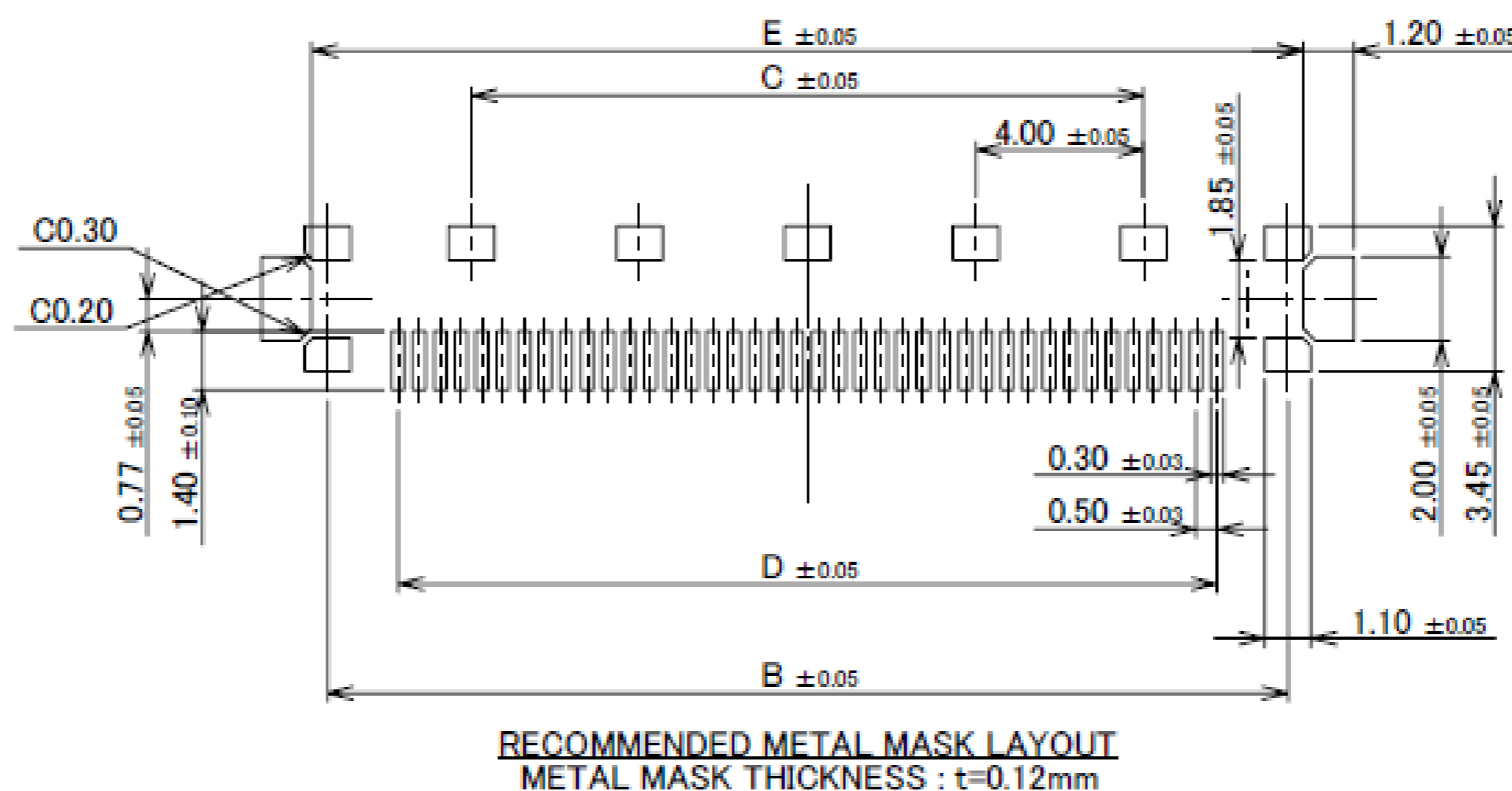
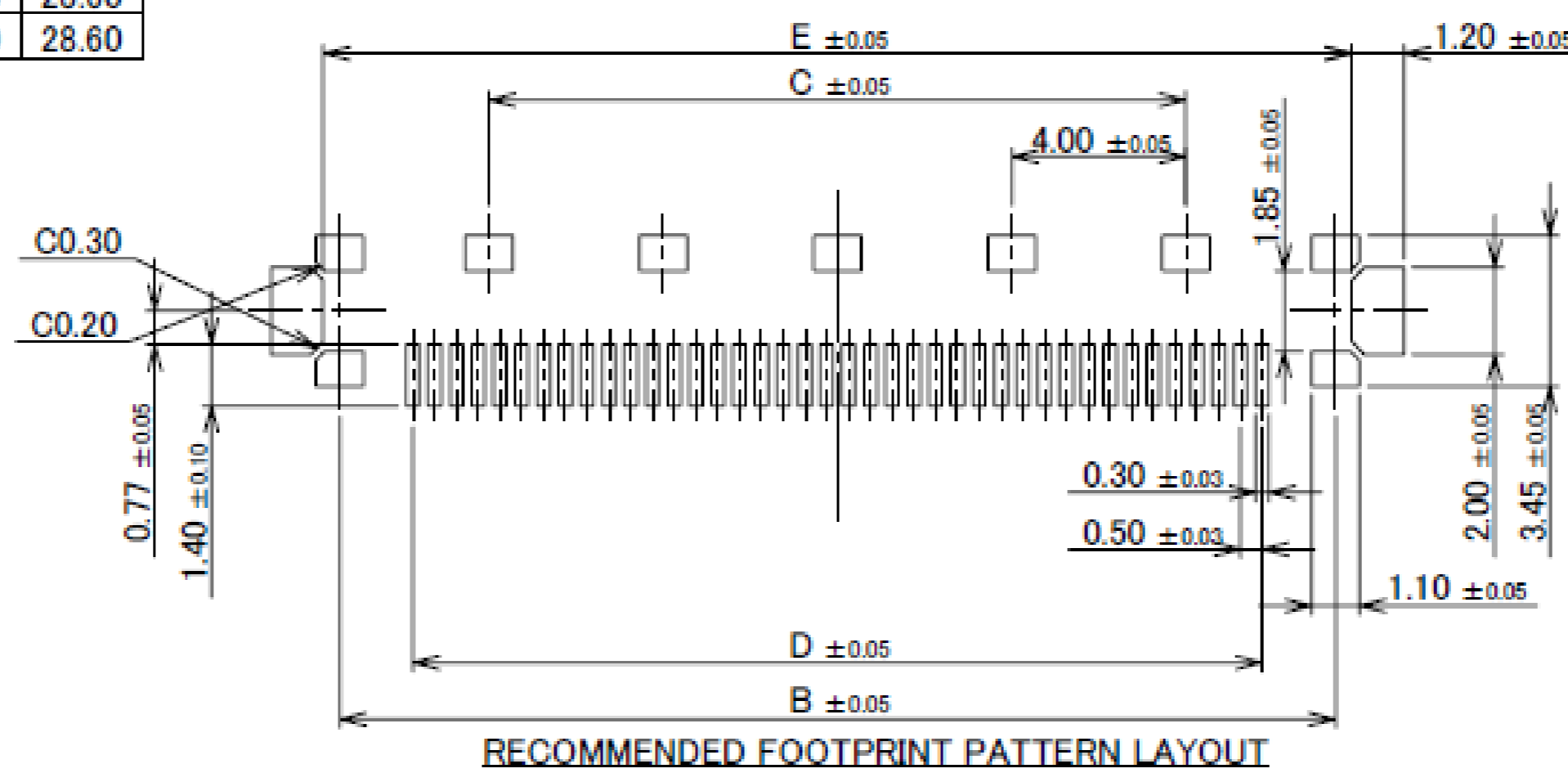
MATING COMBINATION TABLE

Pos.	PLUG PART NO.	RECE. PART NO.
30P	20437-030T-*1	20439-030E-*1
40P	20437-040T-*1	20439-040E-*1
50P	20437-050T-*1	20439-050E-*1



NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CLIP	LCP	UL94V-0, BEIGE
3	SHELL	PHOSPHOR BRONZE	Sr(NO POLISH) 0.50 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	PART NO. 20439-0**E-0* MATING AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
			PART NO. 20439-0**E-1* MATING AREA : Au 0.30 μm MIN. OVER Ni 1.00 μm MIN. OTHER AREA : Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

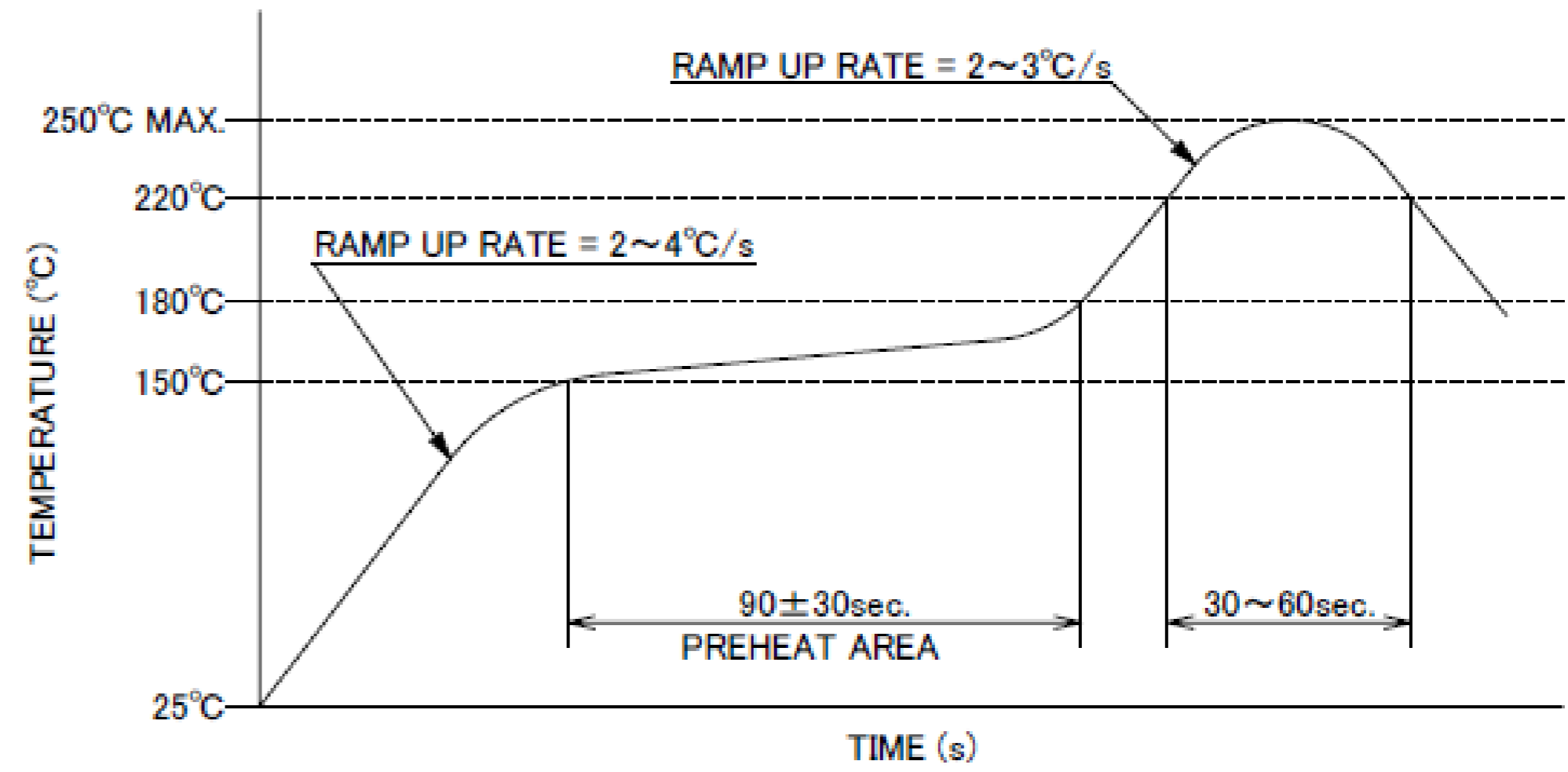
PART NO.	Pos.	B	C	D	E
20439-030E-*1	30	17.86	12.00	14.50	18.60
20439-040E-*1	40	22.86	16.00	19.50	23.60
20439-050E-*1	50	27.86	20.00	24.50	28.60



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Rev.23

# Receptacle Assembly



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

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ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 40, 38, 36, 34, 32 DISCRETE WIRE : AWG# 36, 34, 32 TWINAX CABLE : AWG# 40
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.3A AC/DC [AWG#40] PER CONTACT PIN / UP TO 50 CONTACTS 0.6A AC/DC [AWG#38] PER CONTACT PIN / UP TO 6 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN / UP TO 4 CONTACTS 1.0A AC/DC [AWG#34, 32] PER CONTACT PIN / UP TO 7 CONTACTS TESTING BY REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 145mohm MAX.(AWG#32) / AFTER TEST : $\triangle$ 40mohm MAX. 185mohm MAX.(AWG#34) 210mohm MAX.(AWG#36) 335mohm MAX.(AWG#38) 575mohm MAX.(AWG#40)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : $\triangle$ 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 50.0N MAX. / 40P : 60.0N MAX. / 50P : 70.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 5.0N MIN. / 40P : 6.0N MIN. / 50P : 7.0N MIN.
CABLE RETENTION FORCE	30.0N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-1383
TEST REPORT	TR-07048
PACKING STANDARD	PLUG HOUSING ASS'Y : 300-584 / PLUG SHELL-A : 300-585
INSTRUCTION MANUAL	HIM-09007
ASSEMBLY MANUAL	ASM-07005
APPEARANCE CRITERIA No.	QLS-A***


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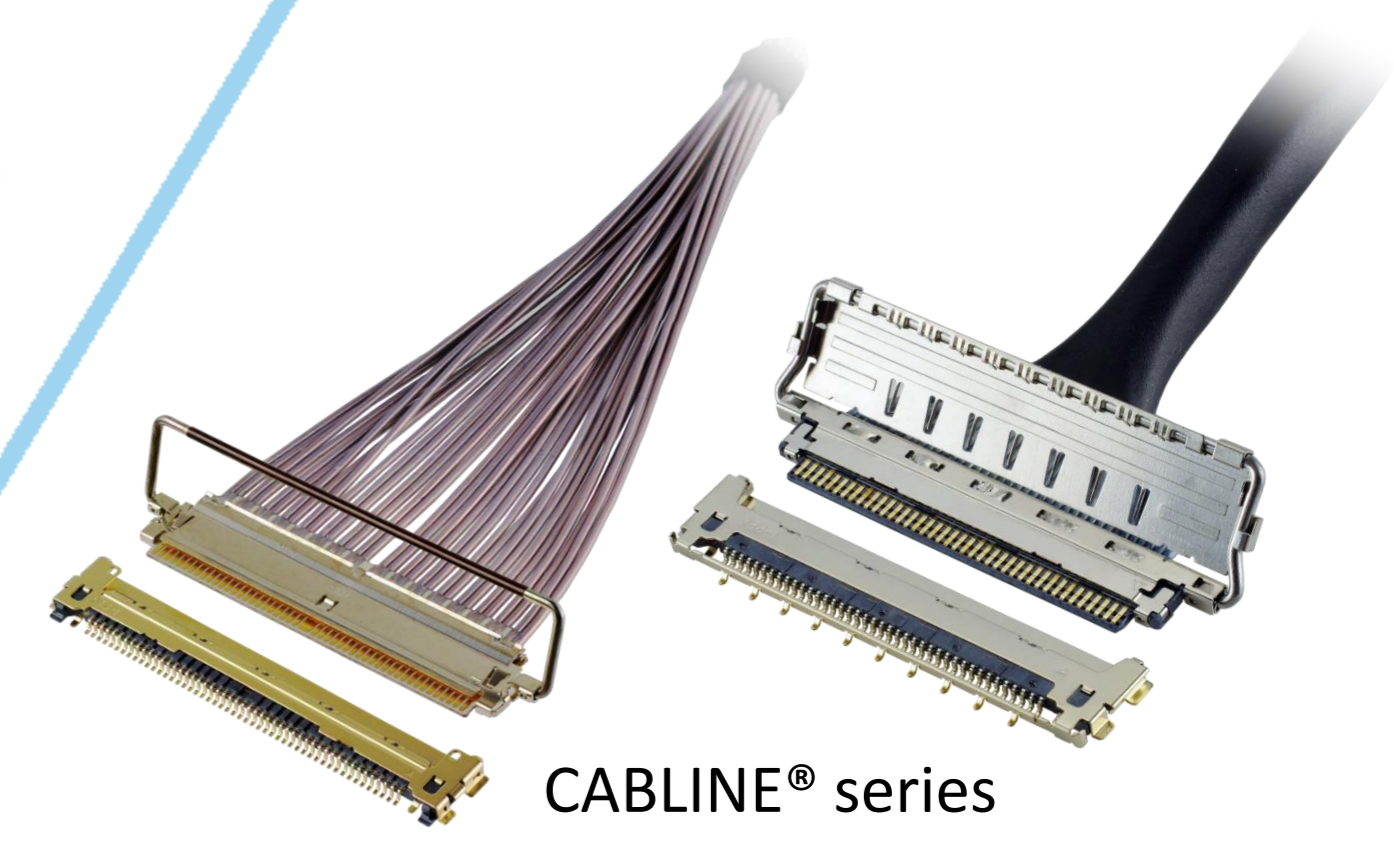
# Custom Connectors Available

 RF Connector

MHF® series



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



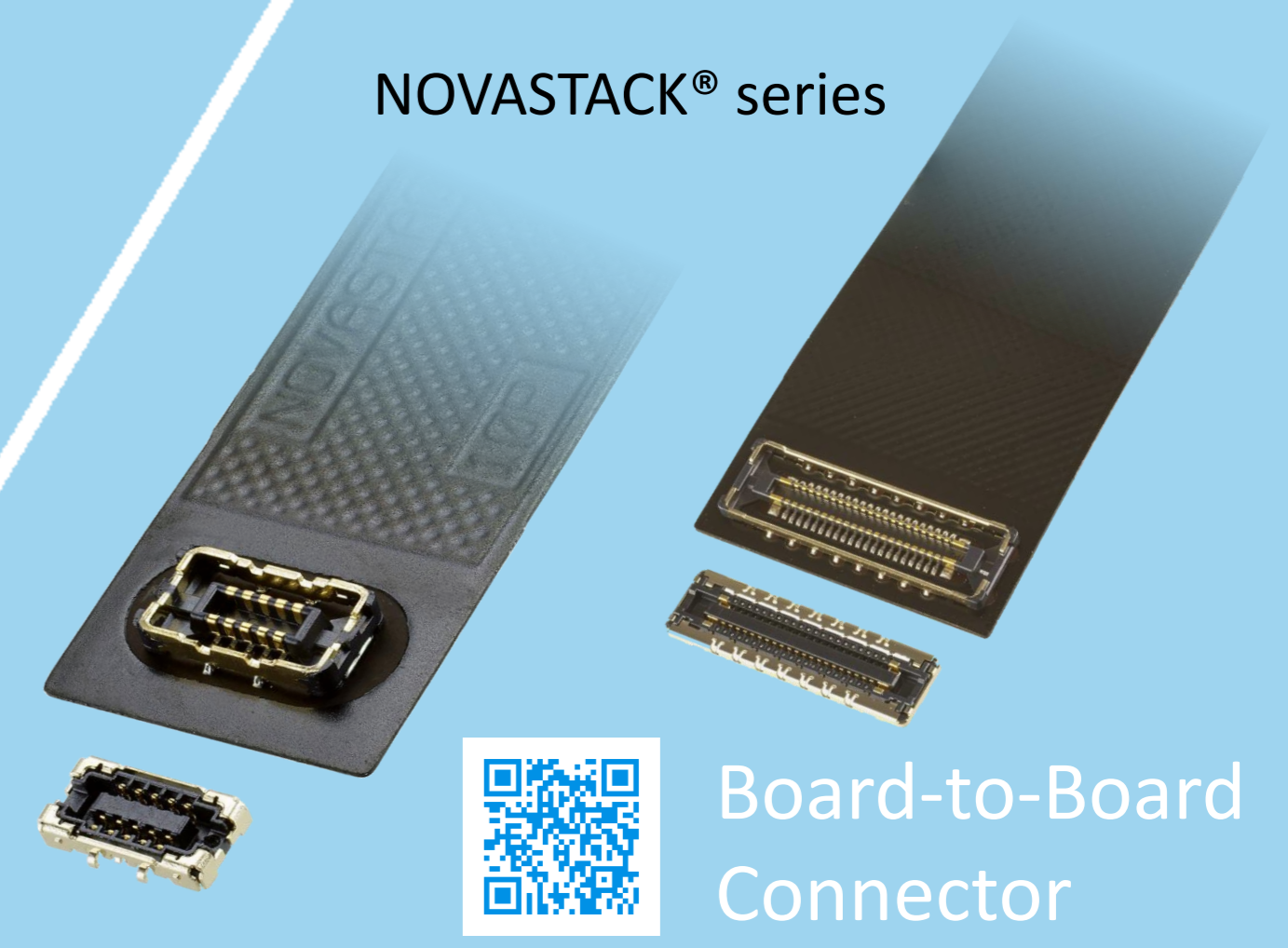
 Optical Module

LIGHTPASS® series



NOVASTACK® series

 Board-to-Board Connector



 Power Connector/  
Terminal

AP series

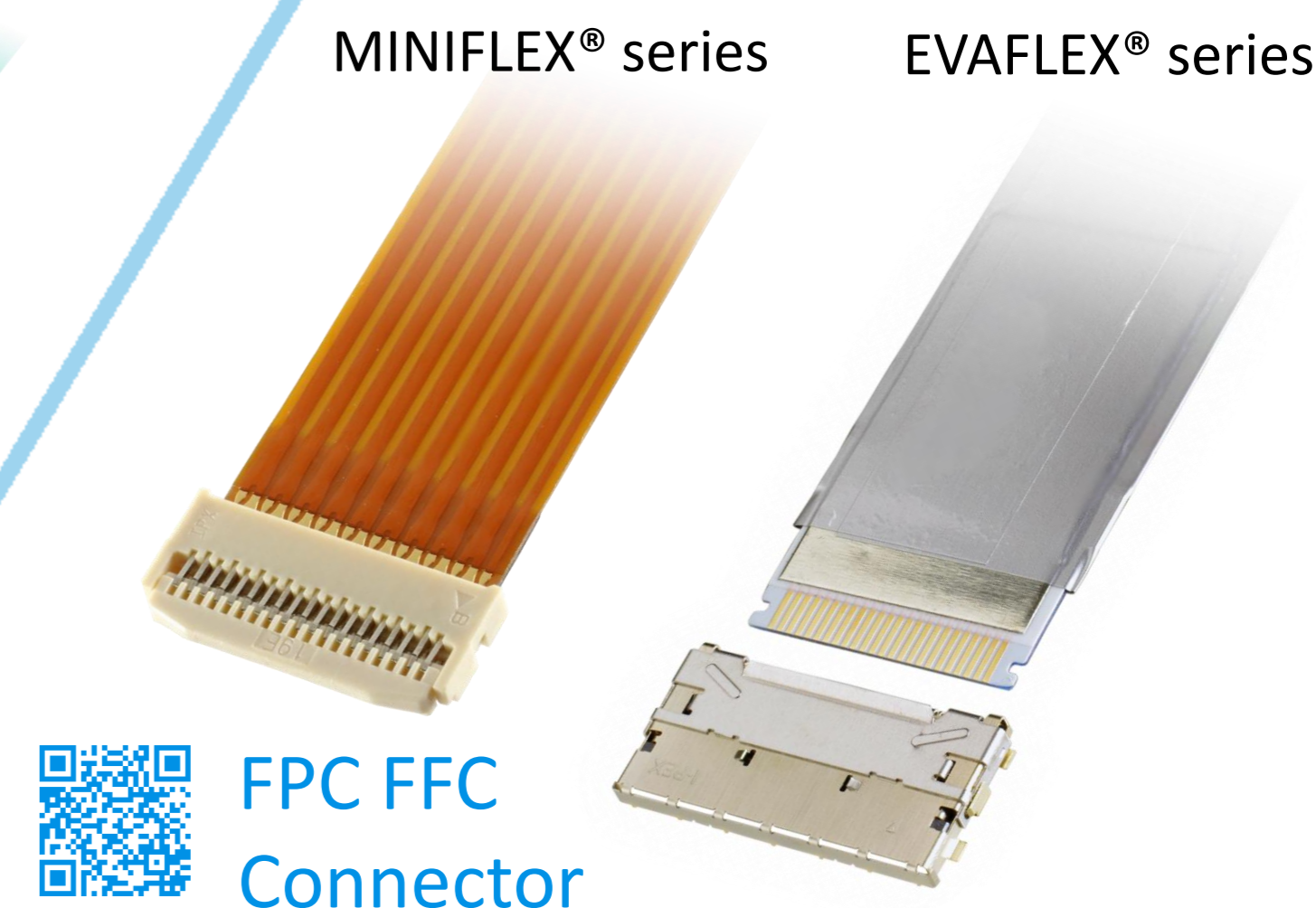
ISH® series



MINIFLEX® series

EVAFLEX® series

 FPC FFC Connector

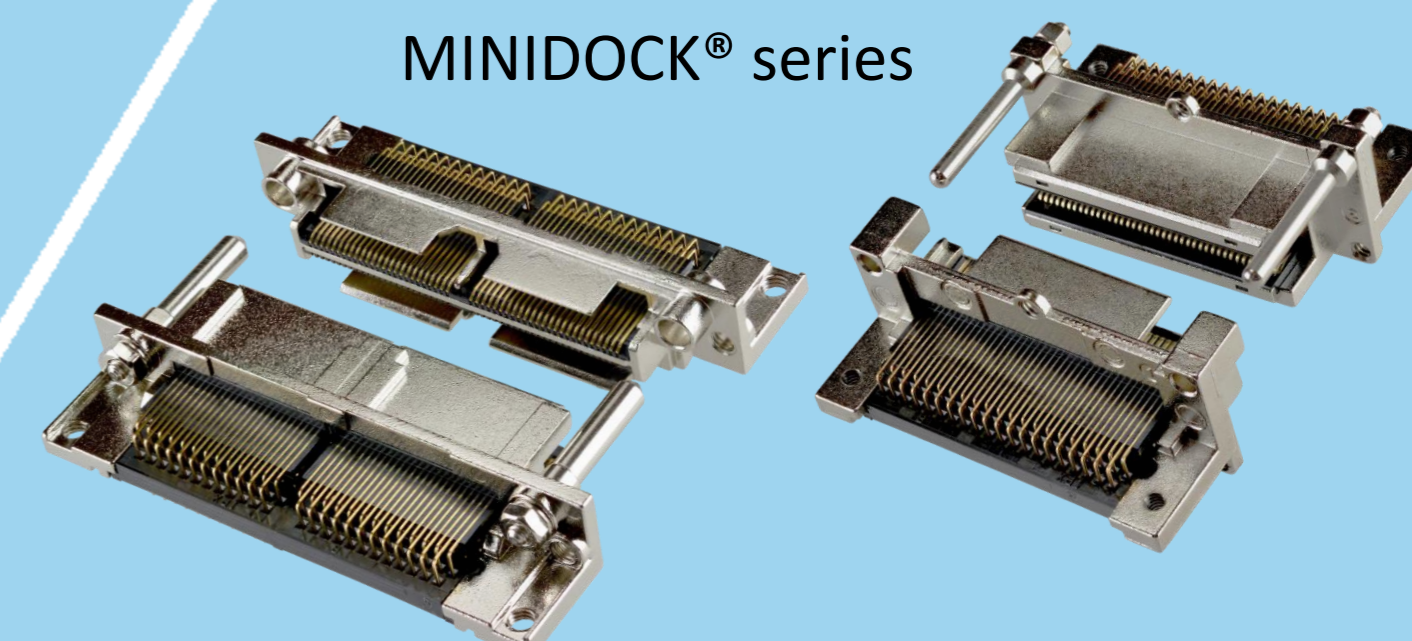


Inquiry



MINIDOCK® series

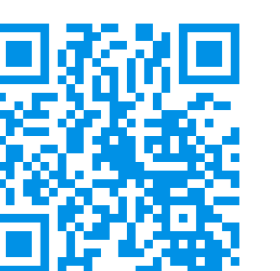
 I/O Connector



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