

CABLINE® V

省スペースでかつフリクションロック付き、USB3.1規格に対応、
コンタミに強い、0.4mmピッチ、水平嵌合タイプ細線同軸コネクタ

Product Specifications:

Mating type	Horizontal	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.71	
Mated size (mm)	Height	1.0 +/- 0.15
	Width	Formula: 4.8 + (0.4*?p)
	Depth	5.65
Pin Counts	Range	Up to 40
	Available	10, 15, 20, 25, 30, 35, 40

Applicable Cable Size:

Maximum O.D. (mm)	0.4
Micro-Coaxial for Signal (AWG)	45 ohm: #38 or smaller 50 ohm: #40 or smaller
Twinax (AWG)	#40
Discrete (AWG)	#36 or smaller

Applicable Standards (Reference Only):

USB 3.1 Gen 1 (5 Gbps) V-By-One HS 1.4 (4 Gbps)
eDP (2.7 Gbps) MiPi standards

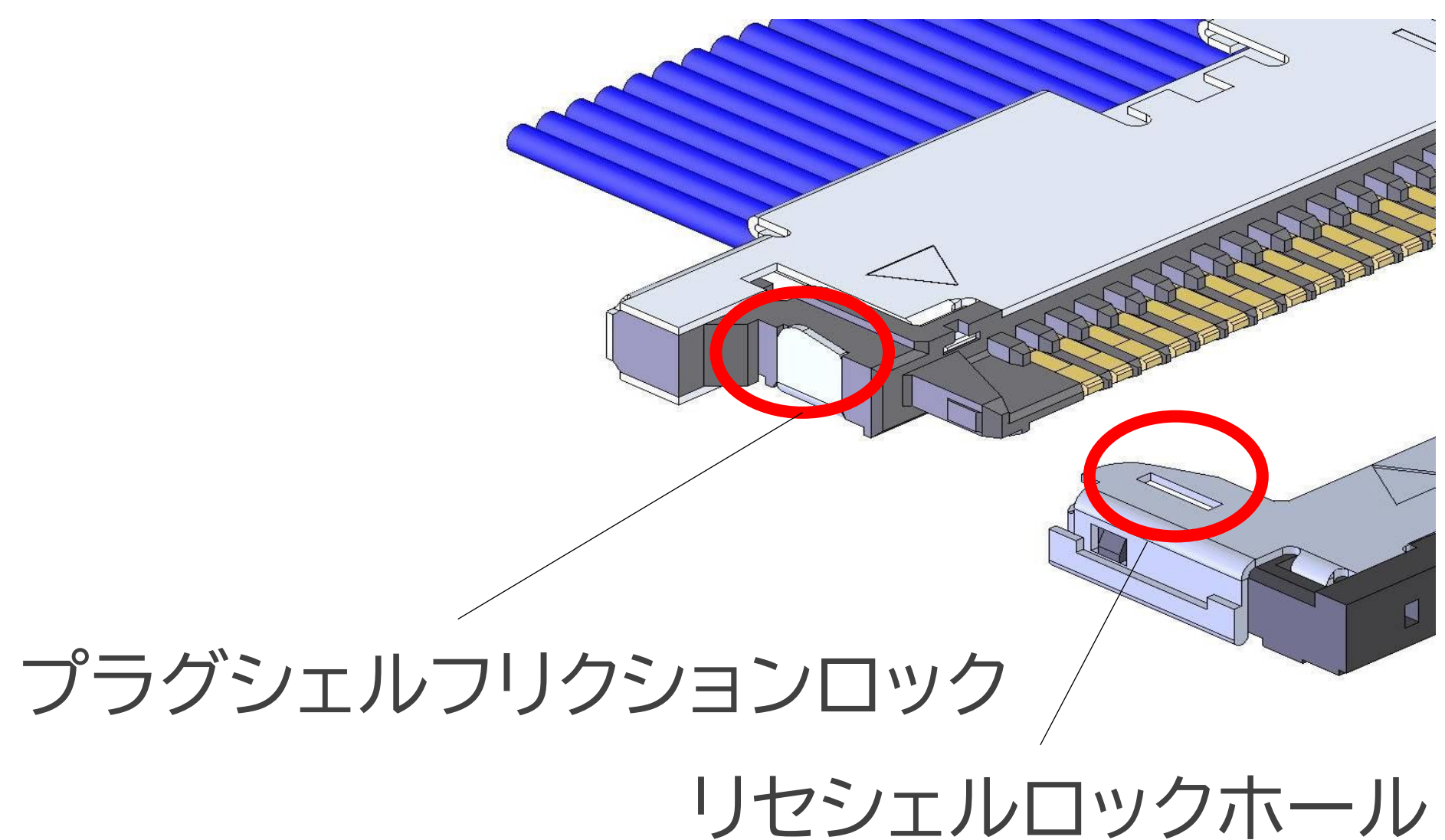
*記載のない極数の対応状況についてはお問い合わせください。



- ▶ フリクションロックの採用により奥行寸法、長手寸法が小さく、小スペースへの部品配置に優利

長手寸法(mm)	$4.8 + (0.4 * ?p)$
奥行寸法(mm)	5.65

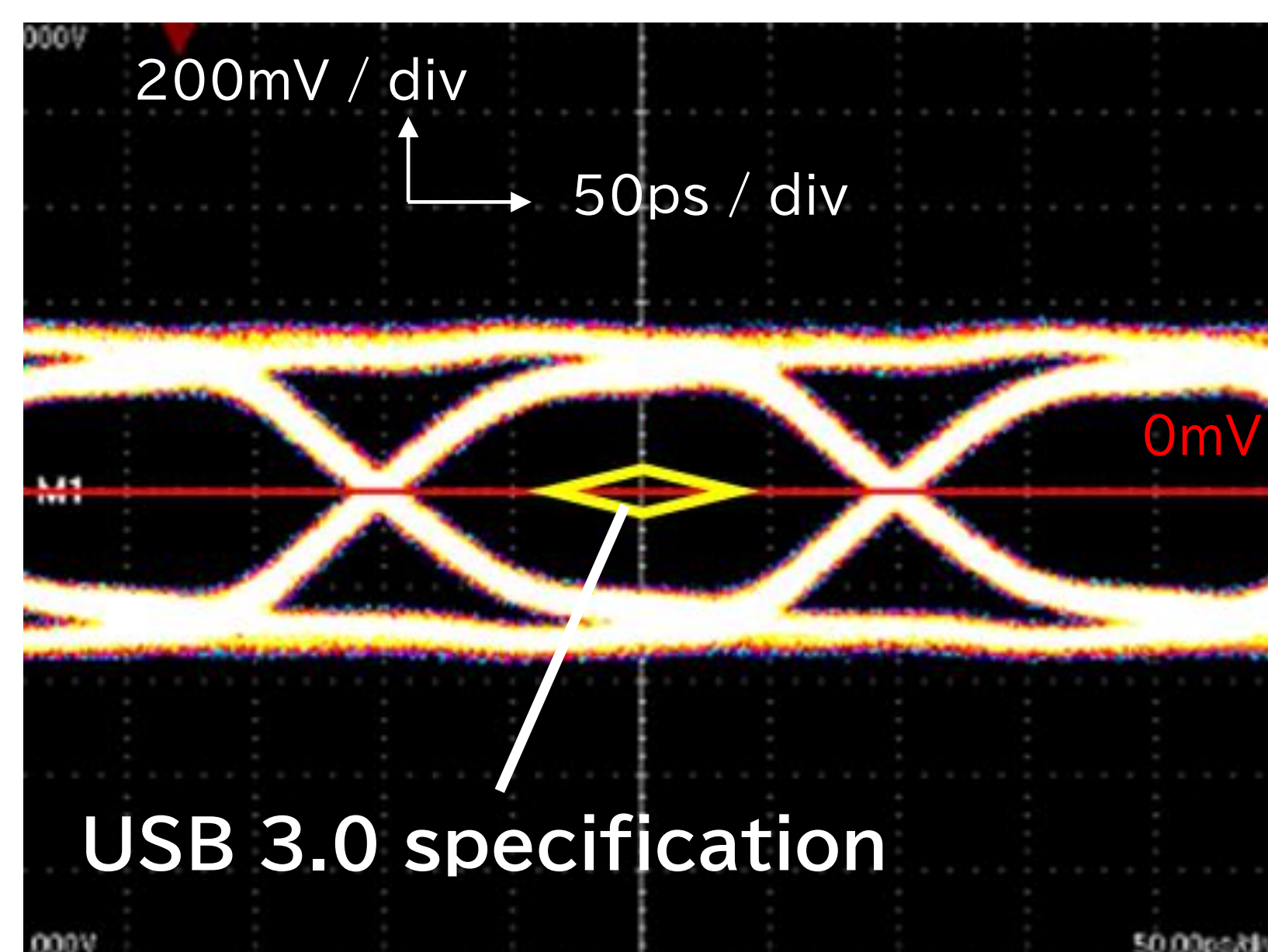
CABLINE V 35p 嵌合保持力	
フリクションロック有りタイプ	12N
フリクションロック無しタイプ	8N



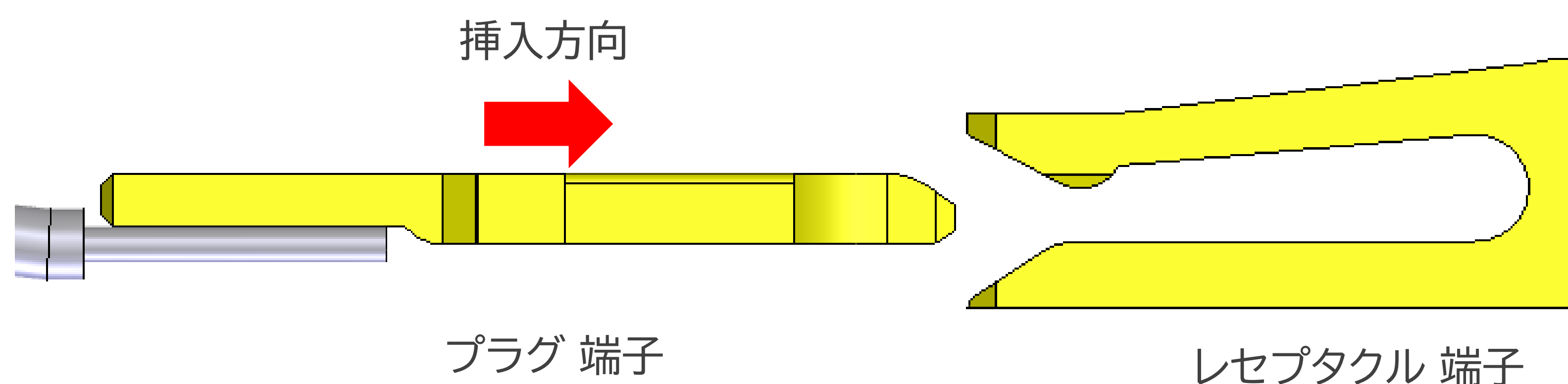
- ▶ USB 3.1 (5Gbps/lane) の高速伝送内部接続に最適

Eye pattern (Differential)
Bit rate : 5Gbps
Rise time : 60ps (10-90%)
Input voltage : 800mVp-p

*試験データの詳細はI-PEX Connectorsにお問い合わせください



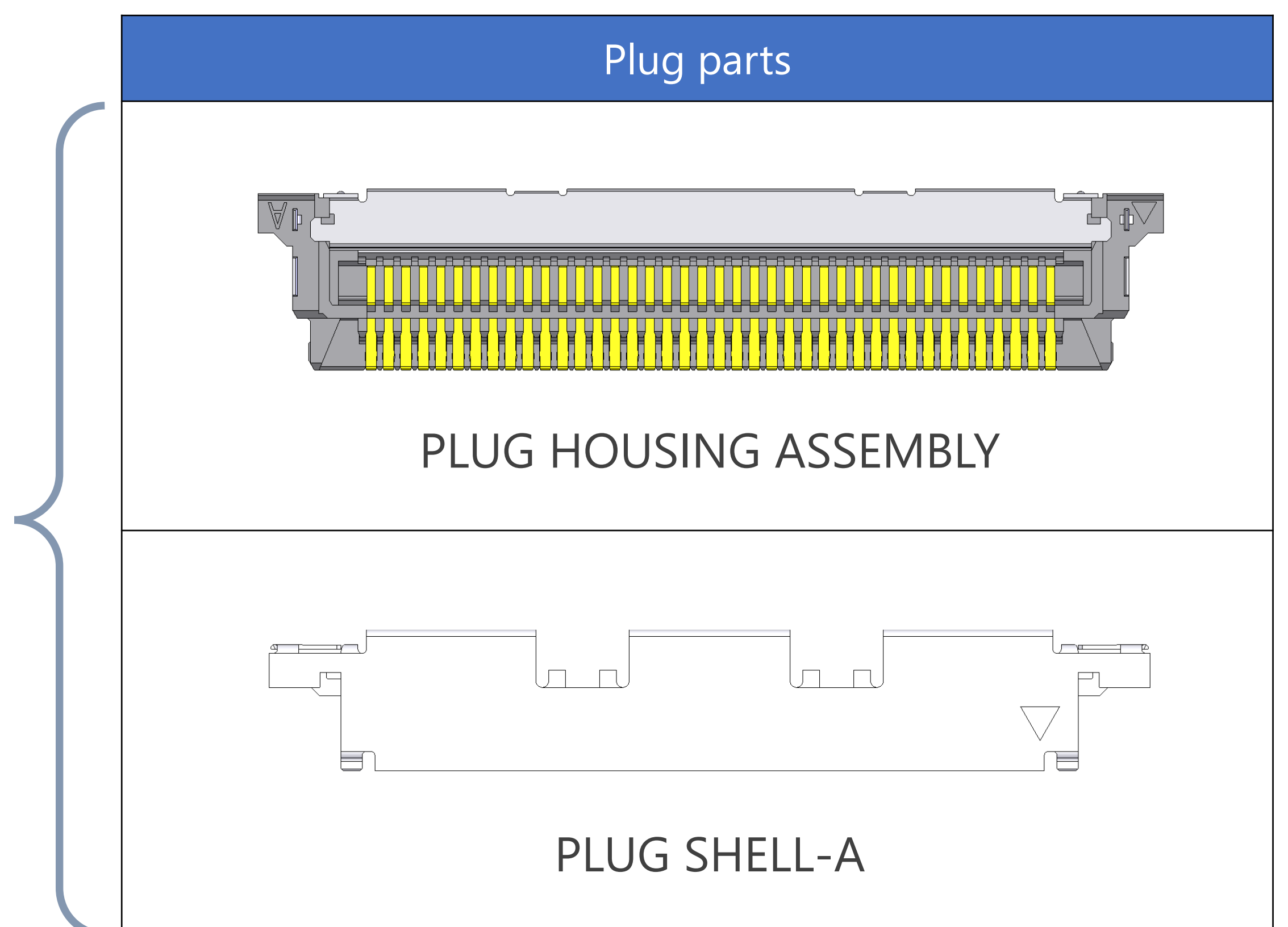
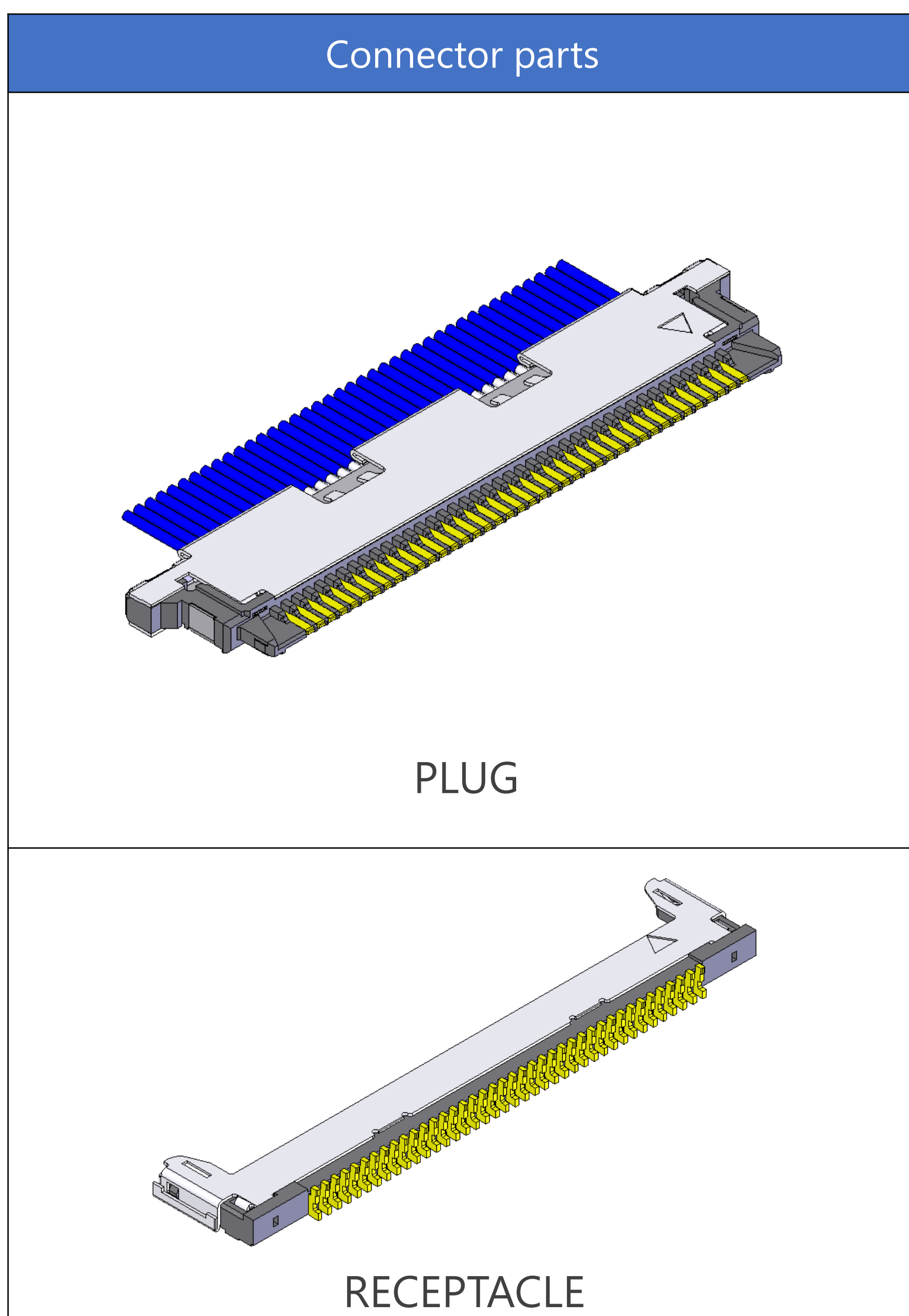
- ▶ 端子がチューニングフォークタイプデザインによりワイピング力に優れ、コンタミに強い



挿入する度接触面がワイピングされ、接触安定性の向上につながります

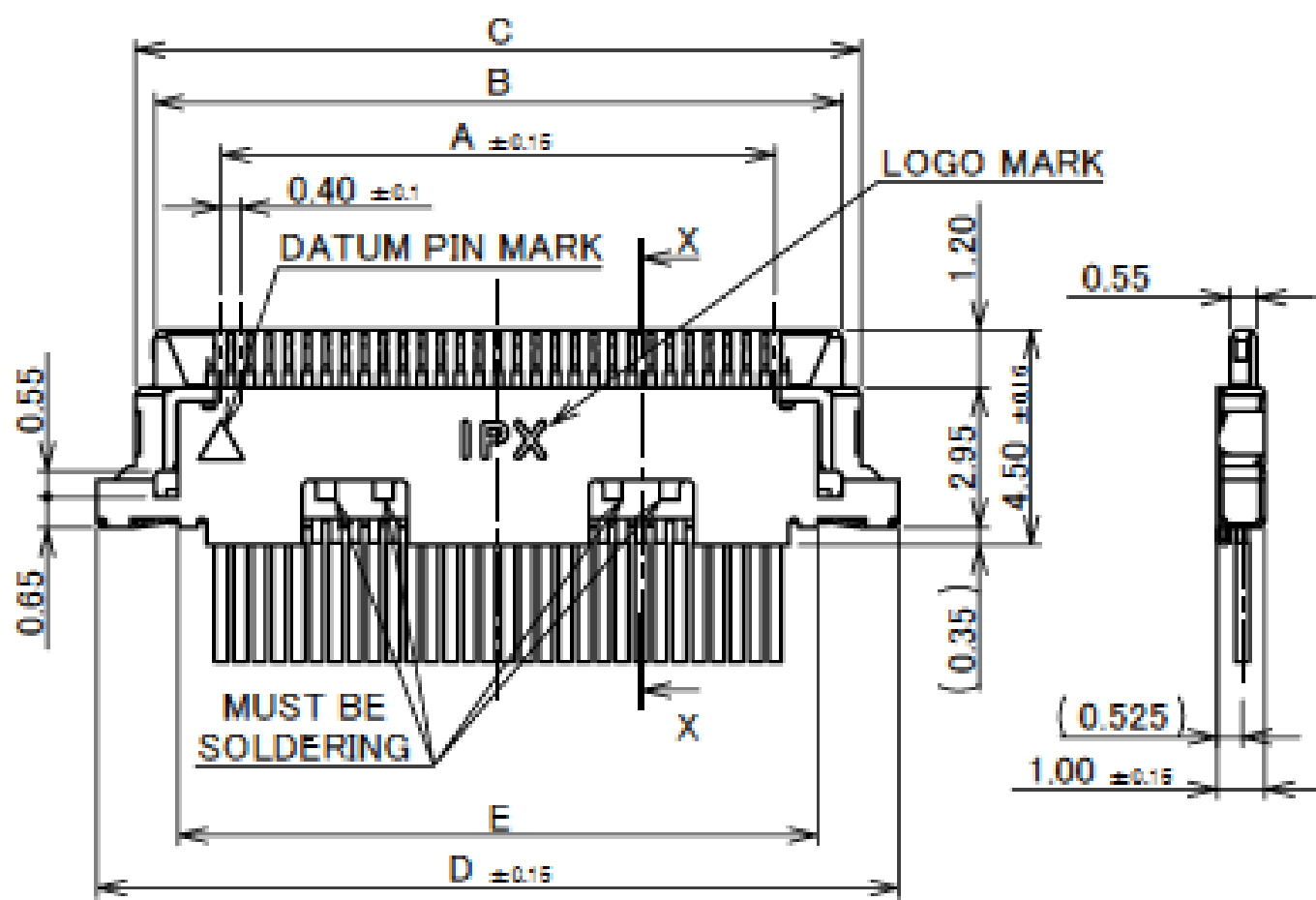
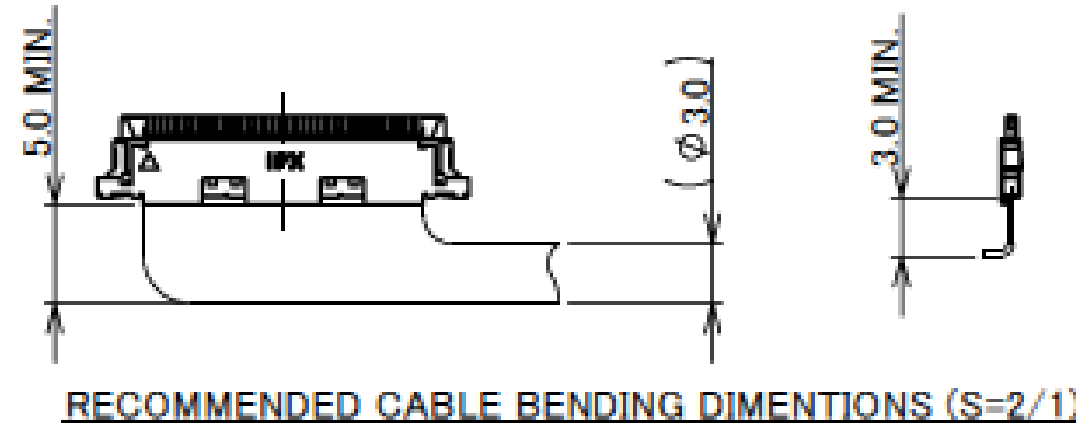
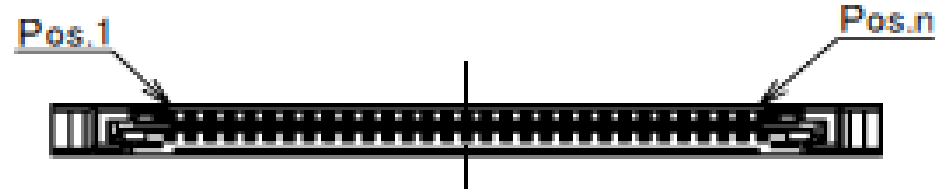
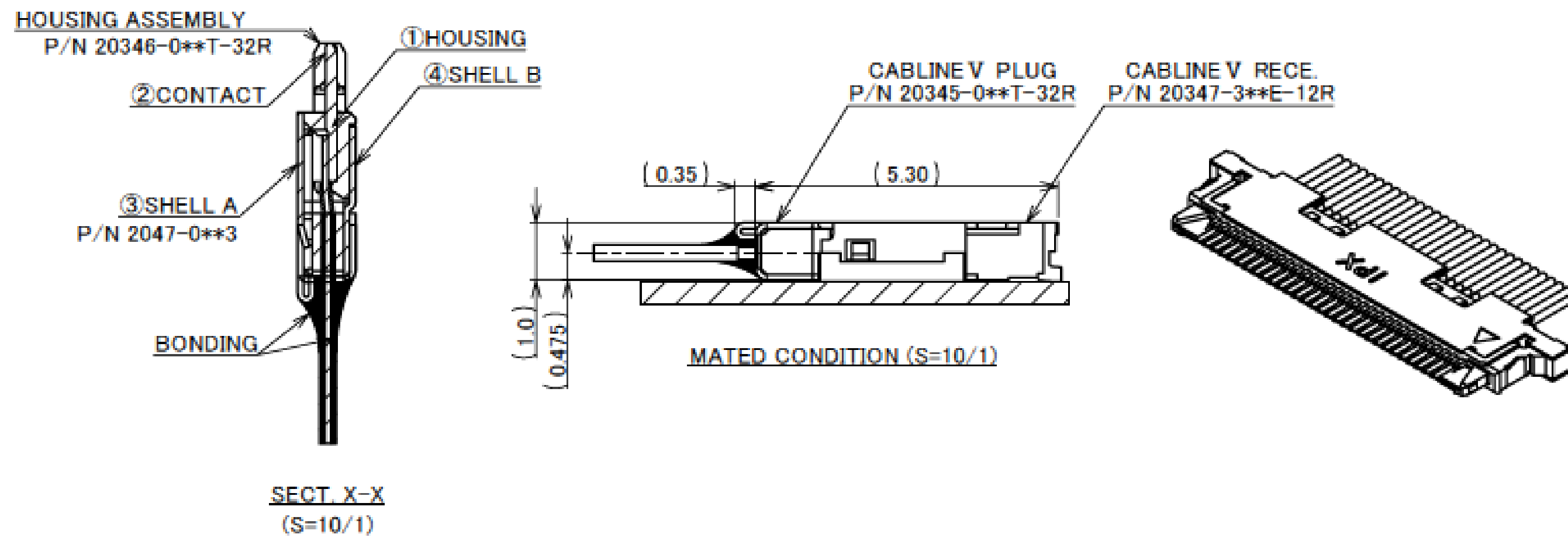
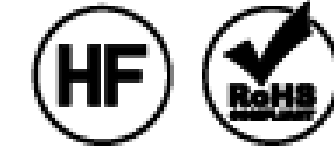
Component Parts Details

Component Parts



Plug for Cable Assembly

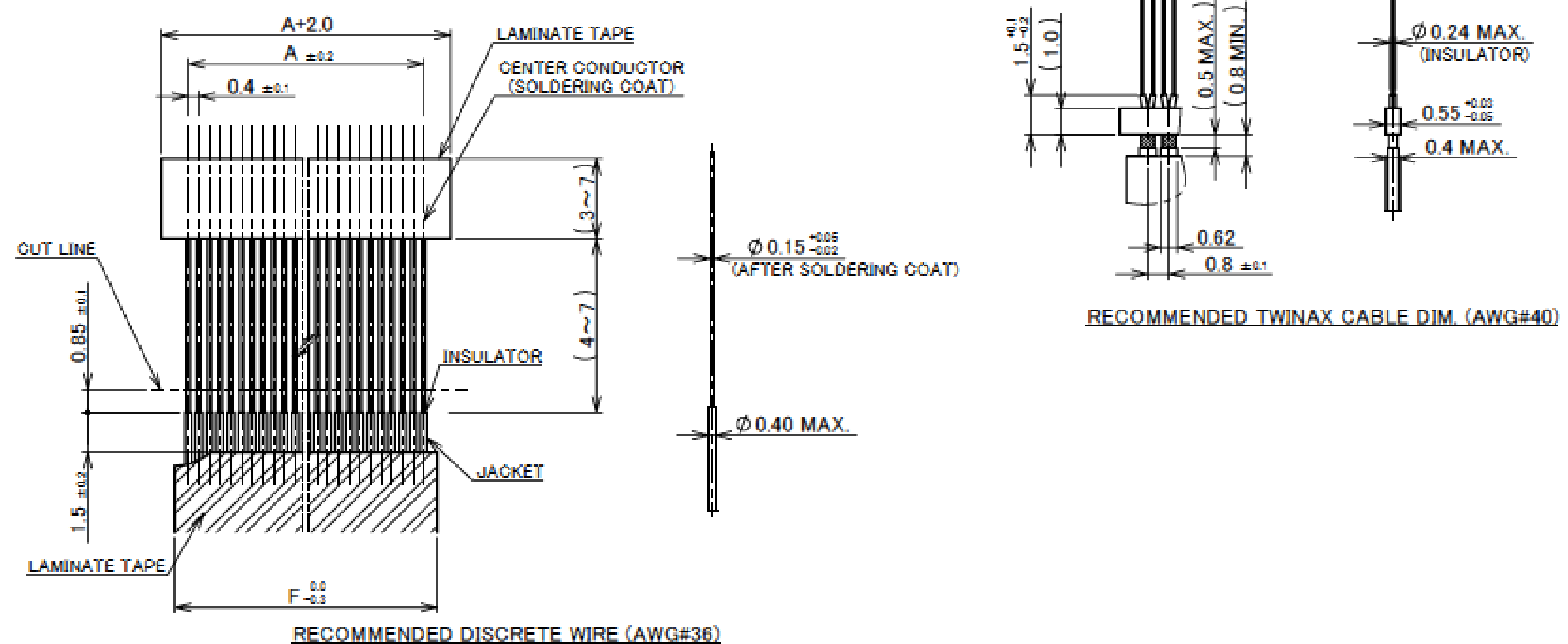
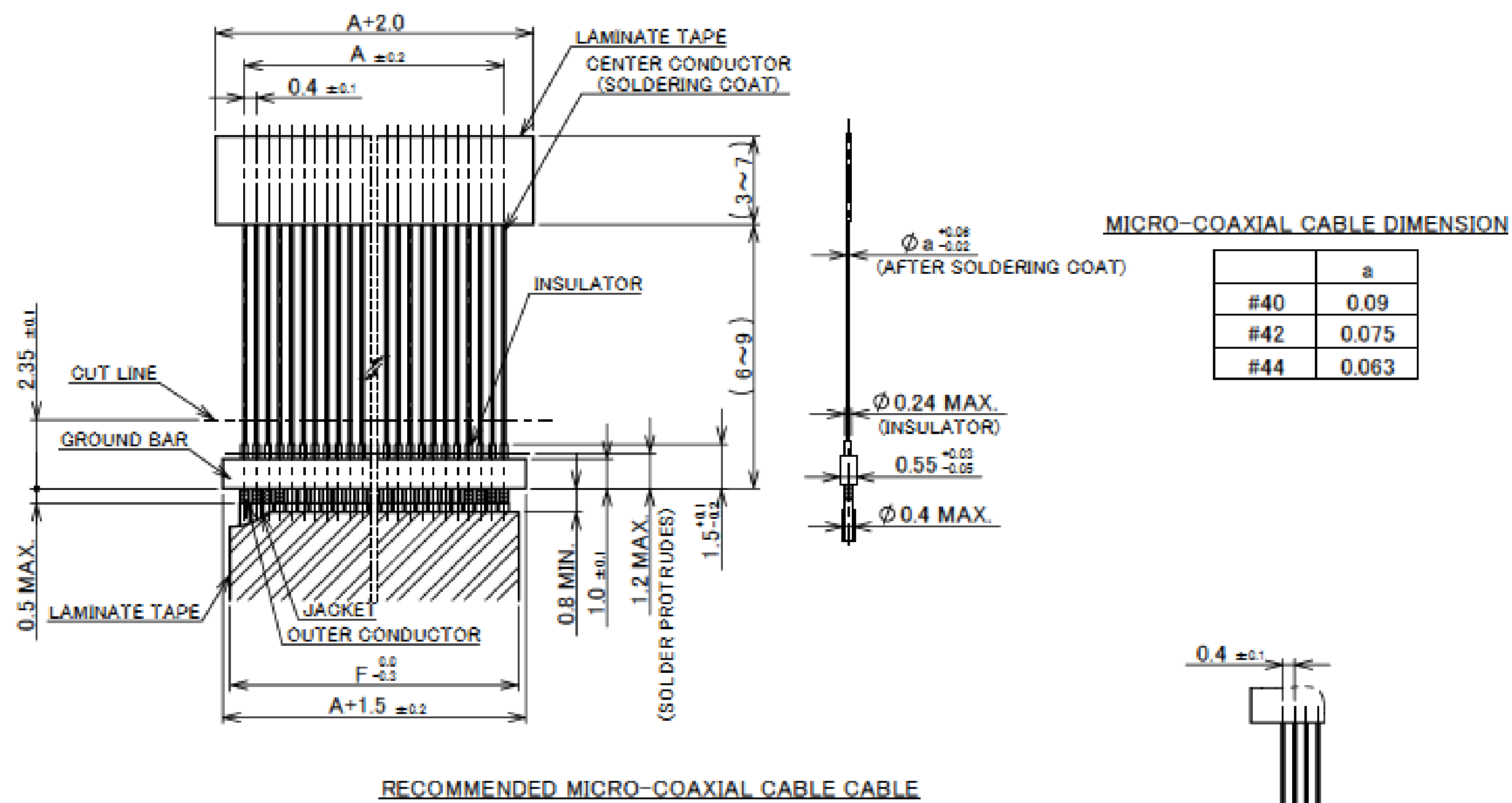
Recommended P/N		20345-0**T-32R				
PART NO.	POS.	A	B	C	D	E
20345-010T-32R	10	3.6	6.4	7.2	8.8	5.4
20345-015T-32R	15	5.6	8.4	9.2	10.8	7.4
20345-020T-32R	20	7.6	10.4	11.2	12.8	9.4
20345-025T-32R	25	9.6	12.4	13.2	14.8	11.4
20345-030T-32R	30	11.6	14.4	15.2	16.8	13.4
20345-035T-32R	35	13.6	16.4	17.2	18.8	15.4
20345-040T-32R	40	15.6	18.4	19.2	20.8	17.4



NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL B	PHOSPHOR BRONZE	Sn 1.00 μm MIN. OVER Ni 1.00 μm MIN.
3	SHELL A	SUS	Sn 1.00 μm MIN. OVER Ni 0.50 μm MIN.
2	CONTACT	BRASS	ALL OVER: Ni 1.00 μm MIN. UNDER PLATING CONTACT AREA: Au 0.10 μm MIN. SOLDERING AREA: Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0, BRACK

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PART NO.	POS.	A	F
20345-010T-32R	10	3.6	4.6
20345-015T-32R	15	5.6	6.6
20345-020T-32R	20	7.6	8.6
20345-025T-32R	25	9.6	10.6
20345-030T-32R	30	11.6	12.6
20345-035T-32R	35	13.6	14.6
20345-040T-32R	40	15.6	16.6



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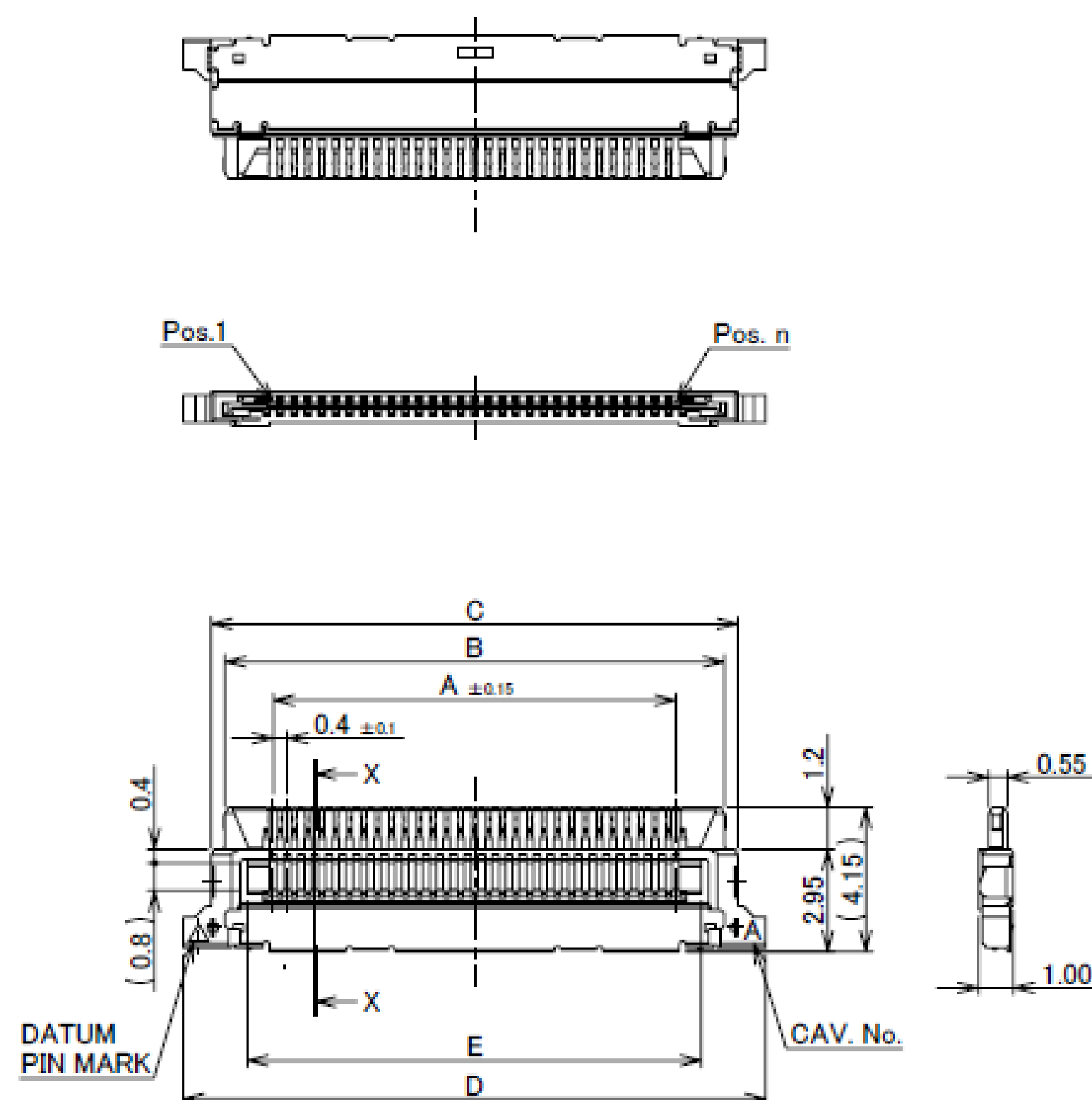
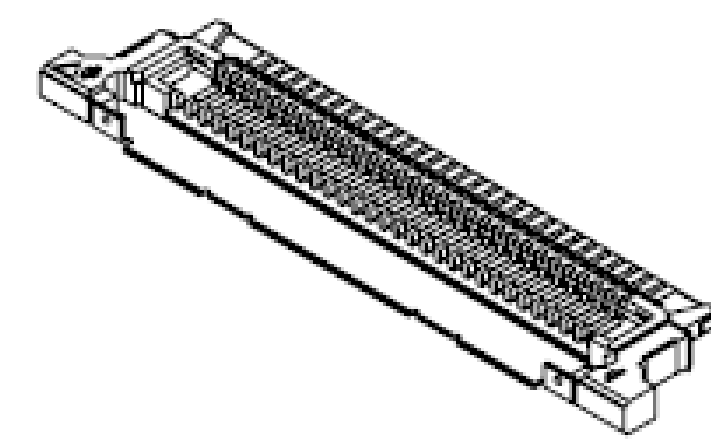
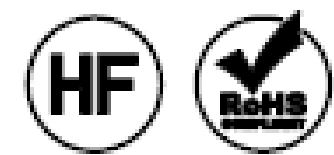
Plug for Cable Assembly

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44,42,40 DISCRETE WIRE : AWG# 36 TWINAX CABLE : AWG# 40
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG#44] (PER CONTACT PIN / UP TO 40 CONTACTS) 0.24A AC/DC [AWG#42] (PER CONTACT PIN / UP TO 40 CONTACTS) 0.3A AC/DC [AWG#40] (PER CONTACT PIN / UP TO 40 CONTACTS) 0.8A AC/DC [AWG#36] (PER CONTACT PIN / UP TO 12 CONTACTS) ※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	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 235mohm MAX.(AWG#36) / AFTER TEST : \triangle 140mohm MAX. 560mohm MAX.(AWG#40) 650mohm MAX.(AWG#42) 1040mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \triangle 140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	10P : 20.0N MAX. 15P : 22.5N MAX. 20P : 25.0N MAX. 25P : 27.5N MAX. 30P : 30.0N MAX. 35P : 32.5N MAX. 40P : 35.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10P : 4.0N MIN. 15P : 5.0N MIN. 20P : 5.5N MIN. 25P : 6.0N MIN. 30P : 7.0N MIN. 40P : 8.5N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 15P : 7.35N MIN. 20P : 9.80N MIN. 25P : 12.25N MIN. 30P : 14.70N MIN. 35P : 17.15N MIN. 40P : 19.60N MIN.
PRODUCT SPECIFICATION	P/N : 20345-0**T-32R *** PRS-1461
TEST REPORT	P/N : 20345-0**T-32R *** TR-08068
INSTRUCTION MANUAL	HIM-03005
ASSEMBLY MANUAL	ASM-03002
APPEARANCE CRITERIA NO.	QLS-A***

Rev.28

Plug Housing Assembly

Recommended P/N	20346-0**T-32R					
PART NO.	POS.	A	B	C	D	E
20346-010T-32R	10	3.6	6.4	7.2	8.8	5.1
20346-015T-32R	15	5.6	8.4	9.2	10.8	7.1
20346-020T-32R	20	7.6	10.4	11.2	12.8	9.1
20346-025T-32R	25	9.6	12.4	13.2	14.8	11.1
20346-030T-32R	30	11.6	14.4	15.2	16.8	13.1
20346-035T-32R	35	13.6	16.4	17.2	18.8	15.1
20346-040T-32R	40	15.6	18.4	19.2	20.8	17.1

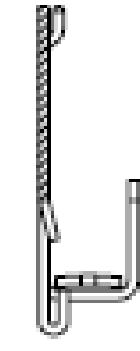
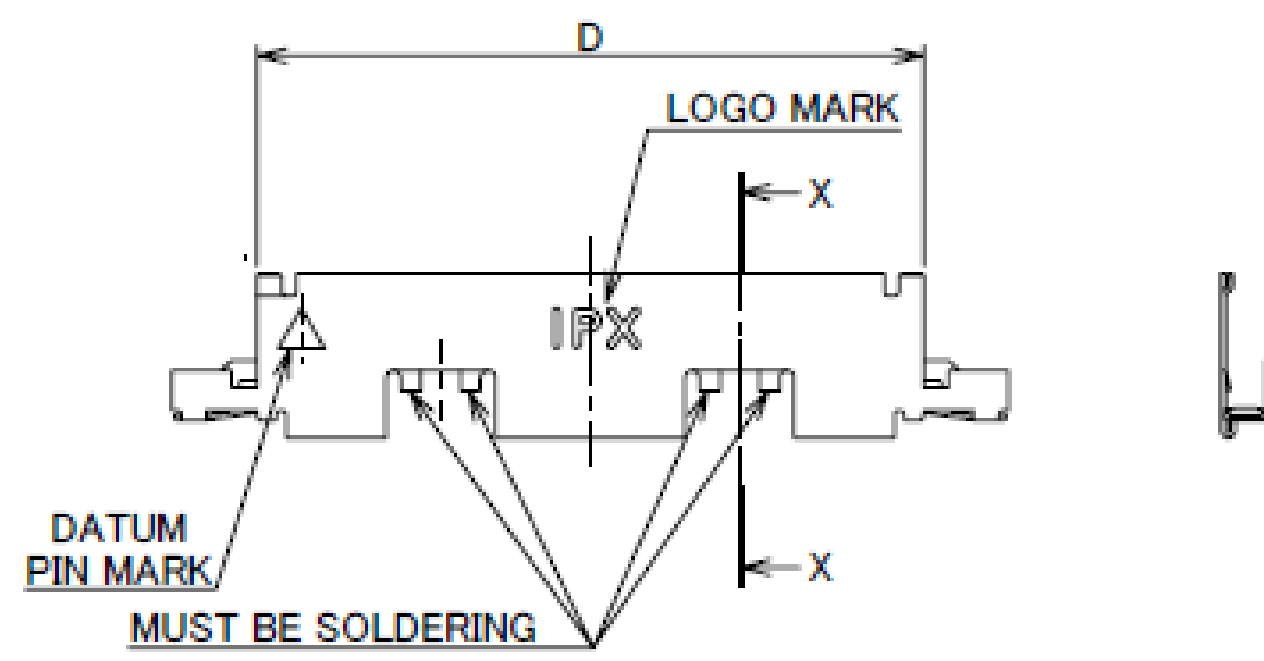
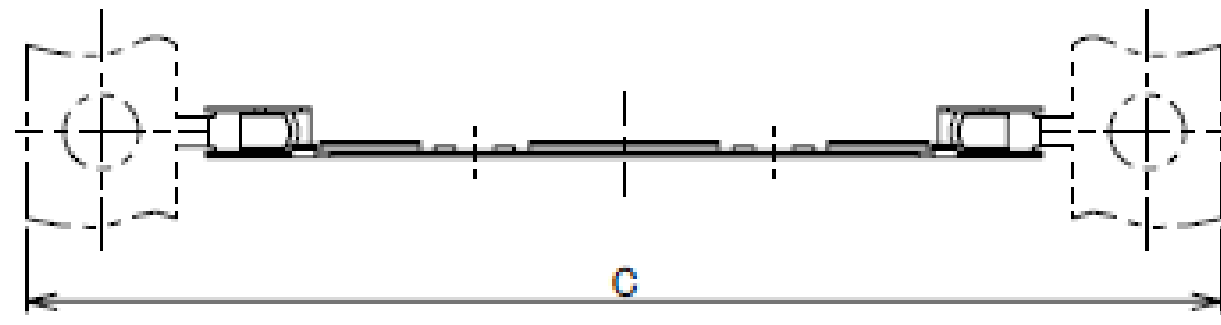
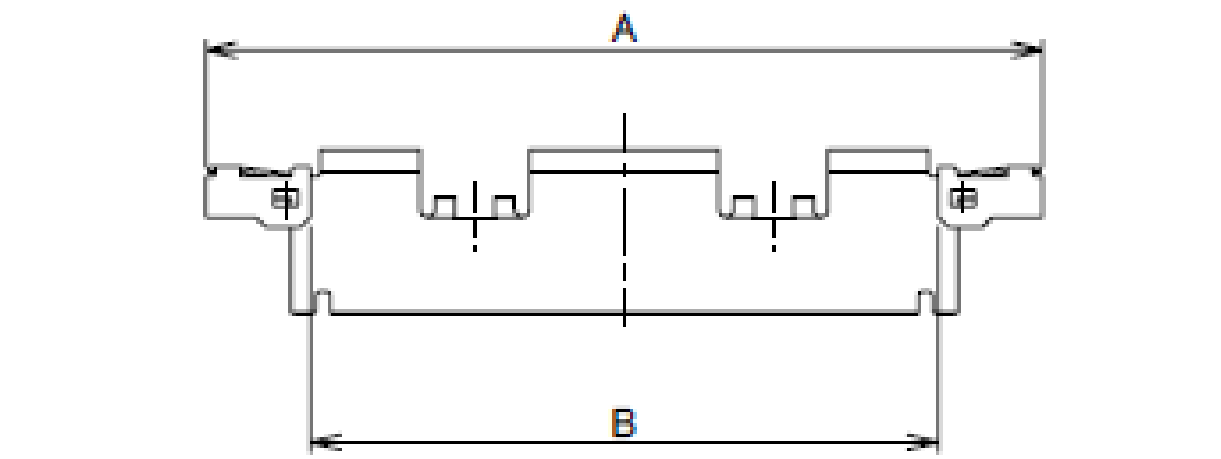
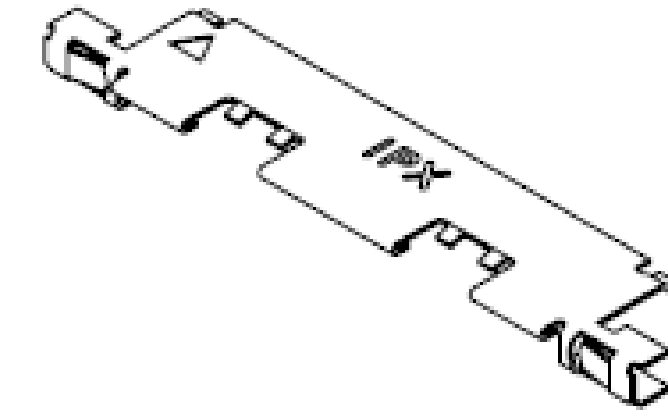
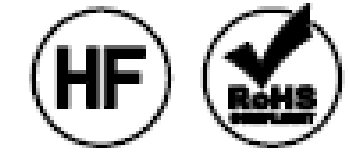


3	SHELL B	PHOSPHOR BRONZE	Sn 1.00 μ m OVER Ni 1.00 μ m MIN.
2	CONTACT	BRASS	ALL OVER: Ni 1.00 μ m MIN. UNDER PLATING CONTACT AREA: Au 0.10 μ m MIN. SOLDERING AREA: Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0, BRACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

Rev.22

Plug Shell-A

Recommended P/N		2047-0**3			
PART NO.	A	B	C	D	
2047-0103	8.8	4.6	19.5	5.4	
2047-0153	10.8	6.6	19.5	7.4	
2047-0203	12.8	8.6	19.5	9.4	
2047-0253	14.8	10.6	27.5	11.4	
2047-0303	16.8	12.6	27.5	13.4	
2047-0353	18.8	14.6	27.5	15.4	
2047-0403	20.8	16.6	27.5	17.4	



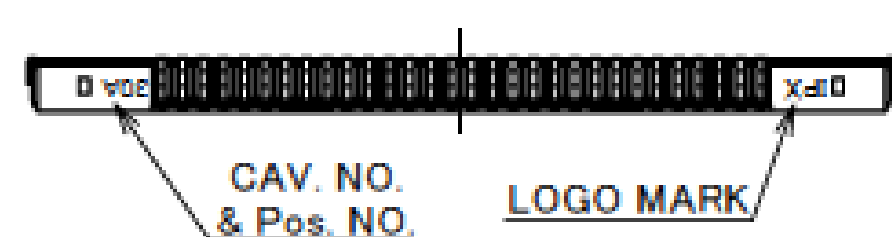
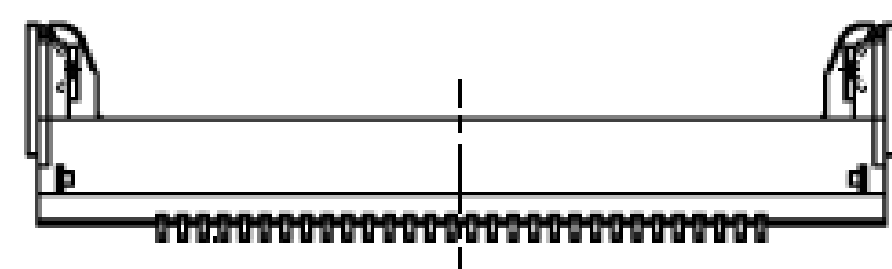
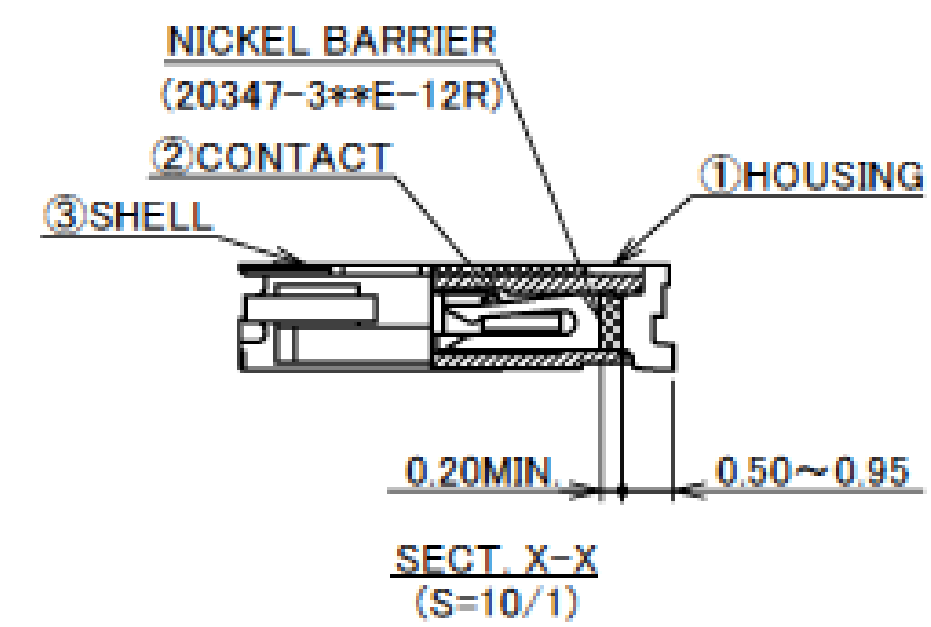
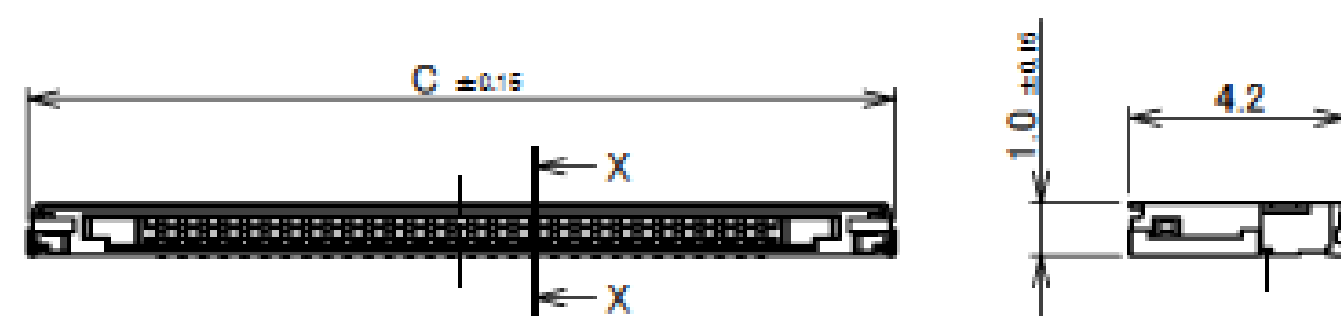
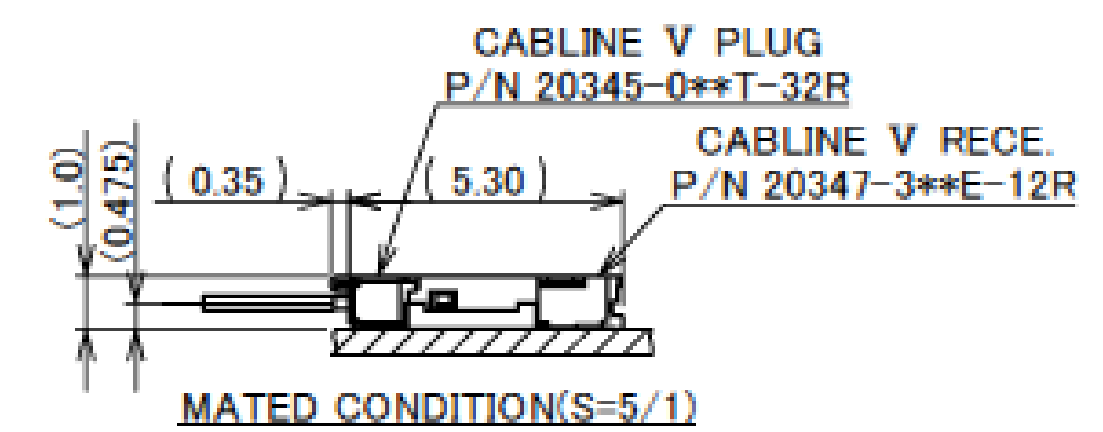
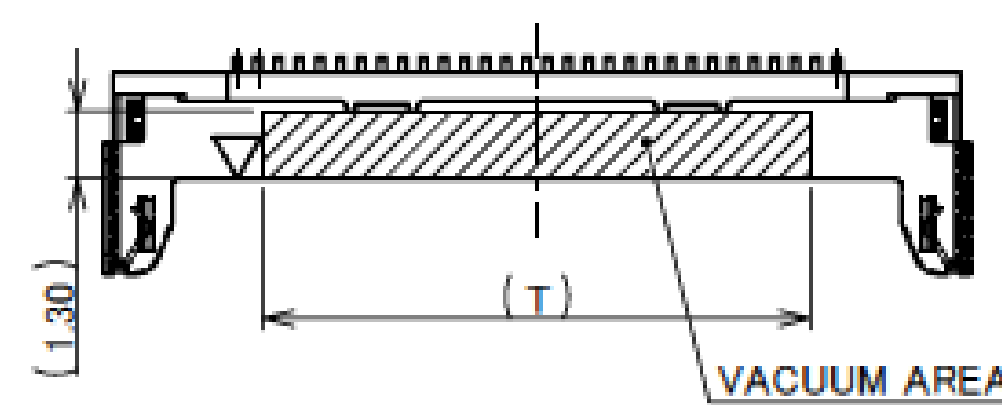
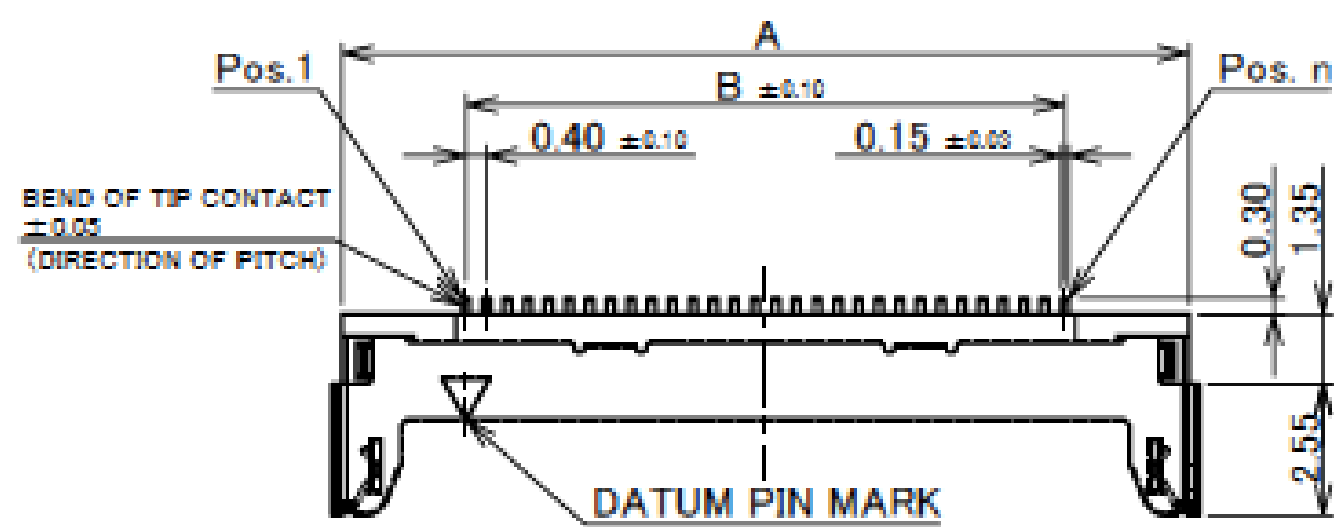
SECT. X-X
(S=10/1)

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL A	SUS	Sn 1.00 μ m MIN. OVER Ni 0.50 μ m MIN.

Rev.21

Receptacle Assembly

Recommended P/N		20347-3**E-12R			
PART NO.	POS.	A	B	C	T
20347-310E-12R	10	8.40	3.60	8.80	2.60
20347-315E-12R	15	10.40	5.60	10.80	4.60
20347-320E-12R	20	12.40	7.60	12.80	6.60
20347-325E-12R	25	14.40	9.60	14.80	8.60
20347-330E-12R	30	16.40	11.60	16.80	10.60
20347-335E-12R	35	18.40	13.60	18.80	12.60
20347-340E-12R	40	20.40	15.60	20.80	14.60

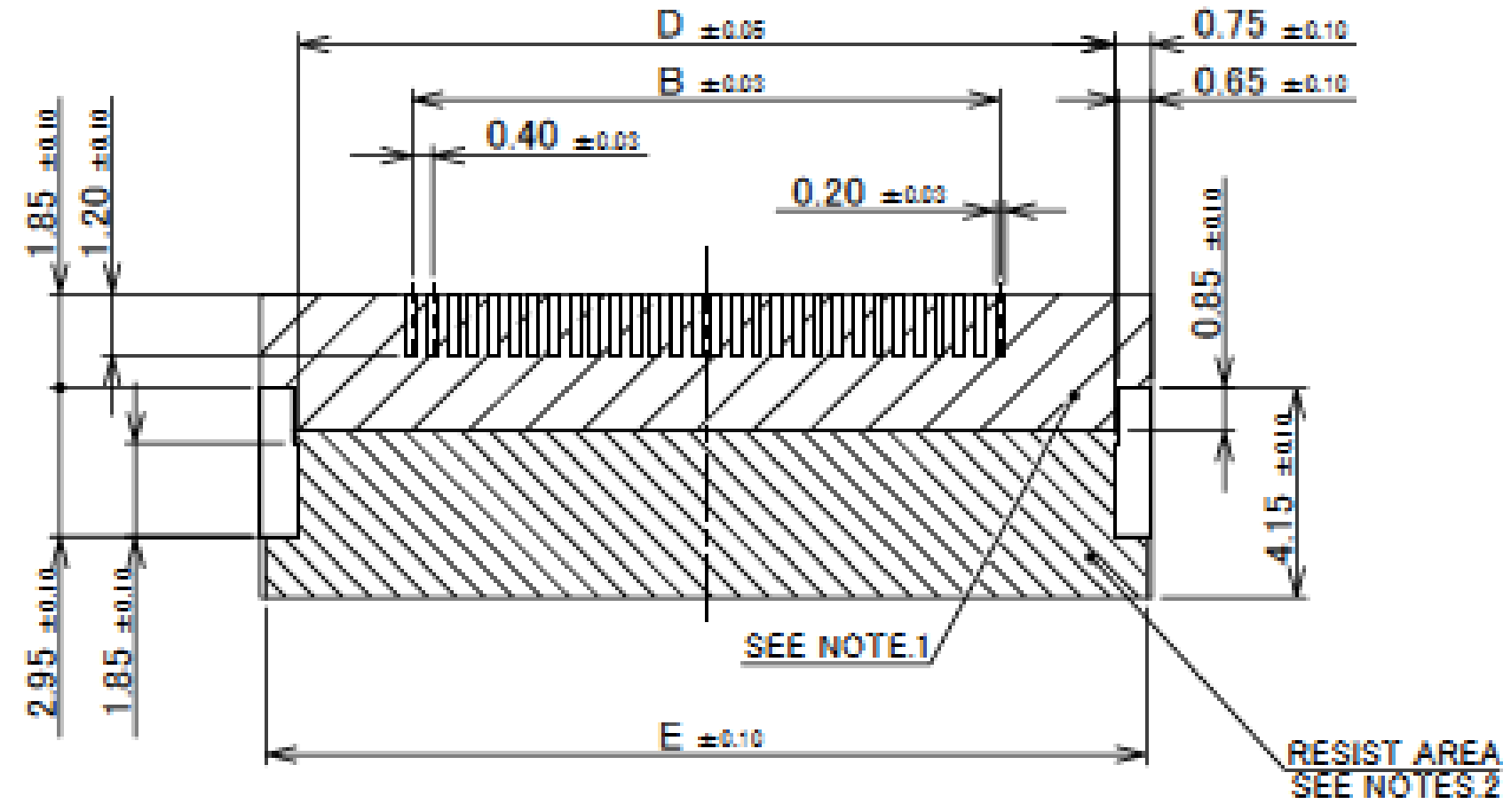


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	SHELL	PHOSPHOR BRONZE	Sn 1.00 μ m MIN. OVER Ni 1.00 μ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 1.00 μ m MIN. UNDER PLATING CONTACT AREA: Au 0.10 μ m MIN. SOLDERING AREA: Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0, BRACK

Rev.36

Receptacle Assembly

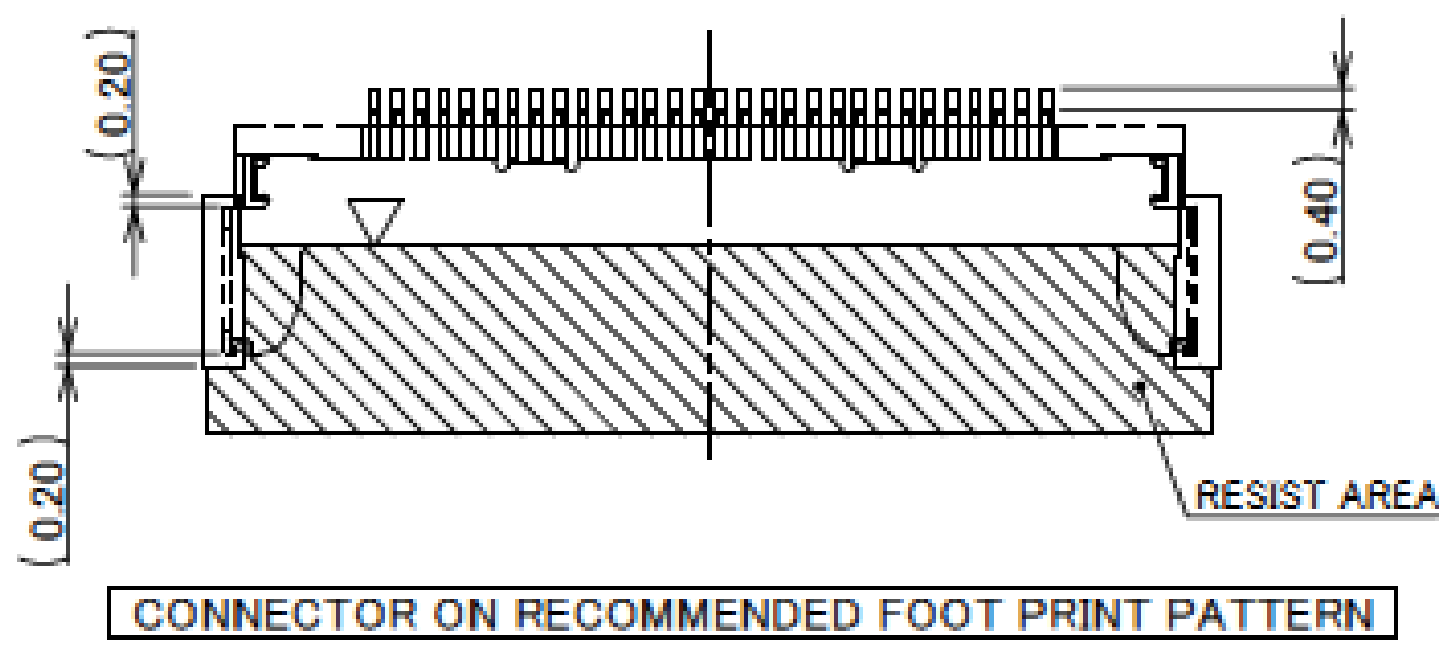
PART NO.	POS.	B	D	E
20347-310E-12R	10	3.60	8.10	9.40
20347-315E-12R	15	5.60	10.10	11.40
20347-320E-12R	20	7.60	12.10	13.40
20347-325E-12R	25	9.60	14.10	15.40
20347-330E-12R	30	11.60	16.10	17.40
20347-335E-12R	35	13.60	18.10	19.40
20347-340E-12R	40	15.60	20.10	21.40



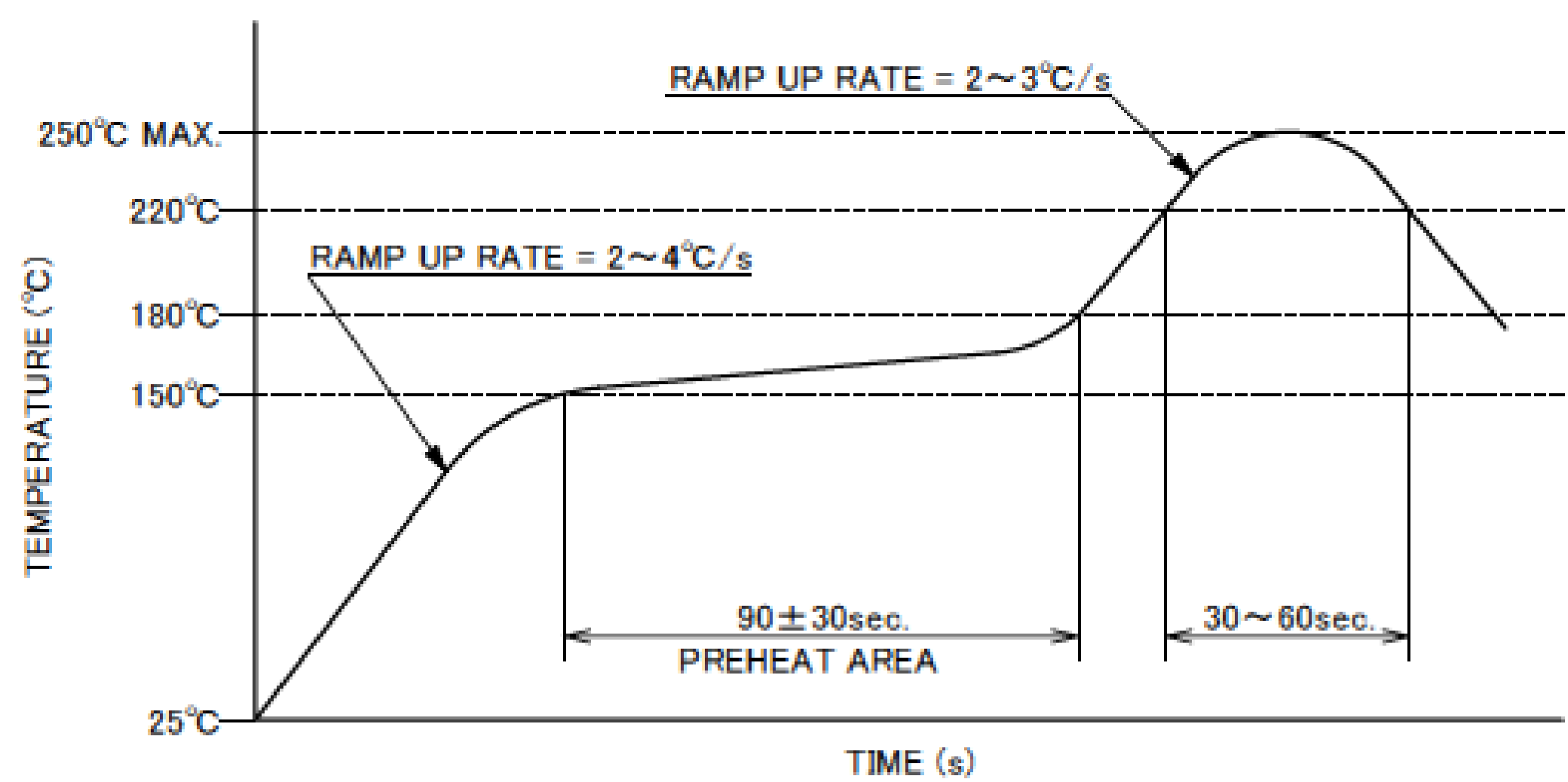
RECOMMENDED FOOT PRINT PATTERN & METALMASK LAYOUT
 RECOMMENDED METALMASK THICKNESS : $t=0.12$

- NOTES.
 1. DO NOT MOUNT ANOTHER COMPONENTS IN THIS AREA.
 2. SOLDER RESIST MUST BE APPLIED TO THIS AREA.

Rev.36



CONNECTOR ON RECOMMENDED FOOT PRINT PATTERN



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

Rev.36

Receptacle Assembly

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44,42,40 DISCRETE WIRE : AWG# 36 TWINAX : AWG# 40
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG#44] PER CONTACT PIN / UP TO 40 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN / UP TO 40 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN / UP TO 40 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN / UP TO 12 CONTACTS ※ 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	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 235mohm MAX.(AWG#36) / AFTER TEST : \triangleleft140mohm MAX. 560mohm MAX.(AWG#40) 650mohm MAX.(AWG#42) 1040mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \triangleleft140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	10P : 20.0N MAX. 15P : 22.5N MAX. 20P : 25.0N MAX. 25P : 27.5N MAX. 30P : 30.0N MAX. 35P : 32.5N MAX. 40P : 35.0N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10P : 4.0N MIN. 15P : 5.0N MIN. 20P : 5.5N MIN. 25P : 6.0N MIN. 30P : 7.0N MIN. 35P : 8.0N MIN. 40P : 8.5N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 15P : 7.35N MIN. 20P : 9.80N MIN. 25P : 12.25N MIN. 30P : 14.70N MIN. 35P : 17.15N MIN. 40P : 19.60N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	P/N 20347-3**E-12R : PRS-1461
TEST REPORT	P/N 20347-3**E-12R : TR-08068
PACKING STANDARD	300-308
INSTRUCTION MANUAL	HIM-03005
ASSEMBLY MANUAL	ASM-03002
APPEARANCE CRITERIA NO.	QLS-A***

Rev.36

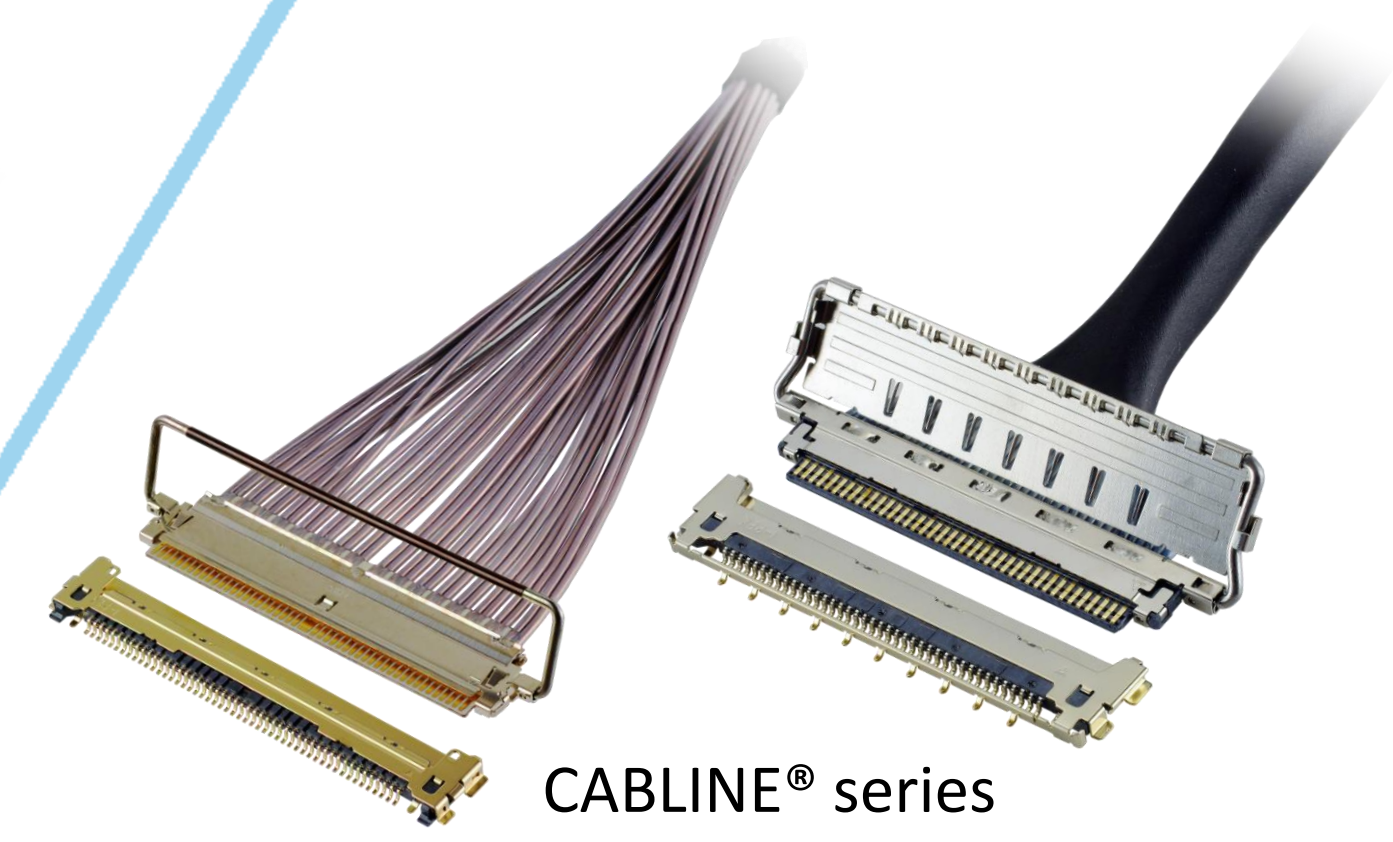
Custom Connectors Available

 RF Connector

MHF® series



Micro-coaxial/Twinax/
Discrete Wire Connector



CABLINE® series



Optical Module

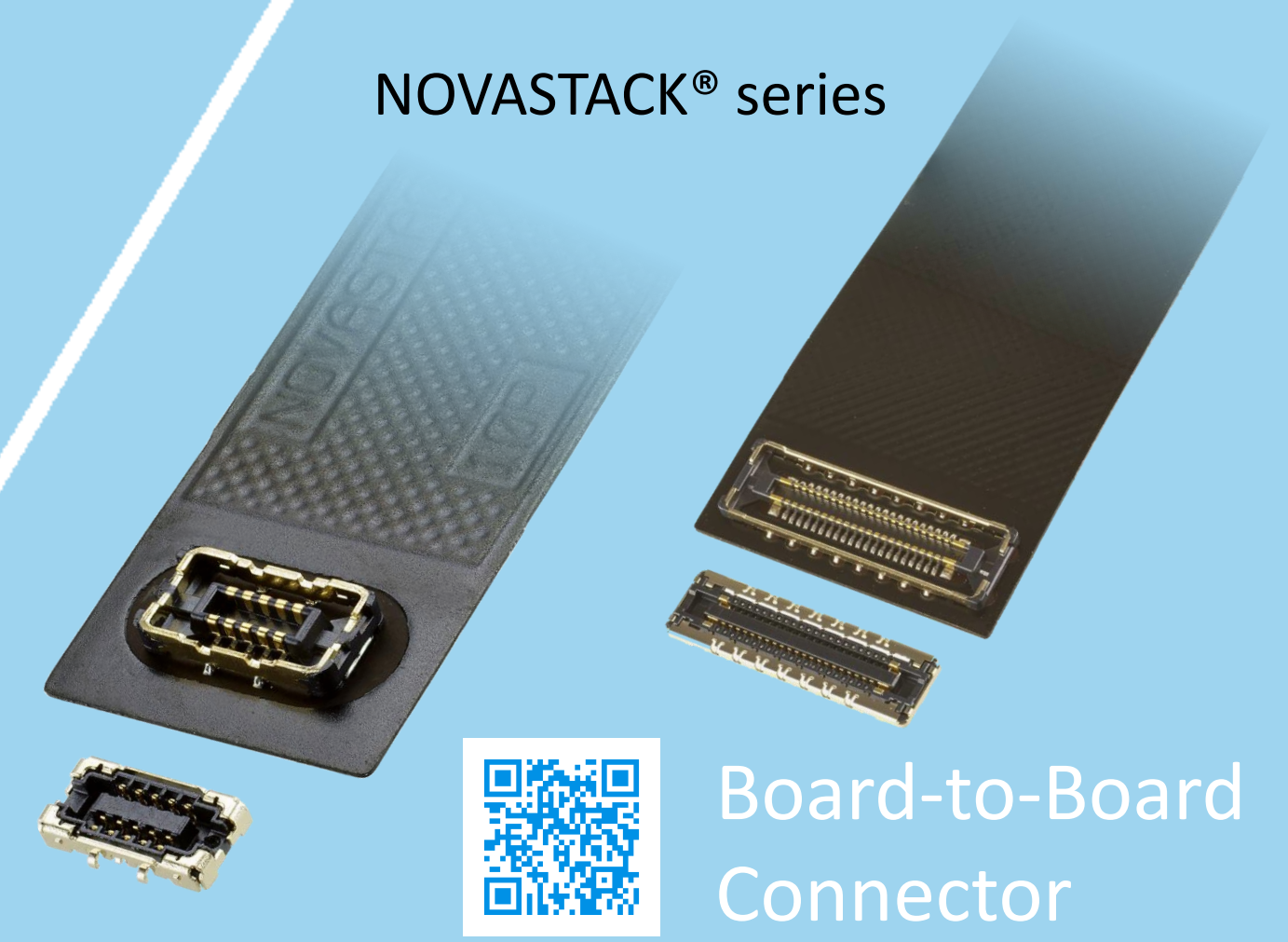
LIGHTPASS® series



NOVASTACK® series



Board-to-Board Connector



Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



FPC FFC Connector



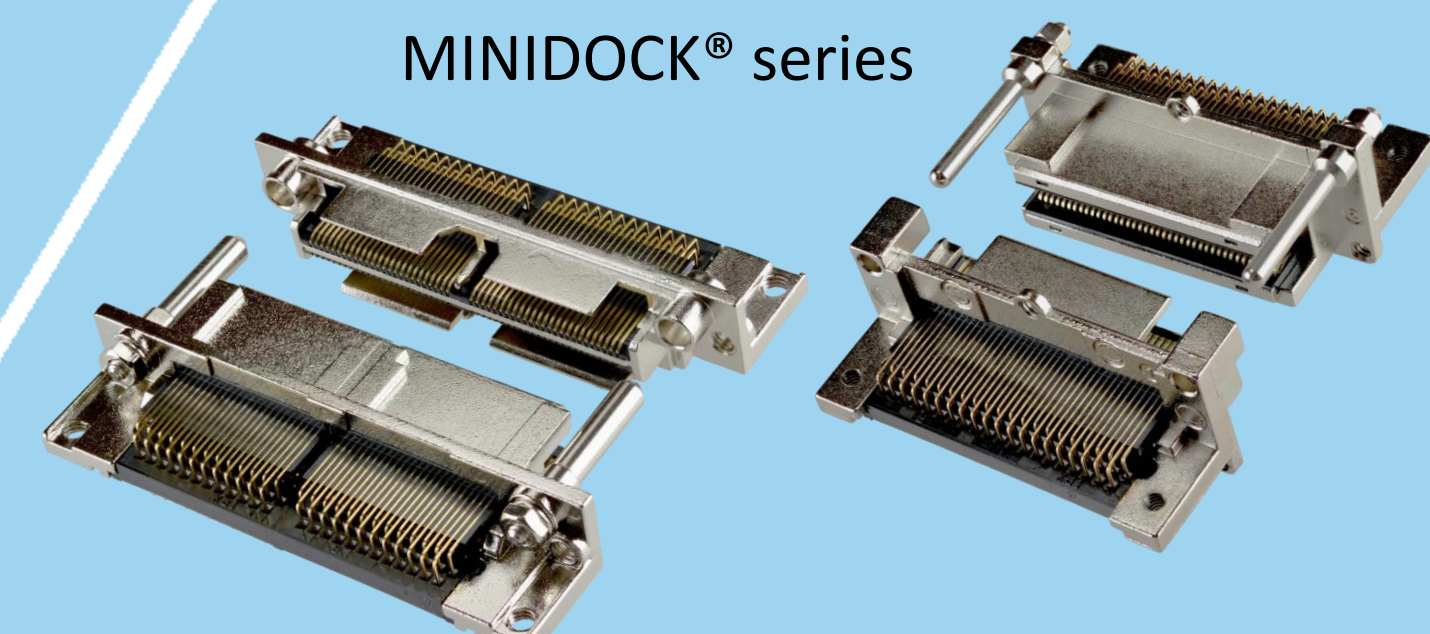
Inquiry



MINIDOCK® series



I/O Connector



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Contact your sales representative or more detailed information.

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