

CABLIN[®]-SS

Narrow depth, robust, right angle vertical mate with max power delivery (AWG#34)
In 0.4 mm pitch size and high temperature/humidity (autoclavable) option

Product Specifications:

Mating type	Right angle vertical	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.3	
Mated size (mm)	Height	1.65 +/- 0.2
	Width	5.8 + (0.4*?p)
	Depth	3.0
Pin Counts	Range	Up to 50
	Available	10, 14, 20, 30, 32, 35, 40, 50

Applicable Cable Size:

Maximum O.D. (mm)	0.4
Micro-Coaxial for Signal (AWG)	45 ohm : #38 or smaller 50 ohm : #40 or smaller
Twin Coaxial (AWG)	-
Discrete (AWG)	#34 or smaller

Applicable Standards (Reference Only):

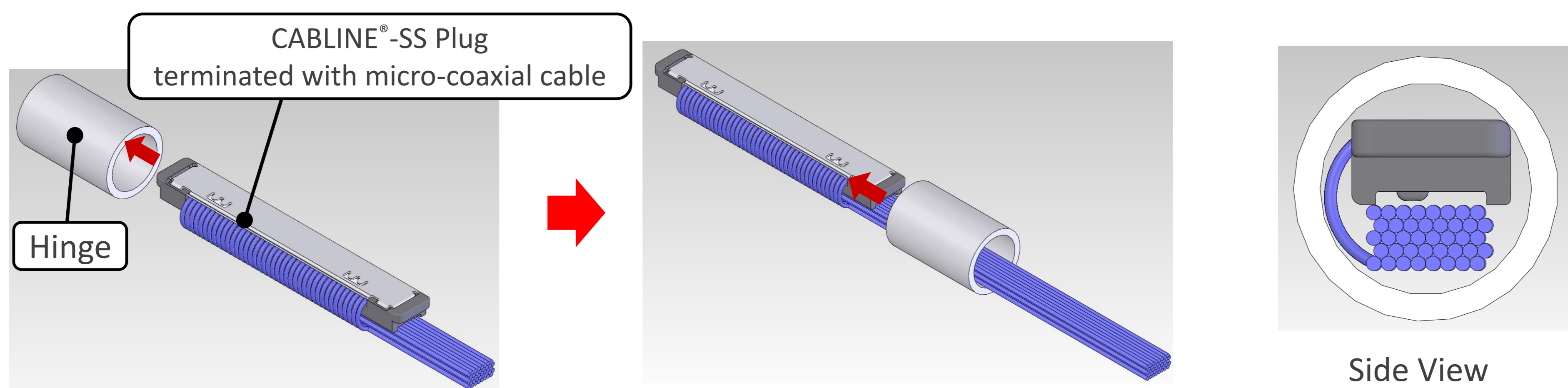
eDP HBR 2 (5.4 Gbps) USB 3.0 (5 Gbps)

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

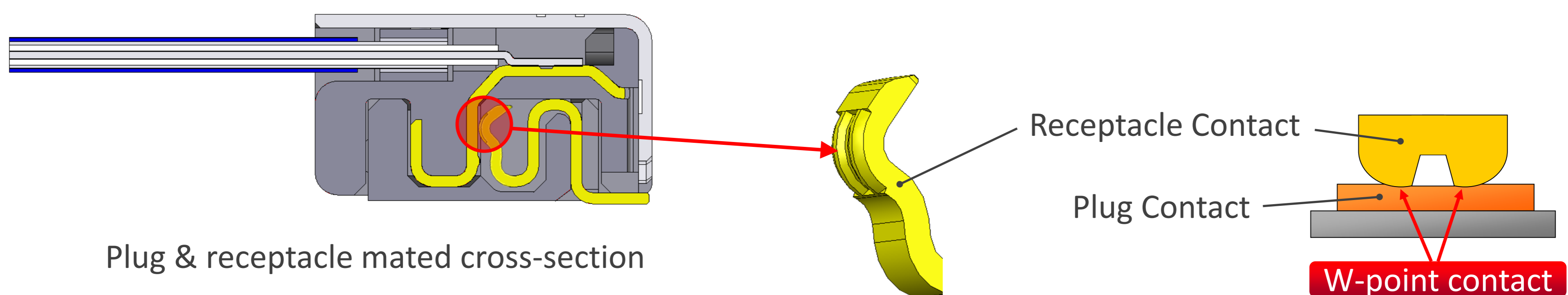


▶ Narrow depth design with maximum power delivery (AWG#34)

Narrow depth design enables go through small hinge after cable termination.



▶ Highly reliable contact using I-PEX's unique W-point design



I-PEX prevents poor contact with foreign particles between plug and receptacle contacts. Provides better contact reliability than typical single-point contact designs.

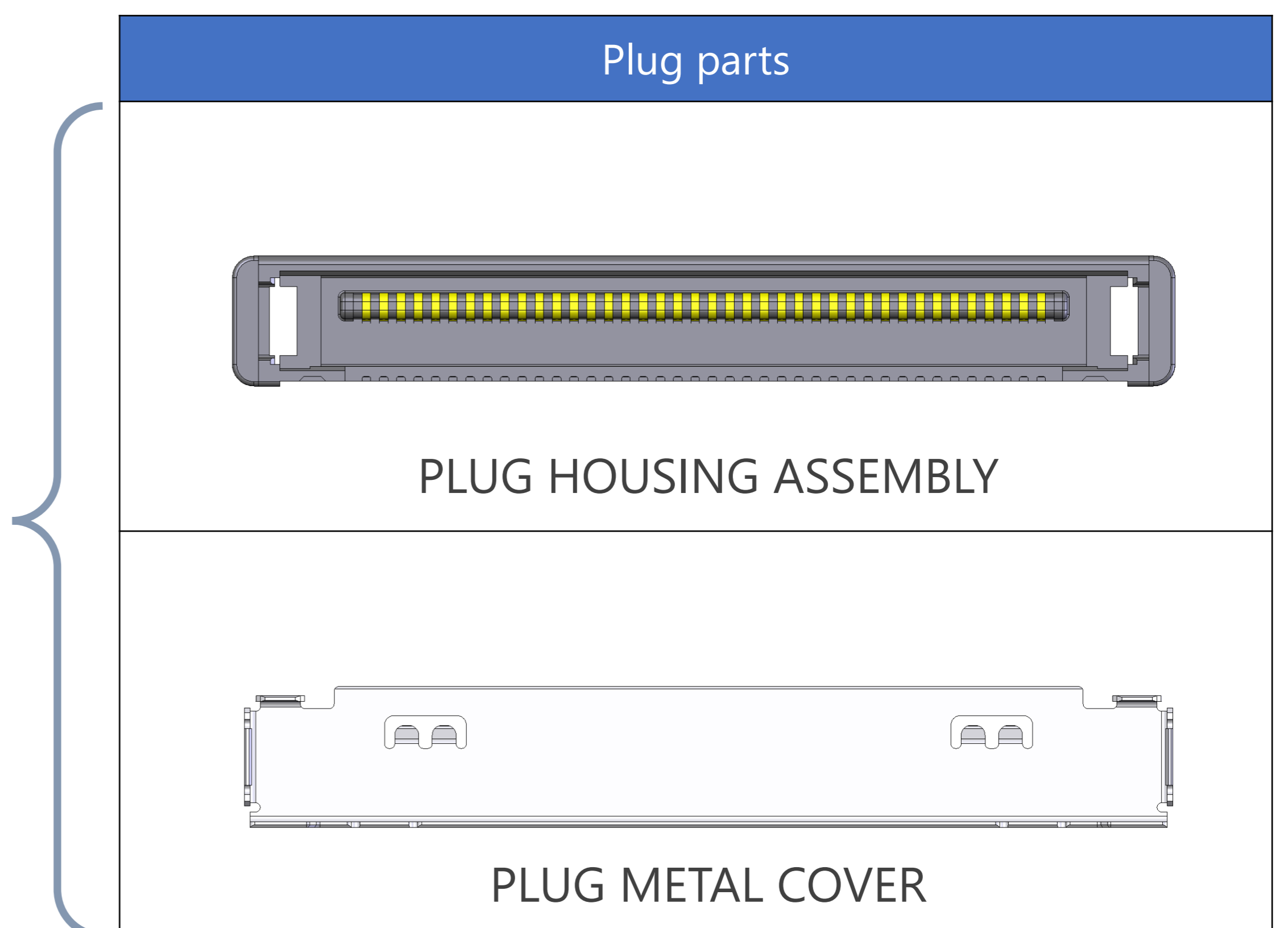
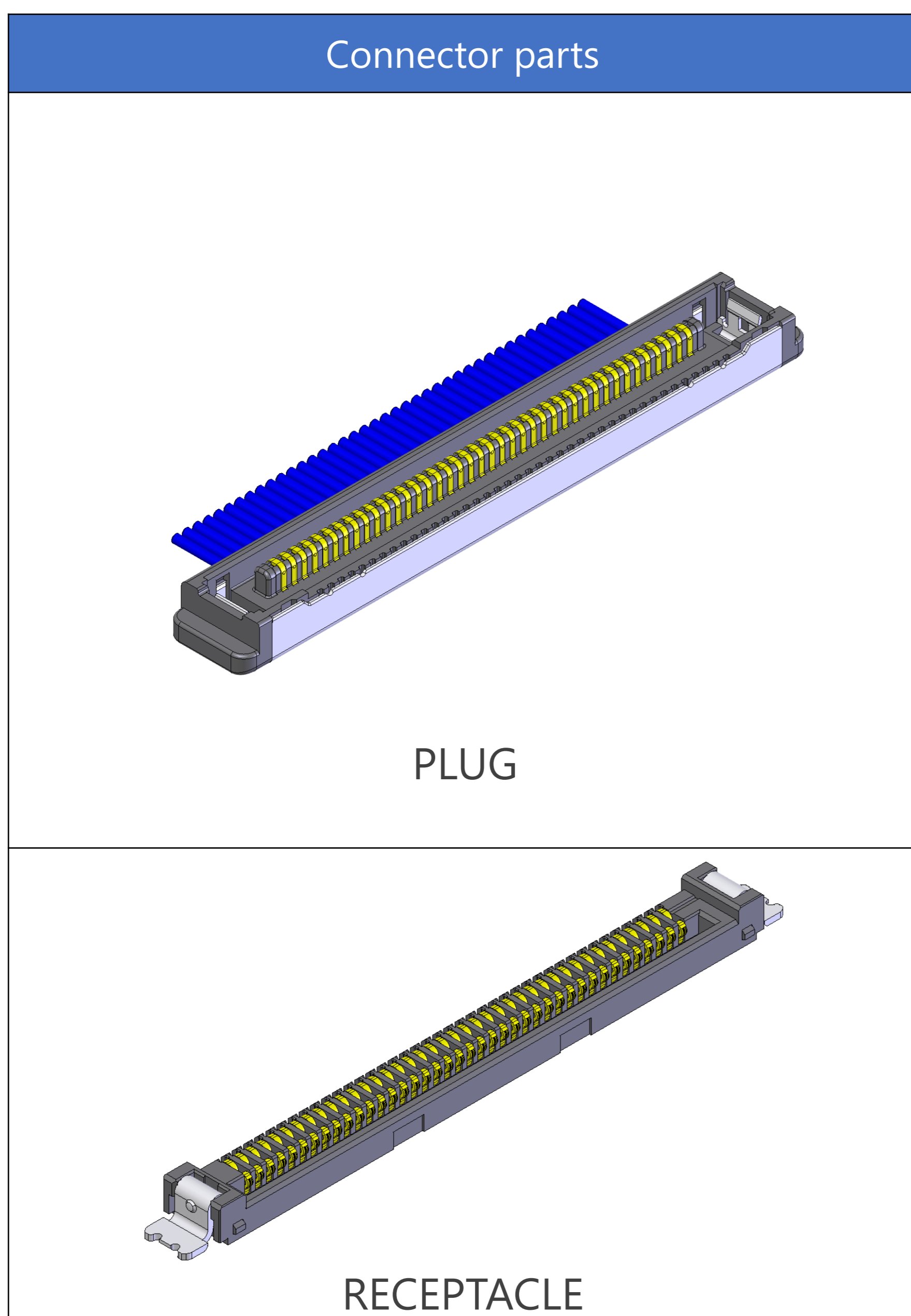
▶ Durable to high temperature/humidity (autoclavable) option available

Suitable for sterilization environment of medical equipment,
autoclave compatible



Component Parts Details

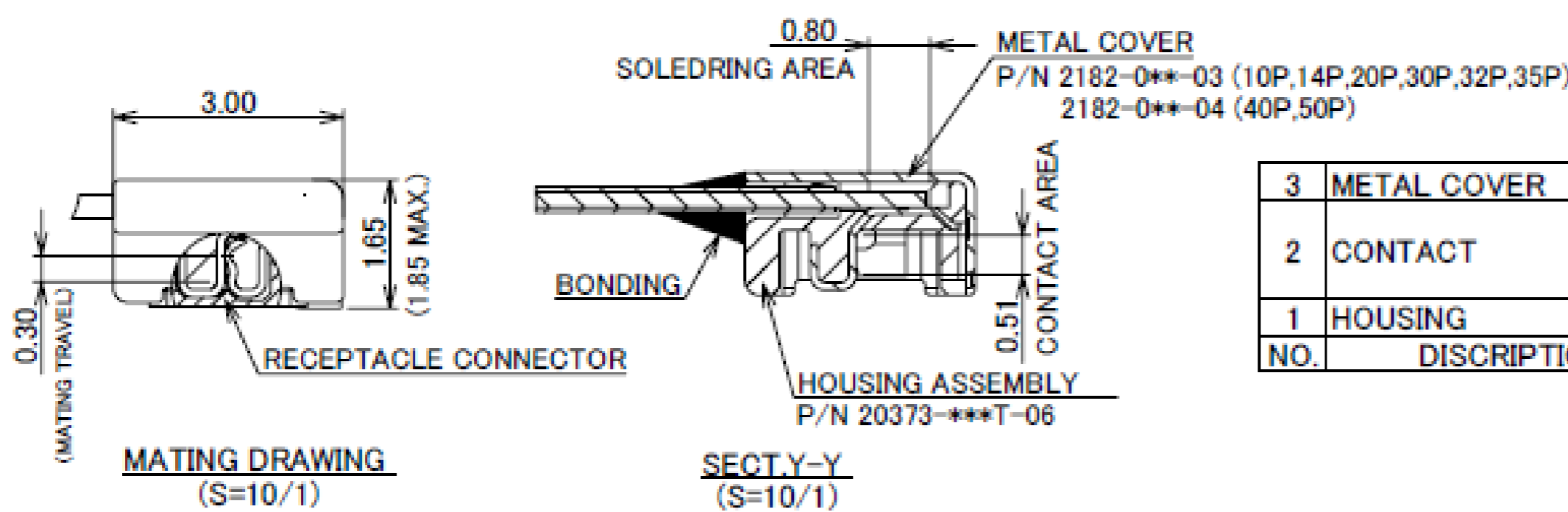
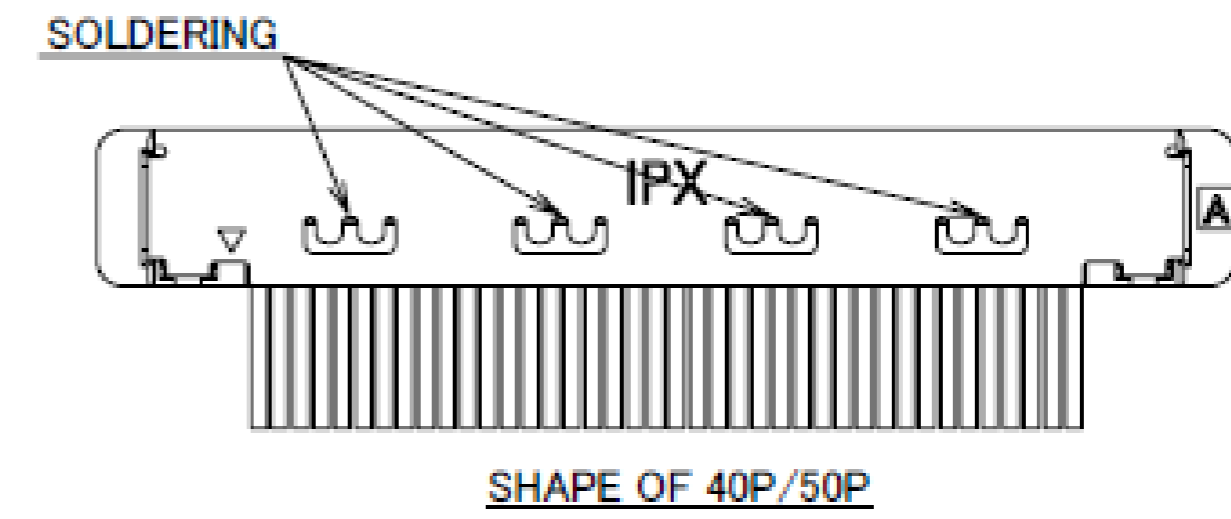
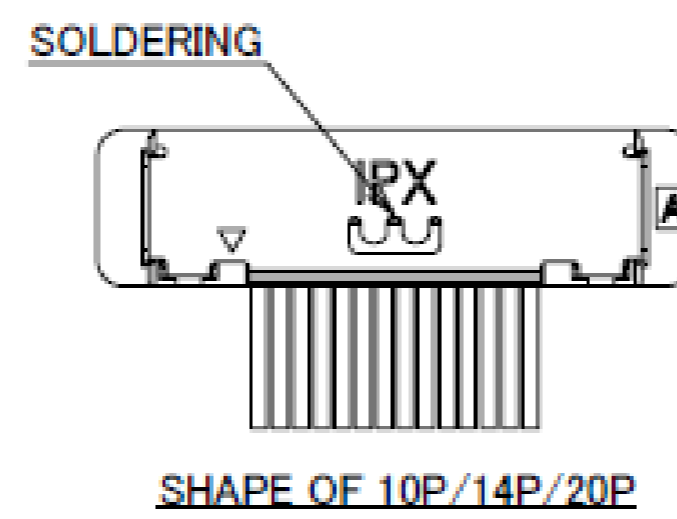
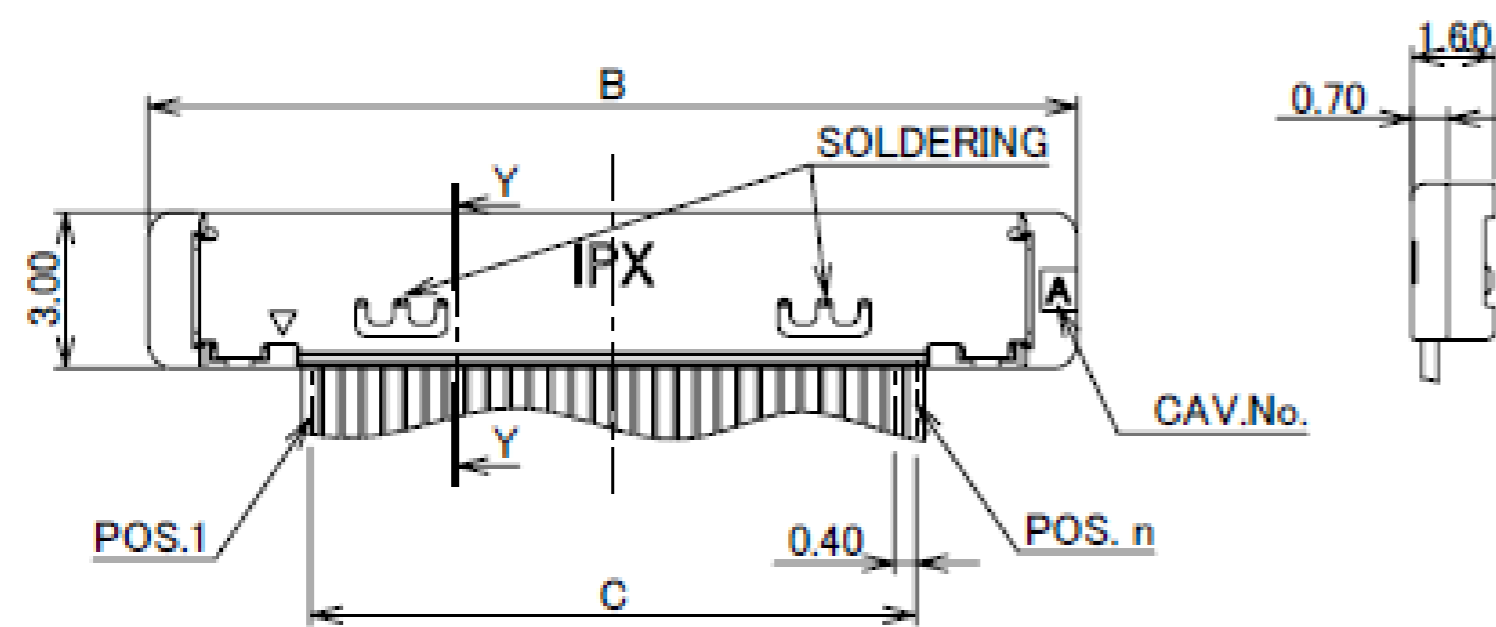
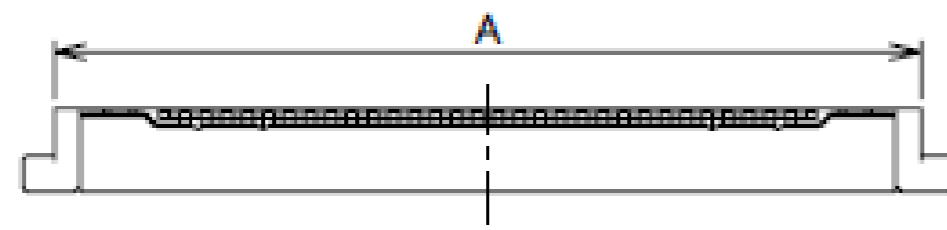
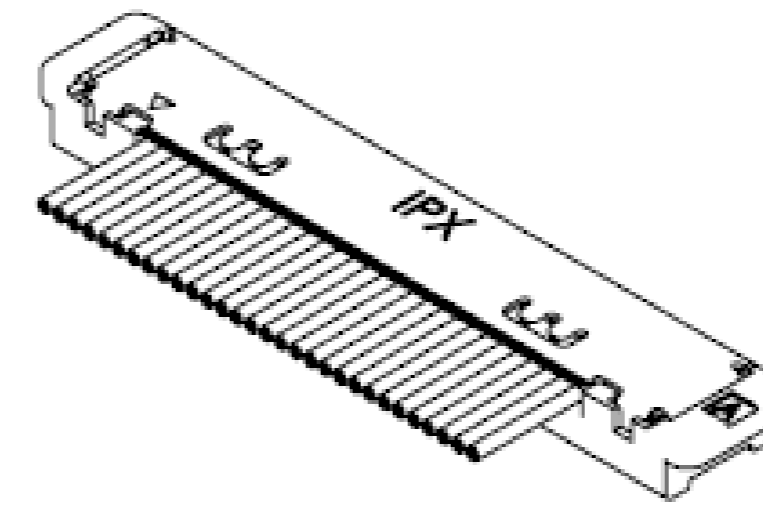
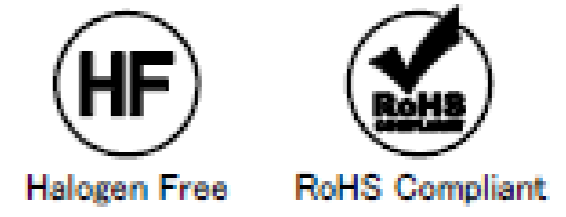
Component Parts



Plug for Cable Assembly

Recommended P/N		20380-R**T-06 (10P / 14P / 20P / 30P / 32P / 35P)				20380-R**T-16 (40P / 50P)	
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PART NO.	POS.	MATING RECEPTACLE P/N	A	B	C
20380-R10T-06	10	20374-R10E-31	8.6	9.8	3.6
20380-R14T-06	14	20374-R14E-31	10.2	11.4	5.2
20380-R20T-06	20	20374-R20E-31	12.6	13.8	7.6
20380-R30T-06	30	20374-R30E-31	16.6	17.8	11.6
20380-R32T-06	32	20374-R32E-31	17.4	18.6	12.4
20380-R35T-06	35	20374-R35E-31	18.6	19.8	13.6
20380-R40T-16	40	20374-R40E-31	20.6	21.8	15.6
20380-R50T-16	50	20374-R50E-31	24.6	25.8	19.6



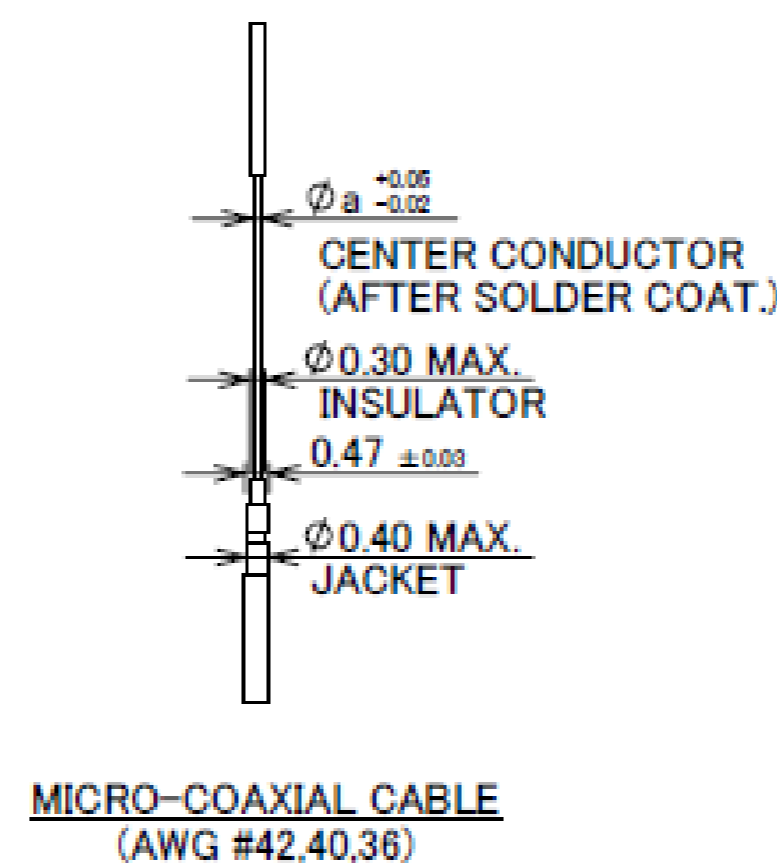
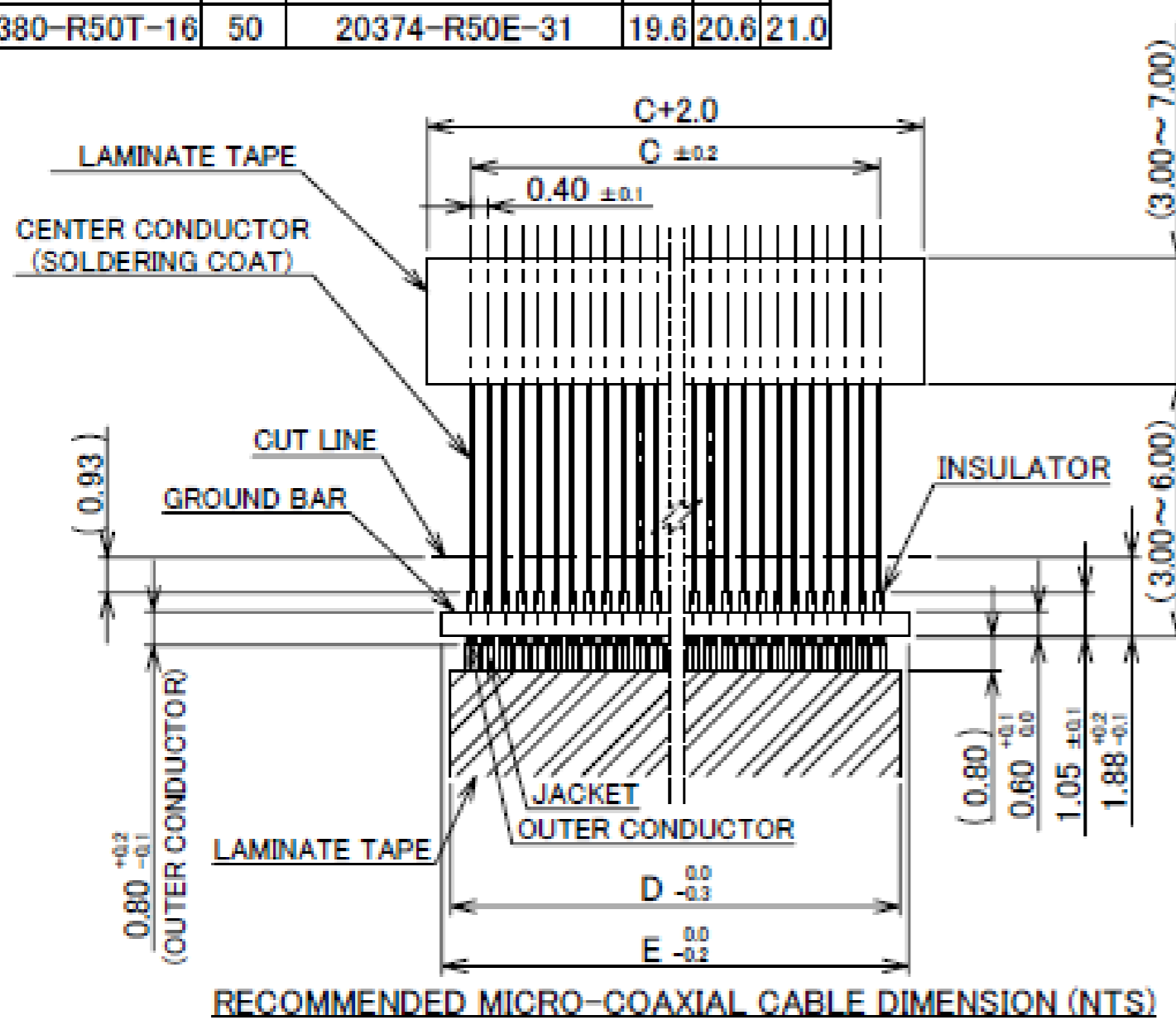
NOTES.
1. THE CABLE MUST NOT HOLD WHEN UN-MATING A CONNECTOR.

NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
3	METAL COVER	PHOSPHOR BRONZE	Sn REFLOW 1.00 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	CONTACT AREA: Au 0.1 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA: Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

Rev.27

Recommended P/N		20380-R**T-06 (10P / 14P / 20P / 30P / 32P / 35P)				20380-R**T-16 (40P / 50P)	
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PART NO.	POS.	MATING RECEPT. P/N	C	D	E
20380-R10T-06	10	20374-R10E-31	3.6	4.6	5.0
20380-R14T-06	14	20374-R14E-31	5.2	6.2	6.6
20380-R20T-06	20	20374-R20E-31	7.6	8.6	9.0
20380-R30T-06	30	20374-R30E-31	11.6	12.6	13.0
20380-R32T-06	32	20374-R32E-31	12.4	13.4	13.8
20380-R35T-06	35	20374-R35E-31	13.6	14.6	15.0
20380-R40T-16	40	20374-R40E-31	15.6	16.6	17.0
20380-R50T-16	50	20374-R50E-31	19.6	20.6	21.0



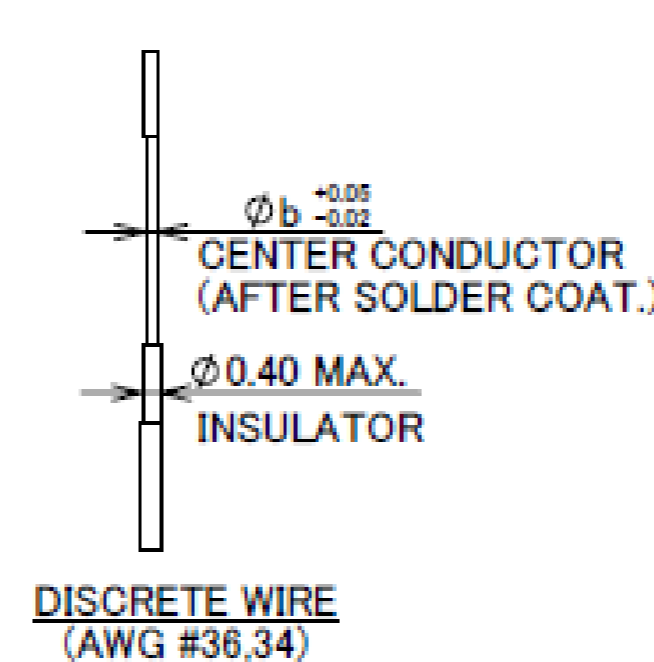
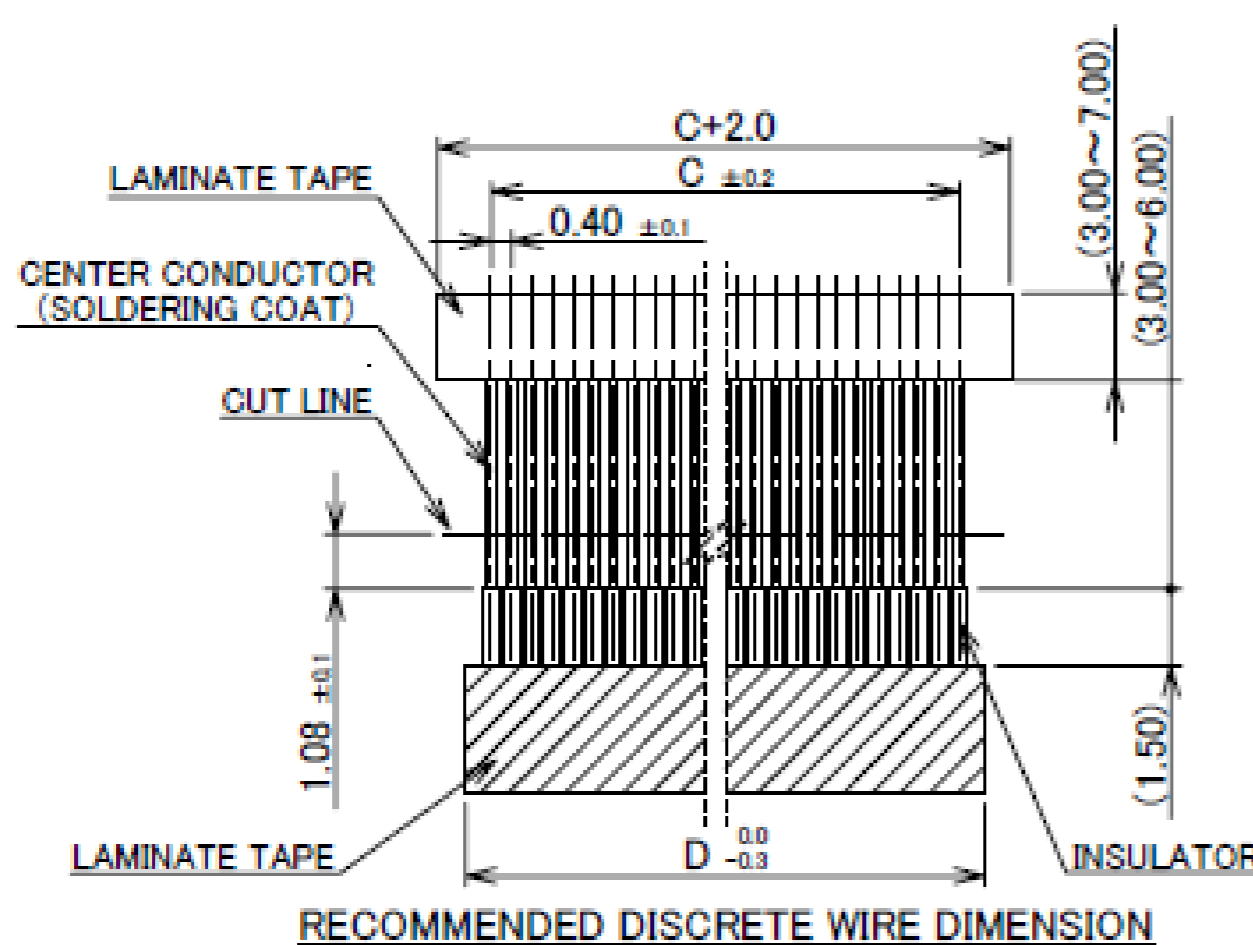
CHARACTERISTIC IMPEDANCE MACHING MICRO-COAXIAL CABLE

	a
#40	φ 0.09
#42	φ 0.075

CHARACTERISTIC IMPEDANCE UN-MACHING MICRO-COAXIAL CABLE

	a
#36	φ 0.15

MICRO-COAXIAL CABLE #36: NOT RECOMMENDED FOR HIGH SPEED SIGNAL TRANSFAER



DISCRETE WIRE DIMENSION

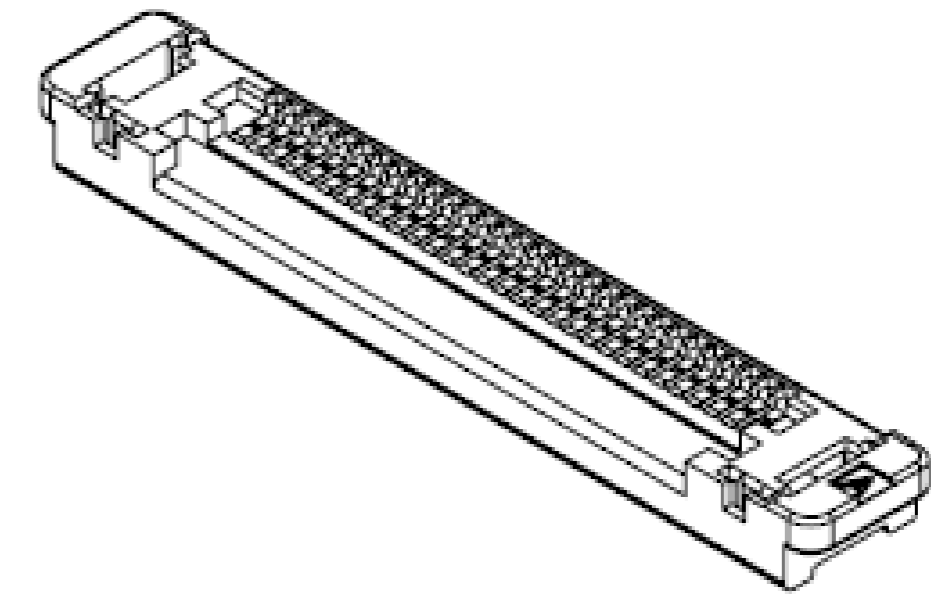
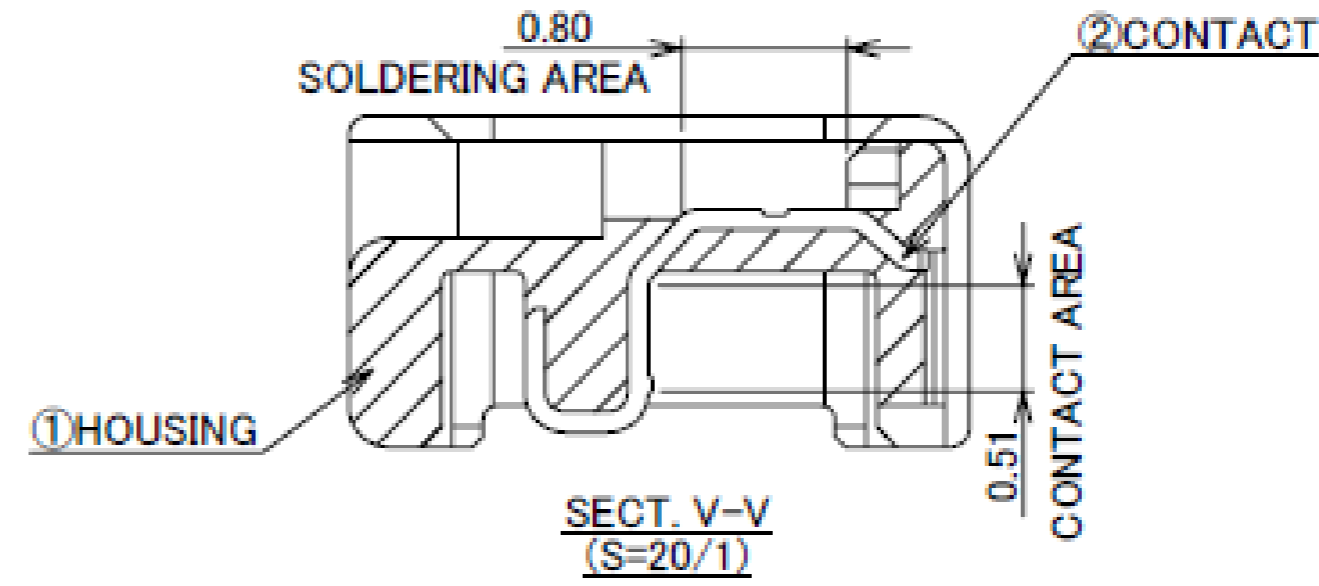
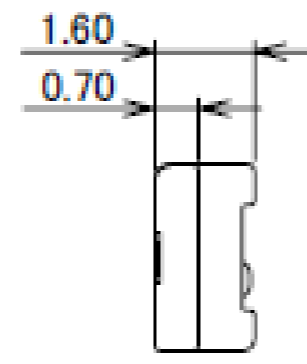
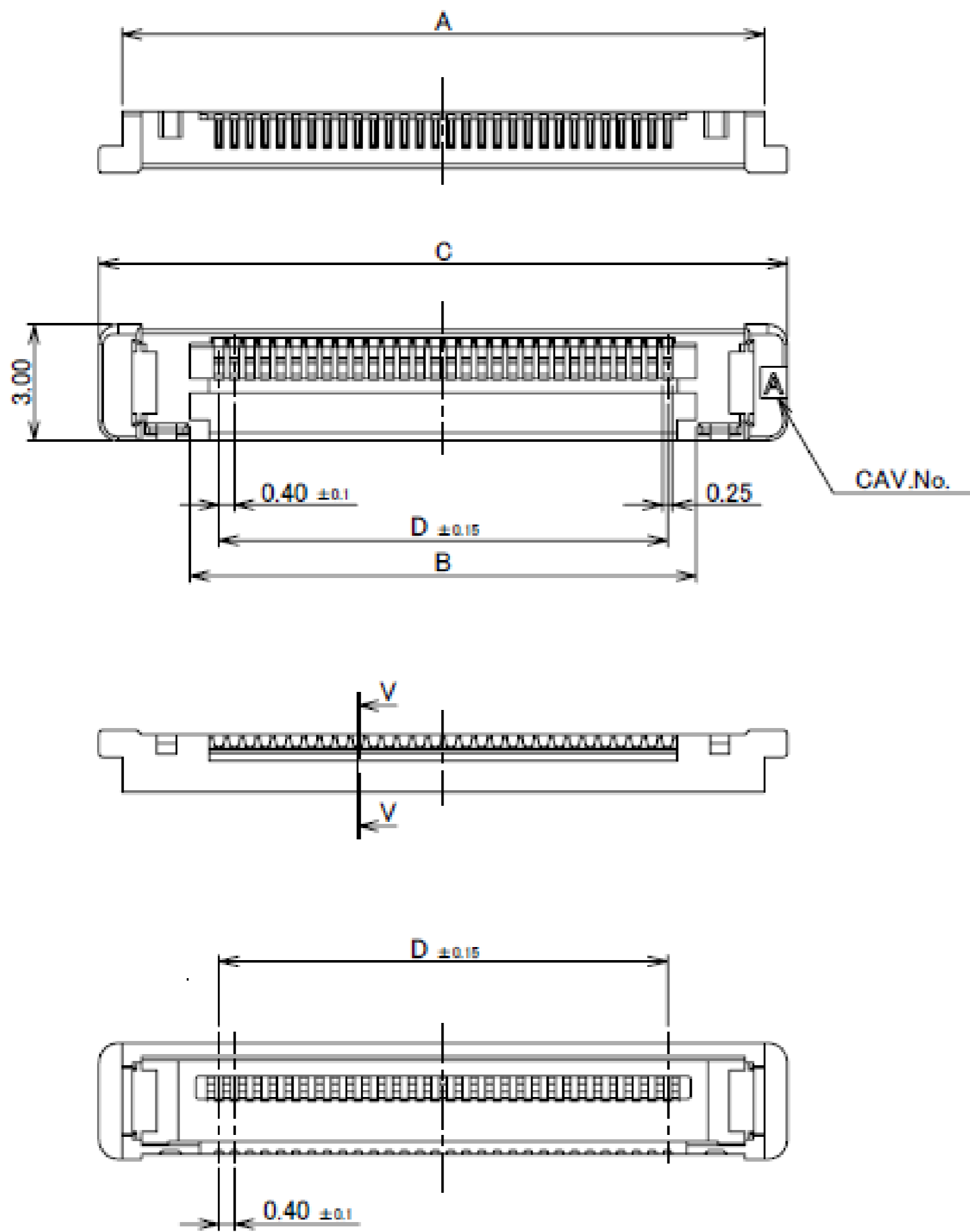
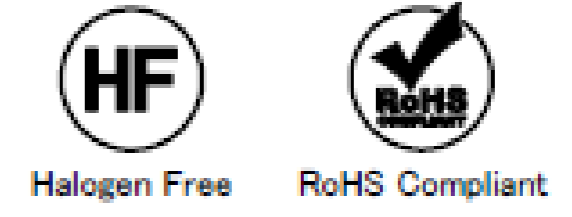
	b
#34	φ 0.192
#36	φ 0.15

Rev.27

Plug Housing Assembly

Recommended P/N		20373-R**T-06			
PART NO.	Pos.	A	B	C	D
20373-R10T-06	10	8.60	5.10	9.80	3.60
20373-R14T-06	14	10.20	6.70	11.40	5.20
20373-R20T-06	20	12.60	9.10	13.80	7.60
20373-R30T-06	30	16.60	13.10	17.80	11.60
20373-R32T-06	32	17.40	13.90	18.60	12.40
20373-R35T-06	35	18.60	15.10	19.80	13.60
20373-R40T-06	40	20.60	17.10	21.80	15.60
20373-R50T-06	50	24.60	21.10	25.80	19.60

FOR AWG #34,#36,#40,#42



NOTES

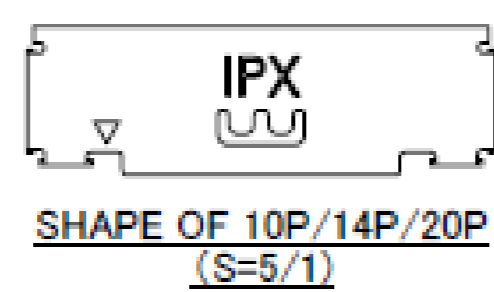
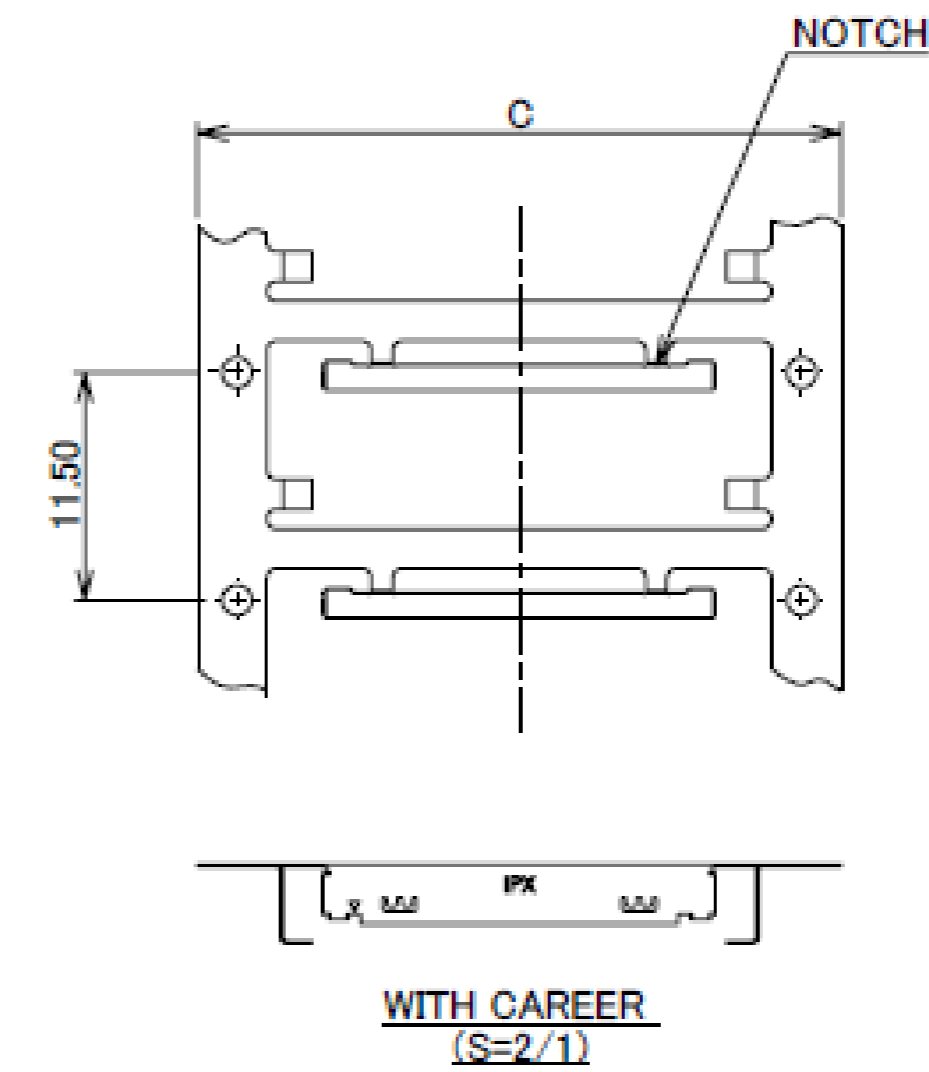
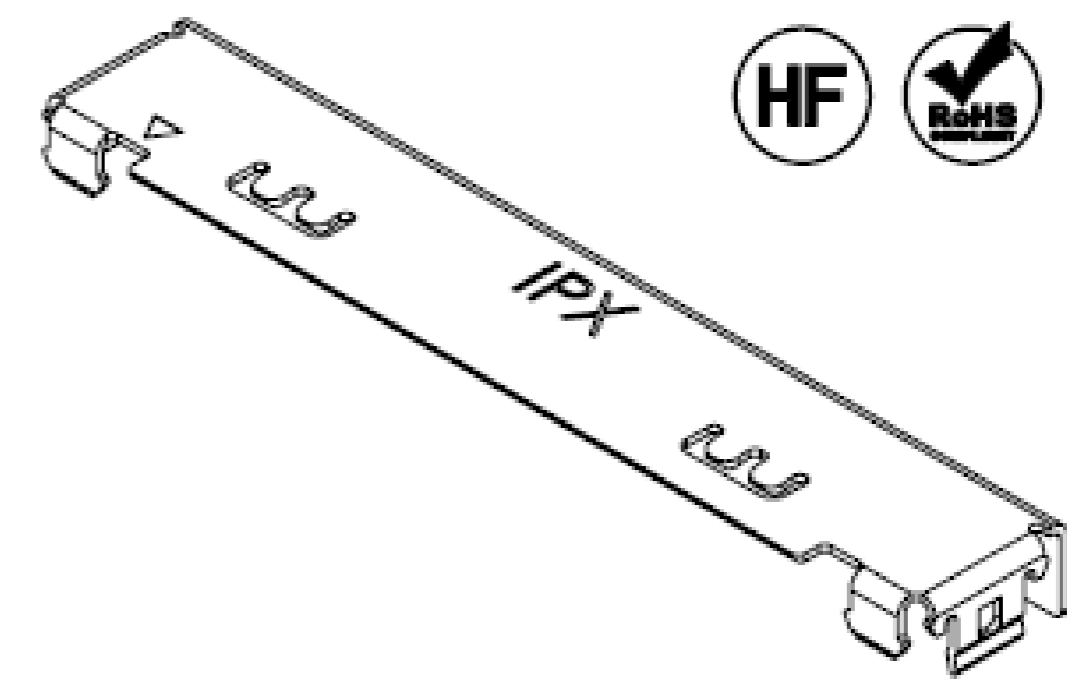
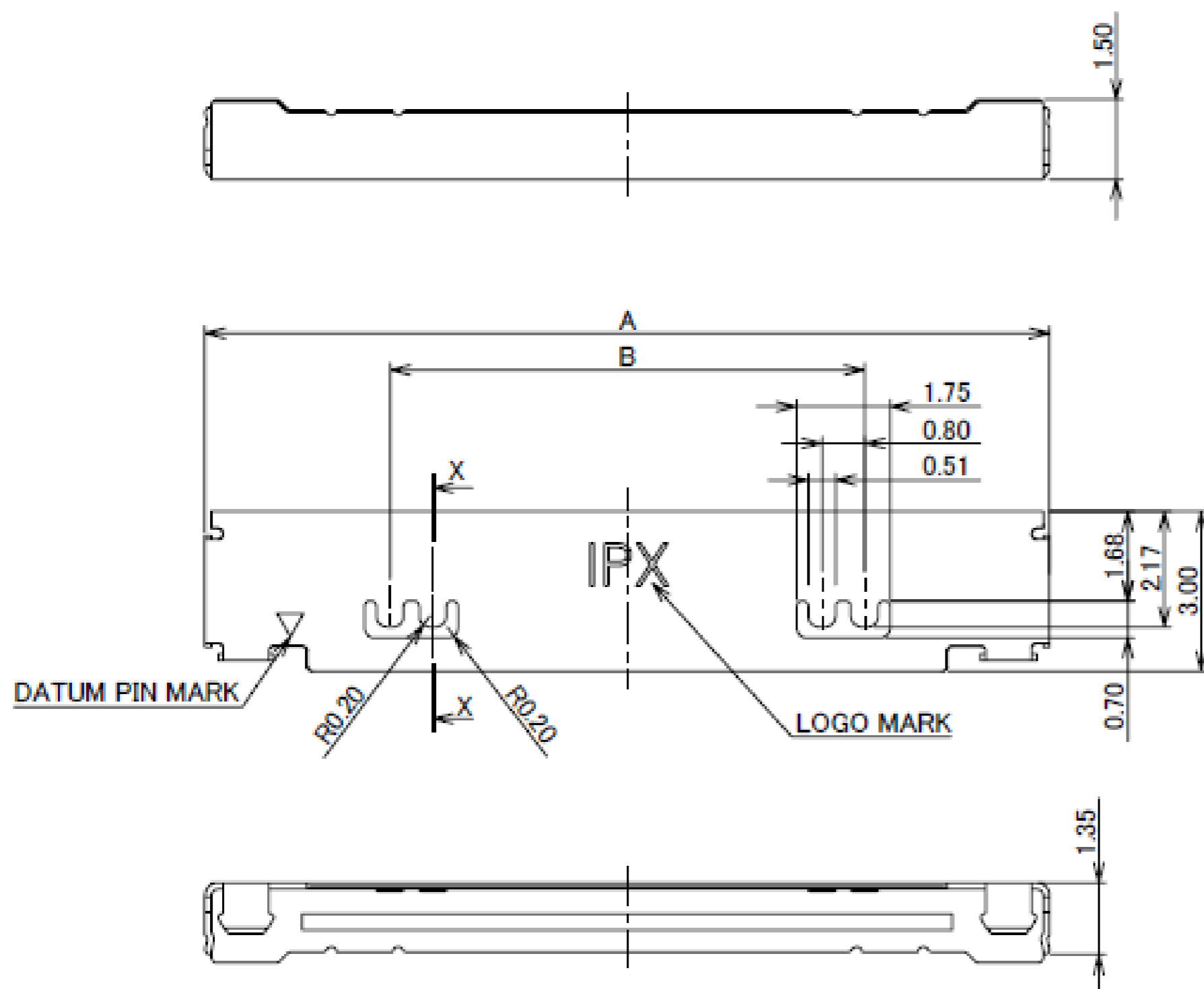
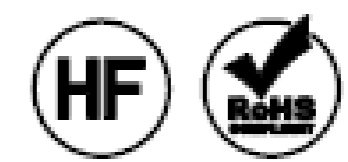
1. THIS PART IS ASSEMBLED WITH METAL COVER (P/N 2182-0**-03(10P,14P,20P,30P,32P,35P) or 2182-0**-04(40P,50P)) AFTER SOLDERED CABLE, AND IT BECOMES P/N 20380-R**T-06(10P,14P,20P,30P,32P,35P) or 20380-R**T-16(40P,50P)

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
2	CONTACT	PHOSPHOR BRONZE	CONTACT AREA: Au 0.1 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA: Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP (RED PHOSPHORUS IS NOT USED)	UL94V-0, BLACK

Rev.22

Plug Metal Cover

Recommended P/N		2182-0**-03 (10P / 14P / 20P / 30P / 32P / 35P)			2182-0**-04 (40P / 50P)	
PART NO.	POS.	A	B	C		
2182-010-03	10	7.84	-	24.50		
2182-014-03	14	9.44	-	24.50		
2182-020-03	20	11.84	-	24.50		
2182-030-03	30	15.84	8.90	28.50		
2182-032-03	32	16.64	9.70	29.30		
2182-035-03	35	17.84	10.90	30.50		



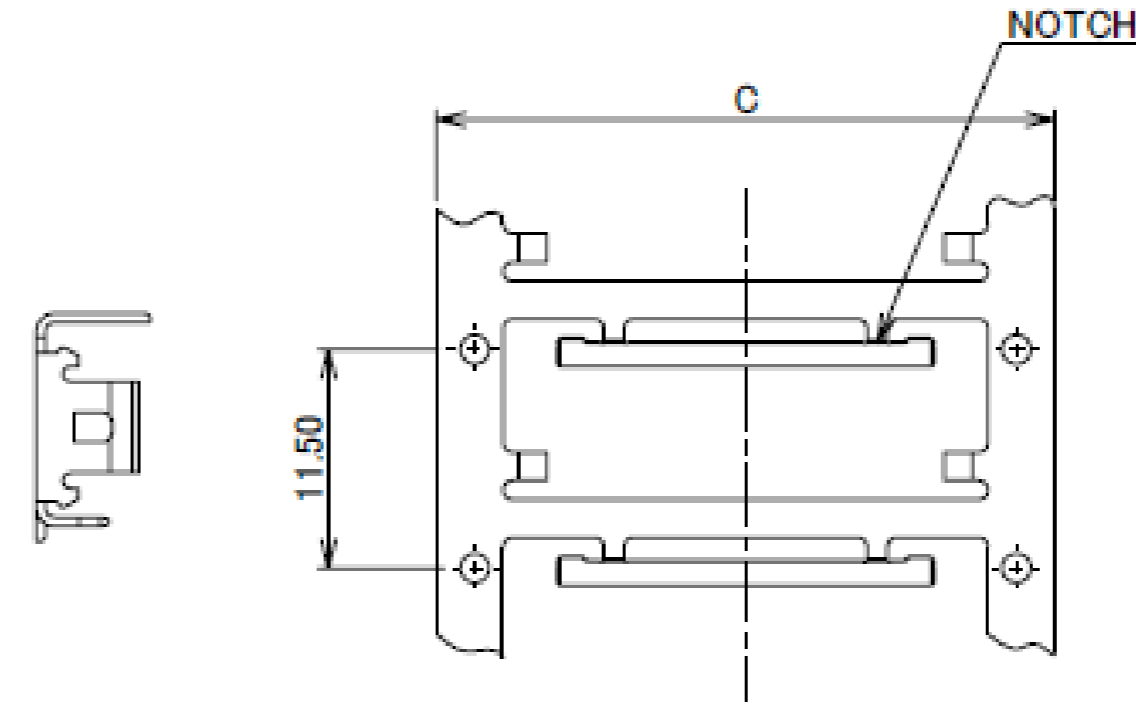
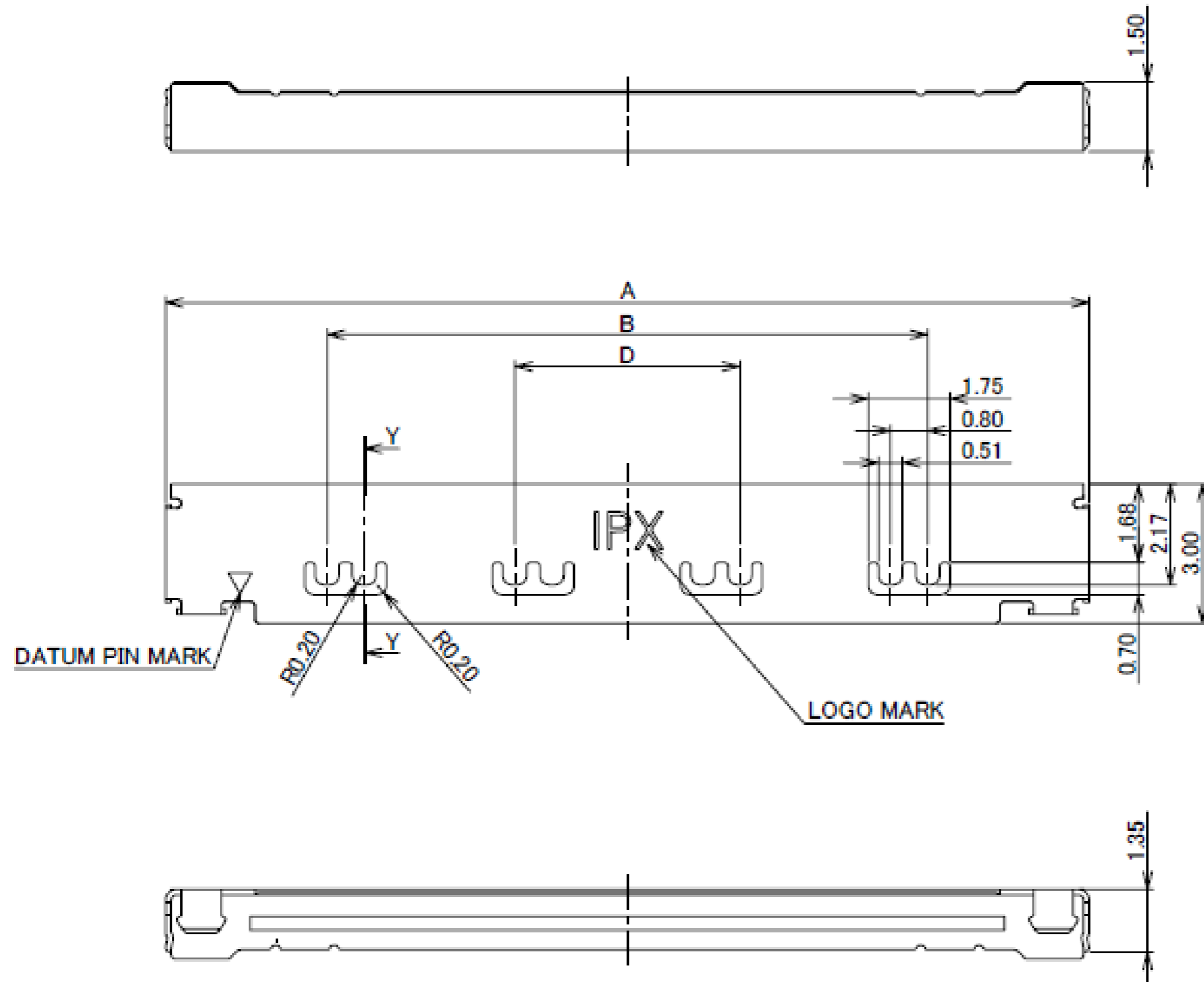
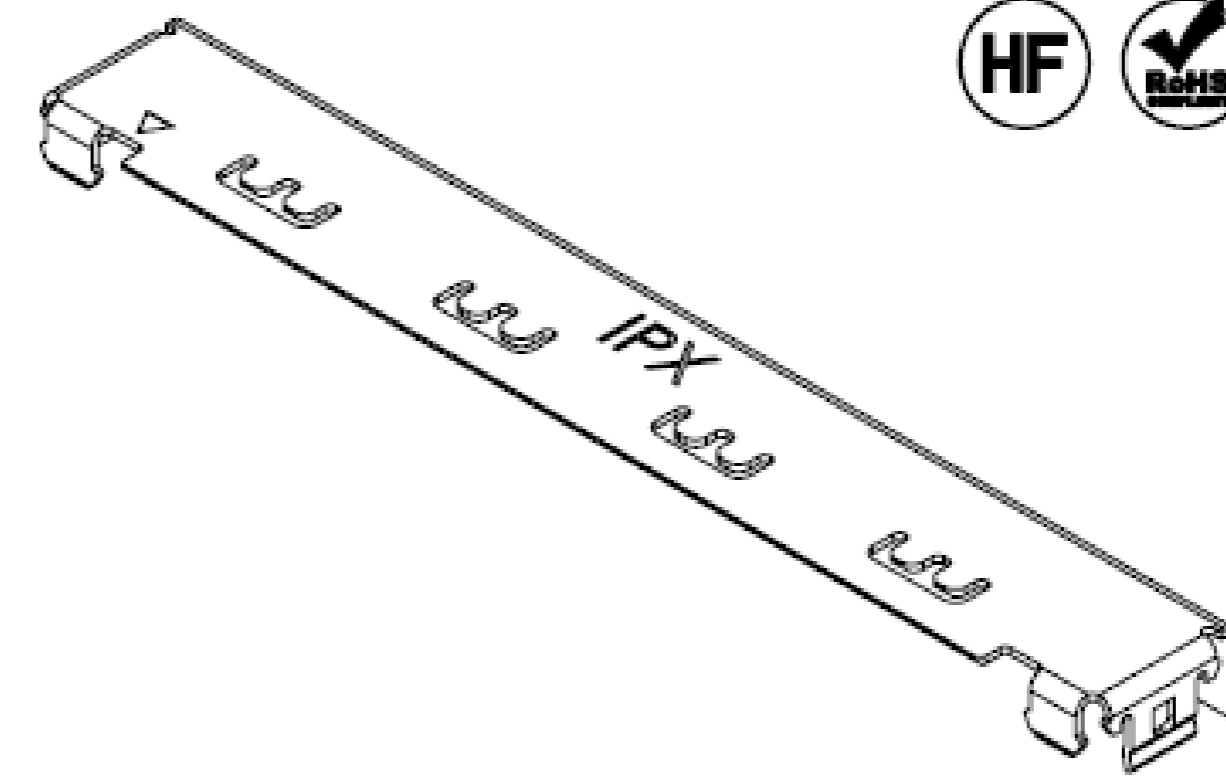
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	METAL COVER	PHOSPHOR BRONZE	Sn REFLOW 1.00 μm MIN.

Rev.19

Plug Metal Cover

Recommended P/N 2182-0**-03 (10P / 14P / 20P / 30P / 32P / 35P) 2182-0**-04 (40P / 50P)

PART NO.	POS.	A	B	C	D
2182-040-04	40	19.84	12.90	32.50	4.84
2182-050-04	50	23.84	16.90	36.50	6.17



WITH CAREER
(S=2/1)

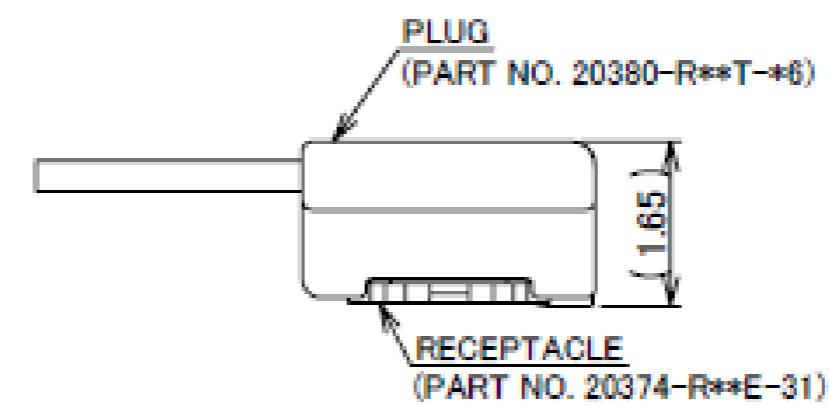
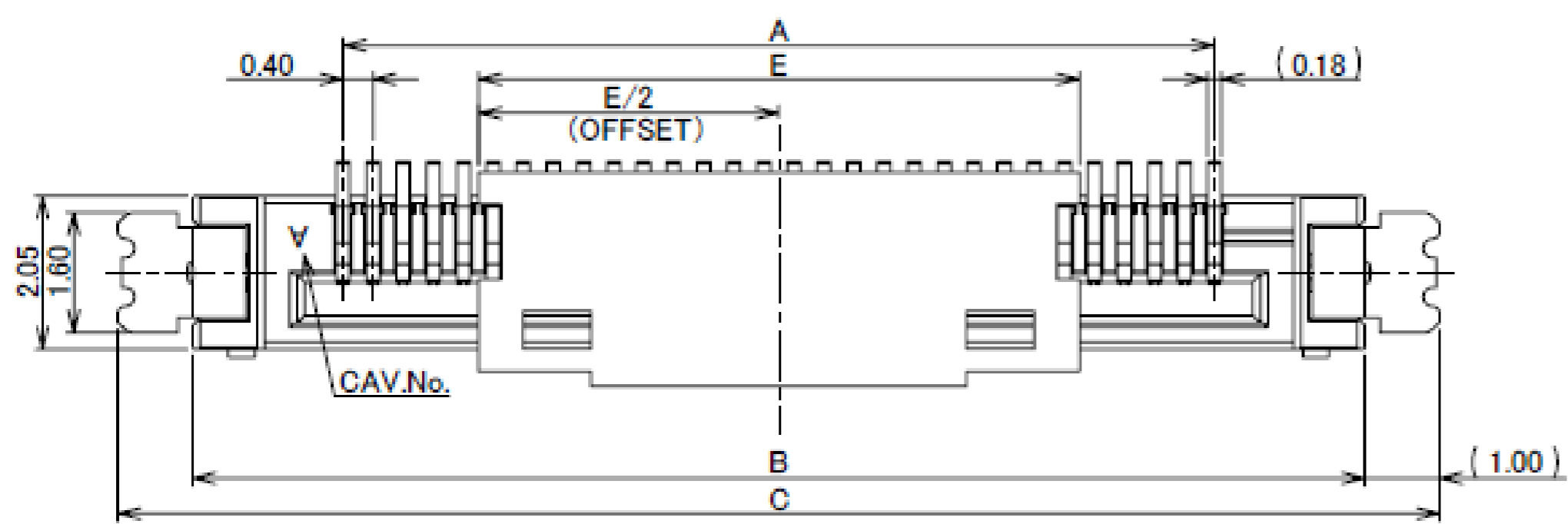
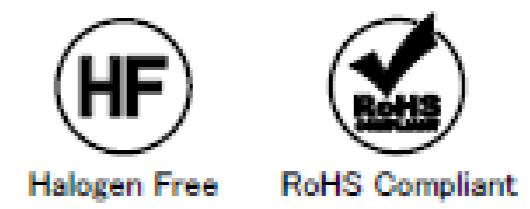
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	METAL COVER	PHOSPHOR BRONZE	Sn REFLOW 1.00 μm MIN.

Rev.19

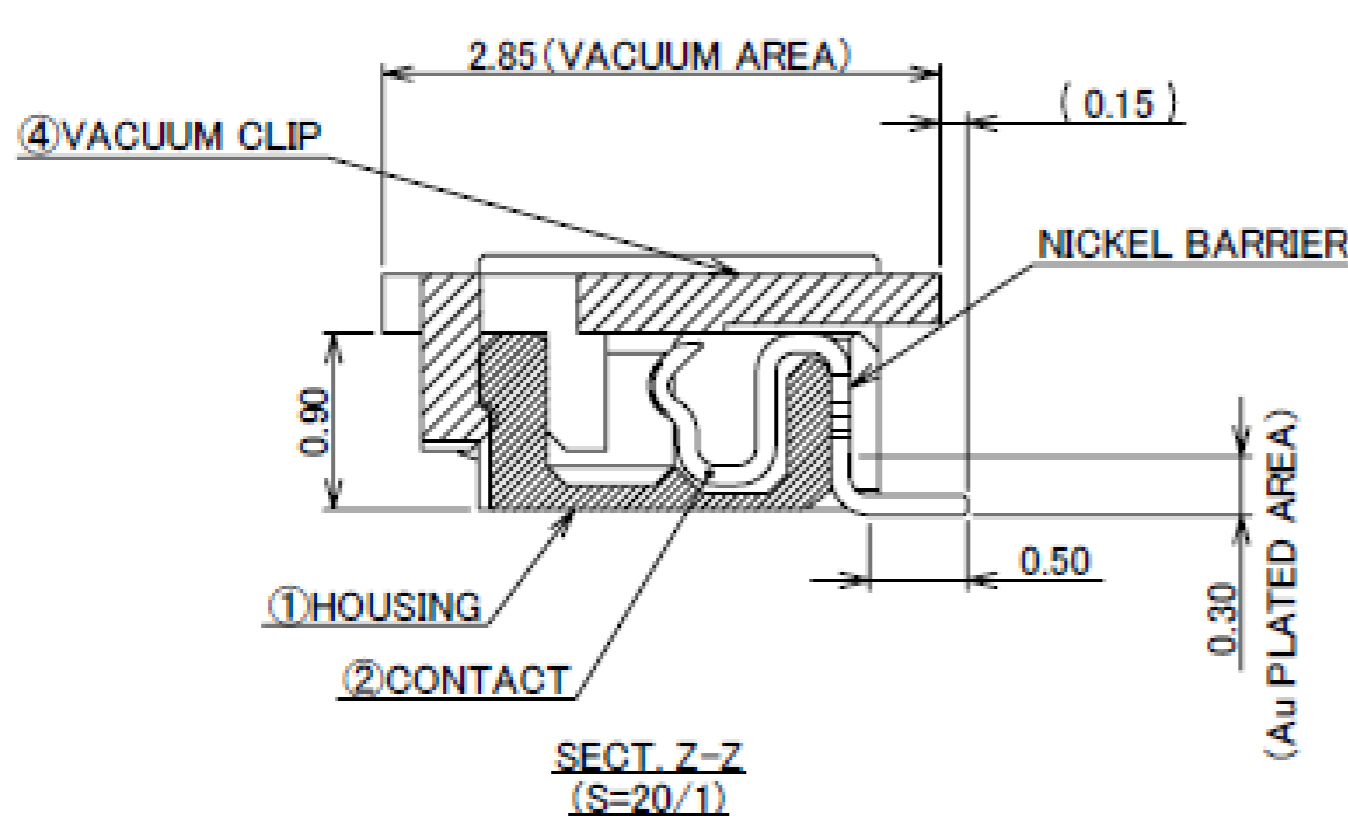
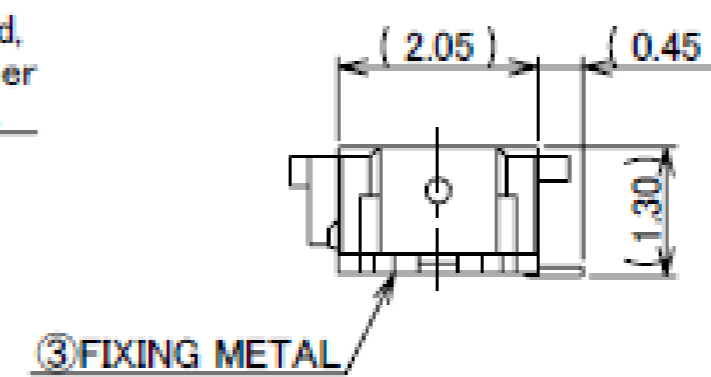
Receptacle Assembly

Recommended P/N 20374-R**E-31

PART NO.	POS.	A	B	C	D	E
20374-R10E-31	10	3.60	7.60	9.60	7.20	5.50
20374-R14E-31	14	5.20	9.20	11.20	8.80	5.50
20374-R20E-31	20	7.60	11.60	13.60	11.20	8.00
20374-R30E-31	30	11.60	15.60	17.60	15.20	8.00
20374-R32E-31	32	12.40	16.40	18.40	16.00	8.00
20374-R35E-31	35	13.60	17.60	19.60	17.20	8.00
20374-R40E-31	40	15.60	19.60	21.60	19.20	8.00
20374-R50E-31	50	19.60	23.60	25.60	23.20	8.00



MATING CONDITION

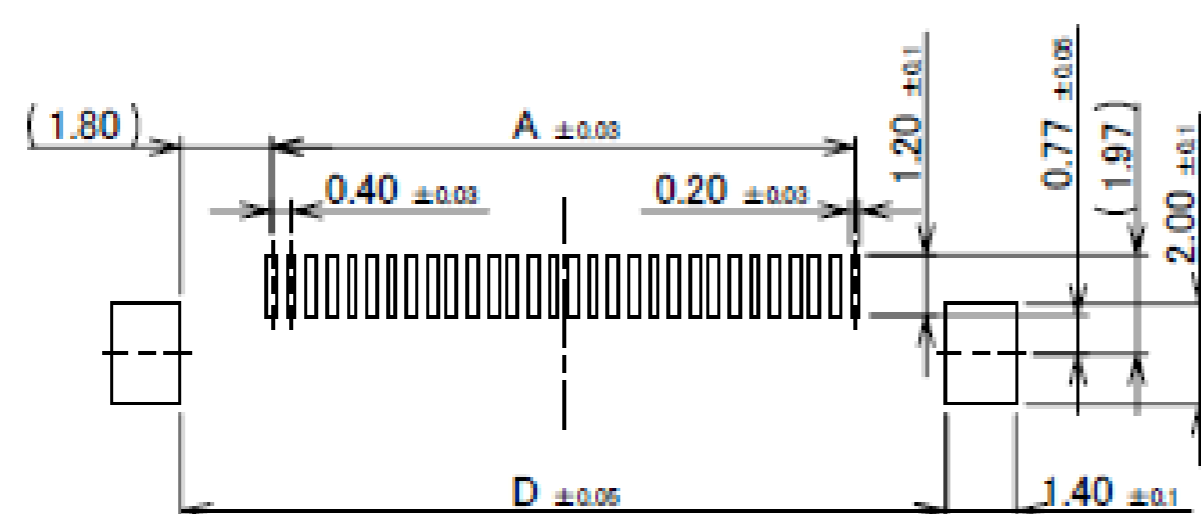


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	VACUUM CRIP	LCP	UL94V-0, BEIGE
3	FIXING METAL	PHOSPHOR BROZE	Sn/Cu(98/2) (LUSTER) 2.0 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	PHOSPHOR BROZE	CONTACT AREA: Au 0.1 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA: Au 0.05 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP (RED PHOSPHORUS IS NOT USED)	UL94V-0, BLACK

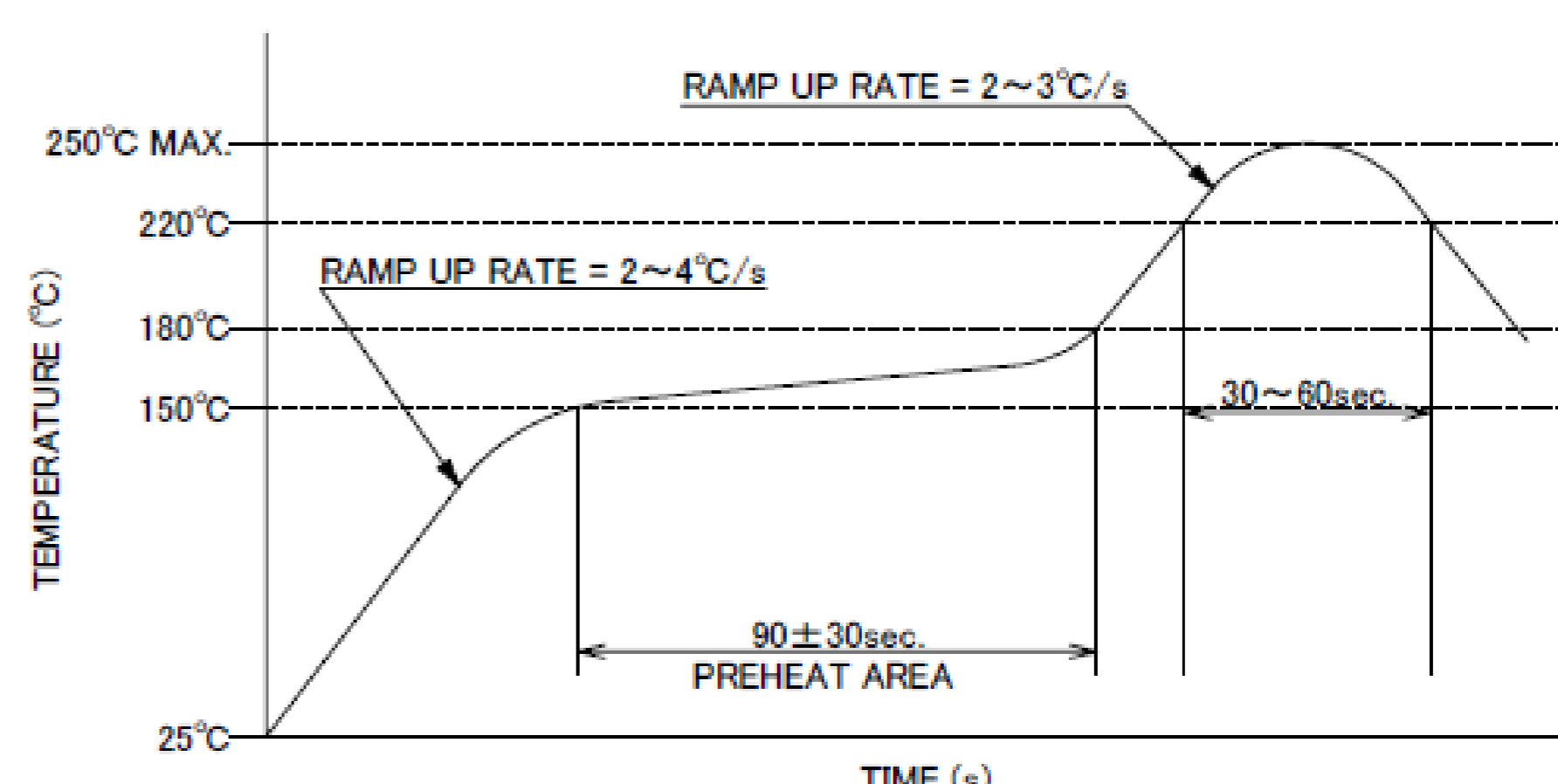
Rev.30

Receptacle Assembly

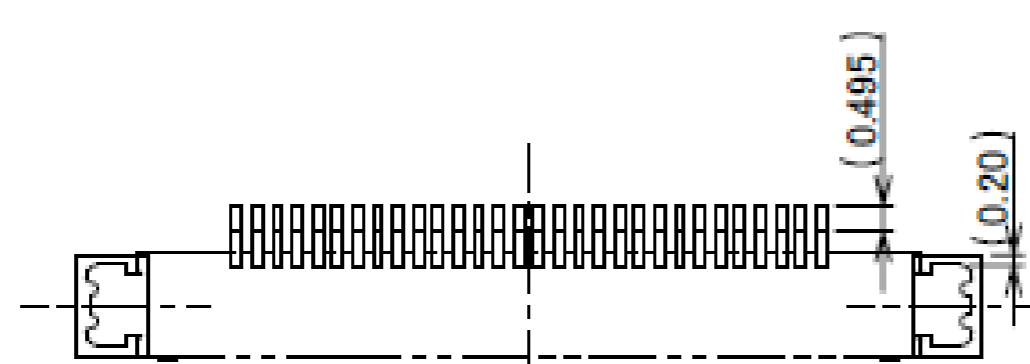
PART NO.	POS.	A	D
20374-R10E-31	10	3.60	7.20
20374-R14E-31	14	5.20	8.80
20374-R20E-31	20	7.60	11.20
20374-R30E-31	30	11.60	15.20
20374-R32E-31	32	12.40	16.00
20374-R35E-31	35	13.60	17.20
20374-R40E-31	40	15.60	19.20
20374-R50E-31	50	19.60	23.20



RECOMMENDED FOOTPRINT PATTERN (MOUNT SIDE)
 Recommended Thickness of Metal Mask : $t=0.13\text{mm}$
 Recommended Opening Ratio of Metal Mask : 79.6%



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



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN

Rev.30

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 42 , 40 , 36 DISCRETE WIRE : AWG# 36 , 34
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.24A AC/DC [AWG#42] AVAILABLE TO 50 PIN 0.25A AC/DC [AWG#40] AVAILABLE TO 50 PIN 0.30A AC/DC [AWG#40] AVAILABLE TO 32 PIN 0.35A AC/DC [AWG#36] AVAILABLE TO 50 PIN 0.40A AC/DC [AWG#36] AVAILABLE TO 37 PIN 0.35A AC/DC [AWG#34] AVAILABLE TO 50 PIN 1.00A AC/DC [AWG#34] AVAILABLE TO 2 PIN
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 180mohm MAX. (AWG#34) / AFTER TEST : \angle 40mohm MAX. 275mohm MAX. (AWG#36) 600mohm MAX. (AWG#40) 700mohm MAX. (AWG#42) (INITIAL CONTAINS THE CONDUCTOR RESISTANCE OF A CABLE 100mm)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \angle 40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	10P : 29.00N MAX. 32P : 33.40N MAX. 14P : 29.80N MAX. 35P : 34.00N MAX. 20P : 31.00N MAX. 40P : 35.00N MAX. 30P : 33.00N MAX. 50P : 38.00N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10P : INITIAL : 4.00N MIN. / AFTER 30 CYCLES : 2.87N MIN. 14P : INITIAL : 4.40N MIN. / AFTER 30 CYCLES : 3.23N MIN. 20P : INITIAL : 5.00N MIN. / AFTER 30 CYCLES : 3.76N MIN. 30P : INITIAL : 6.00N MIN. / AFTER 30 CYCLES : 4.65N MIN. 32P : INITIAL : 6.20N MIN. / AFTER 30 CYCLES : 4.84N MIN. 35P : INITIAL : 6.50N MIN. / AFTER 30 CYCLES : 5.07N MIN. 40P : INITIAL : 7.00N MIN. / AFTER 30 CYCLES : 5.50N MIN. 50P : INITIAL : 8.00N MIN. / AFTER 30 CYCLES : 6.41N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 32P : 15.68N MIN. 14P : 6.86N MIN. 35P : 17.15N MIN. 20P : 9.80N MIN. 40P : 19.60N MIN. 30P : 14.70N MIN. 50P : 24.50N MIN.
PRODUCT SPECIFICATION	PRS-1239
TEST REPORT	TR-04037
INSTRUCTION MANUAL	HIM-04001
ASSEMBLY MANUAL	ASM-04001
APPEARANCE CRITERIA No.	QLS-A***

Rev.27

Custom Connectors Available

 RF Connector

MHF® series



Micro-coaxial/Twinax/
Discrete Wire Connector



CABLINE® series



Optical Module

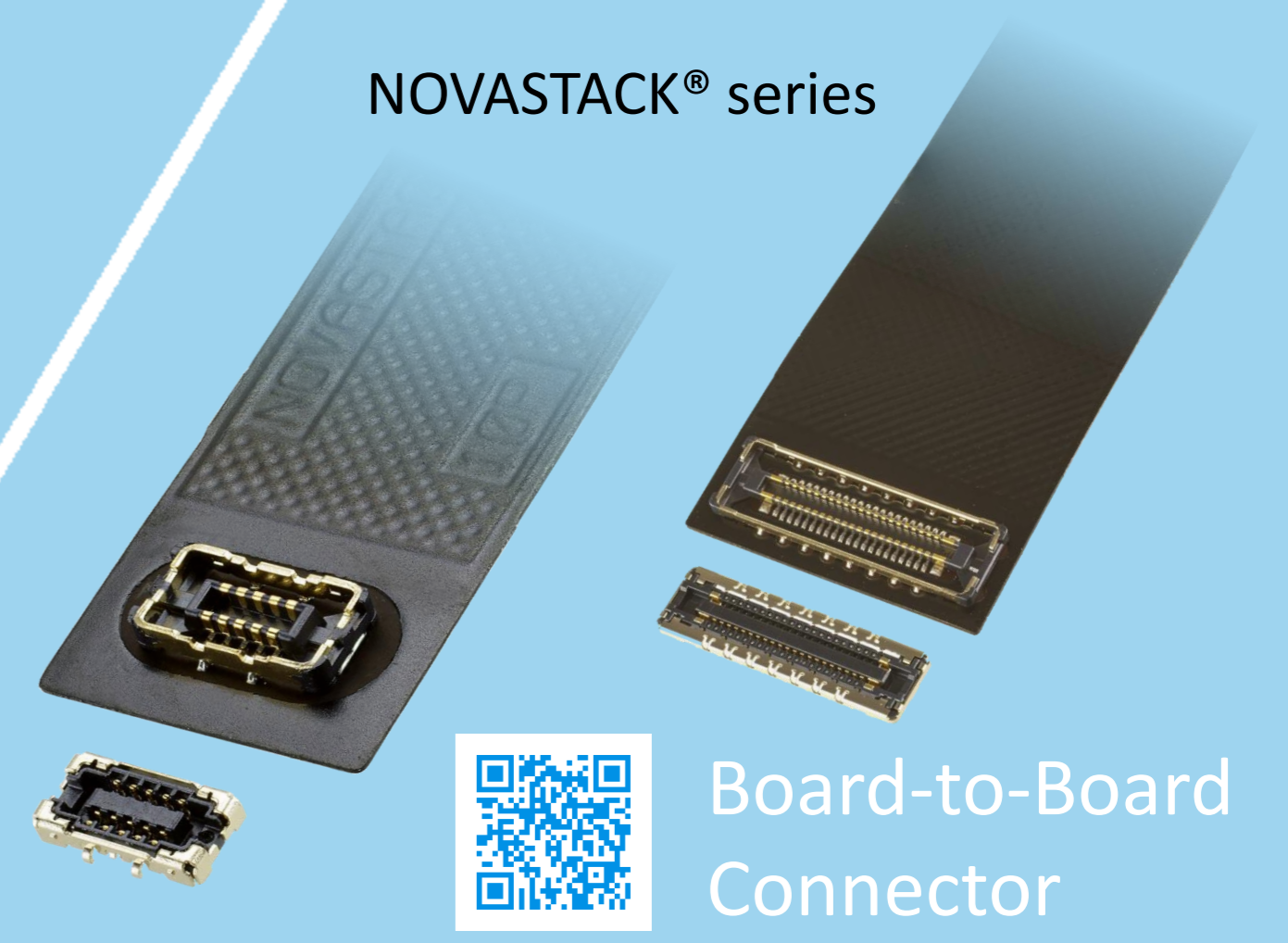
LIGHTPASS® series



NOVASTACK® series



Board-to-Board Connector



Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series



FPC FFC
Connector



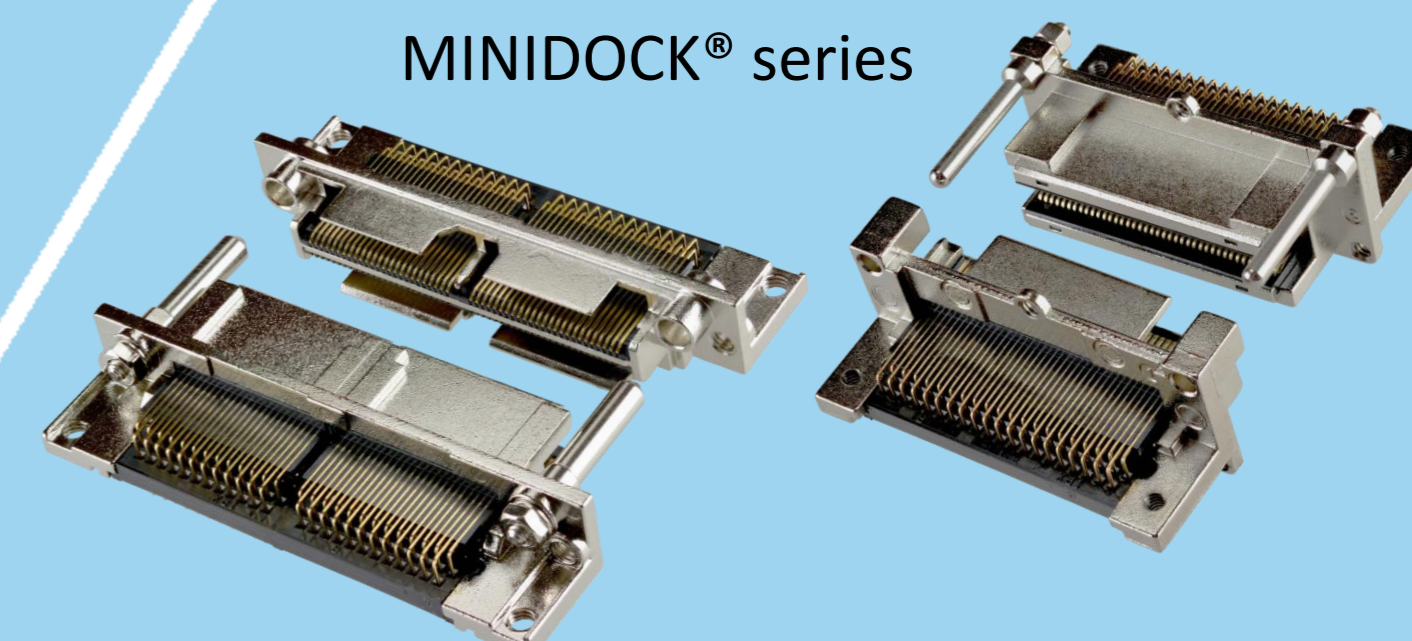
Inquiry



MINIDOCK® series



I/O
Connector



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Contact your sales representative or more detailed information.

www.i-pex.com



I-PEX

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