

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

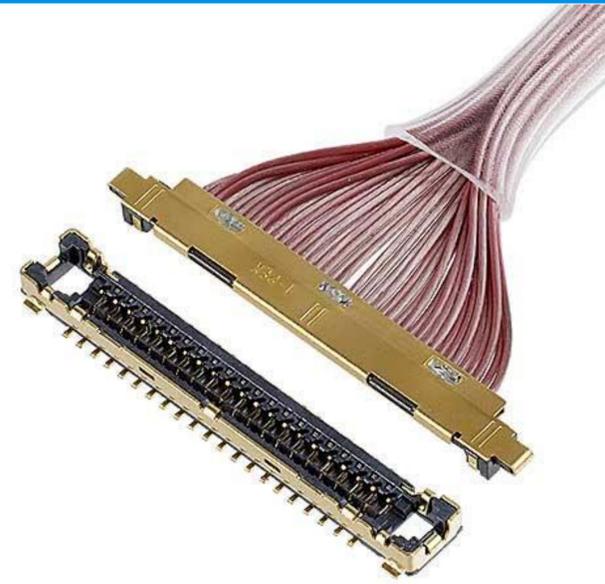
Applicable Cable Size:

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):

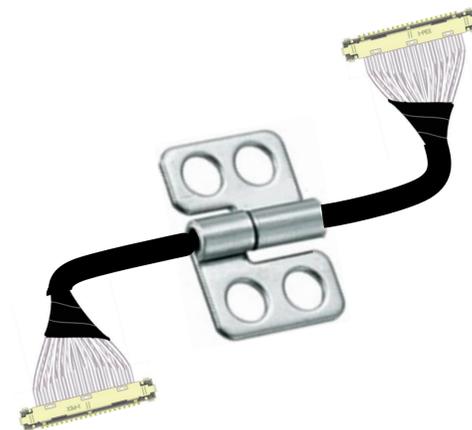
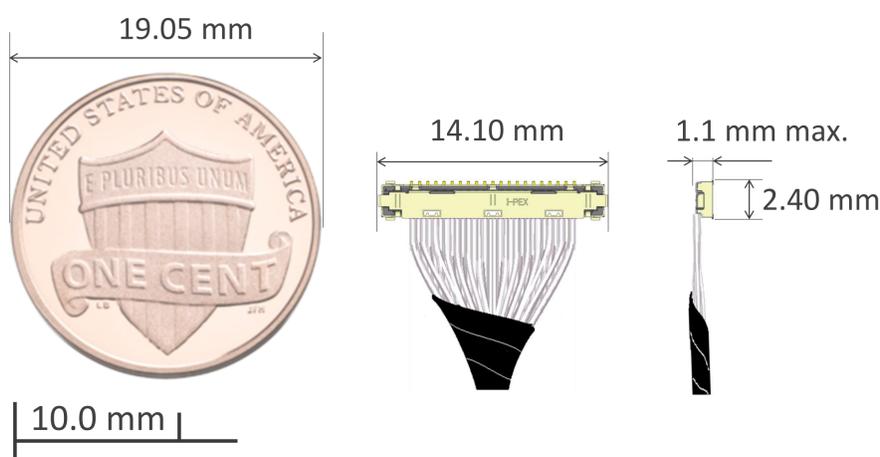
USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps)

* 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.

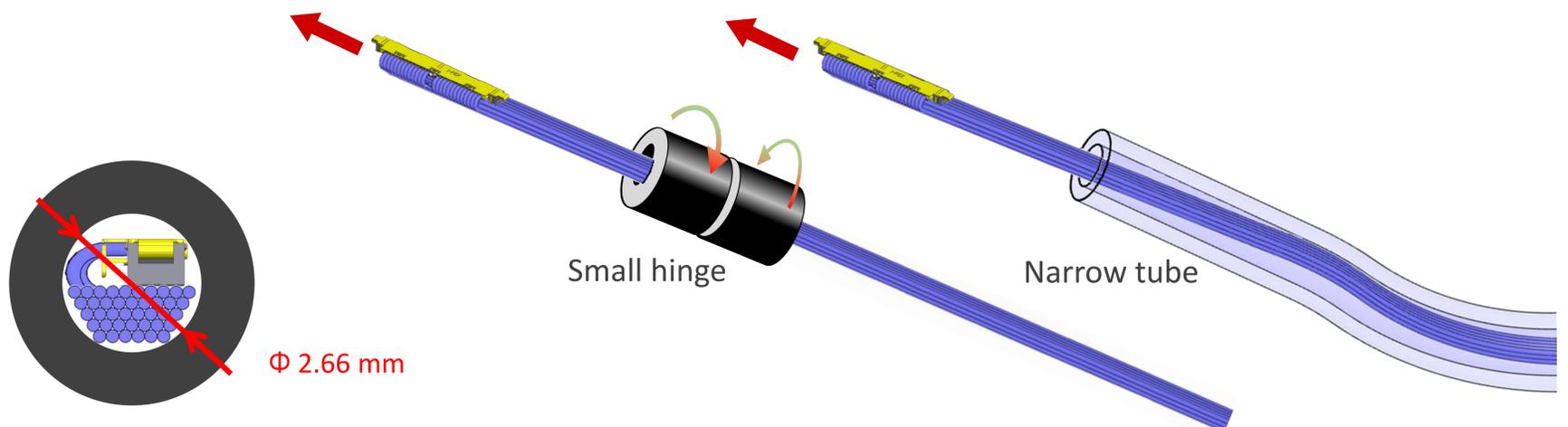


Flexible micro-coaxial cable harness is suitable for small applications with a hinge design.

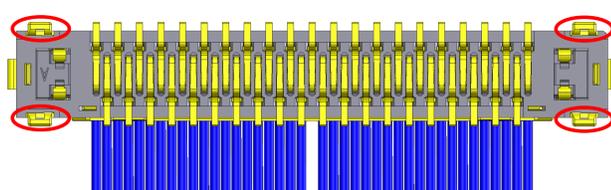
► Slim Plug Design, Suitable for Through-hinge Assemblies

Simulation Reference Example:

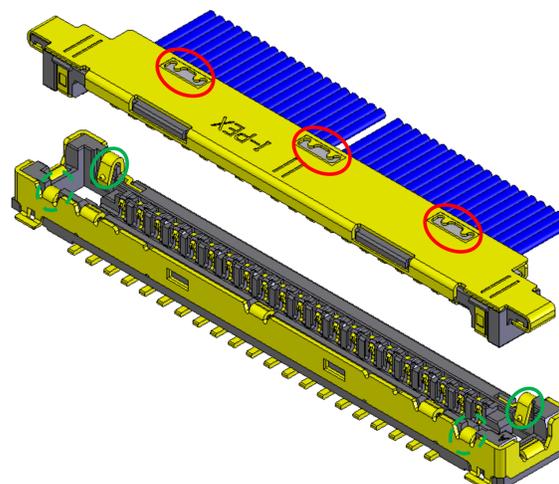
UX II 40p plug with 0.24 mm cable outer diameter harness can go through 2.66 mm inner diameter.



► EMI Shielding and Multi-point Ground Design



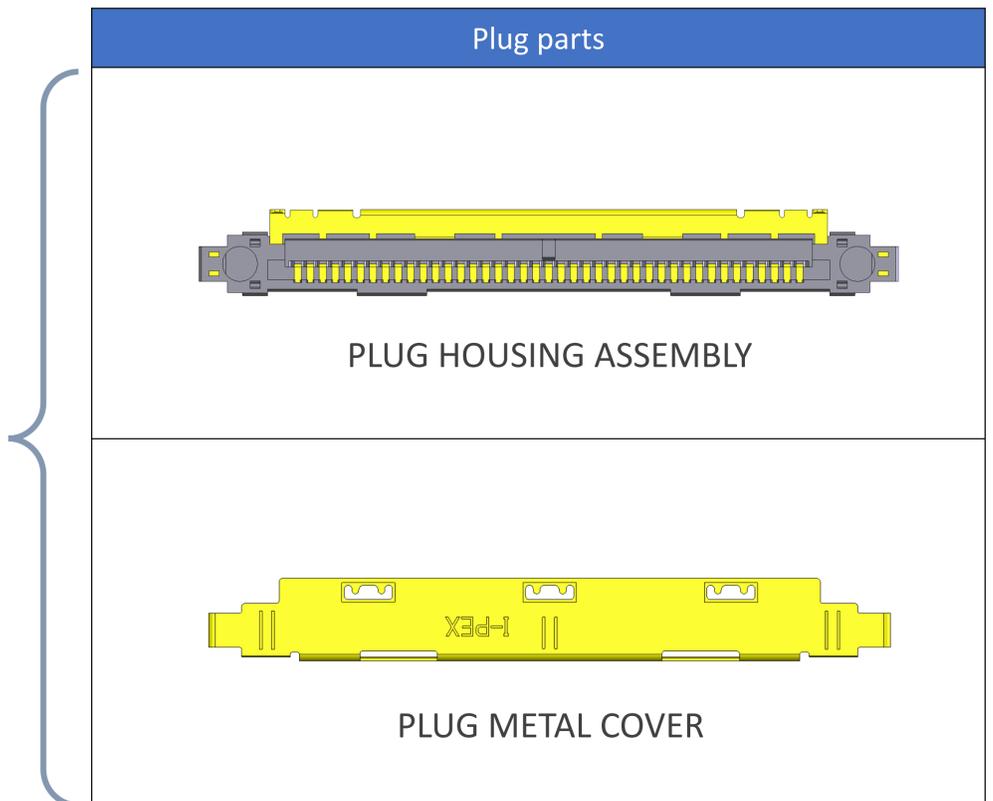
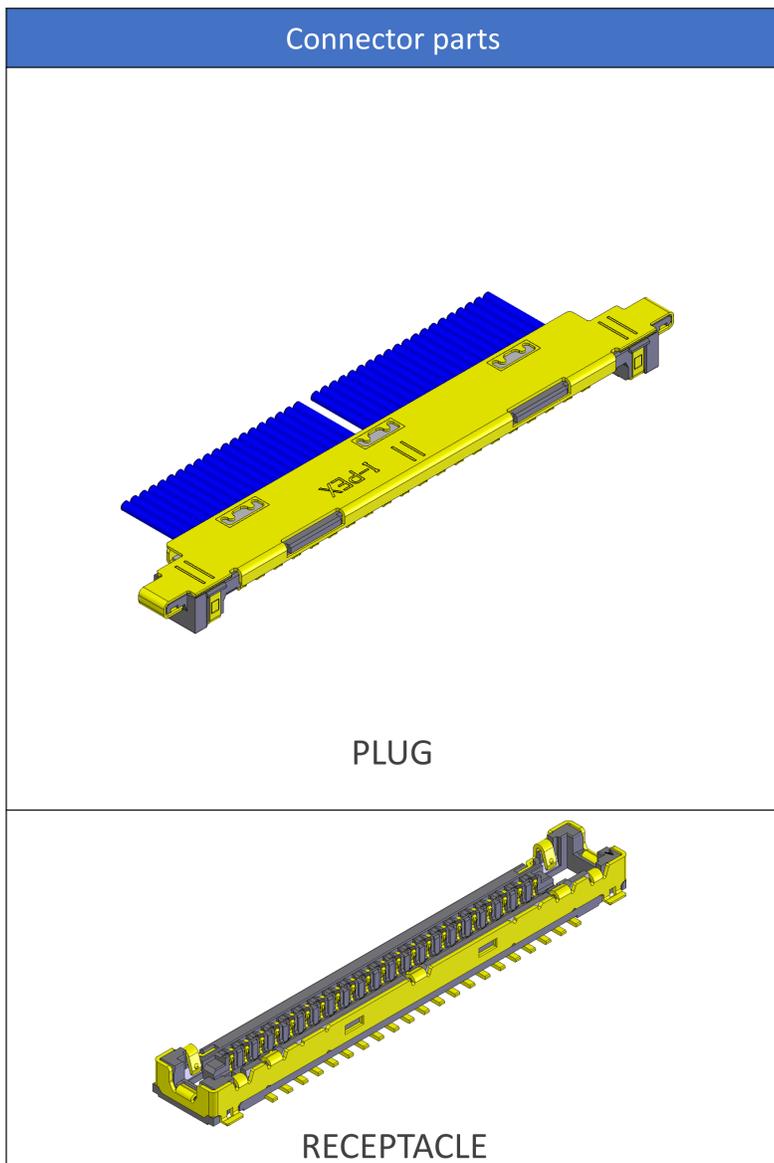
View From Underside



○ Soldered contacts
○ Mechanical contacts

Component Parts Details

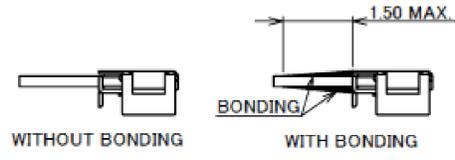
Component Parts



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.

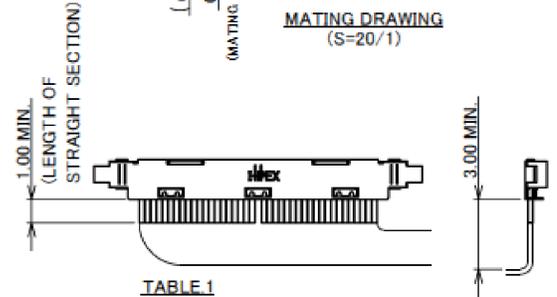
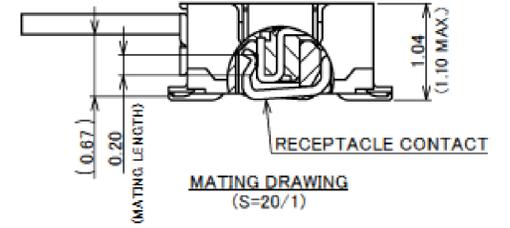
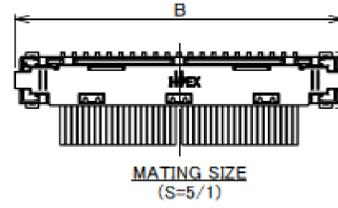
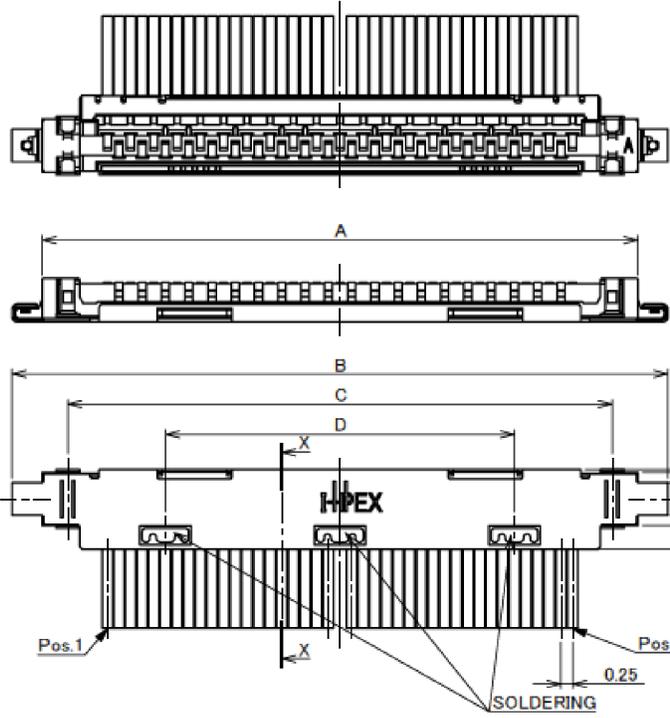
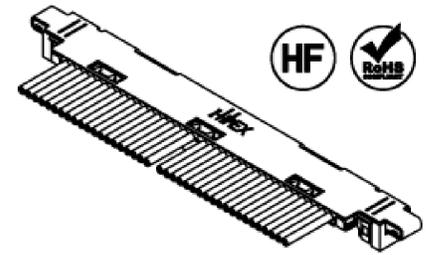
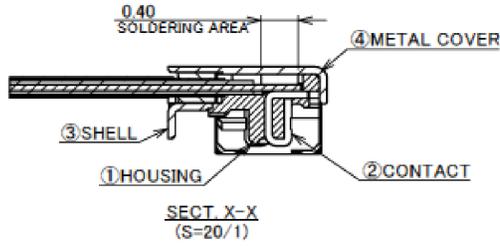


TABLE 1

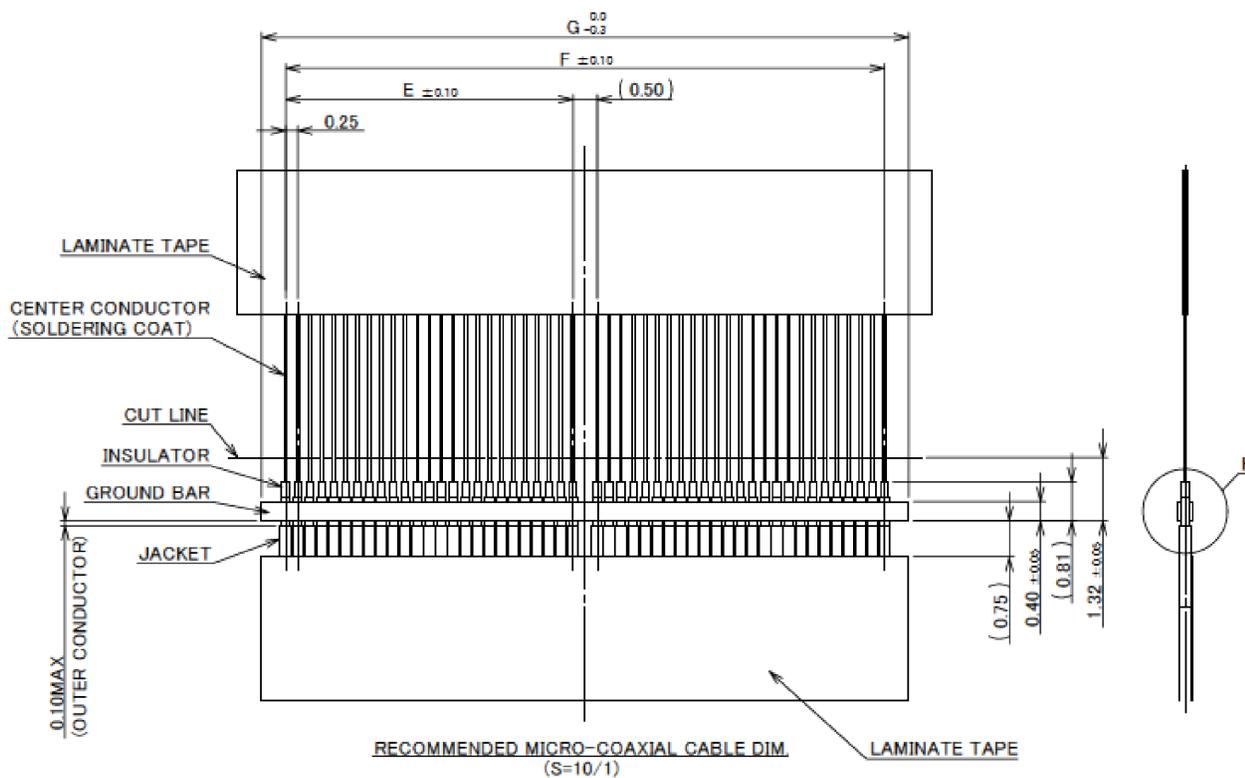
PART NO.	CONTACT MATERIAL
20531-0**T-02	PHOSPHOR BRONZE
20531-0**T-12	CORSON ALLOY



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

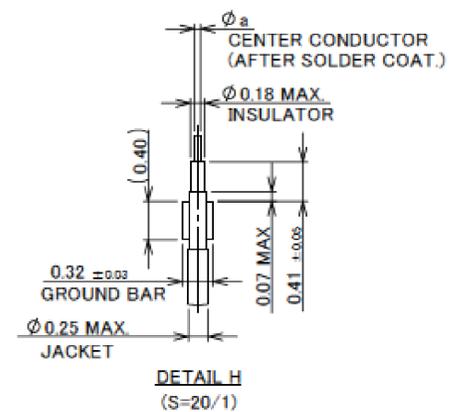
Rev.13

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

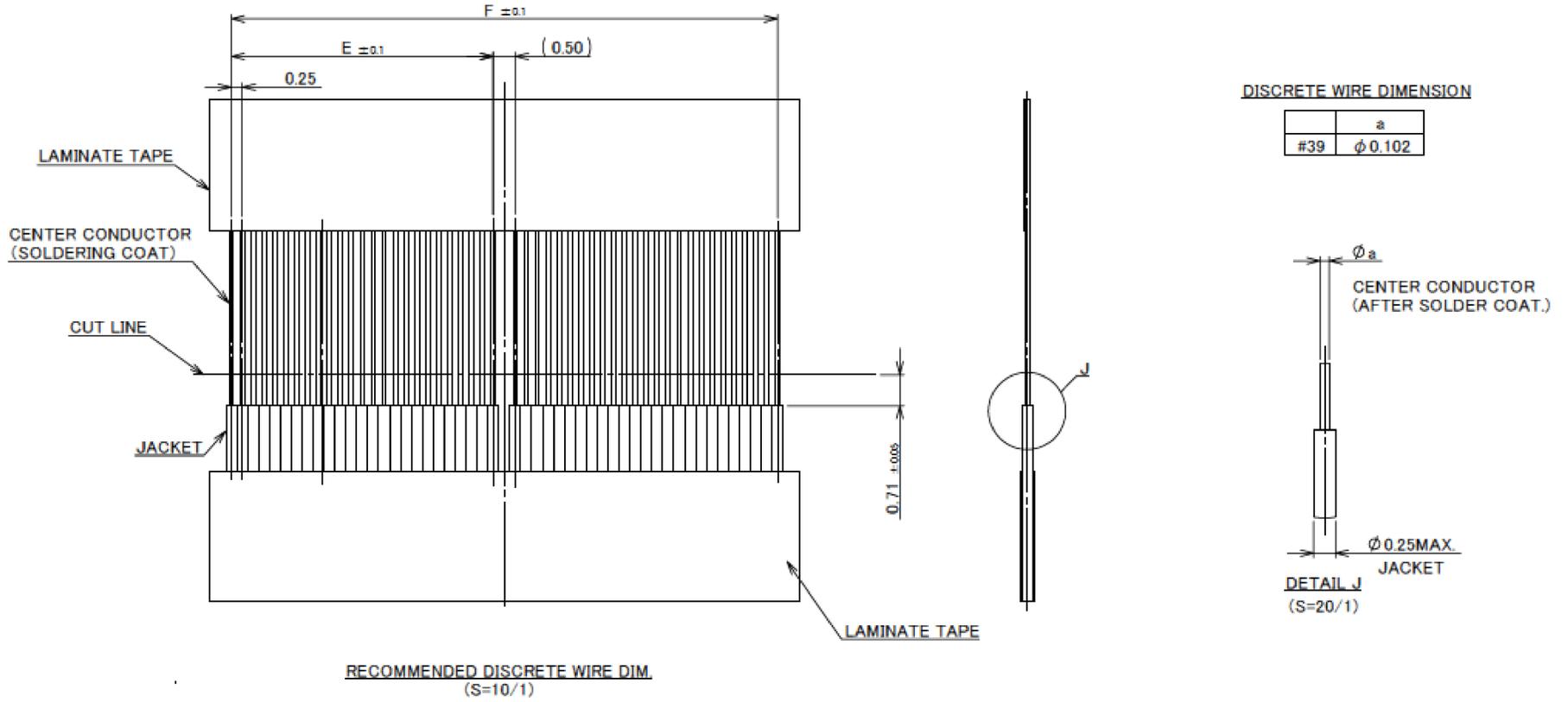
	a
#44	φ 0.063
#46	φ 0.048



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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

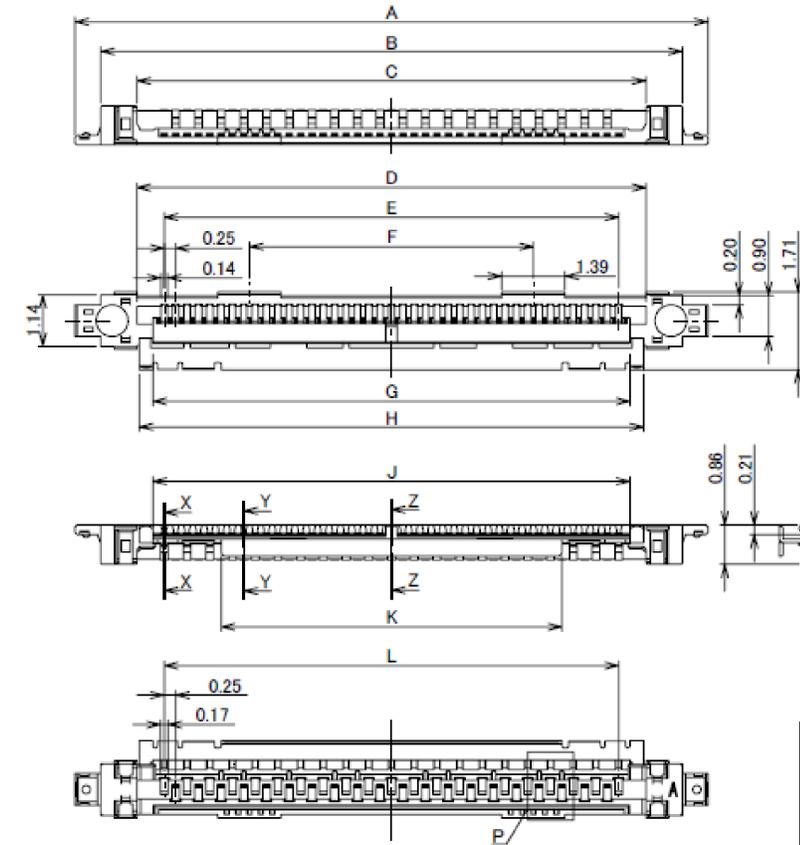
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 44 ,46 DISCRETE WIRE : AWG#39
RATING VOLTAGE	50V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	CONTACT MATERIAL : PHOSPHOR BRONZE (PLUG : 20531-0**T-02 ,RECEPTACLE : 20533-0**E) 0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 6 CONTACTS) 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 : \sphericalangle 40mohm MAX.
GROUND SHELL RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : \sphericalangle 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***

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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.

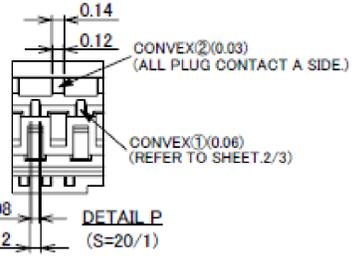
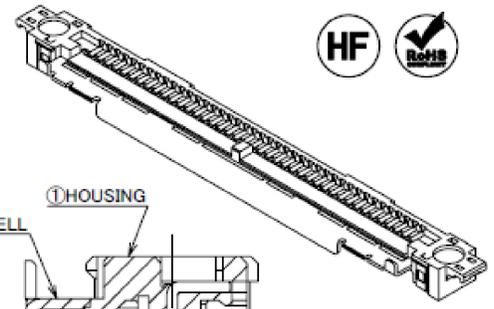
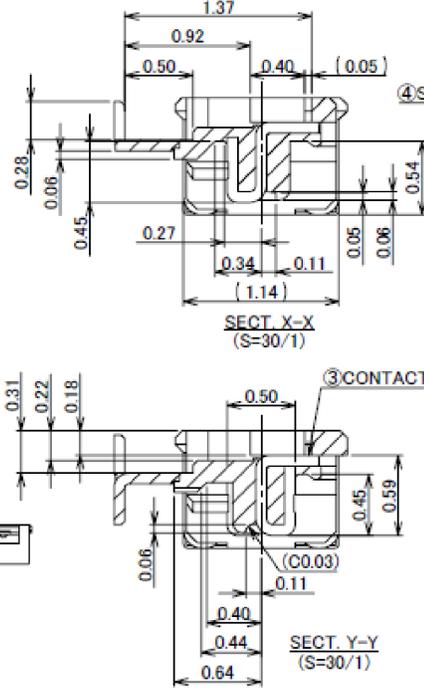
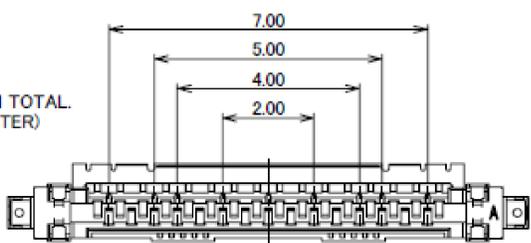


TABLE.1

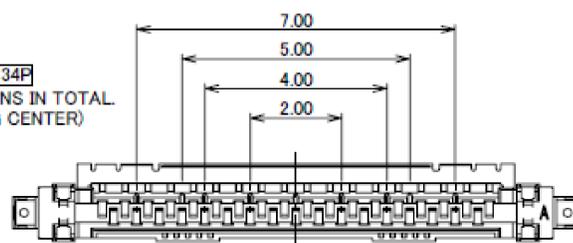
PART NO.	CONTACT MATERIAL
20532-0**T-02	PHOSPHOR BRONZE
20532-0**T-12	CORSON ALLOY

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

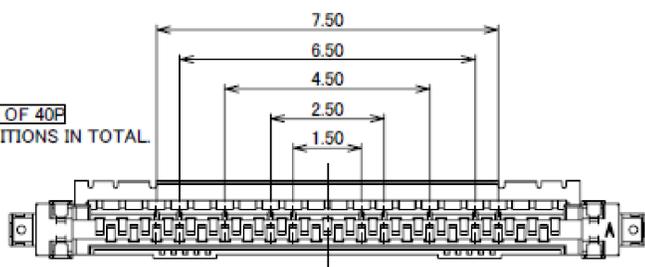
SHAPE OF 30P
9 POSITIONS IN TOTAL
(INCLUDING CENTER)



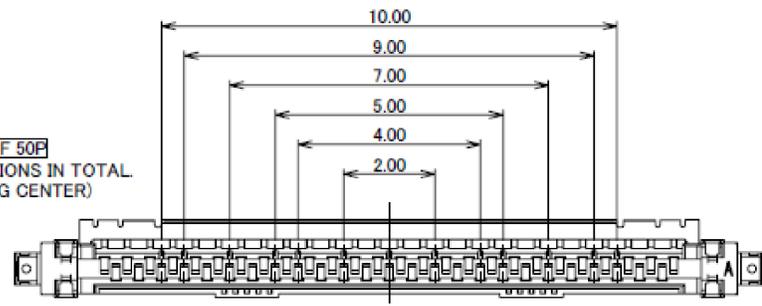
SHAPE OF 34P
9 POSITIONS IN TOTAL
(INCLUDING CENTER)



SHAPE OF 40P
10 POSITIONS IN TOTAL



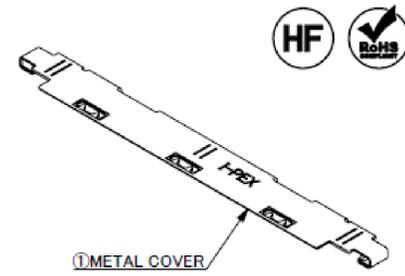
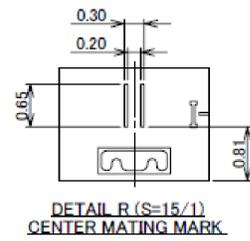
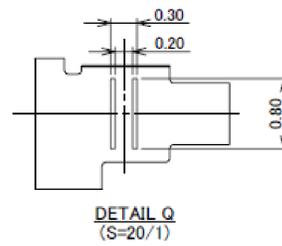
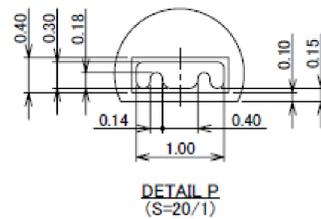
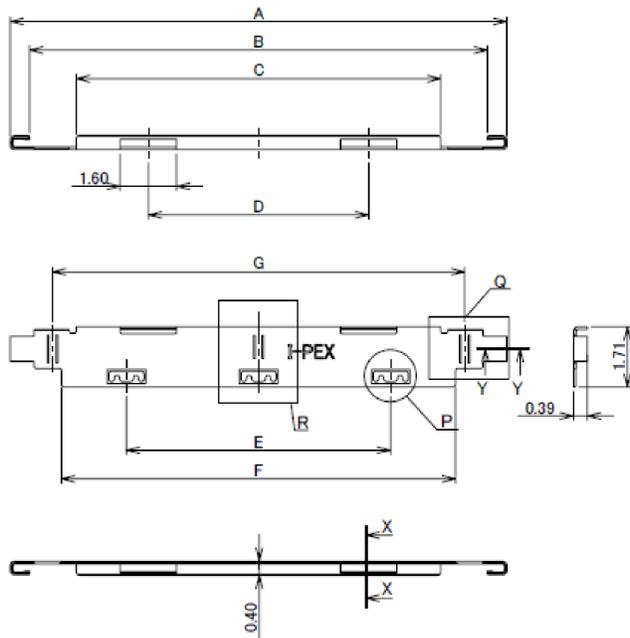
SHAPE OF 50P
13 POSITIONS IN TOTAL
(INCLUDING CENTER)



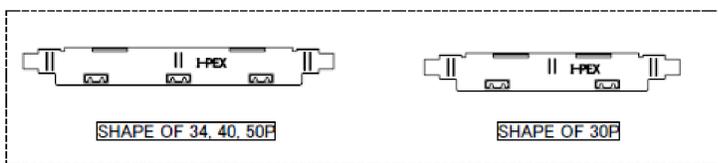
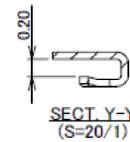
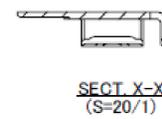
POSITION OF CONVEX(1)

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



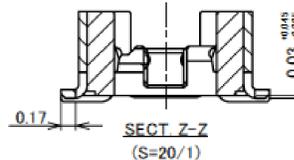
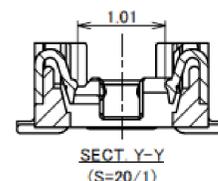
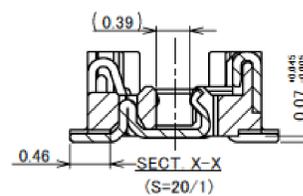
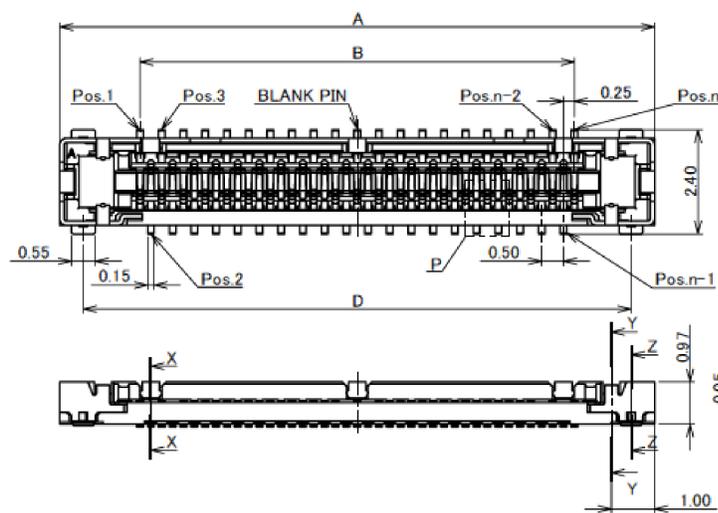
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
1	METAL COVER	SUS	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.

Rev.9

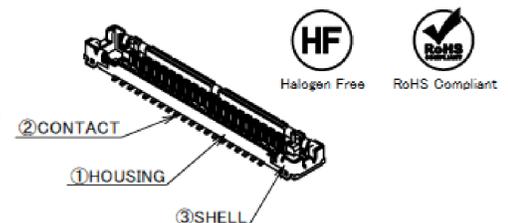
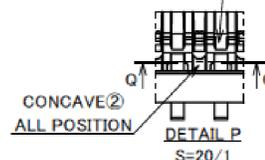
Receptacle Assembly

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



② CONTACT

① HOUSING

③ SHELL

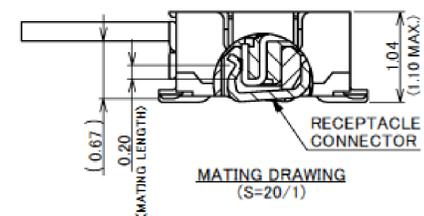


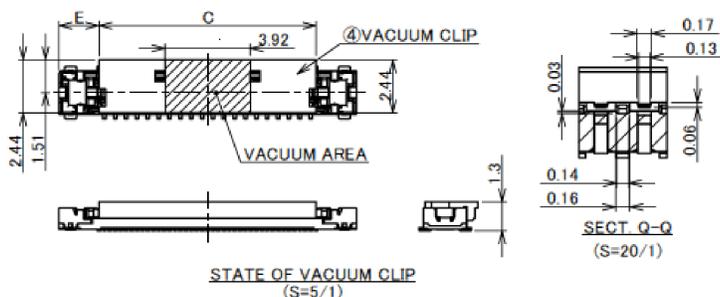
TABLE 2

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)

TABLE 1

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

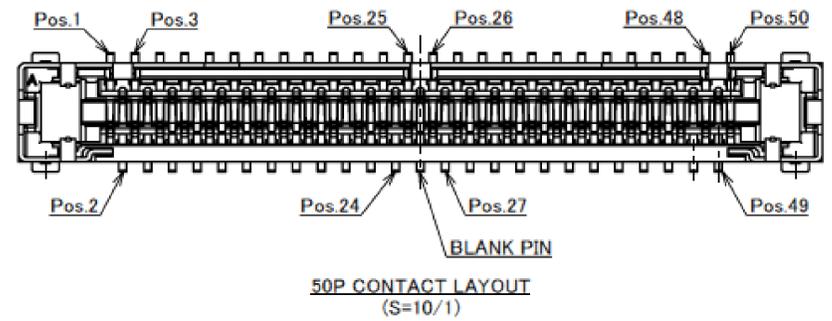
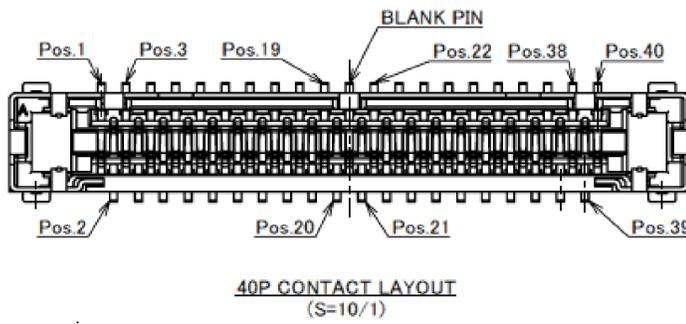
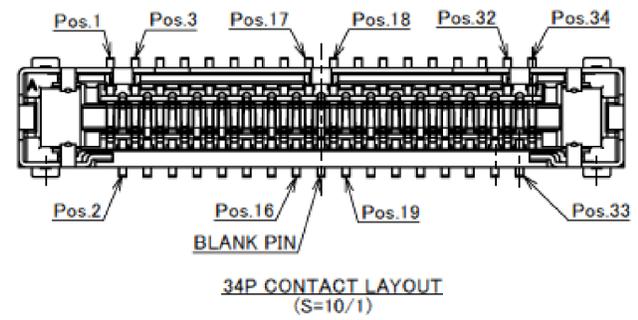
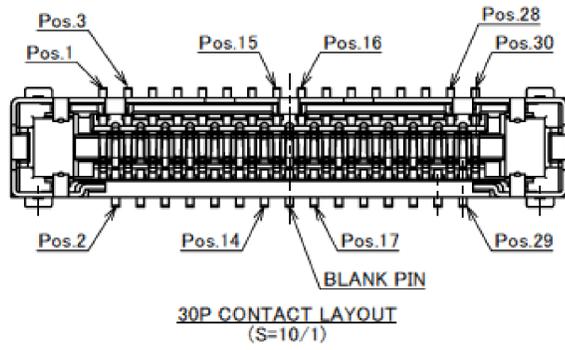
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	VACUUM CLIP	LCP	UL94V-0, BEIGE
3	SHELL	PHOSPHOR BRONZE	Au 0.02 μ m MIN. OVER Ni 1.00 μ m MIN.
2	COTANCT	SEE ABOVE TABLE.1	CONTACT AREA : Au 0.1 μ m MIN. OVER Ni 1.00 μ m MIN. SOLDERING AREA : Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK



Rev.16

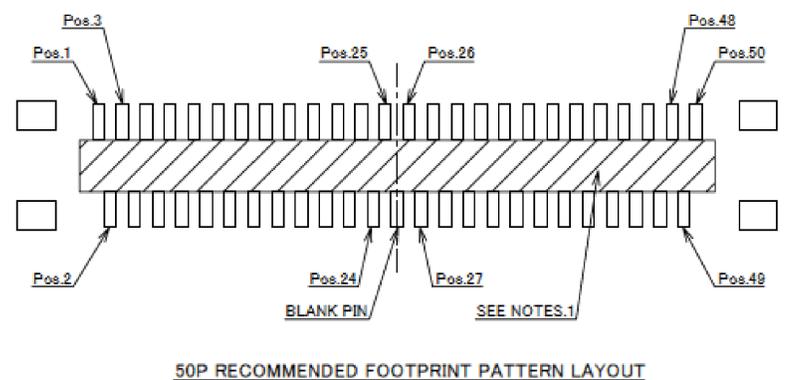
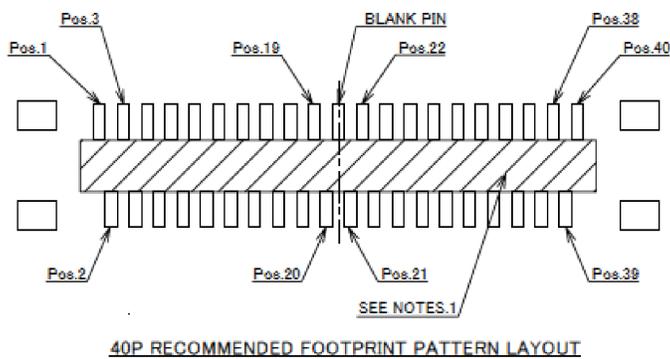
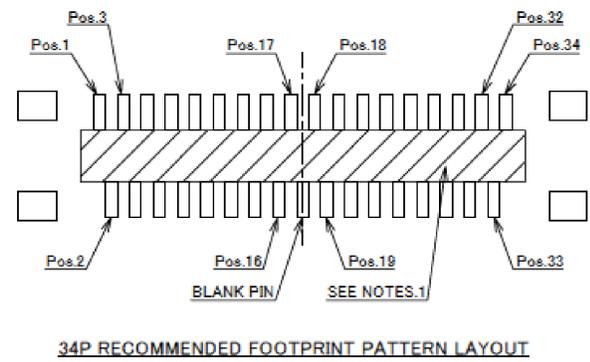
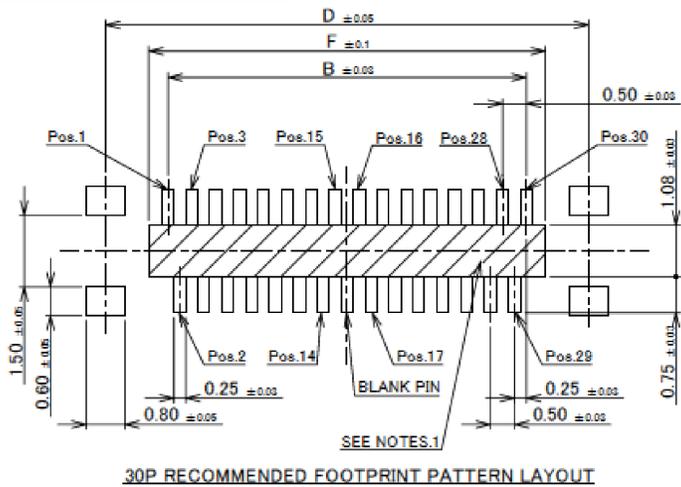
Receptacle Assembly

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



Rev.16

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

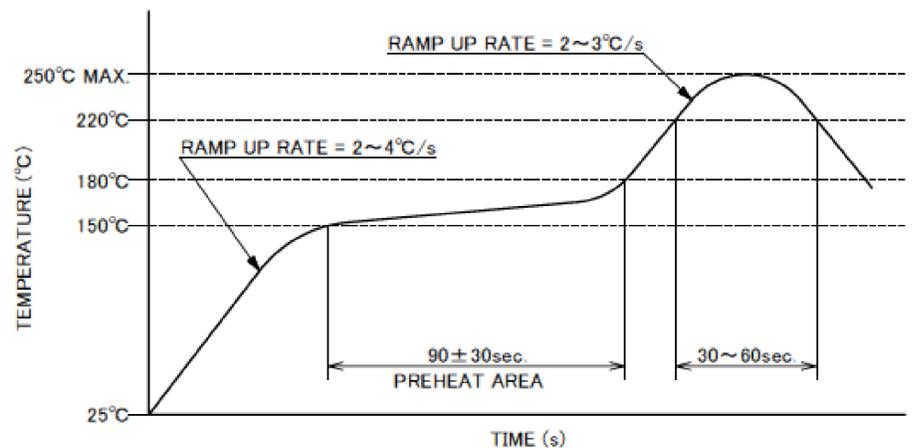
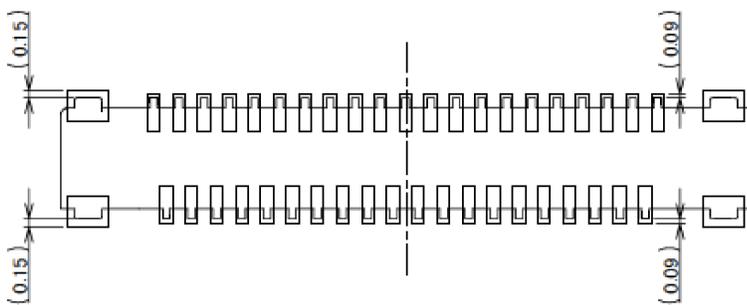
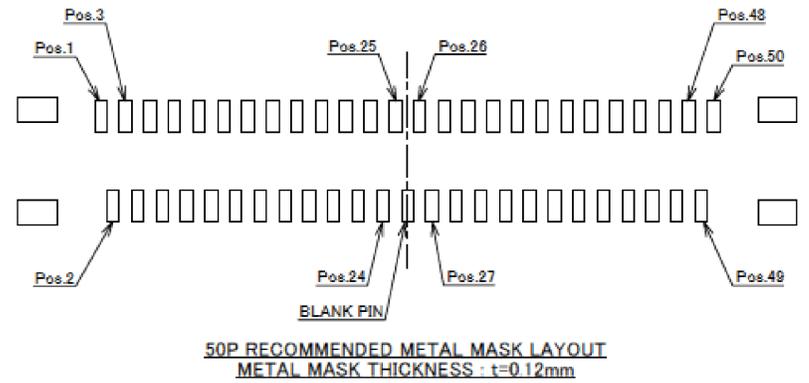
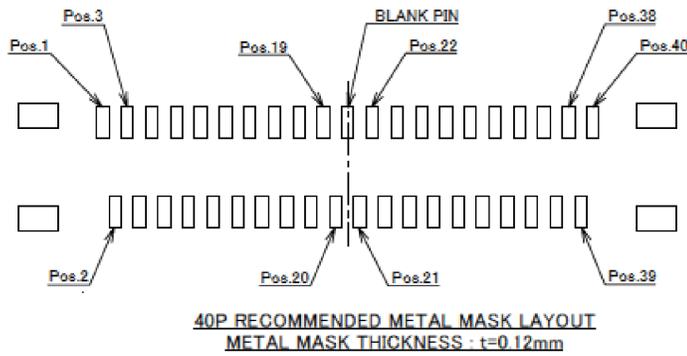
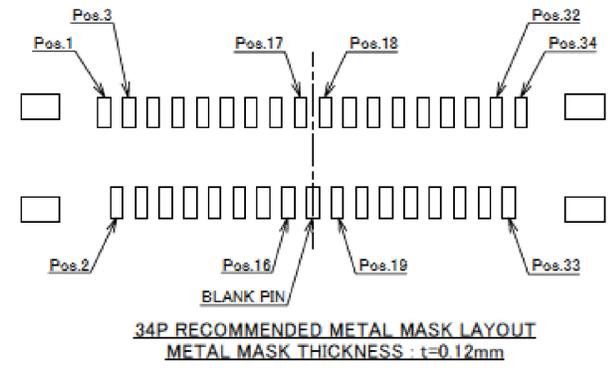
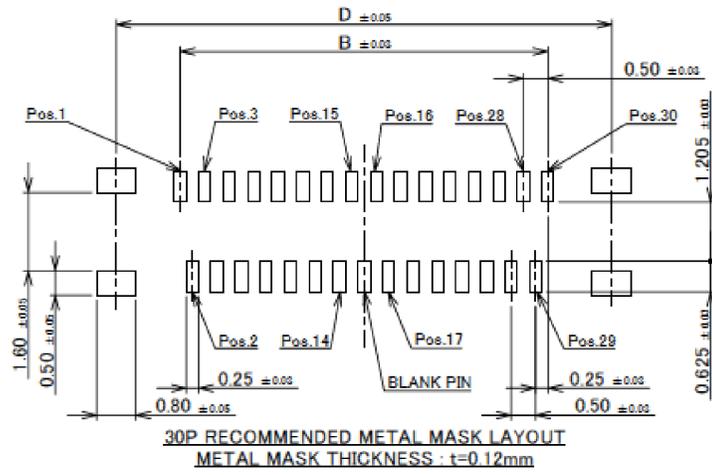


NOTES.
1. SOLDER RESIST SHALL BE APPLIED TO THIS AREA.

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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



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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 : \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-1555
TEST REPORT	TR-10051
INSTRUCTION MANUAL	HIM-10001
PACKING STANDARD	300-874
APPEARANCE CRITERIA No.	QLS-A***

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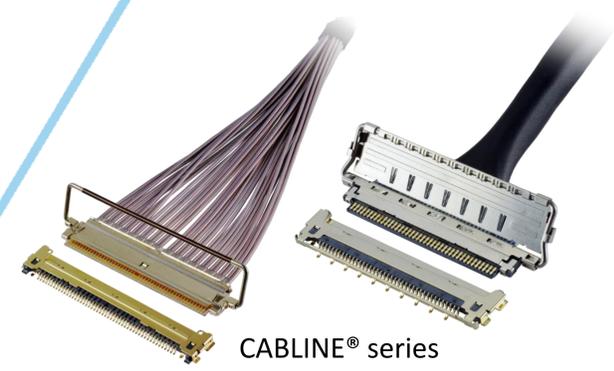
Custom Connectors Available

 RF Connector

MHF® series



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



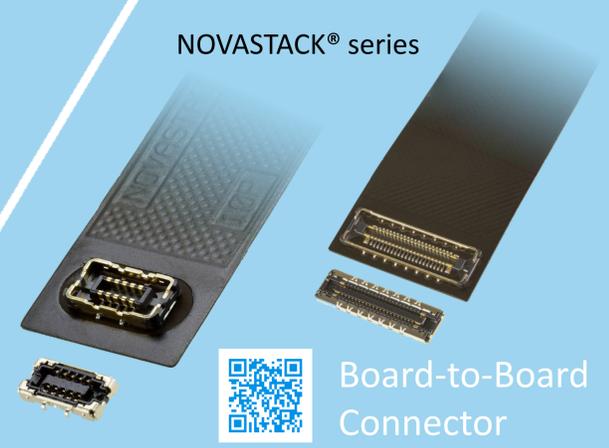
 Optical Module

LIGHTPASS® series



NOVASTACK® series

 Board-to-Board Connector



 Power Connector/
Terminal

AP series

ISH® series



MINIFLEX® series

EVAFLEX® series

 FPC FFC Connector

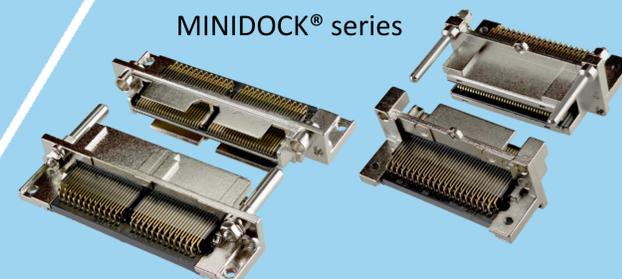


Inquiry



MINIDOCK® series

 I/O Connector



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