

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

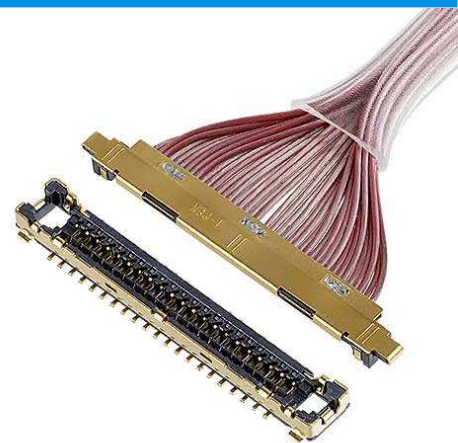
* Please inquire for pin counts not listed or outside of the pin count range.

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

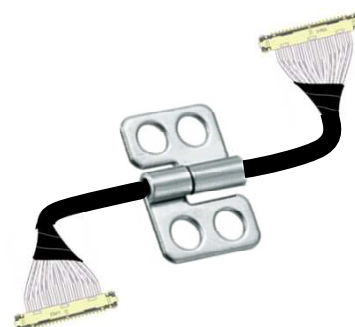
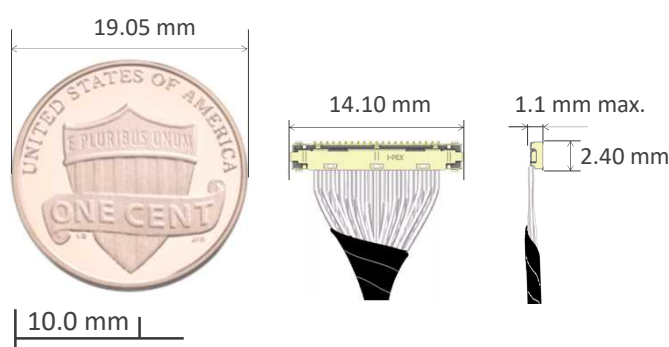
Applicable Standards (Reference Only):

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



Suitable for Small Connector Spaces

CABLINE-UX II 40p size is smaller than a one-cent coin.

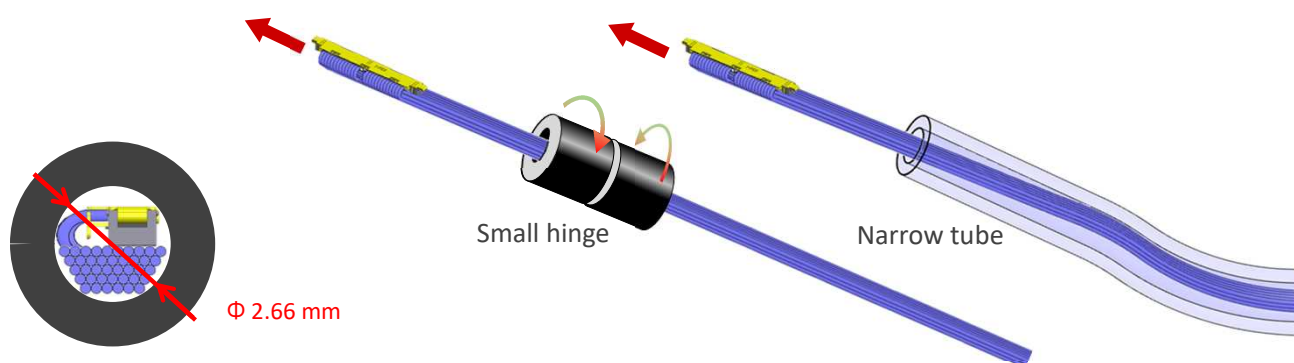


Flexible micro-coaxial cable harness is suitable for small applications with a hinge design.

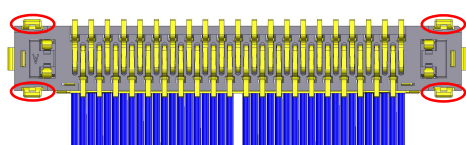
Slim Plug Design, Suitable for Through-hinge Assemblies

Simulation Reference Example:

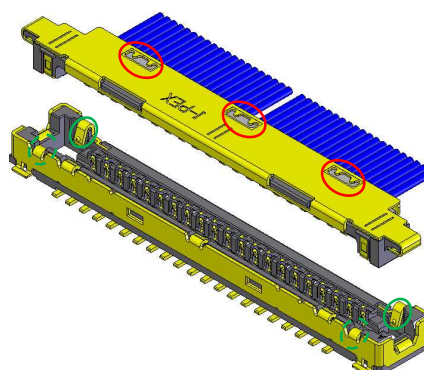
UX II 40p plug with 0.24 mm cable outer diameter harness can go through 2.66 mm inner diameter.



EMI Shielding and Multi-point Ground Design



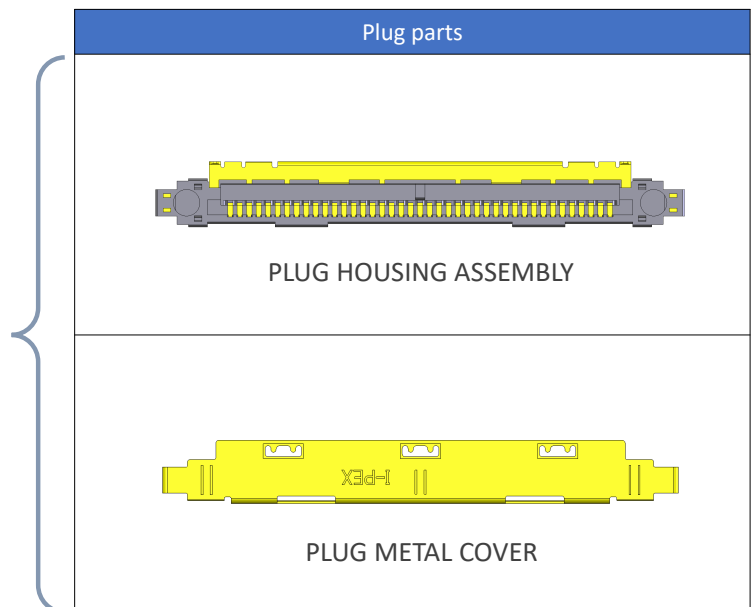
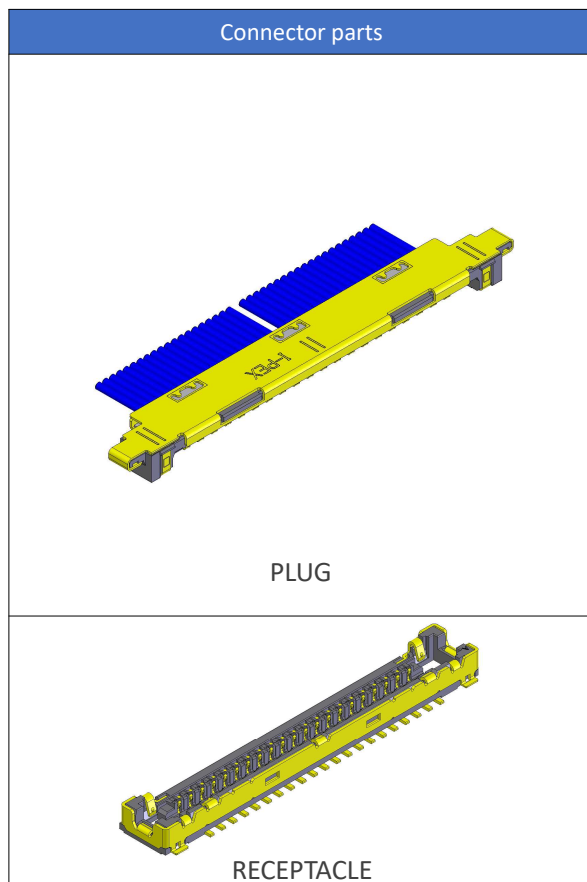
View From Underside



○ Soldered contacts
○ Mechanical contacts

Component Parts Details

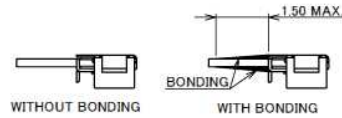
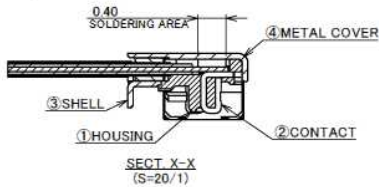
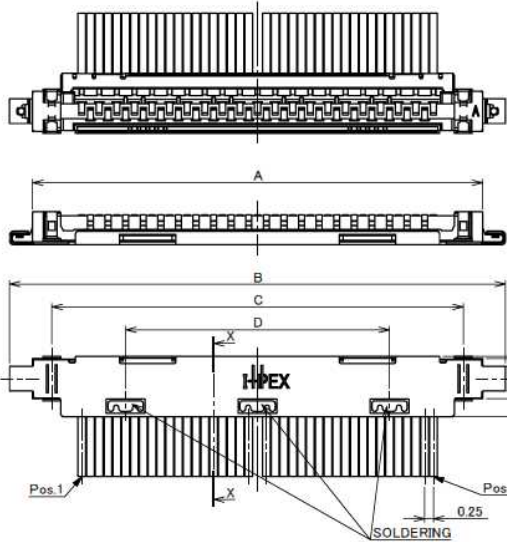
Component Parts



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.



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

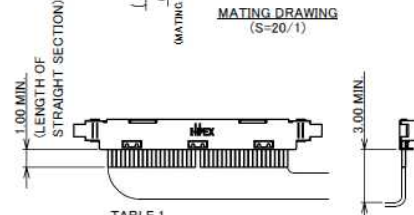
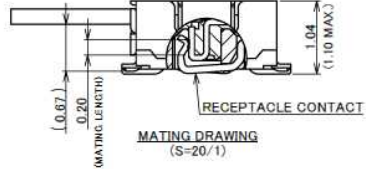
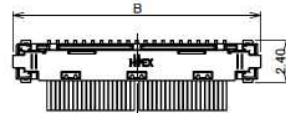


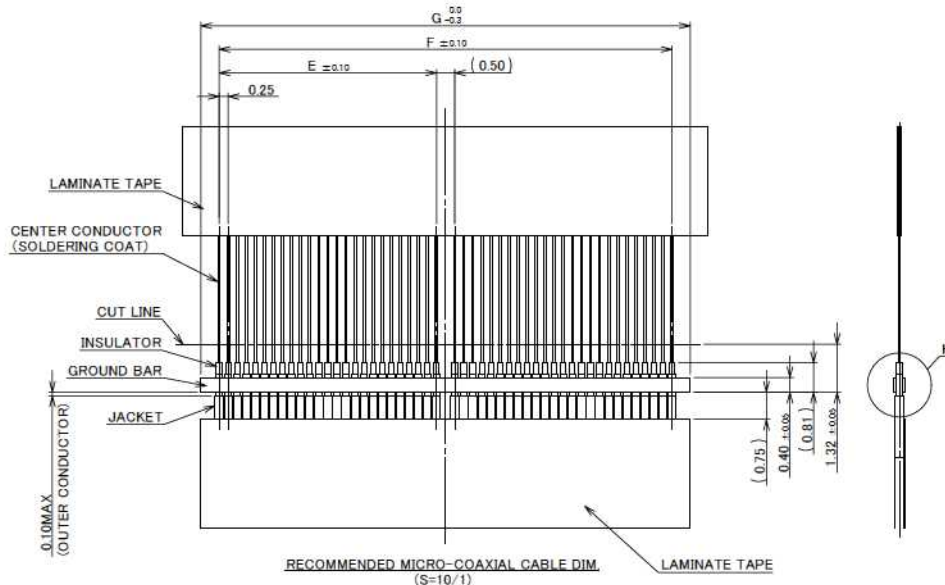
TABLE.1

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 μ m MIN. OVER Ni 1.0 μ m MIN.
3	SHELL	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	SEE ABOVE TABLE.1	Au 0.1 μ m MIN. OVER Ni 1.0 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK

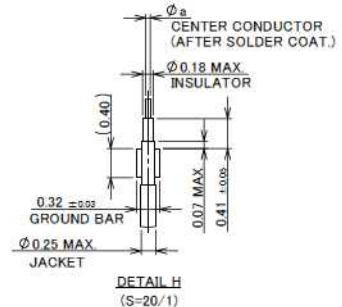
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PART No.	E	F	G
20531-030T-#2	3.5	7.5	8.5
20531-034T-#2	4.0	8.5	9.5
20531-040T-#2	4.75	10.0	11.0
20531-050T-#2	6.0	12.5	13.5



MICRO-COAXIAL CABLE DIMENSION

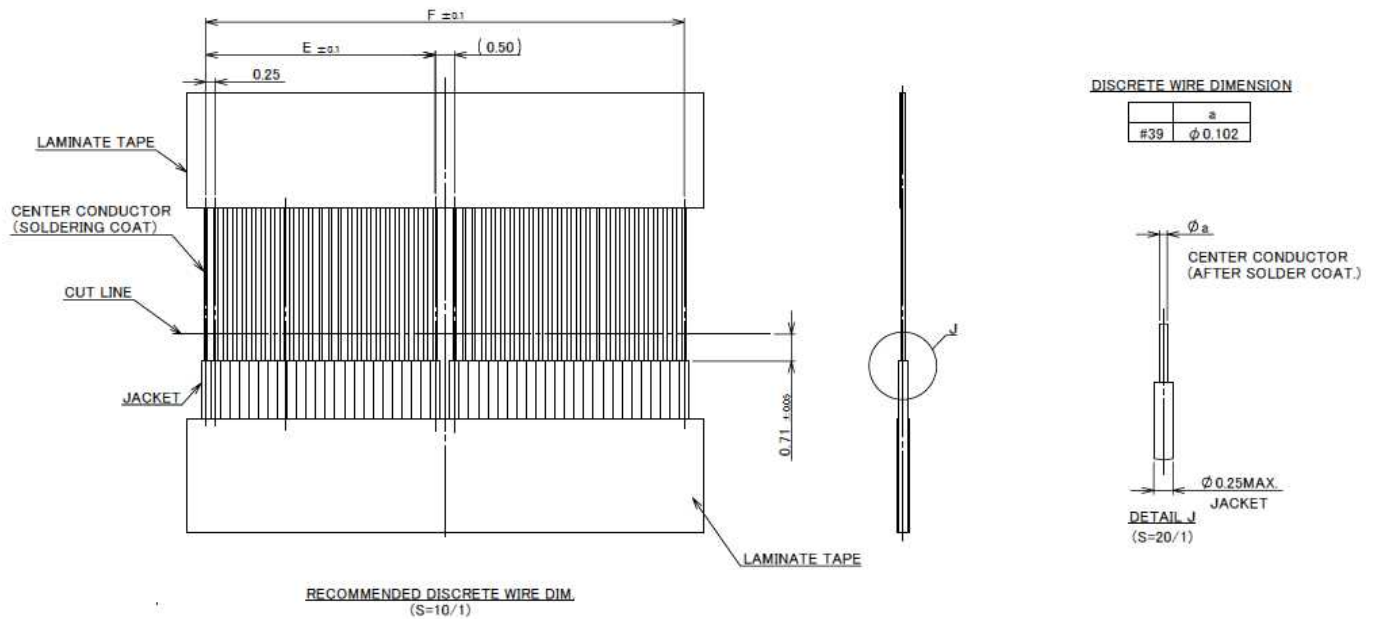
	a
#44	ϕ 0.063
#46	ϕ 0.048



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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



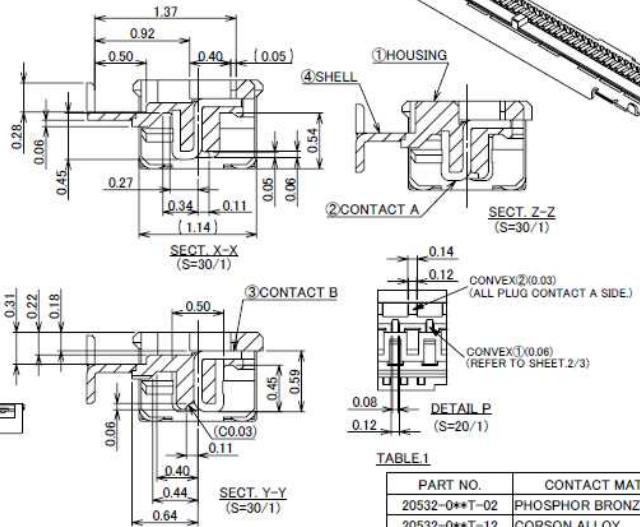
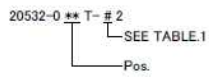
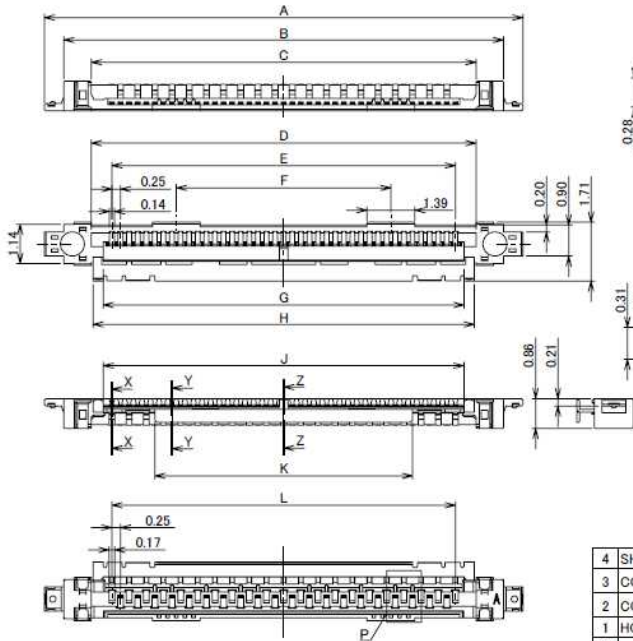
Rev.13

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 : 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***

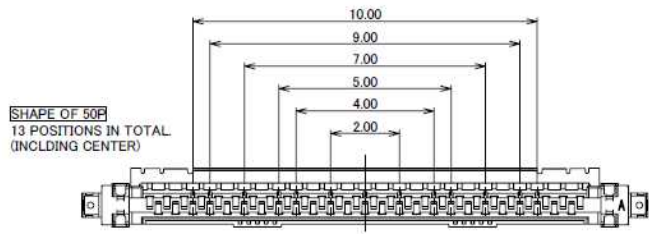
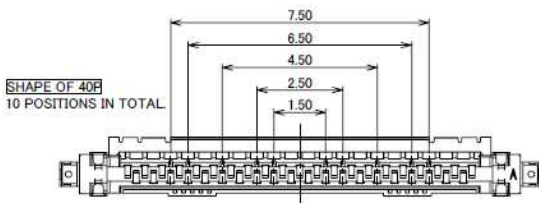
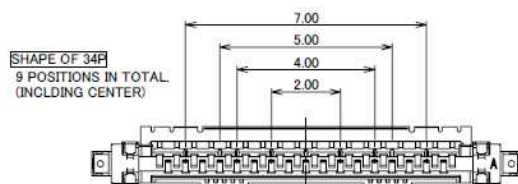
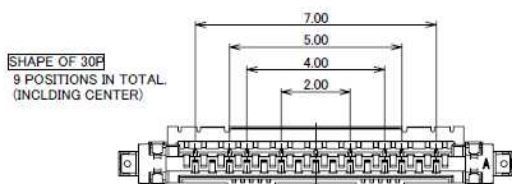
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Plug Housing Assembly

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	8.25	10.50	11.10	10.50	7.50	10.00
20532-050T-#2	50	16.44	15.30	13.70	13.70	12.50	8.25	13.00	13.60	13.00	10.00	12.50



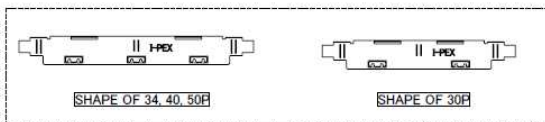
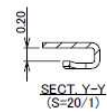
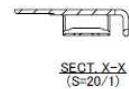
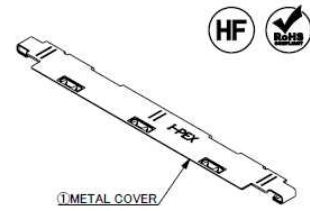
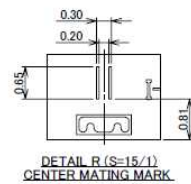
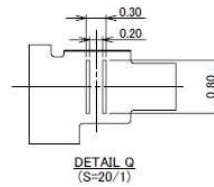
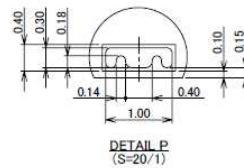
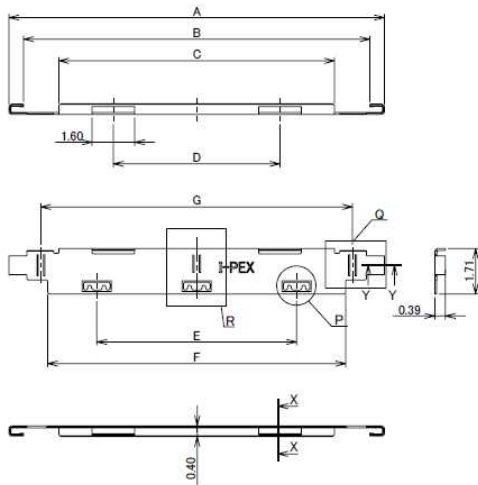
4	SHELL	PHOSPHOR BRONZE	Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN.
3	CONTACT B	SEE ABOVE TABLE.1	Au 0.1 μ m MIN. OVER Ni 1.00 μ m MIN.
2	CONTACT A	SEE ABOVE TABLE.1	Au 0.1 μ m MIN. OVER Ni 1.00 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS



POSITION OF CONVEX①

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	8.25	10.00	13.70	14.20



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

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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.

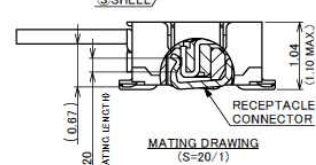
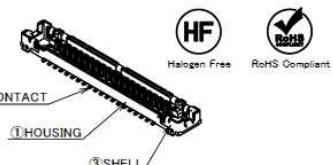
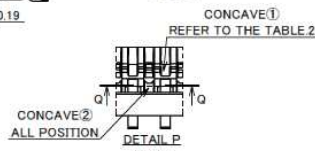
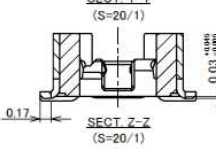
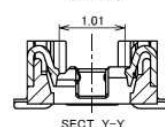
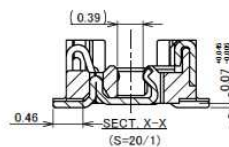
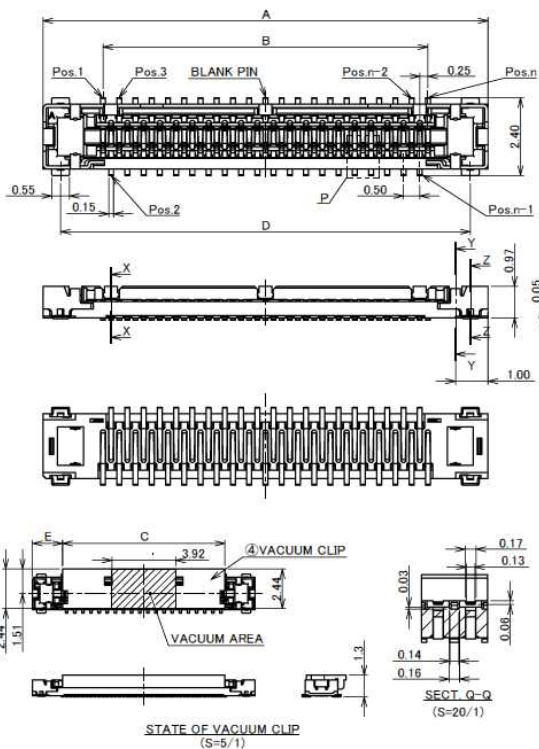


TABLE 2
POSITION OF CONCAVE:
30P : 2, 6, 8, 12, BLANK PIN, 19, 23, 25, 29 pos. (9 POSITIONS)
34P : 4, 8, 10, 14, BLANK PIN, 21, 25, 27, 31 pos. (9 POSITIONS)
40P : 6, 8, 12, 14, 18, 23, 25, 29, 33, 35 pos. (10 POSITIONS)
50P : 8, 9, 12, 14, 18, 22, BLANK PIN, 29, 33, 37, 39, 43, 45 pos. (13 POSITIONS)

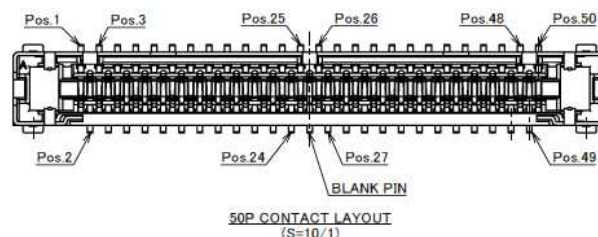
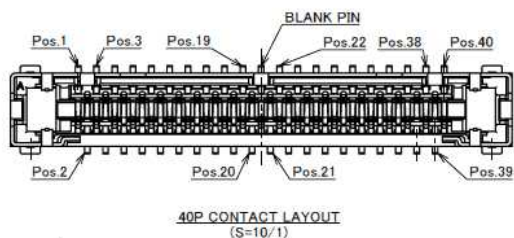
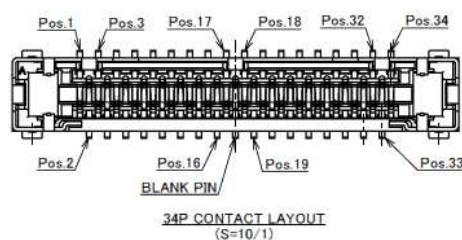
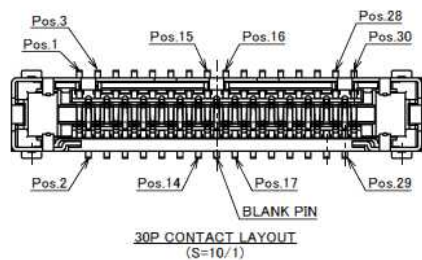
TABLE 1	
PART NO.	CONTACT MATERIAL
20533-0**E	PHOSPHOR BRONZE
20533-0**E-01	CORSON ALLOY

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	UL94-0, BLACK

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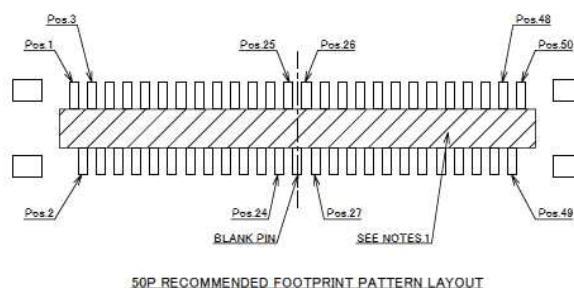
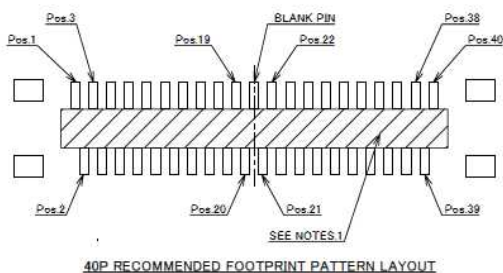
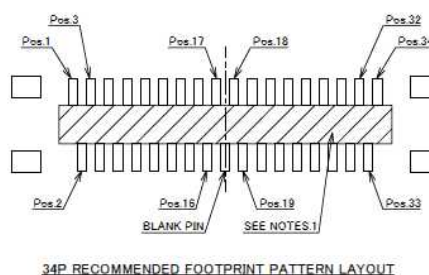
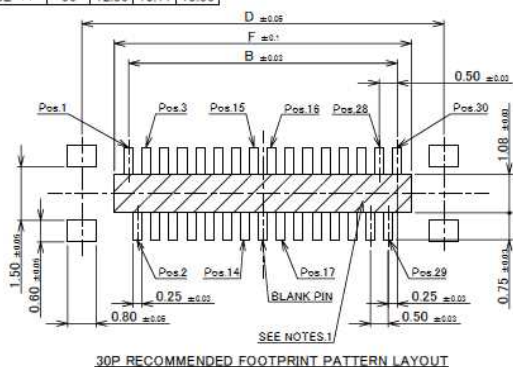
Receptacle Assembly

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



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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

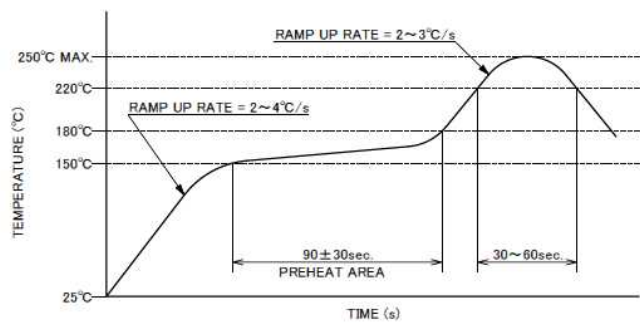
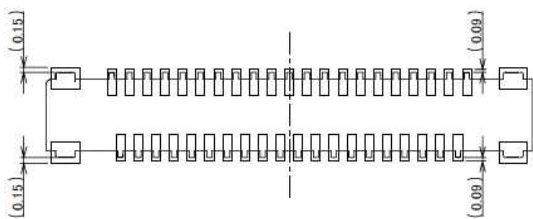
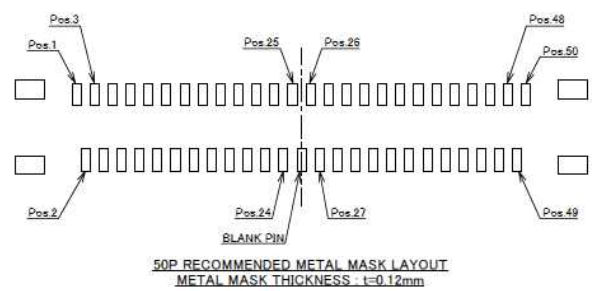
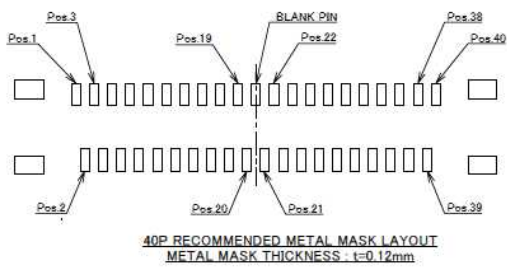
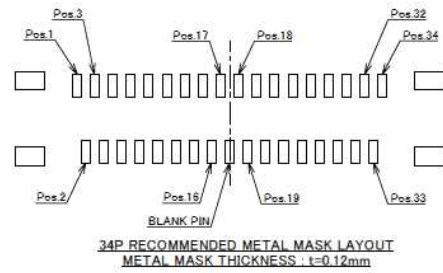
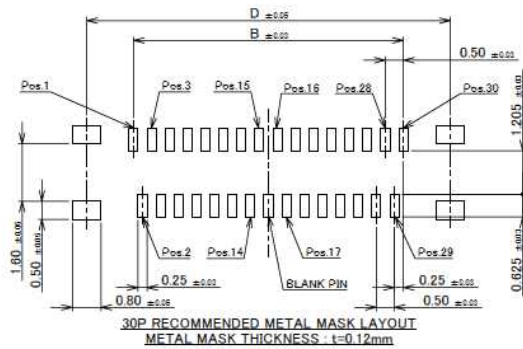


NOTES:
1. SOLDER RESIST SHALL BE APPLIED TO THIS AREA.

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



Rev.15

Rev.15

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℃~+85℃)
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.
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

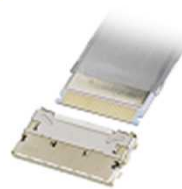
Board to
Board



High-Density



Autolocking
FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial
/ Discrete Cable



High-Speed



RF



High-Frequency



Optical
Module



High-Speed



Power



High-Power



I/O
(Input/Output)



Quick charge



Effector



Custom
Connectors
Available

Inquiry



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