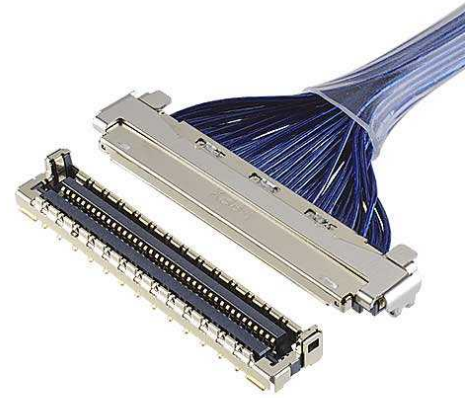


CABLIN[®]-UM

Fully-shielded and multi-point ground, Mechanical lock, High-data-rate transfer (20 Gbps/lane), 0.4 mm pitch, Right angle vertical mating type micro-coaxial connector



Product Specifications:

Mating type	Right Angle Vertical	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.65	
Mated size (mm)	Height	
	With Lock Cover : 2.2 +/- 0.15	
	Without Lock Cover : 2.0 +/- 0.15	
	With Pull Tape Holder: 2.2 +/- 0.15	
Width	Formula: 5.0 + (0.4 * ? p)	
	Depth	5.0 with lock cover
Pin Counts	Range	Up to 60
	Available	30, 40, 60

Applicable Cable Size:

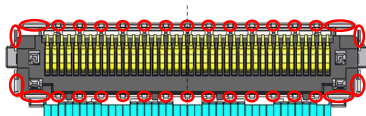
Maximum O.D. (mm)	0.4
Micro-Coaxial for Signal (AWG)	45 ohm: #38 or smaller 50 ohm: #40 or smaller
Twin Coaxial (AWG)	#40, #42
Discrete (AWG)	#34 or smaller

Applicable Standards (Reference Only):

USB4/Thunderbolt 4 (20 Gbps/lane), PCIe Gen 4 (16GT/s), eDP HBR 3 (8.1 Gbps)

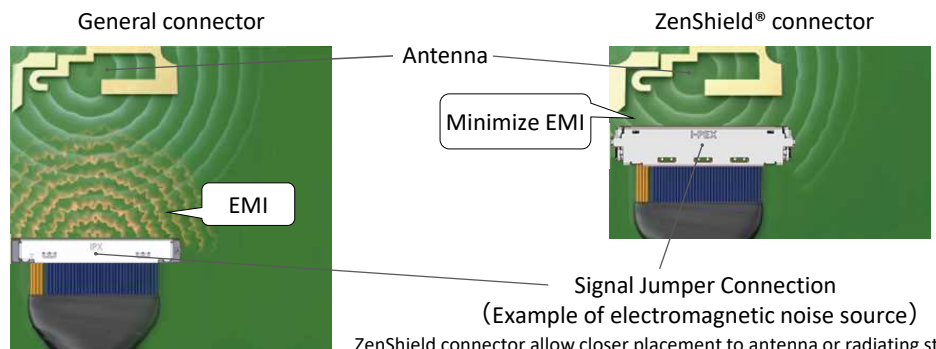
* Please inquire for pin counts not listed or outside of the pin count range.

ZenShield[®] fully-shielded with multi-point grounds to prevent EMI leakage



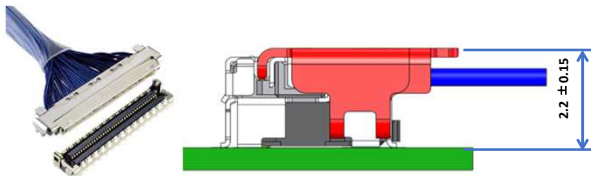
View From Underside

○ Ground SMT points

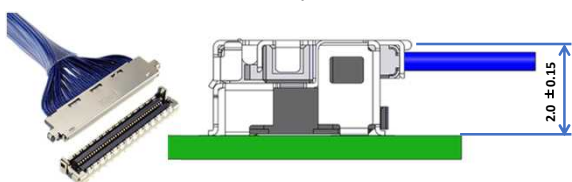


Wide range of variations

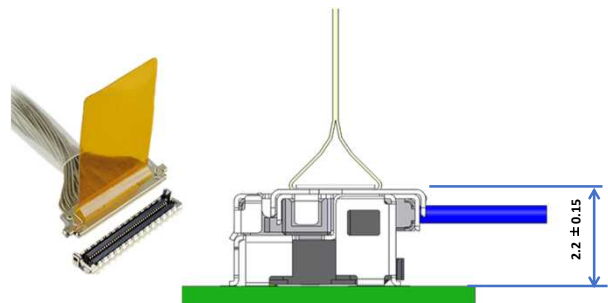
With Lock Cover---Enhanced mating retention force



Without Lock Cover---Low profile

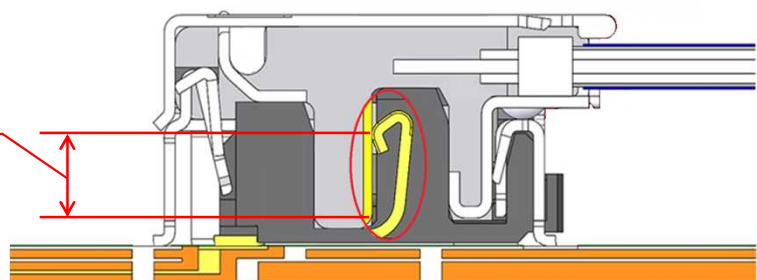


With Pull tape holder---Improve unplug efficiency



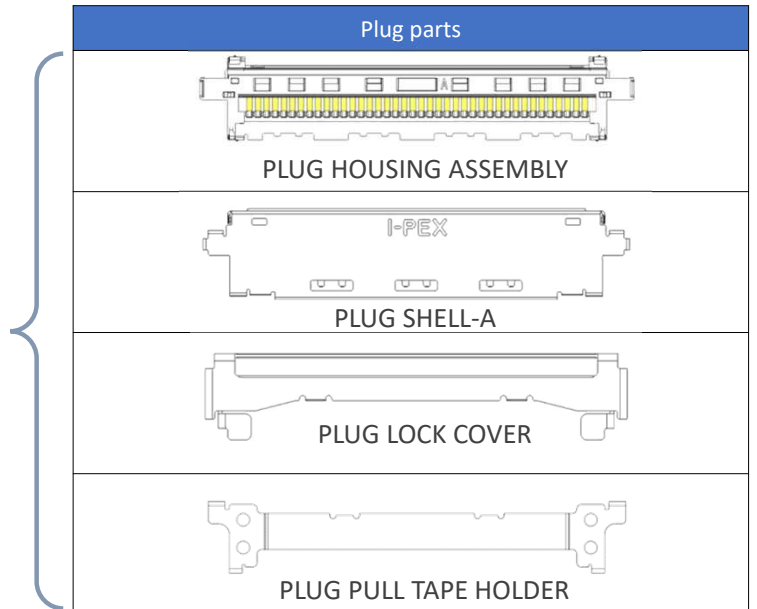
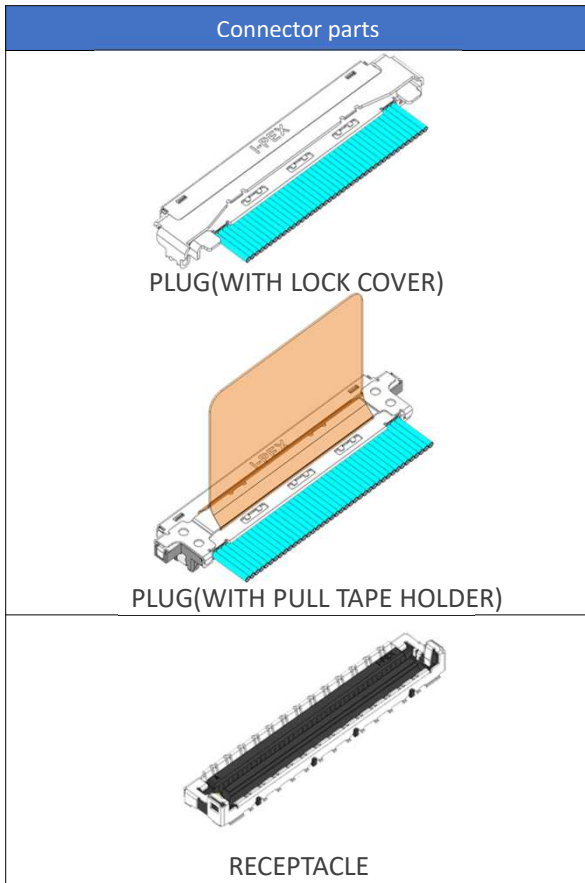
High contact reliability

Wiping length : 0.65 mm min.



Component Parts Details

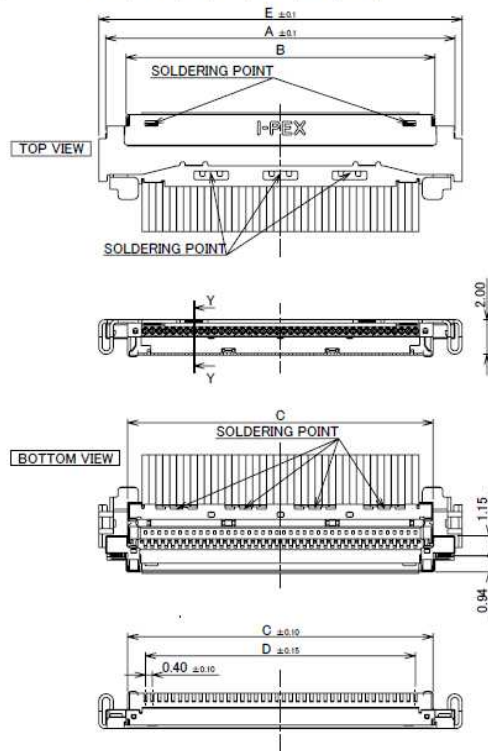
Component Parts



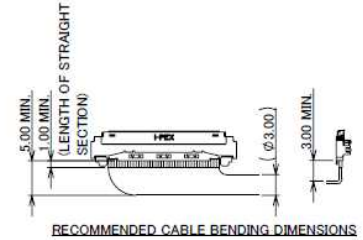
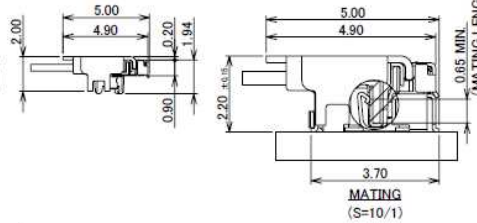
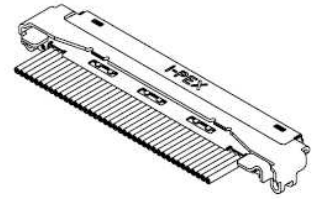
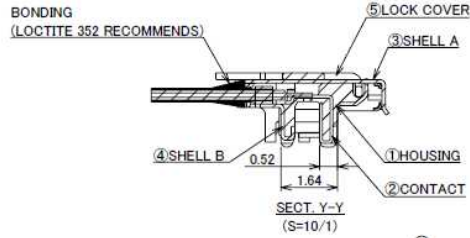
Plug for Cable Assembly

Recommended P/N 20877-0**T-01

PART NO.	Pos.	A	B	C	D	E
20877-030T-01	30	16.20	13.85	13.65	11.60	17.00
20877-040T-01	40	20.20	17.85	17.65	15.60	21.00
20877-060T-01	60	28.20	25.85	25.65	23.60	29.00



With LOCK COVER

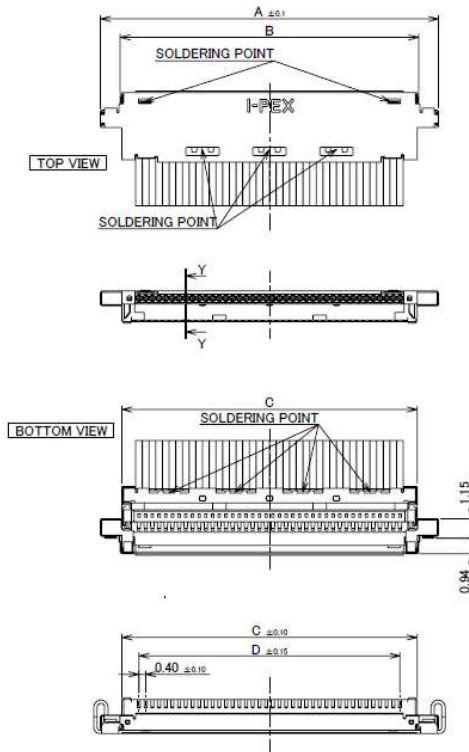


NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
5	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.0 μm MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0_BLACK

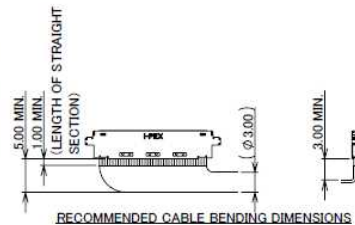
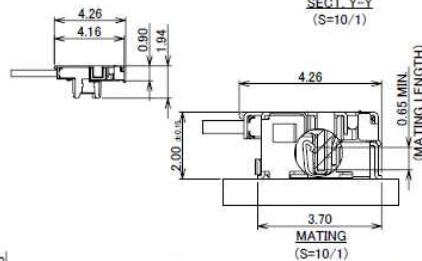
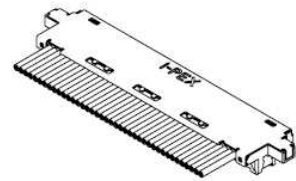
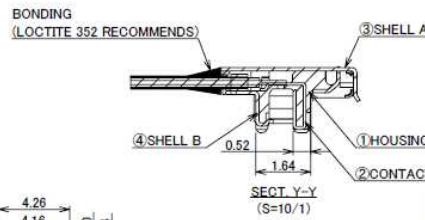
Rev.9

Recommended P/N 20877-0**T-01

PART NO.	Pos.	A	B	C	D
20877-030T-02	30	16.20	13.85	13.65	11.60
20877-040T-02	40	20.20	17.85	17.65	15.60
20877-060T-02	60	28.20	25.85	25.65	23.60



Without LOCK COVER



NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0_BLACK

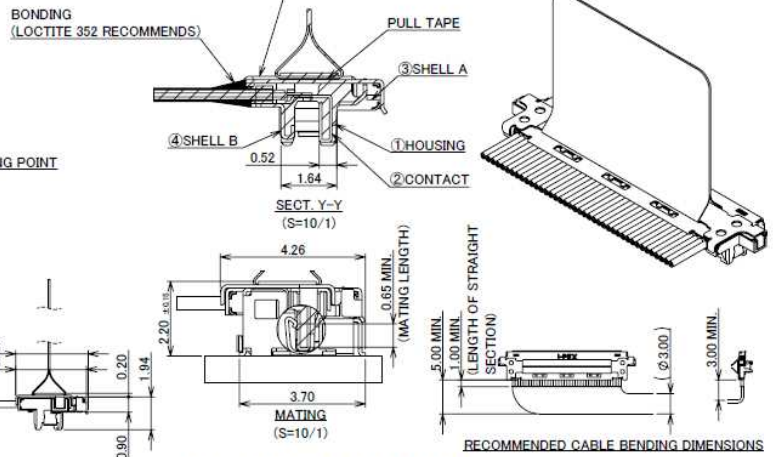
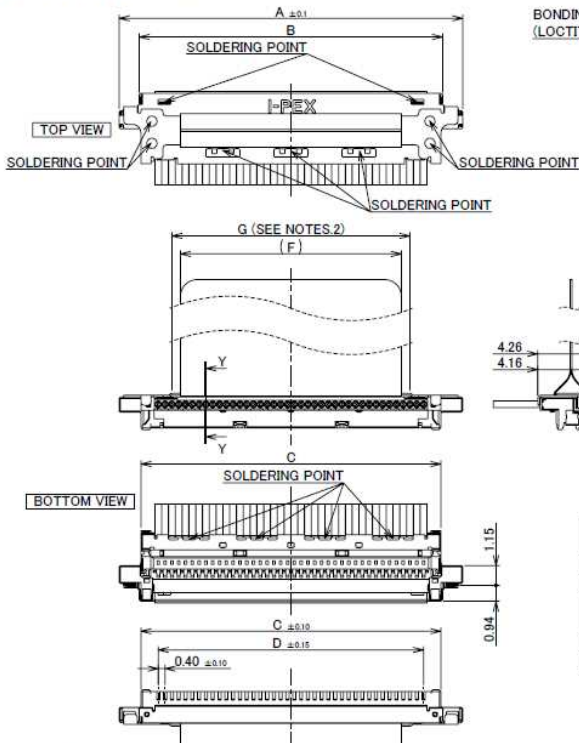
Rev.9

Plug for Cable Assembly

Recommended P/N		20877-0**T-01					
PART NO.	Pos.	A	B	C	D	F	G
20877-030T-03	30	16.20	13.85	13.65	11.80	9.00	10.00
20877-040T-03	40	20.20	17.85	17.65	15.80	13.00	14.00
20877-060T-03	60	28.20	25.85	25.65	23.80	21.00	22.00

◆ MARK MEANS NOT AVAILABLE.

With PULL TAPE HOLDER

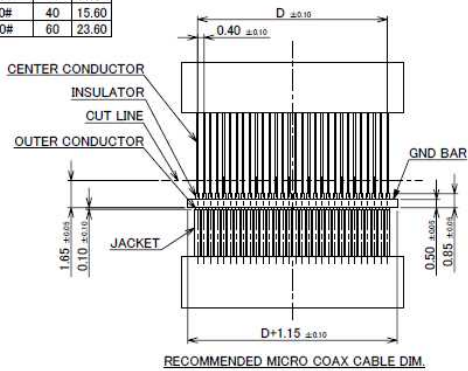


NO.	DISCRPTION	MATERIAL	FINISH , REMARKS
5	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0_BLACK

NOTES.
 1.RECOMMENDED PULL-TAPE
 PULL-TAPE : TERAOKA's INSULATION TAPE No.650S(#50) t=0.08
 2.PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRIAIGHT AREA.

Rev.9

PART NO.	Pos.	D
20877-030T-0H	30	11.80
20877-040T-0H	40	15.60
20877-060T-0H	60	23.60



CHARACTERISTIC IMPEDANCE MATCHING MICRO COAX CABLE

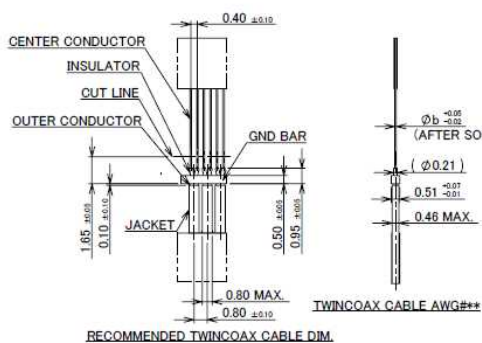
	a
#38	0.12
#40	0.09
#42	0.075
#44	0.063

CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO COAX CABLE

	a
#36	0.15

MICRO COAX CABLE #36 : NOT RECOMMENDED FOR HIGH SPEED SIGNAL TRANSFER

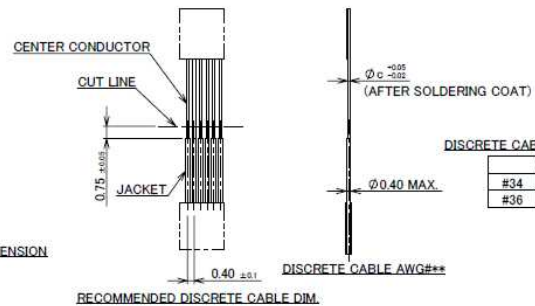
MICRO COAX CABLE AWG#**



TWINCOAX CABLE DIMENSION

	b
#40	0.09
#42	0.075

RECOMMENDED TWINCOAX CABLE DIM.



DISCRETE CABLE DIMENSION

	c
#34	0.192
#36	0.15

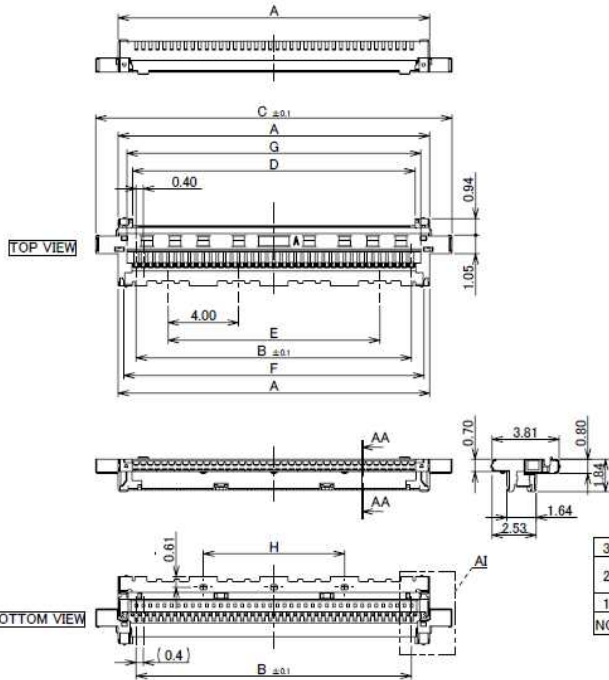
RECOMMENDED DISCRETE CABLE DIM.

Rev.9

Plug Housing Assembly

Recommended P/N 20878-0**T-01

PART No.	Pos.	A	B	C	D	E	F	G	H
20878-030T-01	30	13.65	11.60	16.20	12.01	8.00	13.00	12.65	4.0
20878-040T-01	40	17.65	15.80	20.20	16.01	12.00	17.00	16.65	8.0
20878-060T-01	60	25.65	23.60	28.20	24.01	20.00	25.00	24.65	16.00



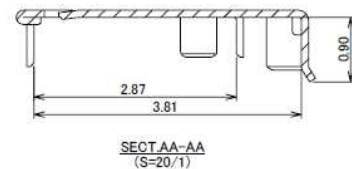
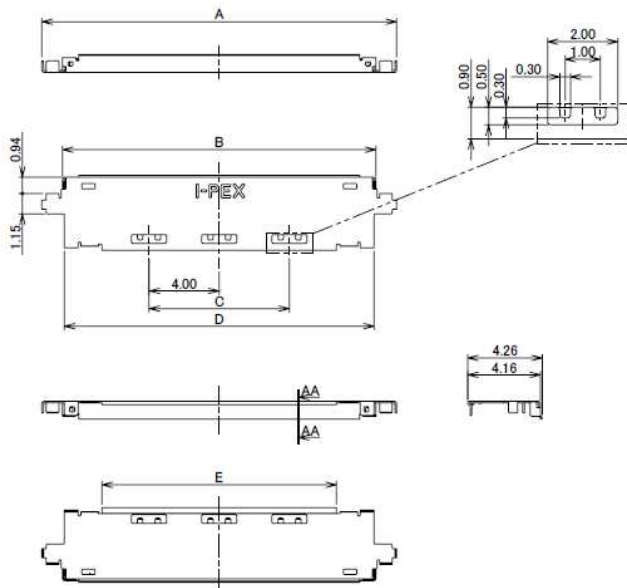
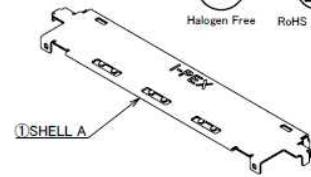
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
3	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0 .BLACK

Rev.4

Plug Shell-A

Recommended P/N 3488-0**1

PART No.	Pos.	A	B	C	D	E
3488-0301	30	16.20	13.88	4.00	13.65	9.36
3488-0401	40	20.20	17.88	8.00	17.65	13.36
3488-0601	60	28.20	25.88	16.00	25.65	21.36

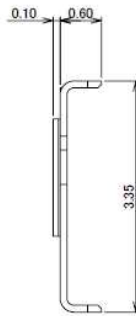
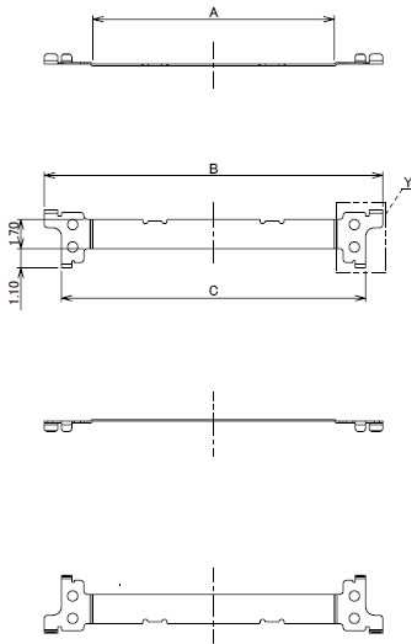


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.

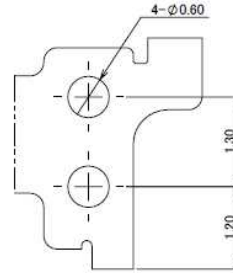
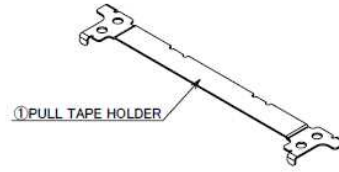
Rev.2

Plug Pull Tape Holder

Recommended P/N		3588-0**1		
PART NO.	Pos.	A	B	C
3588-0301	30	10.00	15.65	13.65
3588-0401	40	14.00	19.65	17.65
3588-0601	60	22.00	27.65	25.65



DETAIL X
(S=20 : 1)



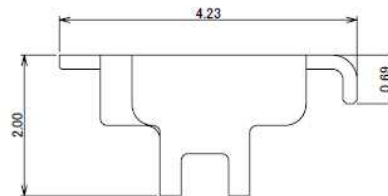
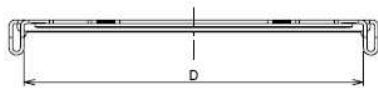
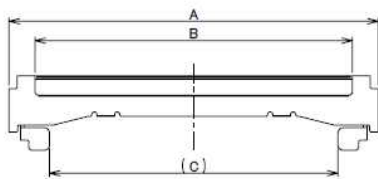
DETAIL Y
(S=20 : 1)

1	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
NO.	DISCRPTION	MATERIAL	FINISH , REMARKS

Rev.3

Lock Cover

Recommended P/N		3493-0**1			
PART NO.	Pos.	A	B	C	D
3493-0301	30	17.00	14.05	12.40	15.30
3493-0401	40	21.00	18.05	16.40	19.30
3493-0601	60	29.00	26.05	24.40	27.30



DETAIL X
(S=20 : 1)



1	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN.
NO.	DISCRPTION	MATERIAL	FINISH , REMARKS

Rev.3

Receptacle Assembly

Recommended P/N 20879-0**E-01

PART NO.	Pos.	A	B	C	D	E	F	G	H
20879-030E-01	30	15.27	13.01	11.60	9.60	12.07	12.88	15.27	13.65
20879-040E-01	40	19.27	17.01	15.60	14.40	16.07	16.88	19.27	17.65
◆20879-060E-01	60	27.27	25.01	23.60	21.60	24.07	24.88	27.27	25.65

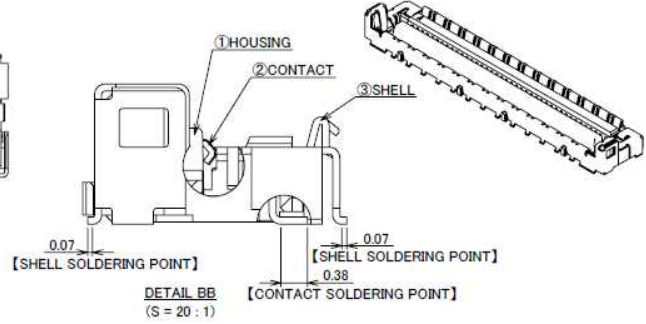
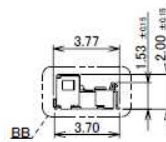
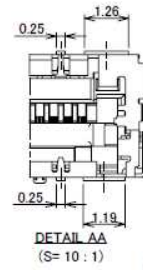
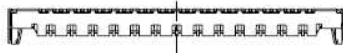
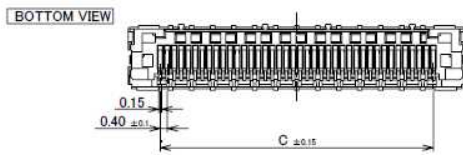
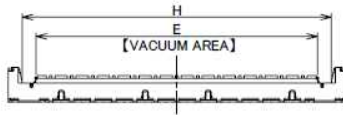
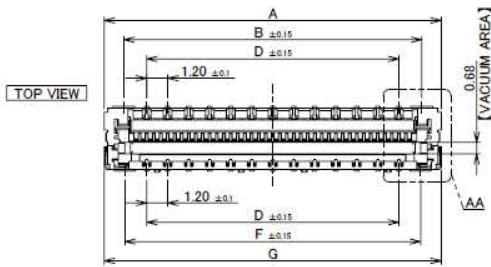
◆MARK MEANS NOT AVAILABLE.

P/N : 20879-0**E-0#
 1 : NARROW GROUND PIN TYPE
 2 : WIDER GROUND PIN TYPE
 Pos.

01 TYPE

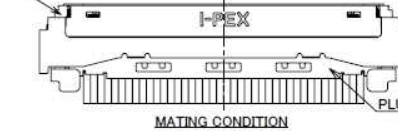


Halogen Free RoHS Compliant



DETAIL BB (S = 20 : 1)

RECE. P/N : 20879-0**E-01



3	SHELL	PHOSPHOR BRONZE	ALL OVER : Ni 1.00 μm MIN. SOLDERING AREA : Au 0.02 μm MIN.
2	CONACT	CORSON ALLOY	ALL OVER : Ni 1.00 μm MIN. CONTACT & SOLDERING AREA : Au 0.03 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRPTION	MATERIAL	FINISH , REMARKS

Rev.9

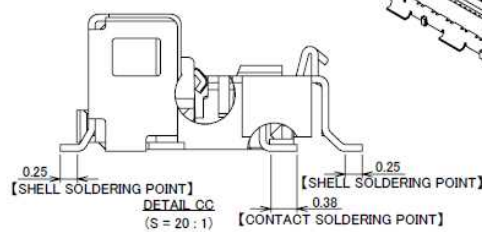
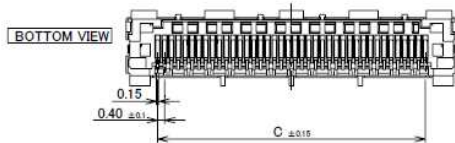
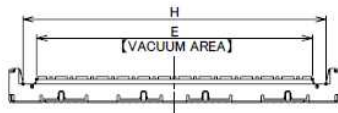
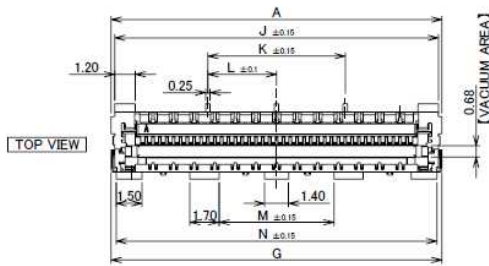
Recommended P/N 20879-0**E-01

PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N
20879-030E-02	30	15.27	11.60	12.07	15.27	13.65	14.87	4.00	-	7.09	14.69
20879-040E-02	40	19.27	15.60	16.07	19.27	17.65	18.87	8.00	4.00	6.70	18.69
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	11.20	10.70	26.69

02 TYPE



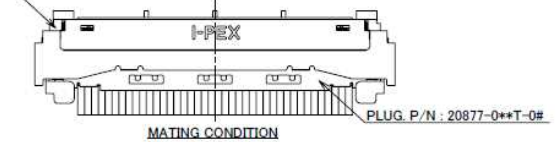
Halogen Free RoHS Compliant



DETAIL CC (S = 20 : 1)



RECE. P/N : 20879-0**E-02



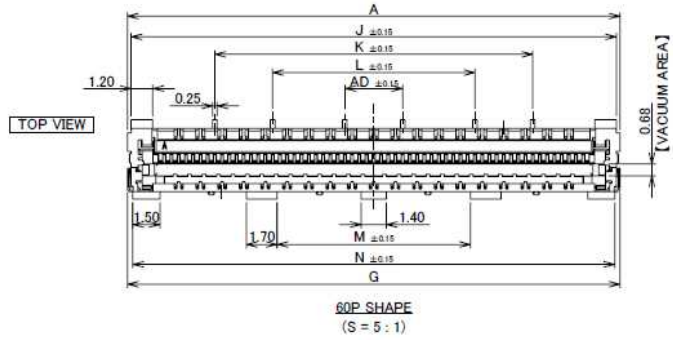
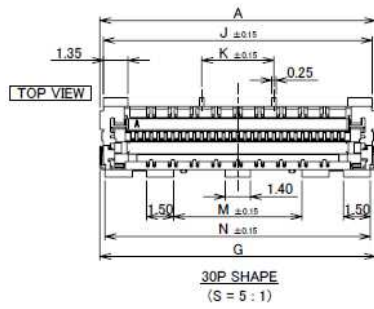
Rev.9

Receptacle Assembly

Recommended P/N 20879-0**E-01

PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N	AD
20879-030E-02	30	15.27	11.60	12.07	15.27	13.85	14.87	4.00	-	7.09	14.69	-
20879-040E-02	40	19.27	15.60	16.07	19.27	17.65	18.87	8.00	4.00	6.70	18.69	-
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	11.20	10.70	26.69	3.20

02 TYPE

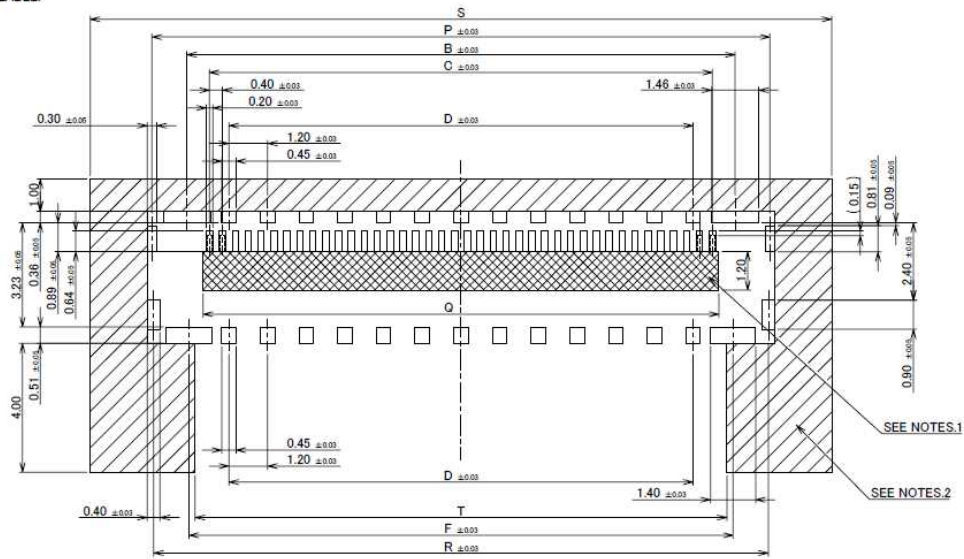


Rev.9

PART No.	Pos.	B	C	D	F	P	O	R	S	T
20879-030E-01	30	13.01	11.60	9.60	12.88	15.17	12.00	15.07	19.00	12.50
20879-040E-01	40	17.01	15.60	14.40	16.88	19.17	16.00	19.07	23.00	16.50
◆20879-060E-01	60	25.01	23.60	21.60	24.88	27.17	24.00	27.07	31.00	24.50

◆MARK MEANS NOT AVAILABLE.

01 TYPE



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

Rev.9

Receptacle Assembly

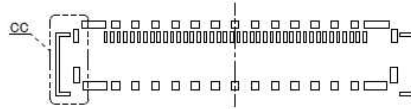
PART No.	Pos.
20879-030E-01	30
20879-040E-01	40
◆20879-060E-01	60

◆MARK MEANS NOT AVAILABLE.

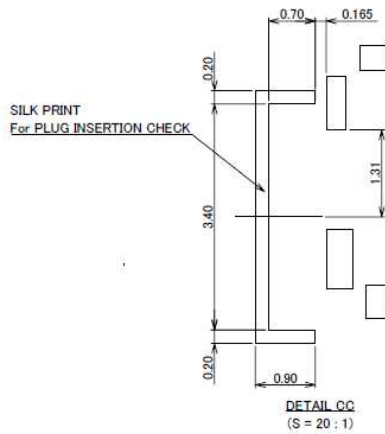
PATENT PENDING

01 TYPE

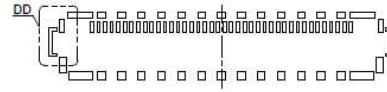
With LOCK COVER



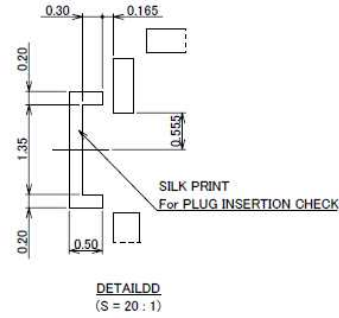
RECOMMENDED SILK PRINT For With LOCK COVER
(S = 5 : 1)



Without LOCK COVER & With PULL TAPE HOLDER



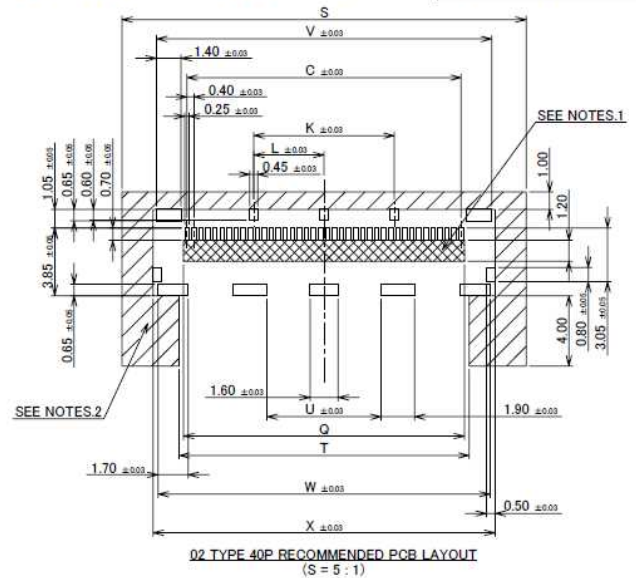
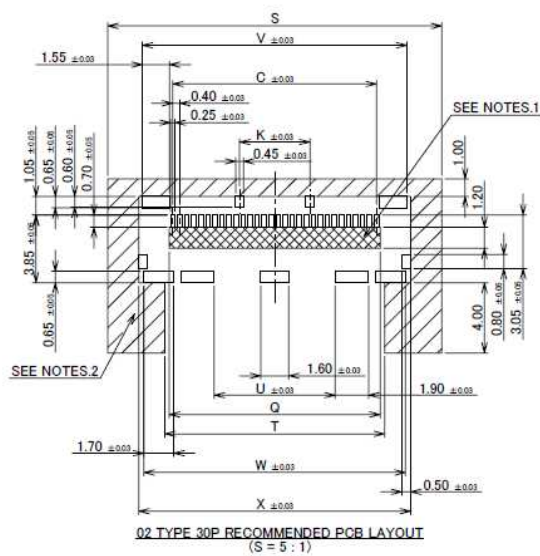
RECOMMENDED SILK PRINT For Without LOCK COVER
(S = 5 : 1)



Rev.9

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X
20879-030E-02	30	11.60	4.00	-	12.00	19.00	12.50	6.89	15.07	14.89	15.47
20879-040E-02	40	15.60	8.00	4.00	16.00	23.00	16.50	6.50	19.07	18.89	19.47
20879-060E-02	60	23.60	17.60	11.20	24.00	31.00	24.50	10.50	27.07	26.89	27.47

02 TYPE



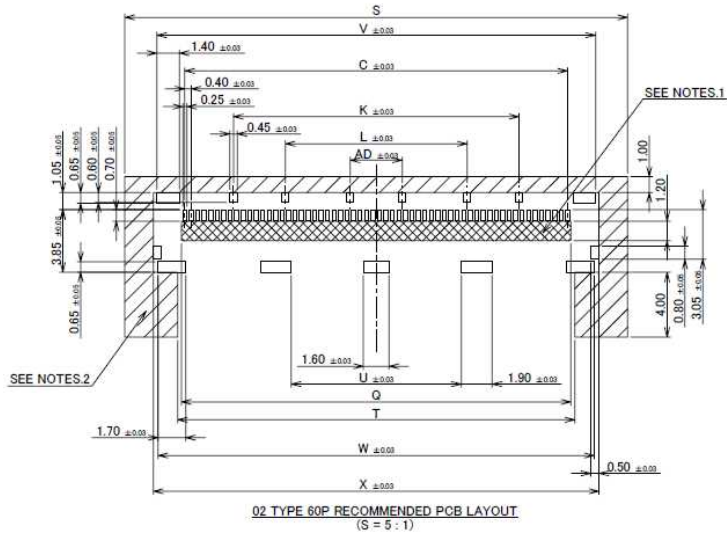
- NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.9

Receptacle Assembly

PART No.	Pos.	C	K	L	Q	S	T	U	V	W	X	AD
20879-030E-02	30	11.60	4.00	-	12.00	19.00	12.50	6.89	15.07	14.89	15.47	-
20879-040E-02	40	15.60	8.00	4.00	16.00	23.00	16.50	6.50	19.07	18.89	19.47	-
20879-060E-02	60	23.60	17.60	11.20	24.00	31.00	24.50	10.50	27.07	26.89	27.47	3.20

02 TYPE



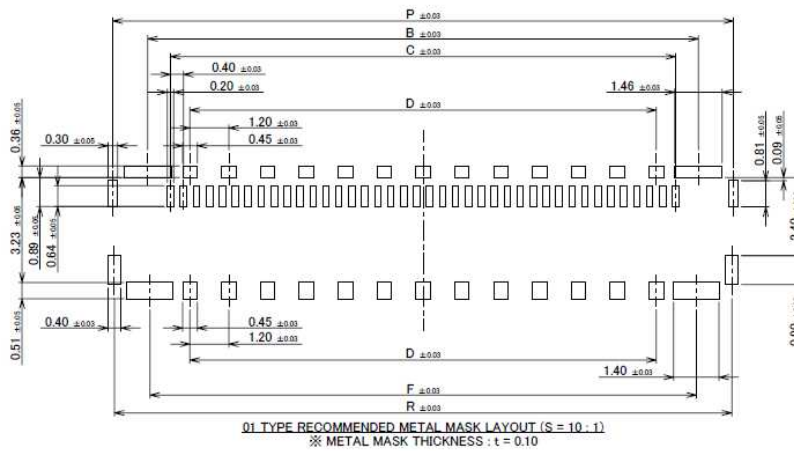
- NOTES
 1. SOLDER RESIST MUST BE APPLIED TO THIS AREA.
 2. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.

Rev.9

PART No.	Pos.	B	C	D	F	P	R
20879-030E-01	30	13.01	11.60	9.60	12.88	15.17	15.07
20879-040E-01	40	17.01	15.60	14.40	16.88	19.17	19.07
◆20879-060E-01	60	25.01	23.60	21.60	24.88	27.17	27.07

◆MARK MEANS NOT AVAILABLE.

01 TYPE

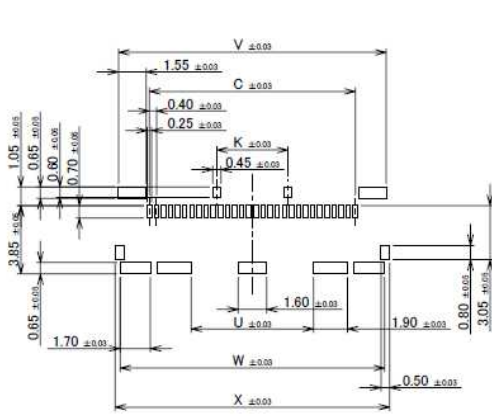


Rev.9

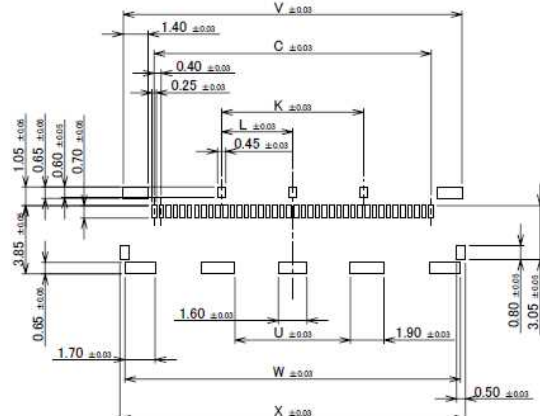
Receptacle Assembly

PART No.	Pos.	C	K	L	U	V	W	X
20879-030E-02	30	11.60	4.00	-	6.89	15.07	14.89	15.47
20879-040E-02	40	15.60	8.00	4.00	6.50	19.07	18.89	19.47
20879-060E-02	60	23.60	17.60	11.20	10.50	27.07	26.89	27.47

02 TYPE



02 TYPE 30P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

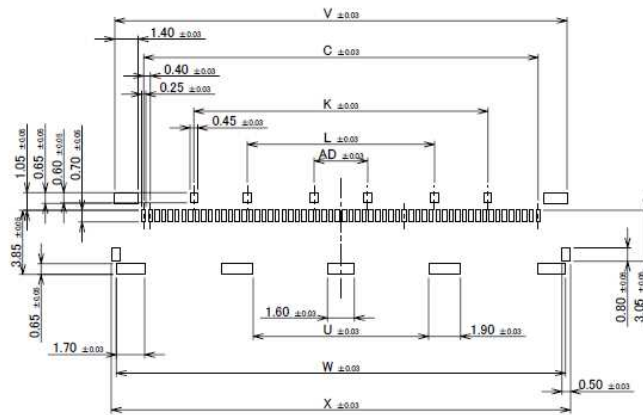


02 TYPE 40P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

Rev.9

PART No.	Pos.	C	K	L	U	V	W	X	AD
20879-030E-02	30	11.60	4.00	-	6.89	15.07	14.89	15.47	-
20879-040E-02	40	15.60	8.00	4.00	6.50	19.07	18.89	19.47	-
20879-060E-02	60	23.60	17.60	11.20	10.50	27.07	26.89	27.47	3.20

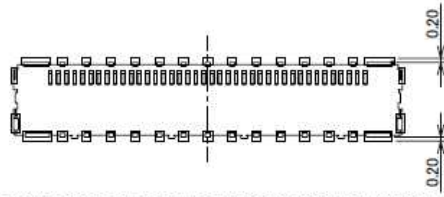
02 TYPE



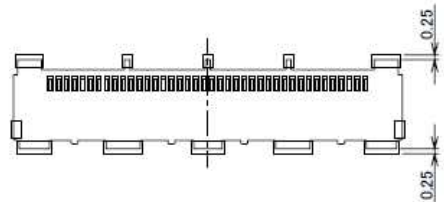
02 TYPE 60P RECOMMENDED METAL MASK LAYOUT (S = 5 : 1)
※ METAL MASK THICKNESS : t = 0.12

Rev.9

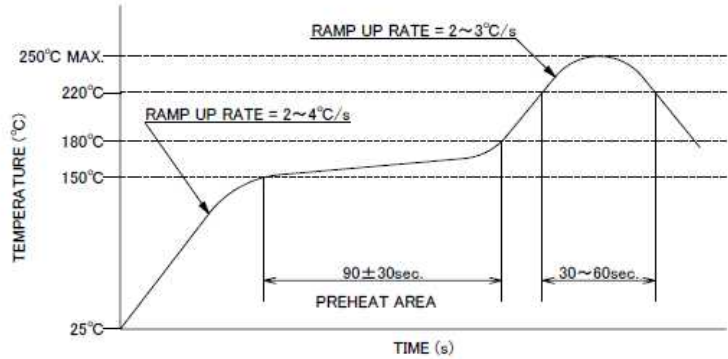
Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※01 TYPE



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN
※02 TYPE



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

Rev.9

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO COAX : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE : AWG# 36 , 34 TWINCOAX : AWG# 40 , 42
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 60 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT PIN/UP TO 49 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT PIN/UP TO 38 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT PIN/UP TO 19 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT PIN/UP TO 12 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT PIN/UP TO 10 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERATURE RISE MAY AFFECTED BY ACTUAL SITUATION.
OPERATING TEMPERATURE	233~378K(-40°C~+105°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 180mohm MAX.(AWG#34) / AFTER TEST : \triangleleft40mohm MAX. 275mohm MAX.(AWG#36) 360mohm MAX.(AWG#38) 600mohm MAX.(AWG#40) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : \triangleleft40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	30P : 34.00N MAX. 60P : 52.00N MAX. 40P : 40.00N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	30P : 3.0N MIN. 60P : 6.0N MAX. 40P : 4.0N MIN.
CABLE RETENTION FORCE	30P : 14.70N MIN. 60P : 29.40N MAX. 40P : 19.60N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2514
TEST REPORT	TR-18067 (RECEPTACLE:20879-0**E-01) TR-18088 (RECEPTACLE:20879-0**E-02)
PACKING STANDARD	PST-18043
INSTRUCTION MANUAL	HIM-18033
ASSEMBLY MANUAL	ASM-18003
APPEARANCE CRITERIA No.	QLS-A***

Rev.9

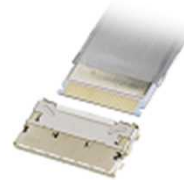
Board to Board



High-Density



Autolocking FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial / Discrete Cable



High-Speed



RF



High-Frequency



Optical Module



High-Speed



Effector



Power



High-Power



I/O (Input/Output)



Quick charge



Inquiry



Custom Connectors Available



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