

- ✓ ZenShield® fully-shielded with multi-point grounds to prevent EMI leakage
- ✓ Wide range of variations
- ✓ High contact reliability

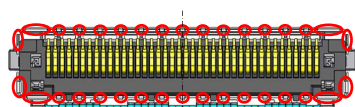
Pin counts:

Range	Up to 60
Available	30, 40, 60

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

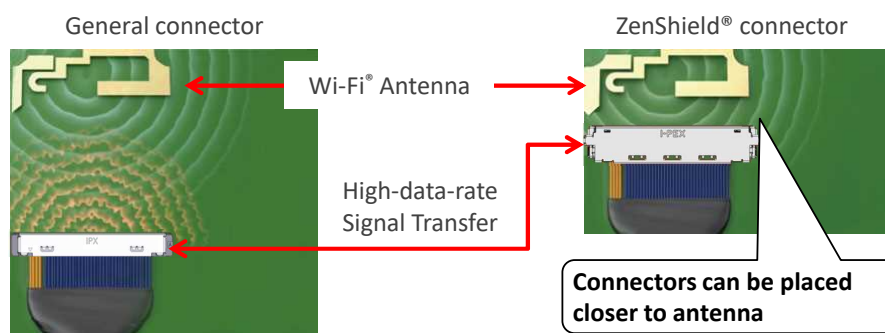
Mating type		Right Angle Vertical
Wire (FPC) pitch (mm)		0.4
Board pitch (mm)		0.4
Mated size (mm)	Height	With Lock Cover : 2.2 +/- 0.15 Without Lock Cover : 2.0 +/- 0.15 With Pull Tape Holder: 2.2 +/- 0.15
	Width Formula	5.0 + (0.4 * ? p)
	Depth	5.0 with lock cover
Wiping length (mm)		0.65
Applicable wire (AWG#)	Micro-coax for signals	45ohm : #38 or smaller 50ohm : #40 or smaller
	Twincoax	#40
	Discrete	#34 or smaller
Contact point		-
Performance (Reference only)		Thunderbolt 3 (20 Gbps/lane) PCIe Gen 4 (16GT/s) USB 3.1 Gen 2 (10 Gbps) eDP HBR 3 (8.1 Gbps)

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



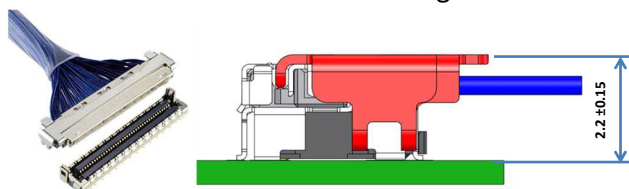
View From Underside

○ Ground SMT points

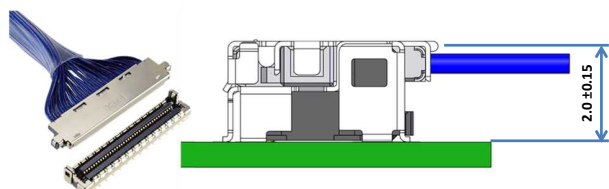


Wide range of variations

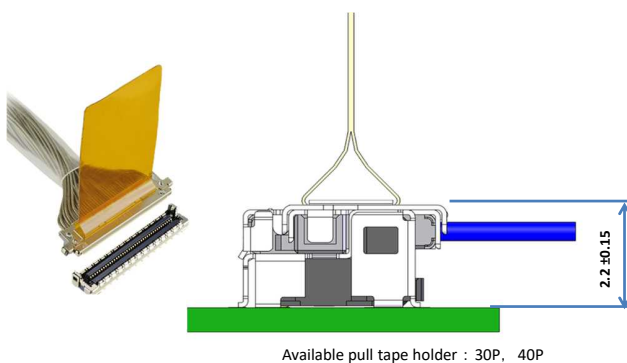
With Lock Cover---Enhanced mating retention force



Without Lock Cover---Low profile

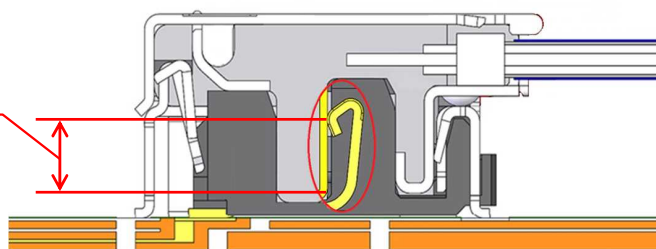


With Pull tape holder---Improve unplug efficiency



High contact reliability

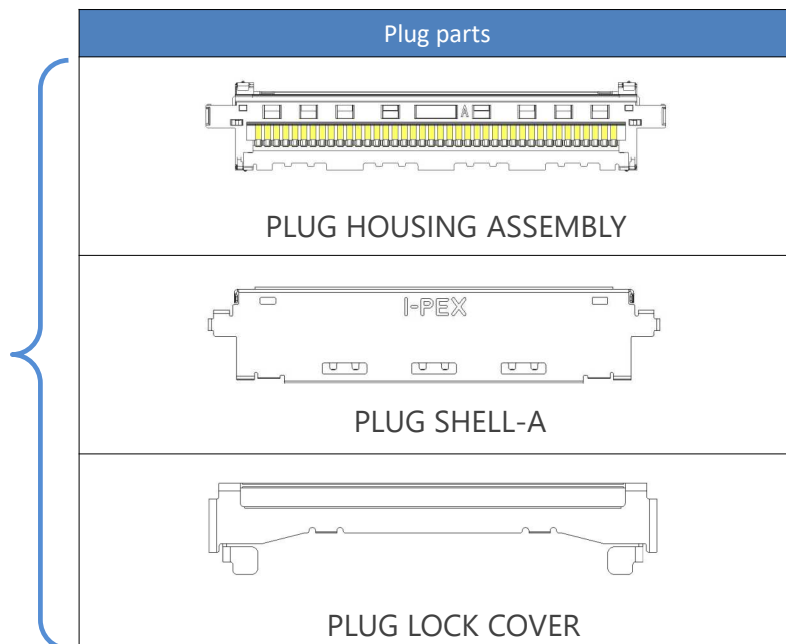
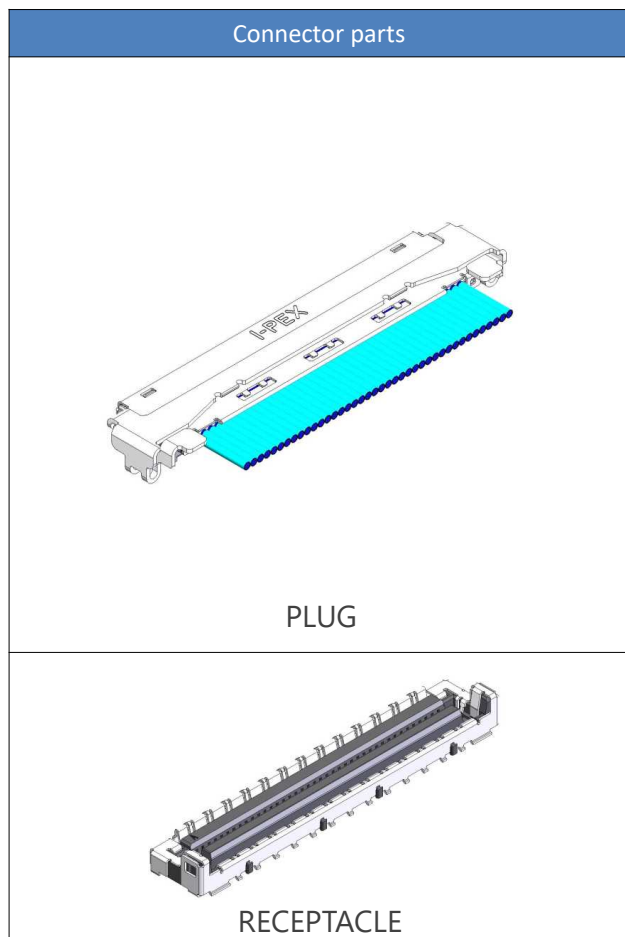
Wiping length : 0.65 mm min.



CABLINE[®]-UM

Component Parts Detail

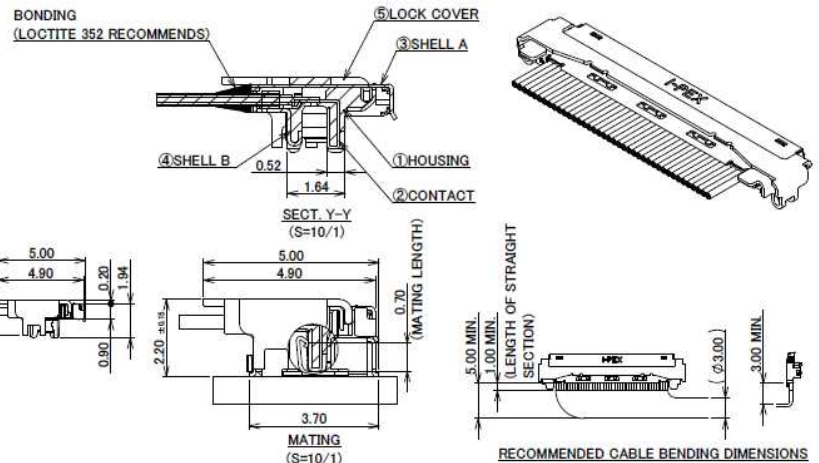
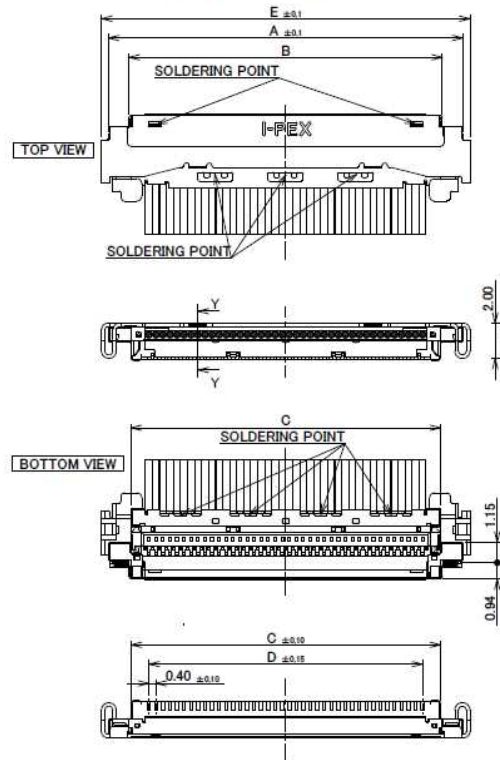
Component Parts:



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

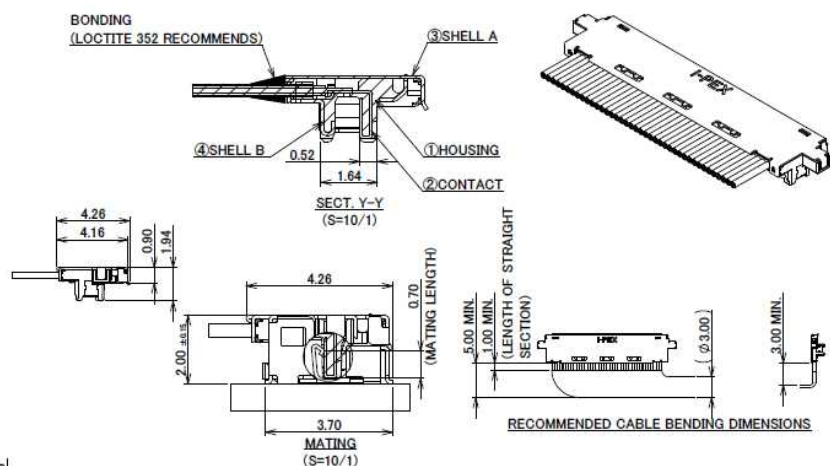
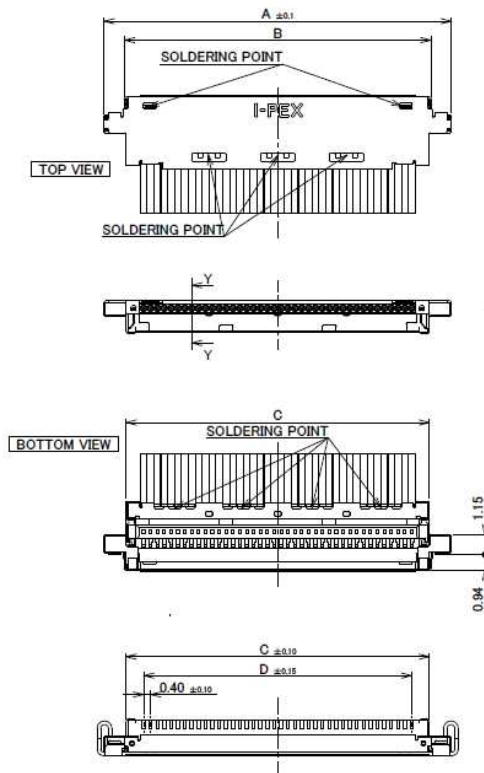


NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
5	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.0 μ m MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.0 μ m MIN. CONTACT & SOLDERING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

Rev.3

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



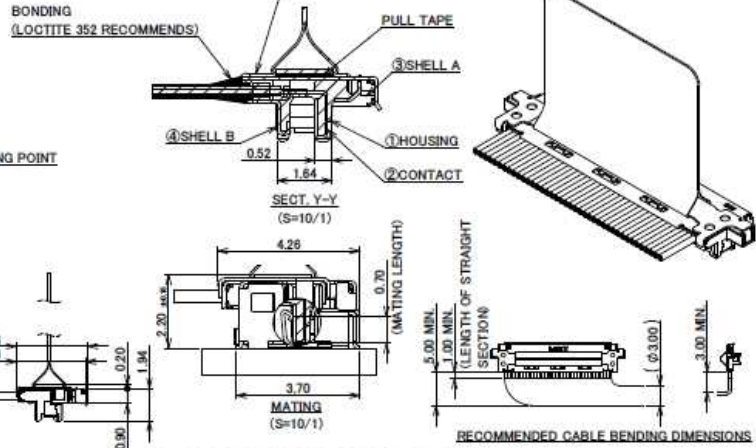
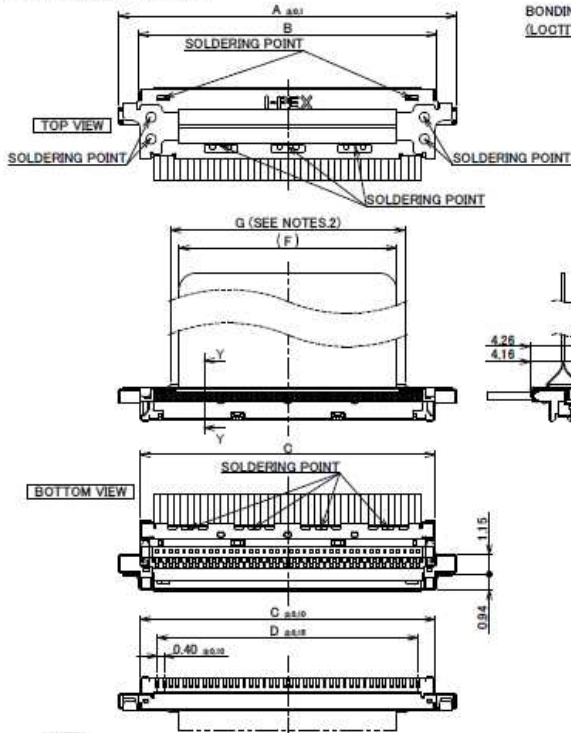
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	CPRSON ALLY	ALL OVER Ni 1.0 μ m MIN. CONTACT & SOLDERING AREA : Au 0.03 μ m MIN.
1	HOUSING	LCP	UL94V-0 ,BLACK

Rev.3

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	11.60	9.00	10.00	
20877-040T-03	40	20.20	17.85	17.65	15.60	13.00	14.00	
20877-060T-03	60	28.20	25.85	25.65	23.60	21.00	22.00	

◆ MARK MEANS NOT AVAILABLE.

With PULL TAPE HOLDER

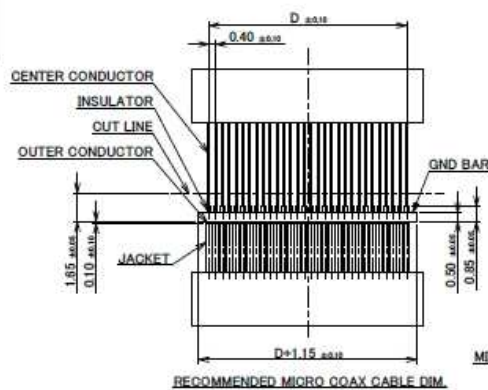


NO.	DISCRPTION	MATERIAL	FINISH, REMARKS
5	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
4	SHELL B	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
3	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.0 μ m MIN.
2	CONTACT	COORSON ALLOY	ALL OVER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

NOTES.
 1. RECOMMENDED PULL-TAPE
 PULL-TAPE : TERAOKA'S INSULATION TAPE No.850S(#50) $\epsilon=0.08$
 2. PULL-TAPE CAN BE PUT WITHIN THE RANGE OF "G" STRAIGHT AREA.

Rev.3

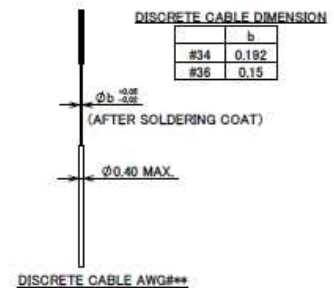
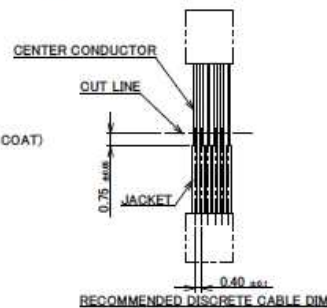
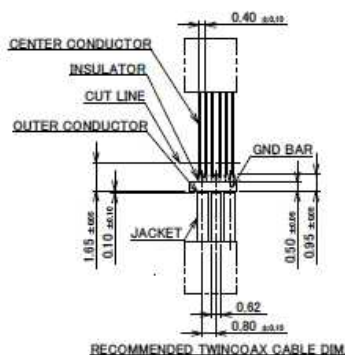
PART NO.	Pos.	D
20877-030T-0#	30	11.60
20877-040T-0#	40	15.60
20877-060T-0#	60	23.60



MICRO COAX CABLE DIMENSION

	a
#36	0.15
#38	0.12
#40	0.09
#42	0.075
#44	0.063

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



DISCRETE CABLE DIMENSION

	b
#34	0.192
#36	0.15

Rev.3

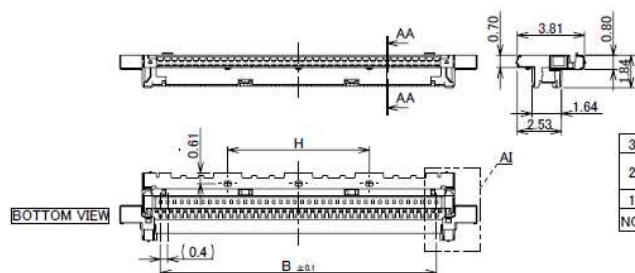
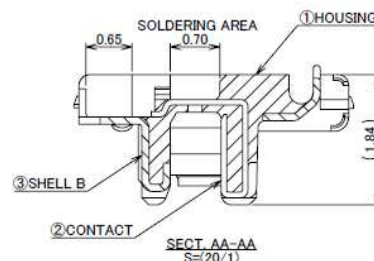
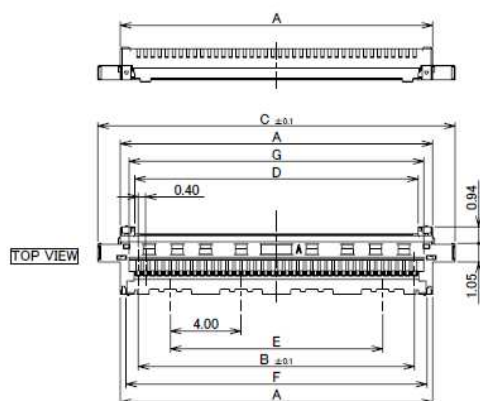
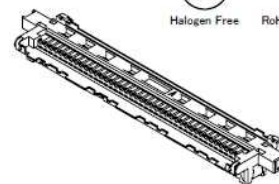
Plug Housing Assembly :

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	15.60	20.20	16.01	12.00	17.00	16.65	8.0
20878-060T-01	60	26.65	23.60	28.20	24.01	20.00	25.00	24.65	16.00



Halogen Free RoHS Compliant



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

Rev.3

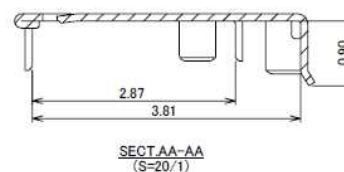
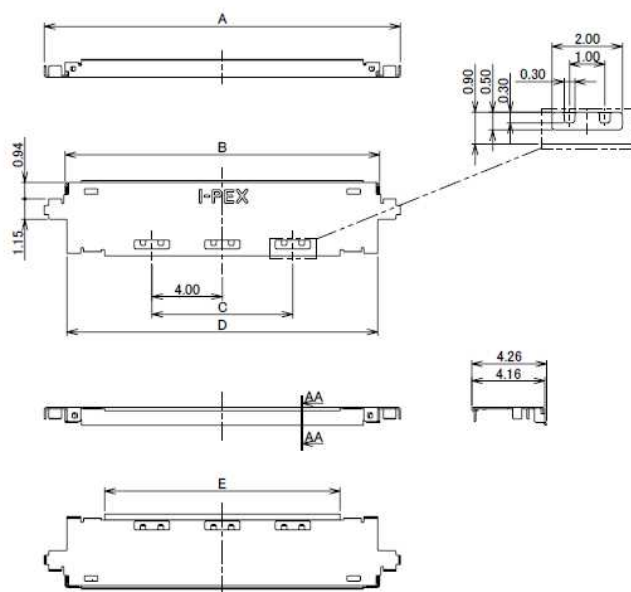
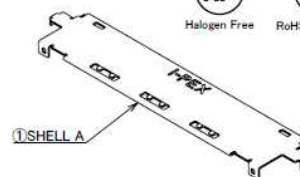
Plug Shell-A :

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



Halogen Free RoHS Compliant

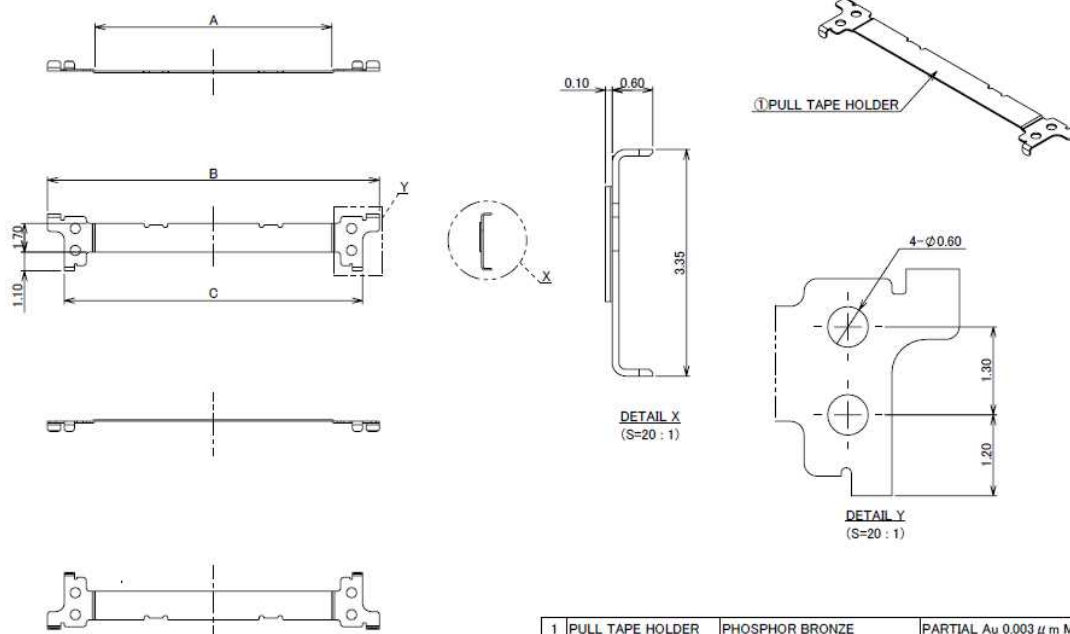


1	SHELL A	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

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	

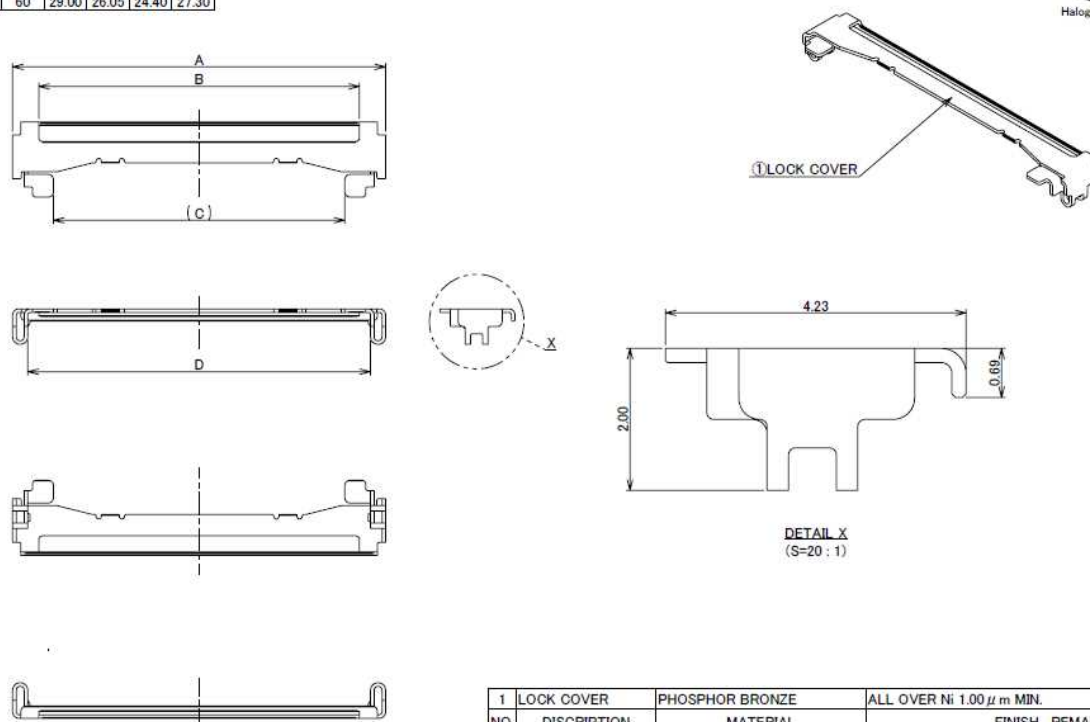


1	PULL TAPE HOLDER	PHOSPHOR BRONZE	PARTIAL Au 0.003 μ m MIN. OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.2

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



1	LOCK COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μ m MIN.
NO.	DISCRIPTION	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

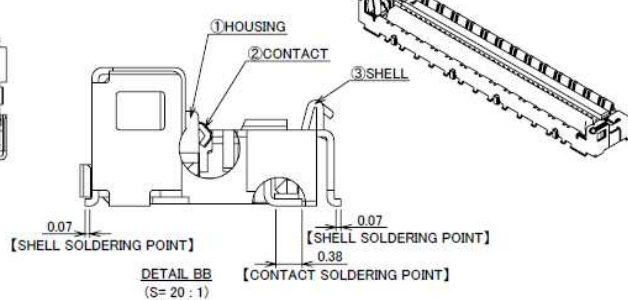
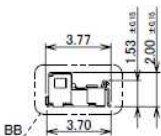
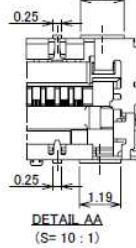
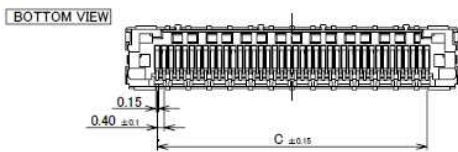
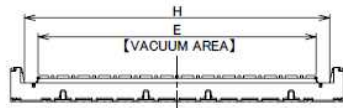
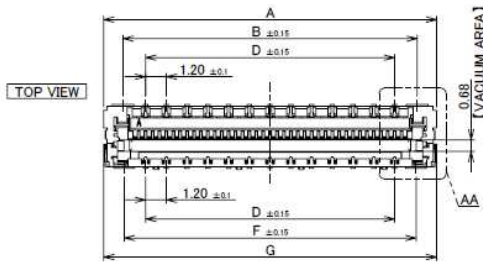
2 : WIDER GROUND PIN TYPE

01 TYPE



Halogen Free

RoHS Compliant



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

Rev.4

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

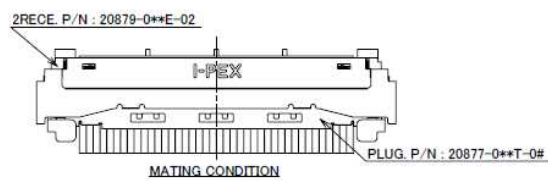
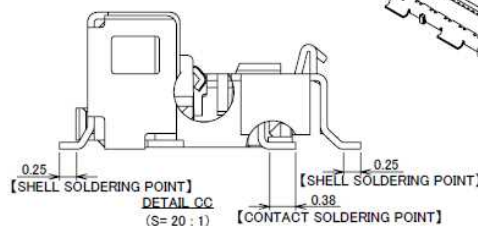
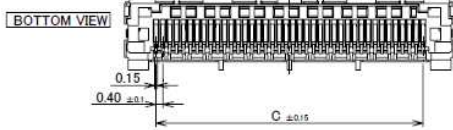
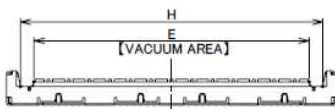
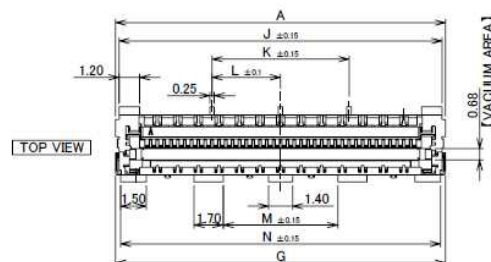
PART NO.	Pos.	A	C	E	G	H	J	K	L	M	N
20879-030E-02	30	15.27	11.60	12.07	15.27	13.65	14.87	4.00	—	7.09	14.69
20879-040E-02	40	19.27	15.60	16.07	19.27	17.65	18.87	8.00	4.00	6.70	18.69
20879-060E-02	60	27.27	23.60	24.07	27.27	25.65	26.87	17.60	11.20	10.70	26.69

02 TYPE



Halogen Free

RoHS Compliant

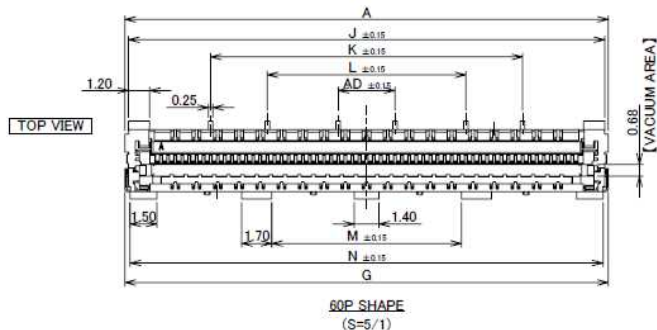
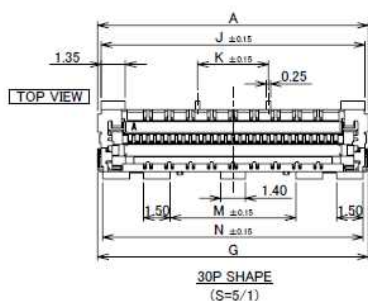


Rev.4

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	13.65	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	3.20

02 TYPE

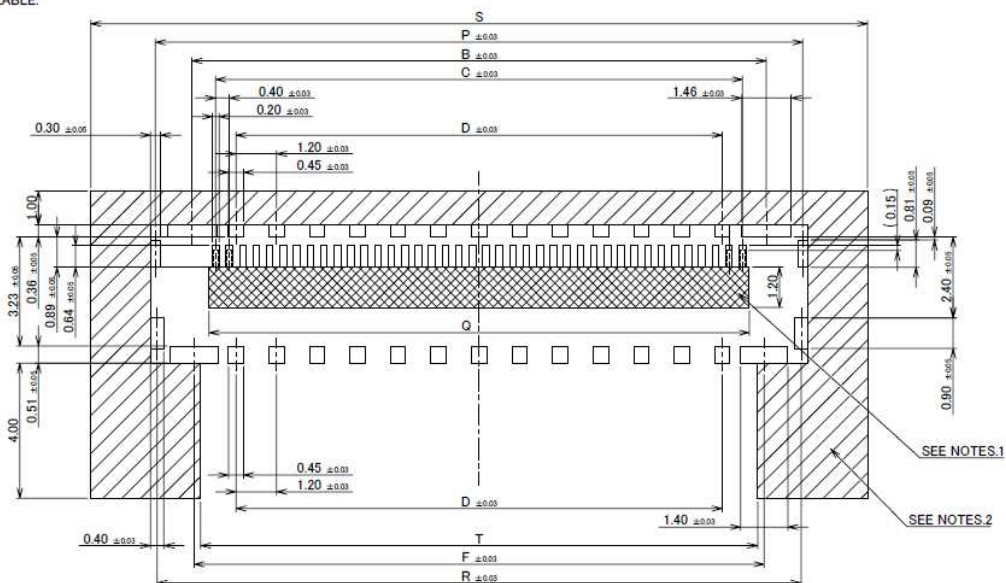


Rev.4

PART No.	Pos.	B	C	D	F	P	Q	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

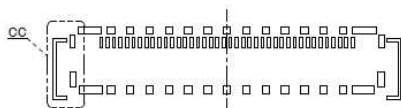


NOTES
1. SOLDER RESIST SHALL BE COATED IN CASE OF RUNNING TRACES ON THIS FOOT PRINT PATTERN PROHIBITION AREA.
2. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

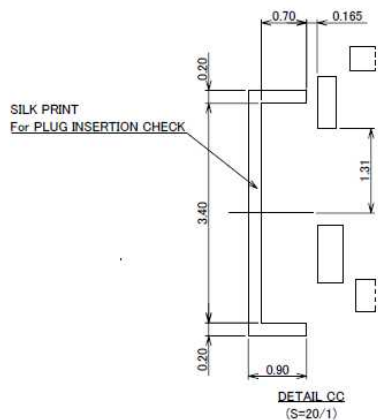
Rev.4

◆ MARK MEANS NOT AVAILABLE.

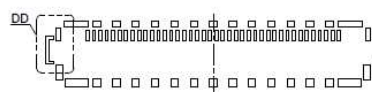
With LOCK COVER



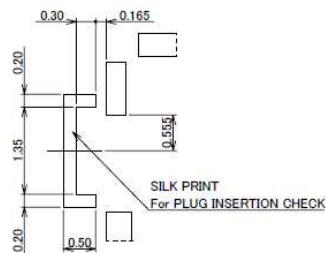
RECOMMENDED SILK PRINT For With LOCK COVER
(S=5/1)



DETAIL CC
(S=20/1)



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

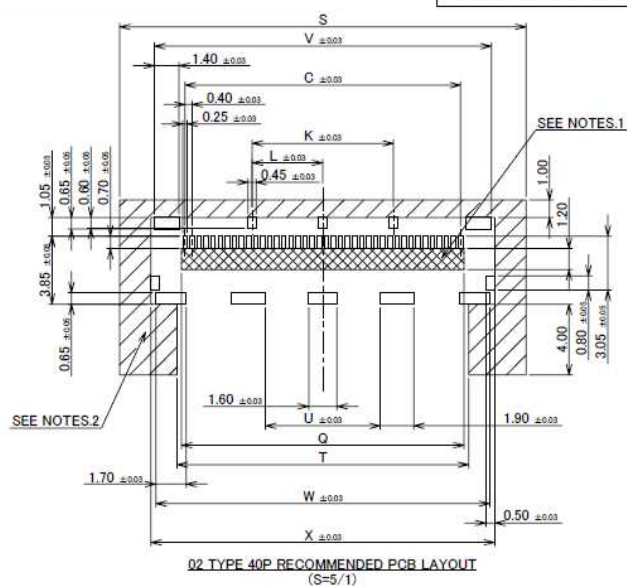


DETAILDD
(S=20/1)

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 30P RECOMMENDED PCB LAYOUT
(S=5/1)

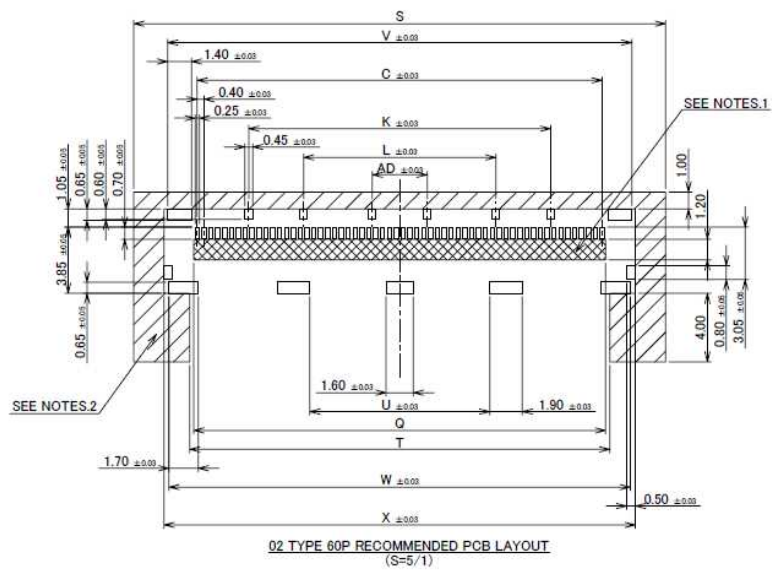
NOTES.
1.SOLDER RESIST SHALL BE COATED IN CASE OF RUNNING TRACES ON THIS
FOOT PRINT PATTERN PROHIBITION AREA.
2.THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.



I-PEX

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



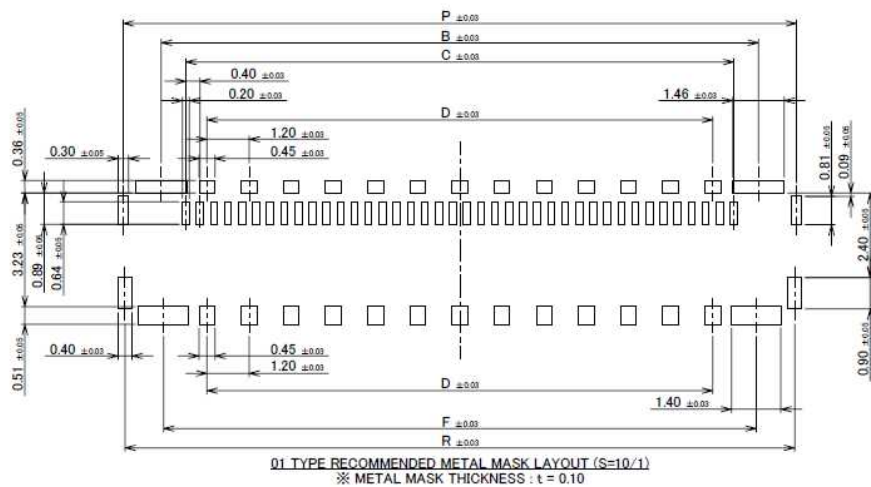
NOTES.
1.SOLDER RESIST SHALL BE COATED IN CASE OF RUNNING TRACES ON THIS FOOT PRINT PATTERN PROHIBITION AREA.
2.THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

Rev.4

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.

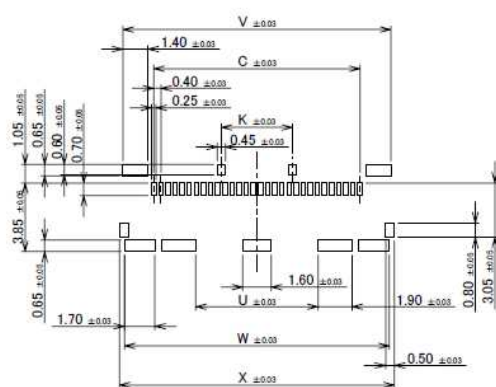
01 TYPE



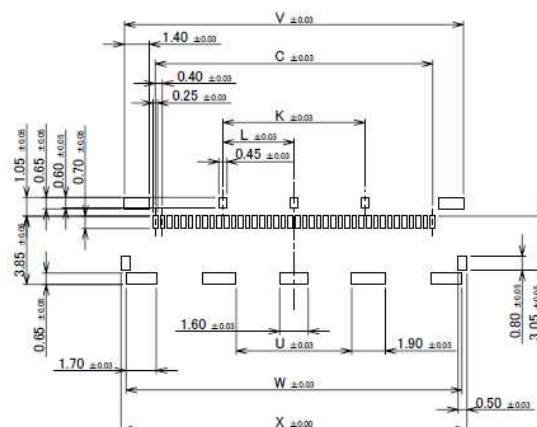
Rev.4

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

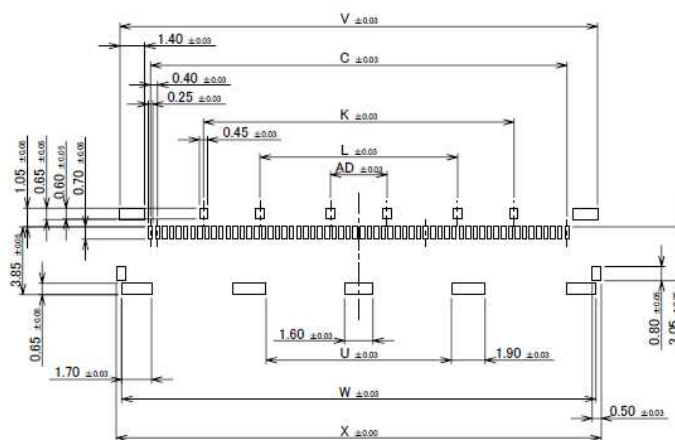


02 TYPE 40P RECOMMENDED METAL MASK LAYOUT (S=5/1)
※ METAL MASK THICKNESS : t = 0.12

Rev.4

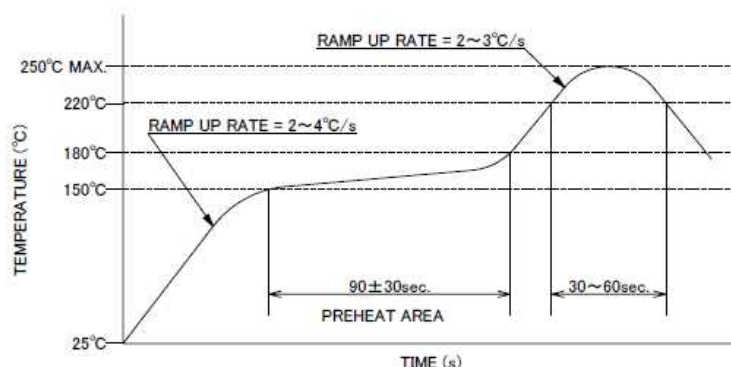
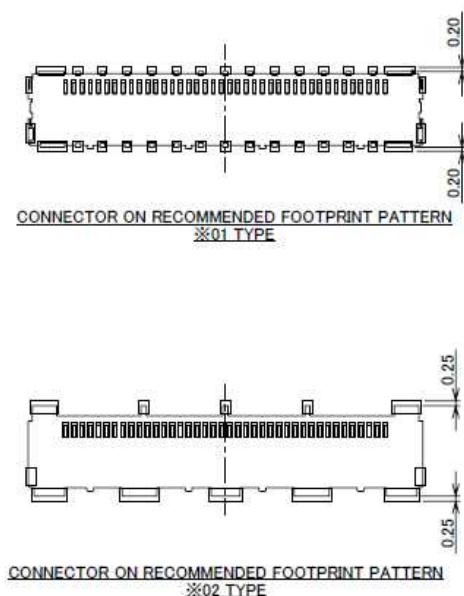
PART No.	Pos.	C	K	L	U	V	W	X	AD
20879-030E-02	30	11.60	4.00	-	6.89	15.07	14.89	15.47	-
20879-040E-02	40	15.60	8.00	4.00	6.50	19.07	18.89	19.47	-
20879-060E-02	60	23.60	17.60	11.20	10.50	27.07	26.89	27.47	3.20

02 TYPE



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

Rev.4



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

Rev.4

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO COAX : AWG# 44 , 42 , 40 , 38 , 36 DISCRETE : AWG# 36 , 34 TWINCOAX : AWG# 40
RATING VOLTAGE	100V AC (PER A CONTACT)
RATING AMPERAGE (FOR CONTACT)	0.1A AC/DC [AWG#44] PER CONTACT/UP TO 40 CONTACTS 0.24A AC/DC [AWG#42] PER CONTACT/UP TO 40 CONTACTS 0.3A AC/DC [AWG#40] PER CONTACT/UP TO 40 CONTACTS 0.5A AC/DC [AWG#38] PER CONTACT/UP TO 19 CONTACTS 0.8A AC/DC [AWG#36] PER CONTACT/UP TO 11 CONTACTS 1.0A AC/DC [AWG#34] PER CONTACT/UP TO 10 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 : 180mohm MAX.(AWG#34) / AFTER TEST : <40mohm 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 : <40mohm 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 MIN. 40P : 4.0N MIN.
CABLE RETENTION FORCE	30P : 14.70N MIN. 60P : 29.40N MIN. 40P : 19.60N MIN.
PRODUCT SPECIFICATION	PRS-2514
TEST REPORT	TR-18067 (RECEPTACLE:20879-0**E-01) TR-18088 (RECEPTACLE:20879-0**E-02)
INSTRUCTION MANUAL	HIM-18033
ASSEMBLY MANUAL	ASM-18003
APPEARANCE CRITERIA No.	QLS-A***

Rev.3



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Contact your sales representative for more detailed information. [www.i-pex.com]