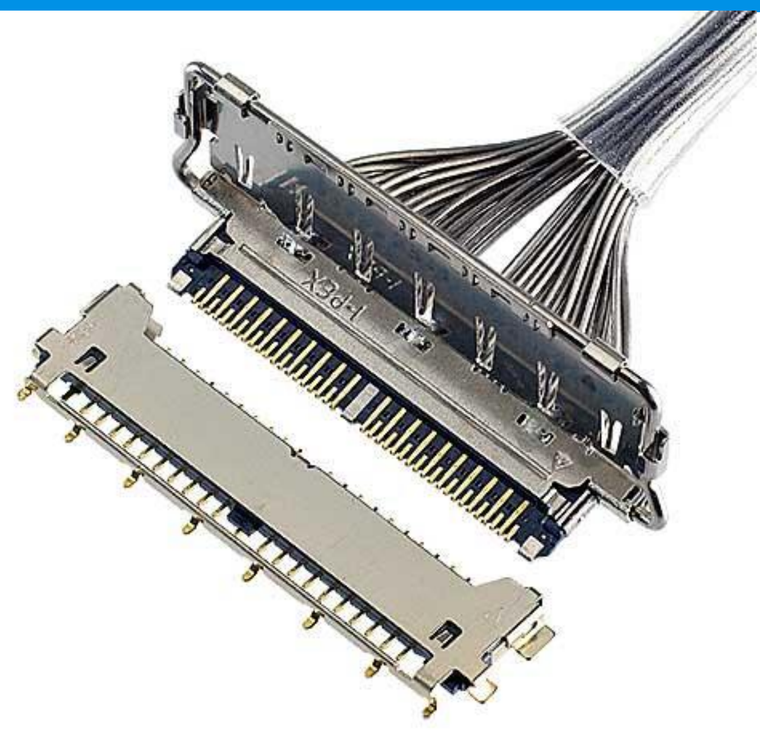
CABLINE®-CX II With Cover



较窄间距（0.25 mm pitch），较低嵌合高度(嵌合高度 = 1.00 mm max.),
EMI屏蔽罩和多点接地设计，机械锁扣，水平插拔款的极细同轴线连接器

Product Specifications:

Mating type		Horizontal
Board Pitch (mm)		0.5
Wiping Length (mm)		0.54
Mated size (mm)	Height	1.00 max. with cover
	Width	Formula: 6.45 + (0.25*?p)
	Depth	5.6
Pin Counts	Range	Up to 40
	Available	40

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):

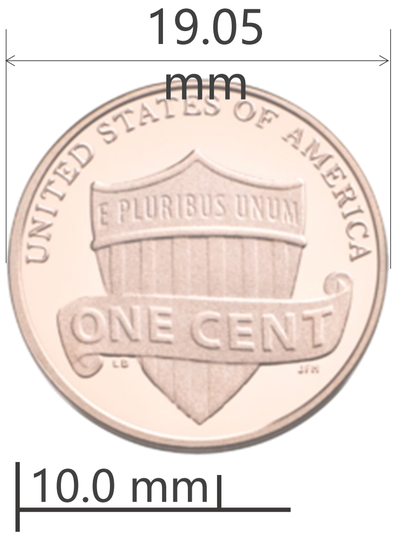
USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps) Gbps

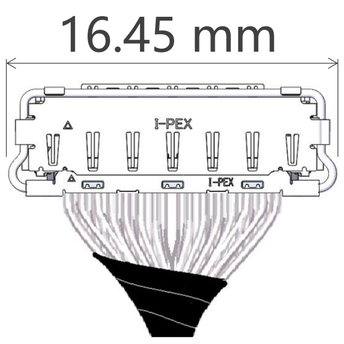
*如您需要了解未列出或不在范围内的Pin数，请咨询我们。
*CABLINE®-CX II 带屏蔽罩的款式 (组合高度最高 0.78 mm) 也可提供。

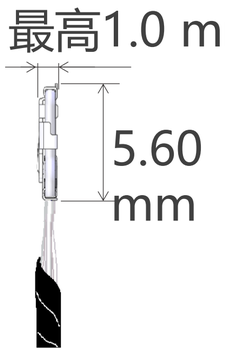
空间有限的小型电子产品的理想选择

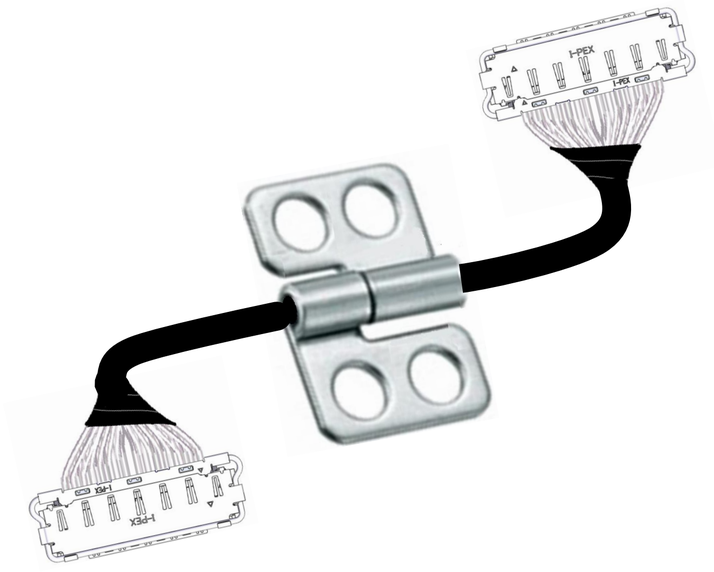
穿越转轴组件- CABLINE®连接器

CABLINE-CX II 40p 连接器的大小比一分钱硬币还小。
组合高度: 最高 1.0 mm



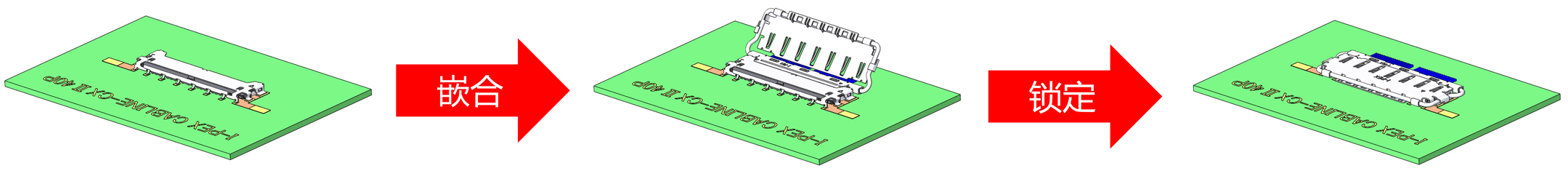




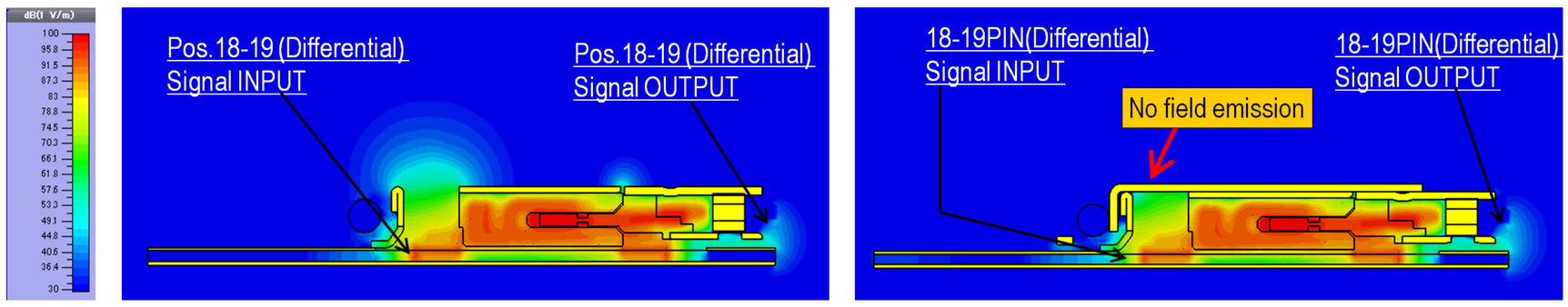


柔软的极细同轴线束适合用于有转轴设计的应用

360° EMI 屏蔽机械式锁扣罩防止 EMI 外泄

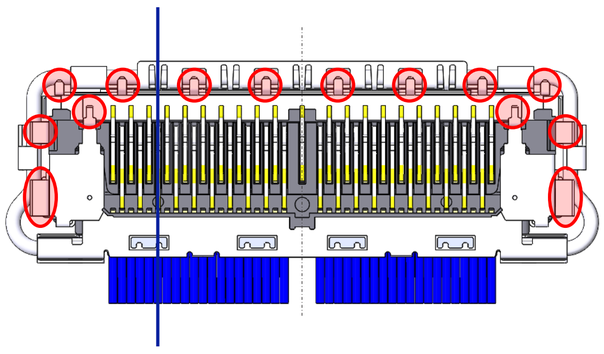


EMI 模拟(2.4 GHz)

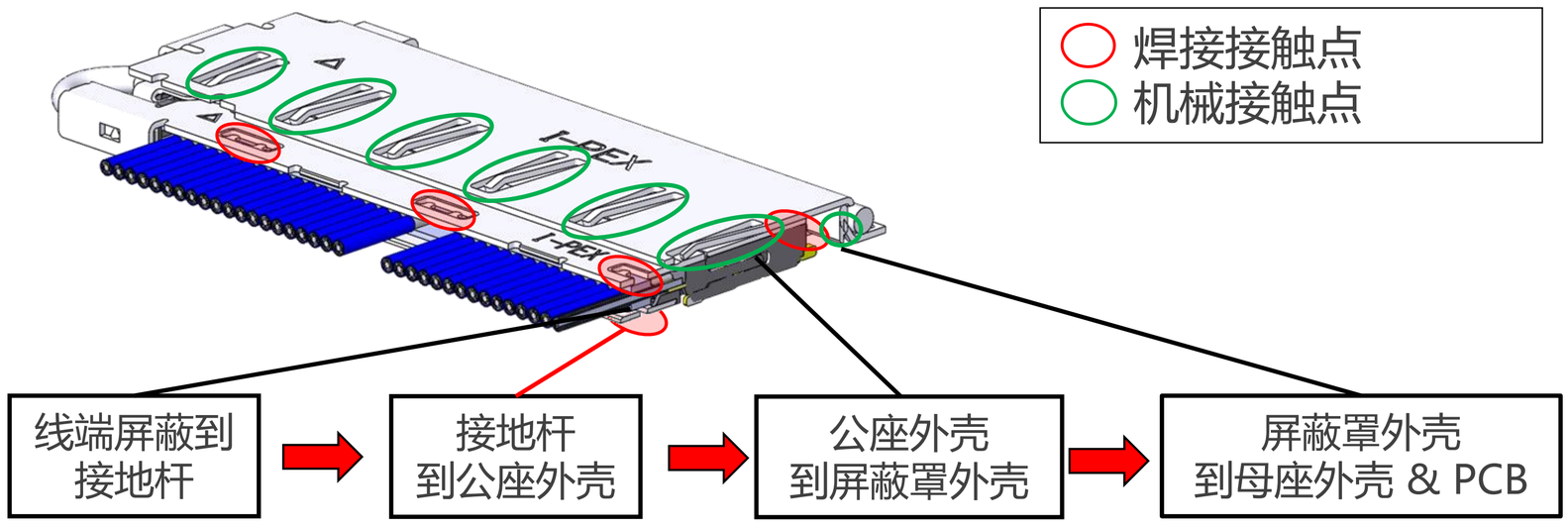


不带 EMI 屏蔽罩　　带 EMI 屏蔽罩

EMI 屏蔽和多点接地设计



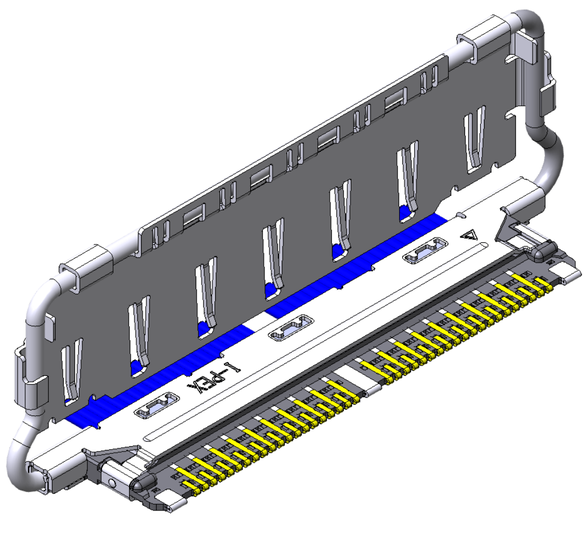
底部图



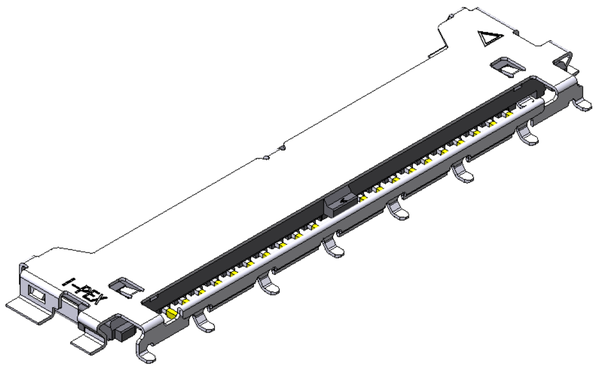
Component Parts Details

Component Parts

Connector parts

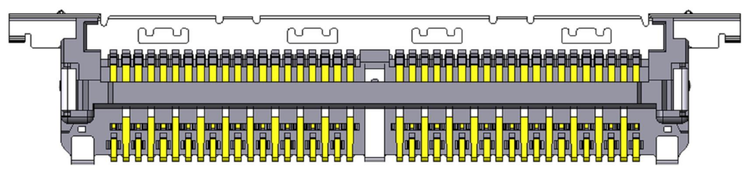


PLUG

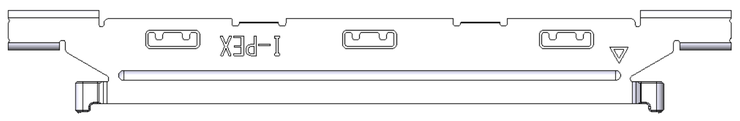


RECEPTACLE

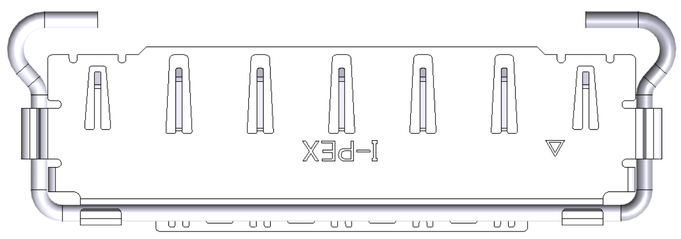
Plug parts



PLUG HOUSING ASSEMBLY



PLUG SHELL-A



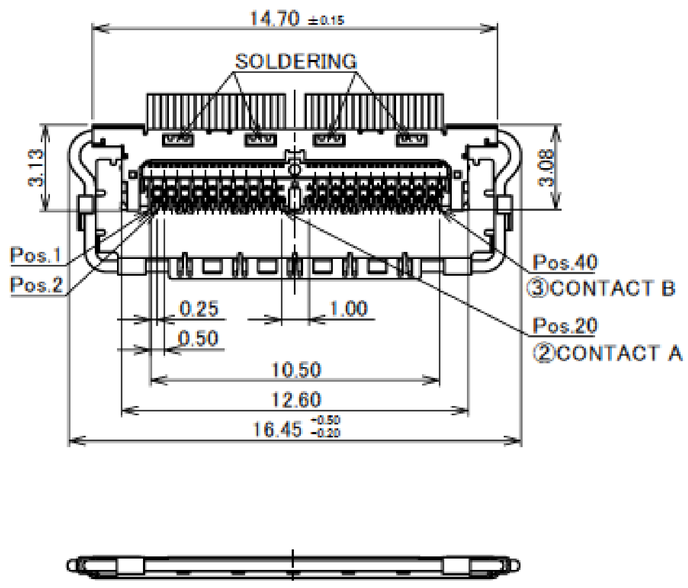
PLUG LOCK BAR ASSEMBLY

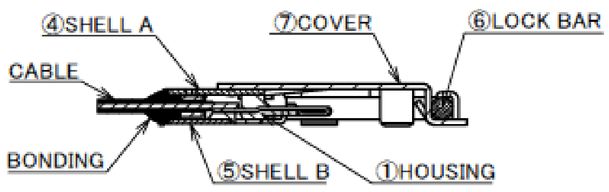
Plug for Cable Assembly

Recommended P/N	20977-040T-01

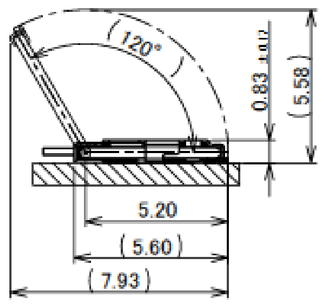
PART NO.	Pos.
20977-040T-01	40

BOTTOM VIEW

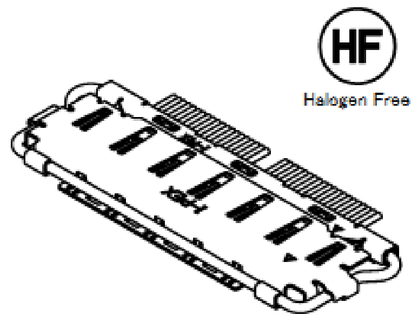




SECT. AA-AA
(S= 10 : 1)

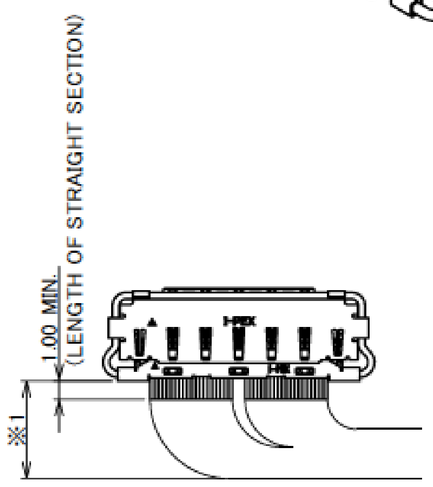


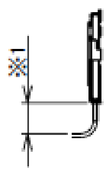
LOCK BAR MOVEMENT



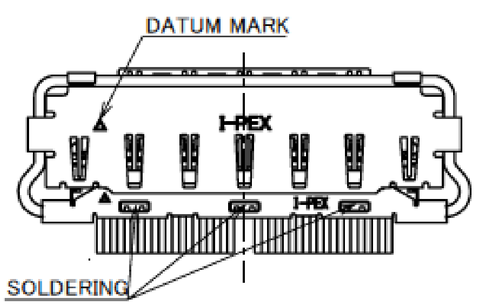
Halogen Free

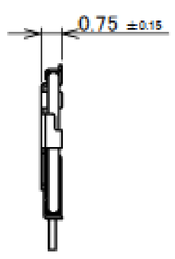
RoHS Compliant

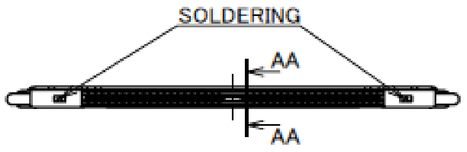




TOP VIEW



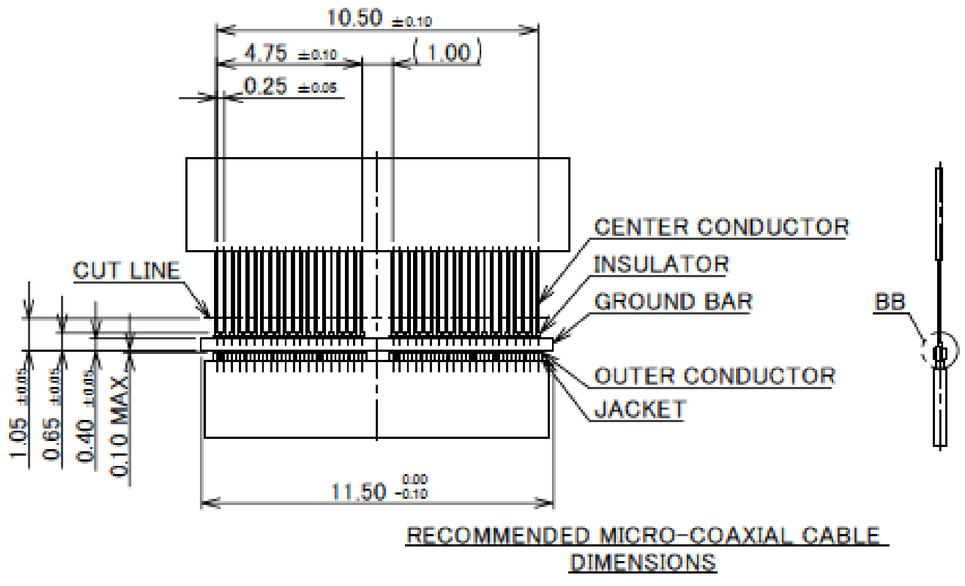




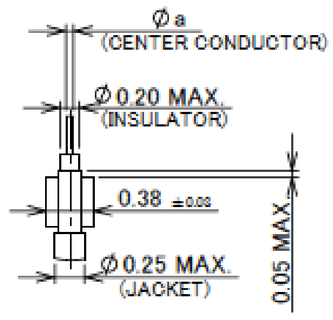
REFERENCE CABLE BENDING DIMENSIONS

※1 : THE BEND DIMENSIONS MAY VARY BASED ON THE SIZE AND QUANTITY OF CABLES.
PLEASE CONFIRM THE MINIMUM BENDING RADIUS WITH I-PEX OR THE HARNESS MANUFACTURER.

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
7	COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN.
6	LOCK BAR	SUS	–
5	SHELL B	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
4	SHELL A	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK



RECOMMENDED MICRO-COAXIAL CABLE
DIMENSIONS



DETAIL BB
(S= 20 : 1)

CHARACTERISTIC IMPEDANCE MATCHING MICRO-COAXIAL CABLE

	a
#44	0.063
#46	0.048

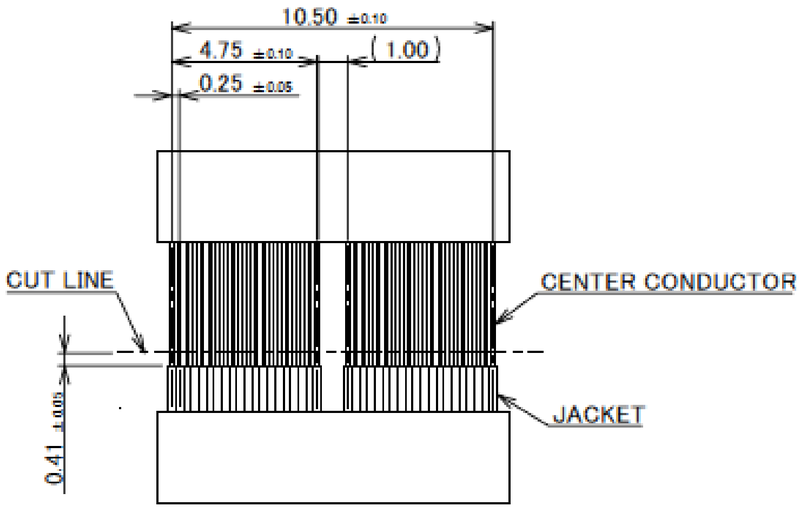
CHARACTERISTIC IMPEDANCE UN-MATCHING MICRO-COAXIAL CABLE

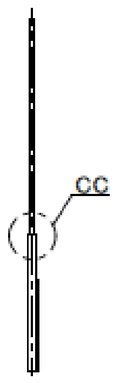
	a
#39	0.102

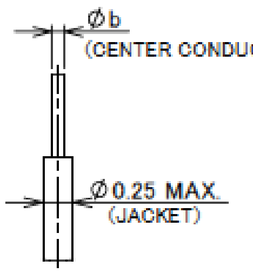
MICRO-COAXIAL CABLE #39 : NOT RECOMMENDED
FOR HIGH SPEED SIGNAL TRANSFER

DISCRETE WIRE DIMENSION

	b
#39	0.102







DETAIL CC
(S= 20 : 1)

RECOMMENDED DISCRETE WIRE DIMENSIONS

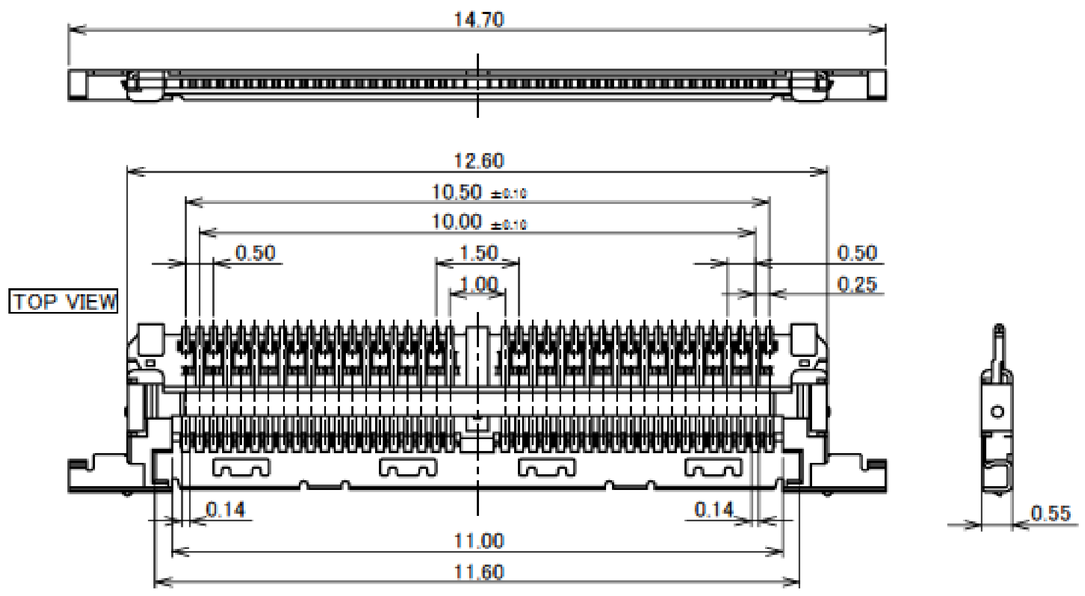
Plug for Cable Assembly

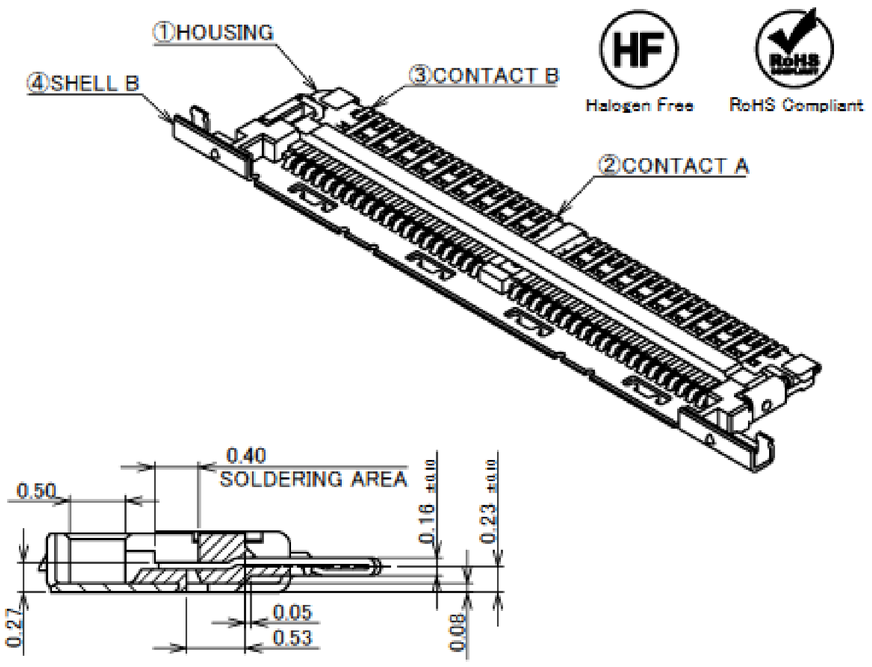
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46,44,39 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	100V AC (PER CONTACT PIN) ※THIS IS THE RATED VOLTAGE OF THE CONNECTOR. PLEASE NOTE THAT THE RATED VOLTAGE MAY VARY IN THE HARNESS DEPENDING ON THE CABLES USED.
RATING AMPERAGE (FOR CONTACT)	0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PER CONTACT PIN/UP TO 8 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233～358K(-40℃～+85℃) (CONTAINING TEMPERATURE RISE BY CURRENT)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : ⊿40mohm MAX. INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : ⊿40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / 20 CYCLES)	40P : 30.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	40P : 4.0N MIN.
CABLE RETENTION FORCE	40P : 19.60N MIN.
PRODUCT SPECIFICATION	PRS-2403
TEST REPORT	TR-17063
INSTRUCTION MANUAL	HIM-17035
ASSEMBLY MANUAL	ASM-17008
APPEARANCE CRITERIA No.	QLS-A***

Rev.4

Plug Housing Assembly

Recommended P/N	20974-040T-01
PART NO.	Pos.
20974-040T-01	40





NOTES.
1. ASSEMBLY
 1-1. 20977-040T-01
  THIS PART IS ASSEMBLED WITH SHELL A (P/N 3655-0401) AND
  LOCK BAR ASS'Y (P/N 20975-040T-01) AFTER SOLDERED THE CABLE.
 1-2. 20978-040T-01
  THIS PART IS ASSEMBLED WITH SHELL A (P/N 3655-0401) AND
  LOCK BAR (P/N 3656-0402) AFTER SOLDERED THE CABLE.

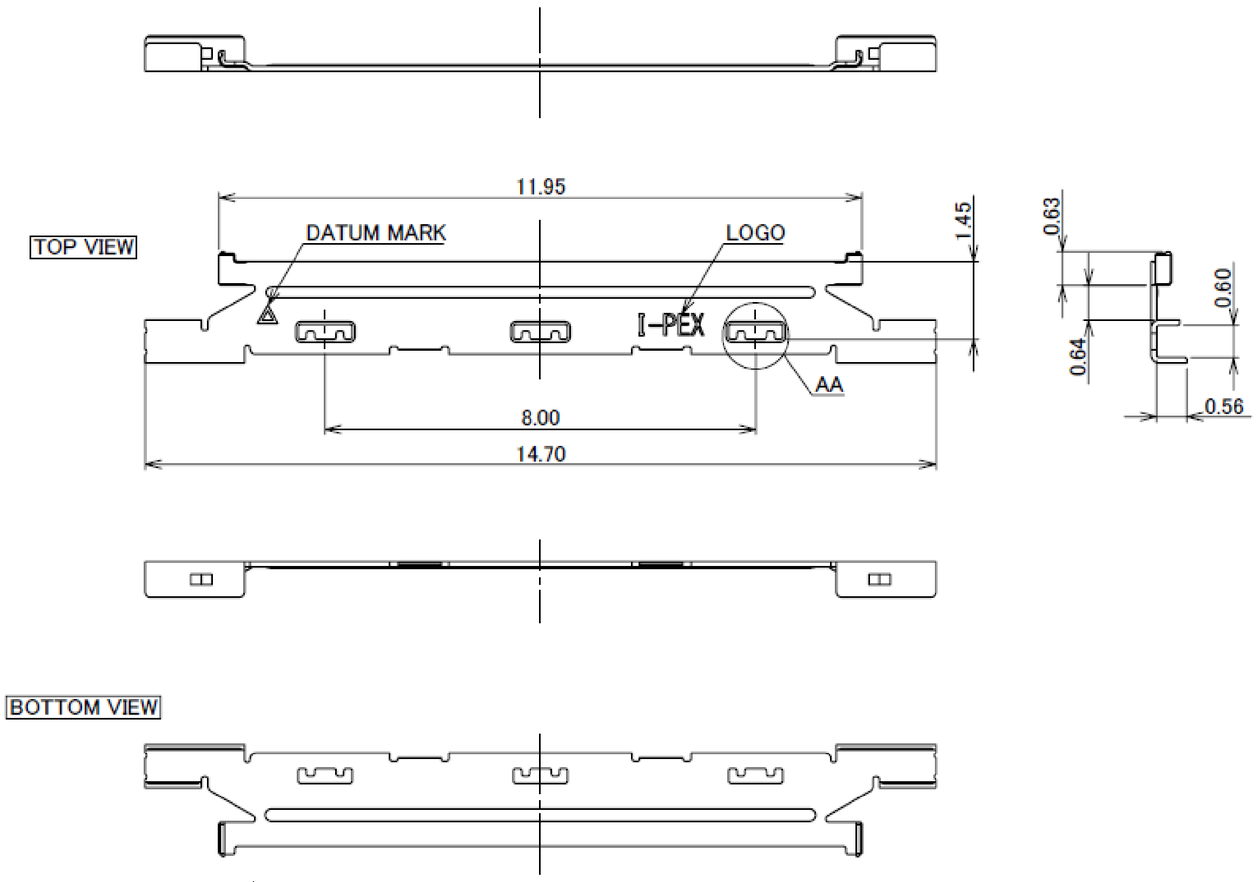
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL B	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	CORSON ALLOY	CONTACT AREA : Au 0.25 μm MIN. OVER Ni 2.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

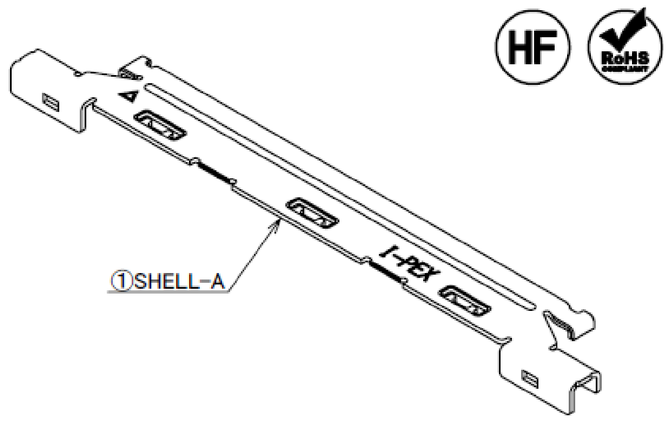
Rev.1

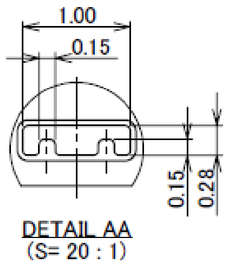
Plug Shell-A

Recommended P/N	3655-0401

PART No.
3655-0401







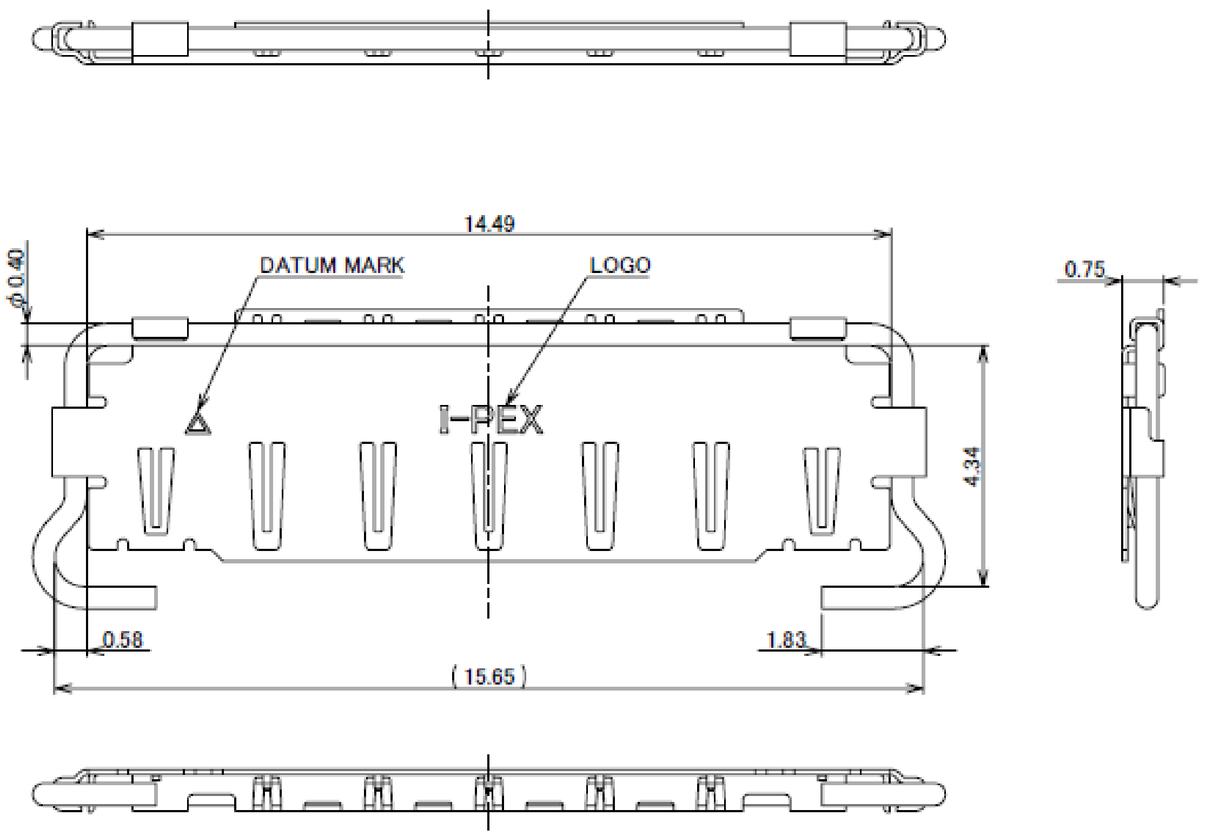
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
1	SHELL-A	SUS	PARTIAL Au 0.003 μm MIN. OVER Ni 1.0 μm MIN.

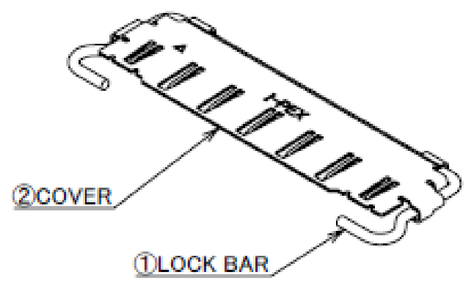
Rev.0

Plug Lock Bar Assembly

Recommended P/N	20975-040T-01

PART No.
20975-040T-01





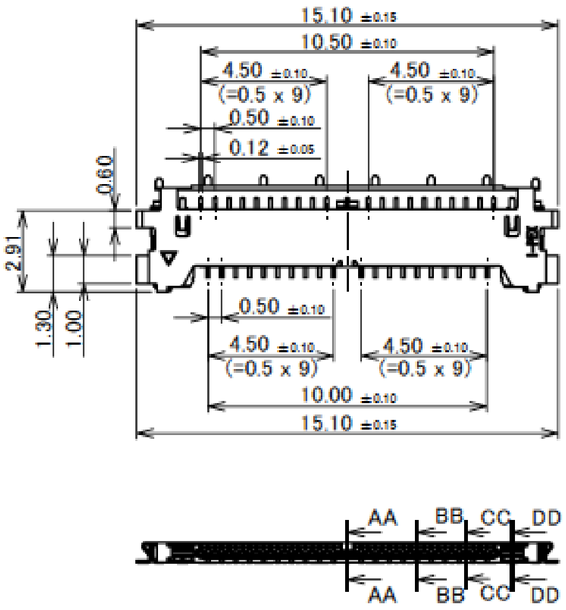
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
2	COVER	PHOSPHOR BRONZE	ALL OVER Ni 1.00 μm MIN.
1	LOCK BAR	SUS ϕ0.40	–

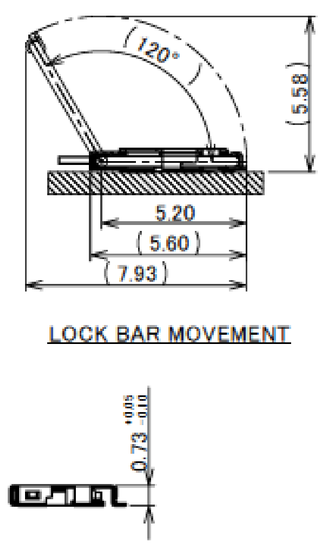
Rev.0

Receptacle Assembly

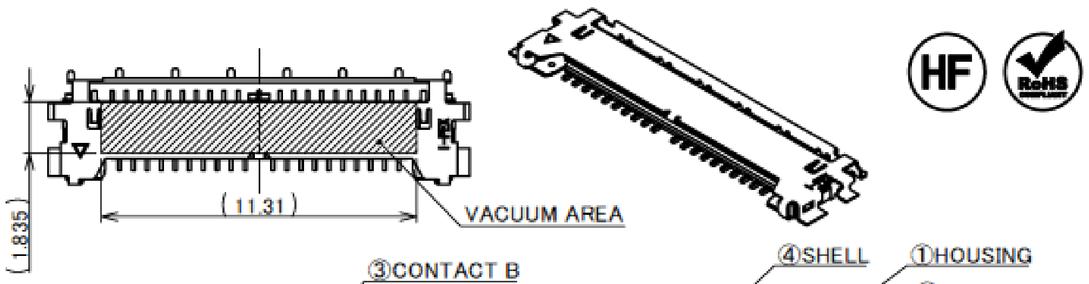
Recommended P/N	20976-040E-01

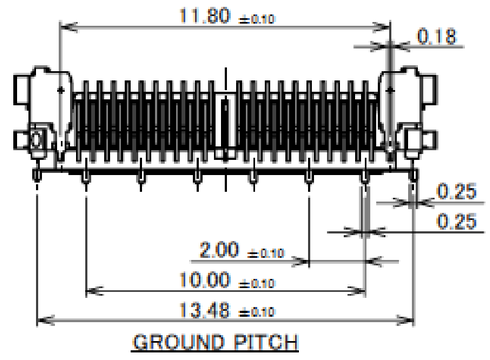
PART NO.	Pos.
20976-040E-01	40



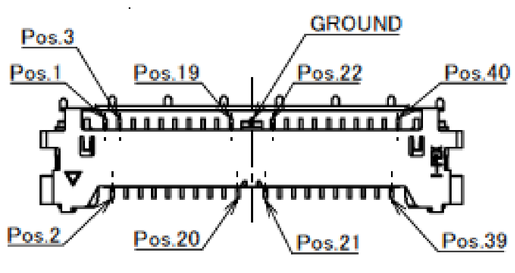


LOCK BAR MOVEMENT

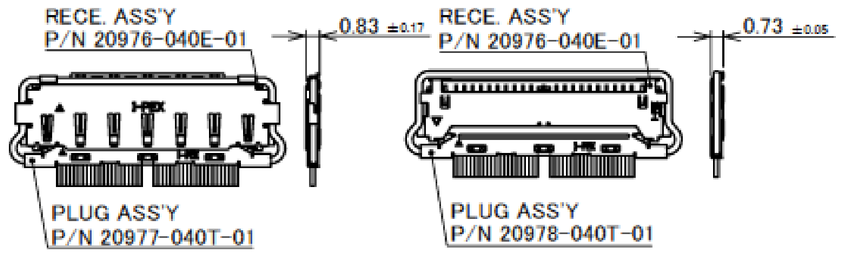


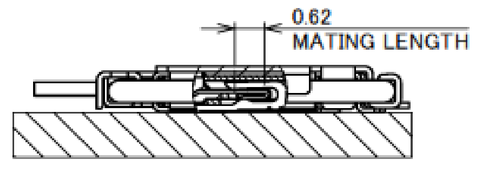


GROUND PITCH



CONTACT ARRANGEMENT

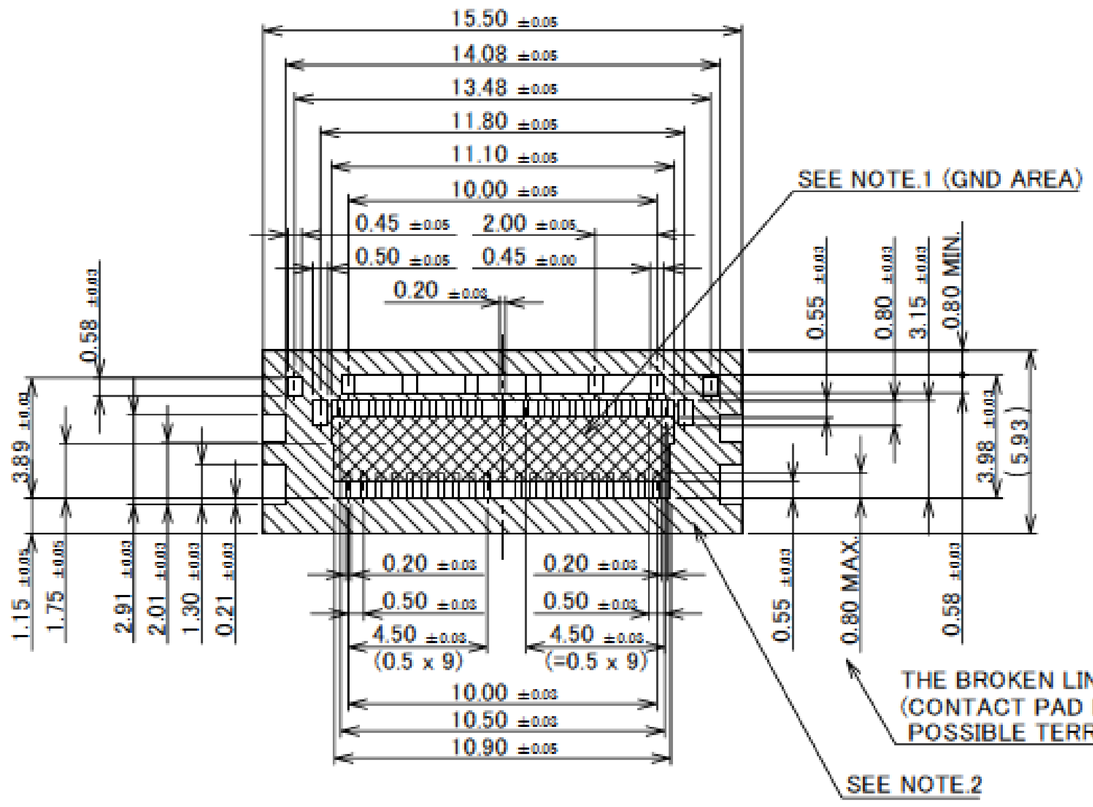




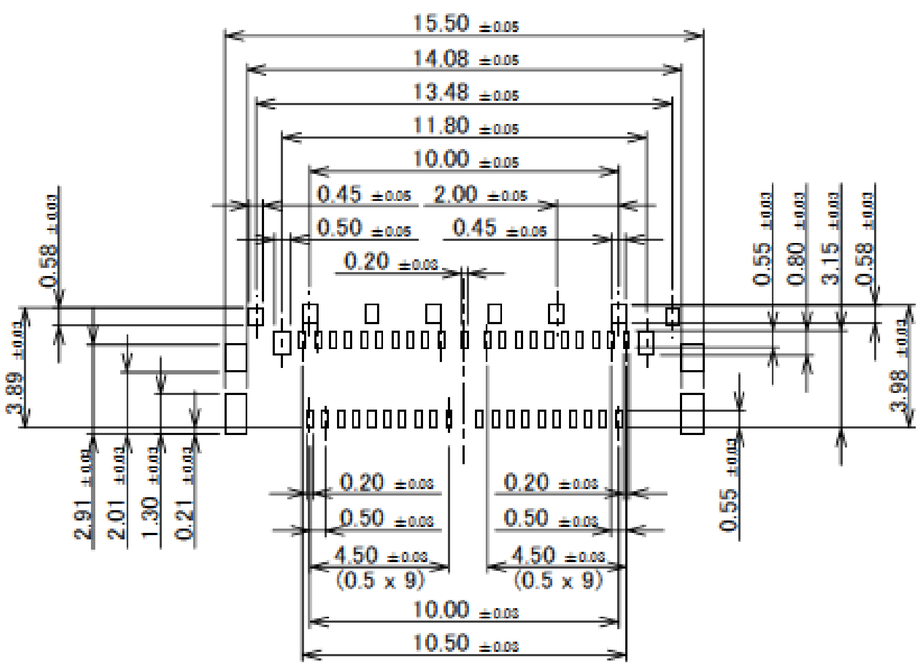
MATING CONDITION

NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS
4	SHELL	PHOSHOR BRONZE	PARTIAL Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
3	CONTACT B	CORSON ALLOY	CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
2	CONTACT A	CORSON ALLOY	CONTACT AREA : Au 0.10 μm MIN. OVER Ni 1.00 μm MIN. SOLDERING AREA : Au 0.03 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK

Rev.3



RECOMMENDED FOOTPRINT PATTERN LAYOUT

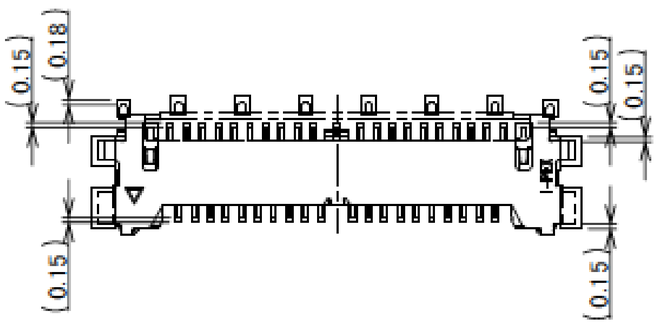


RECOMMENDED METAL MASK LAYOUT
METAL MASK THICKNESS : t=0.12 mm

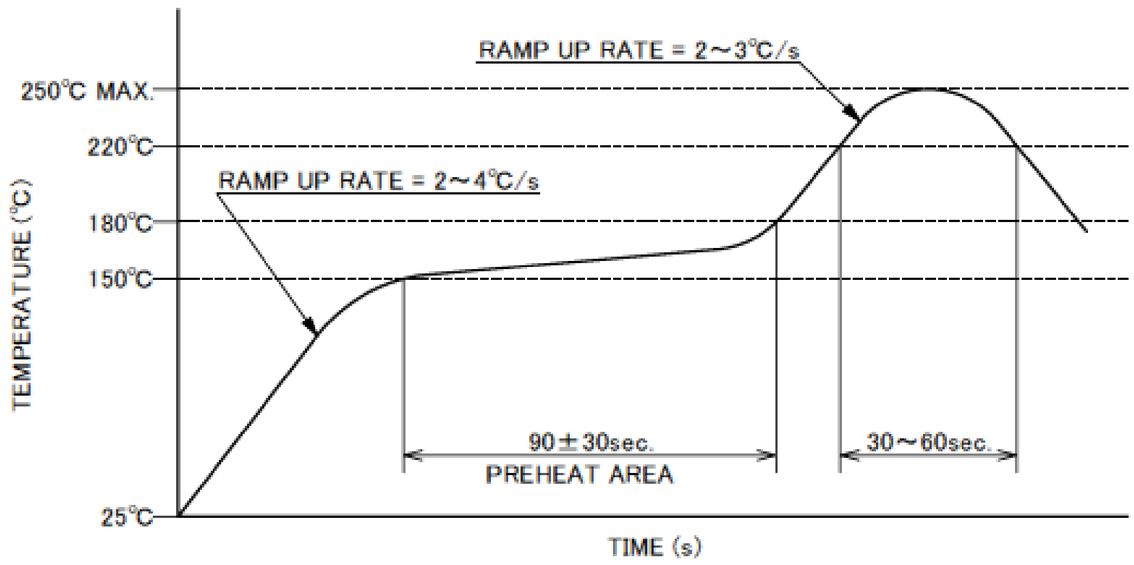
NOTES.
1. SOLDER RESIST MUST BE APPLIED TO THIS AREA
2. DO NOT MOUNT ANOTHER COMPONENTS IN THIS AREA.

Rev.3

Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

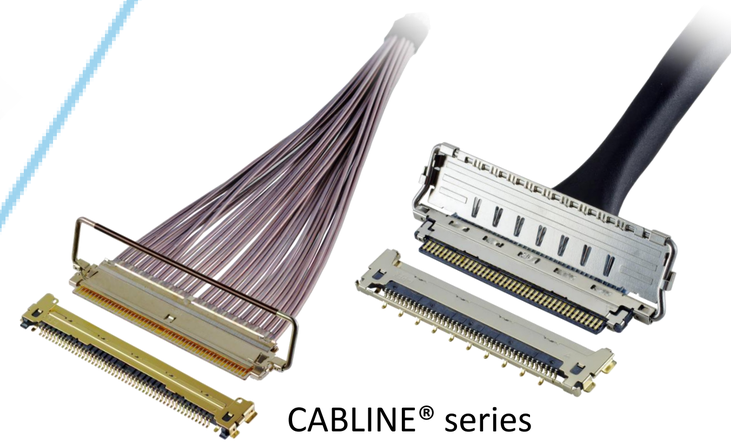
ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46,44 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	100V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.10A AC/DC [AWG#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15A AC/DC [AWG#44] PER CONTACT PIN/UP TO 40 CONTACTS 0.50A AC/DC [AWG#39] PLUG WITH COVER CABLE ASS'Y (P/N : 20977-040T-01) PER CONTACT PIN/UP TO 8 CONTACTS PLUG WITHOUT COVER CABLE ASS'Y (P/N : 20978-040T-01) PER CONTACT PIN/UP TO 7 CONTACTS ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION
OPERATING TEMPERATURE	233～358K(-40℃～+85℃) (CONTAINING TEMPERATURE RISE BY CURRENT)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 388mohm MAX.(AWG#39) / AFTER TEST : ⊿40mohm MAX. INITIAL : 1,080mohm MAX.(AWG#44) INITIAL : 1,830mohm MAX.(AWG#46)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : ⊿40mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / 20 CYCLES)	40P : 30.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	40P : 4.0N MIN.
CABLE RETENTION FORCE	40P : 19.60N MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2403
TEST REPORT	TR-17063
PACKING STANDARD	PST-17126
INSTRUCTION MANUAL	HIM-17035 (WHEN PLUG WITH COVER CABLE ASS'Y IS USED) HIM-17040 (WHEN PLUG WITHOUT COVER CABLE ASS'Y IS USED)
APPEARANCE CRITERIA No.	QLS-A***

Custom Connectors Available

RF Connectors

MHF® series

Micro-Coaxial/Twinax Connectors



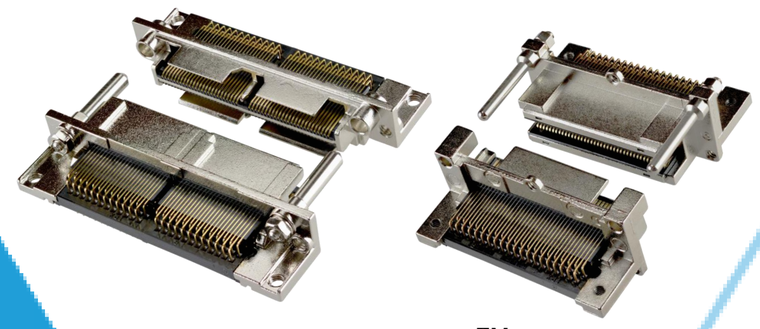
CABLINE® series

Wire-to-Board Connectors/ Terminals

AP series

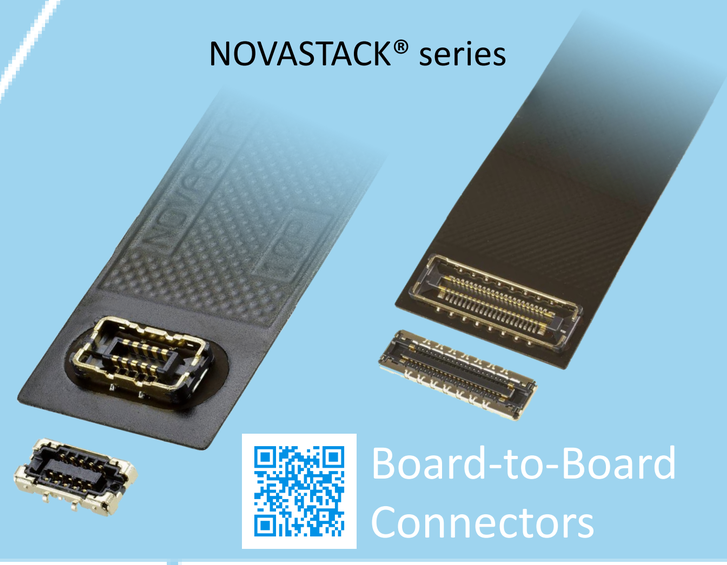
ISH® series

I/O Connectors



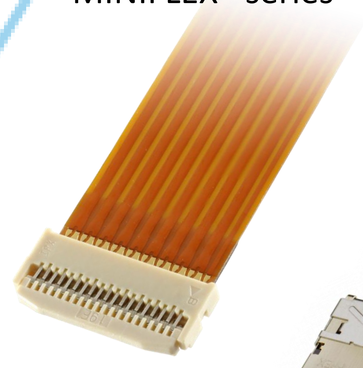
MINIDOCK™ series

NOVASTACK® series

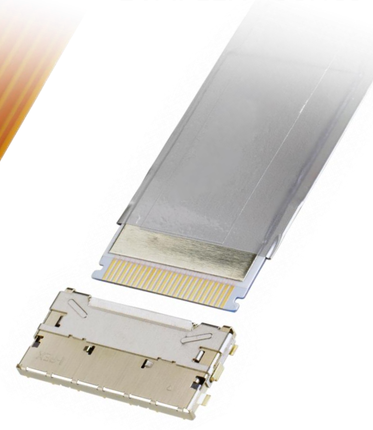


Board-to-Board Connectors

MINIFLEX® series



EVAFLEX® series



FPC/FFC Connectors

Inquiry

Contact your sales representative or more detailed information.

www.i-pex.com

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