

CABLINE®-SS

Narrow depth, robust, right angle vertical mate with max power delivery (AWG#34)
In 0.4 mm pitch size and high temperature/humidity (autoclavable) option

Product Specifications:

Mating type	Right angle vertical	
Board Pitch (mm)	0.4	
Wiping Length (mm)	0.3	
Mated size (mm)	Height	1.65 +/- 0.2
	Width	5.8 + (0.4*?p)
	Depth	3.0
Pin Counts	Range	Up to 50
	Available	10, 14, 20, 30, 32, 35, 40, 50

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

Applicable Cable Size:

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

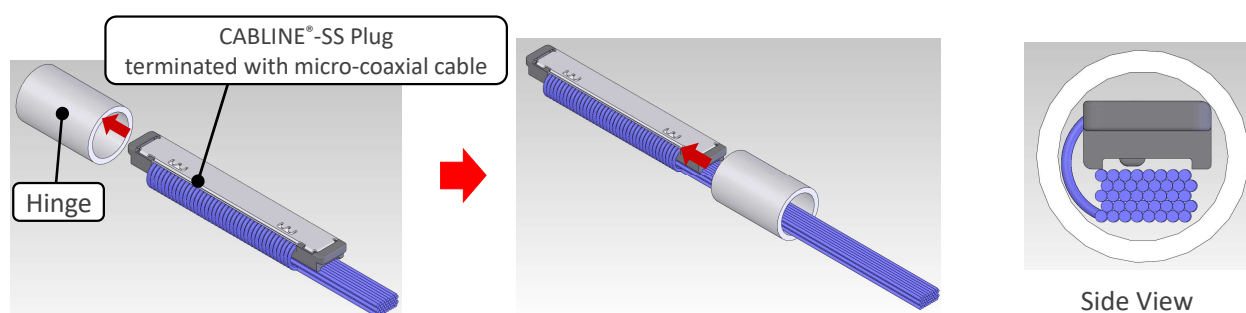
Applicable Standards (Reference Only):

eDP HBR 2 (5.4 Gbps)	USB 3.0 (5 Gbps)
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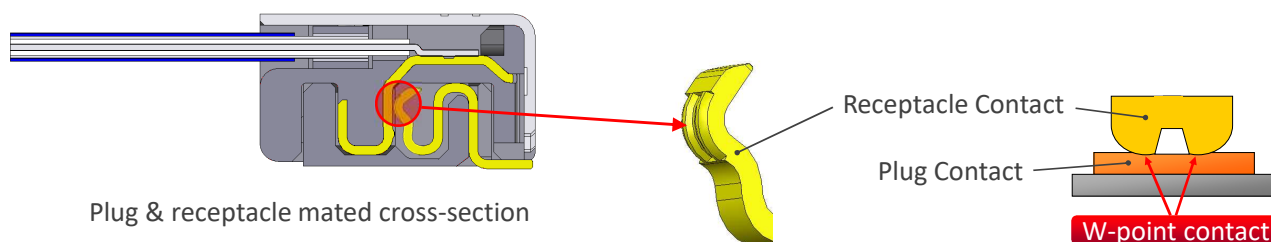


► Narrow depth design with maximum power delivery (AWG#34)

Narrow depth design enables go through small hinge after cable termination.



► Highly reliable contact using I-PEX's unique W-point design



I-PEX prevents poor contact with foreign particles between plug and receptacle contacts. Provides better contact reliability than typical single-point contact designs.

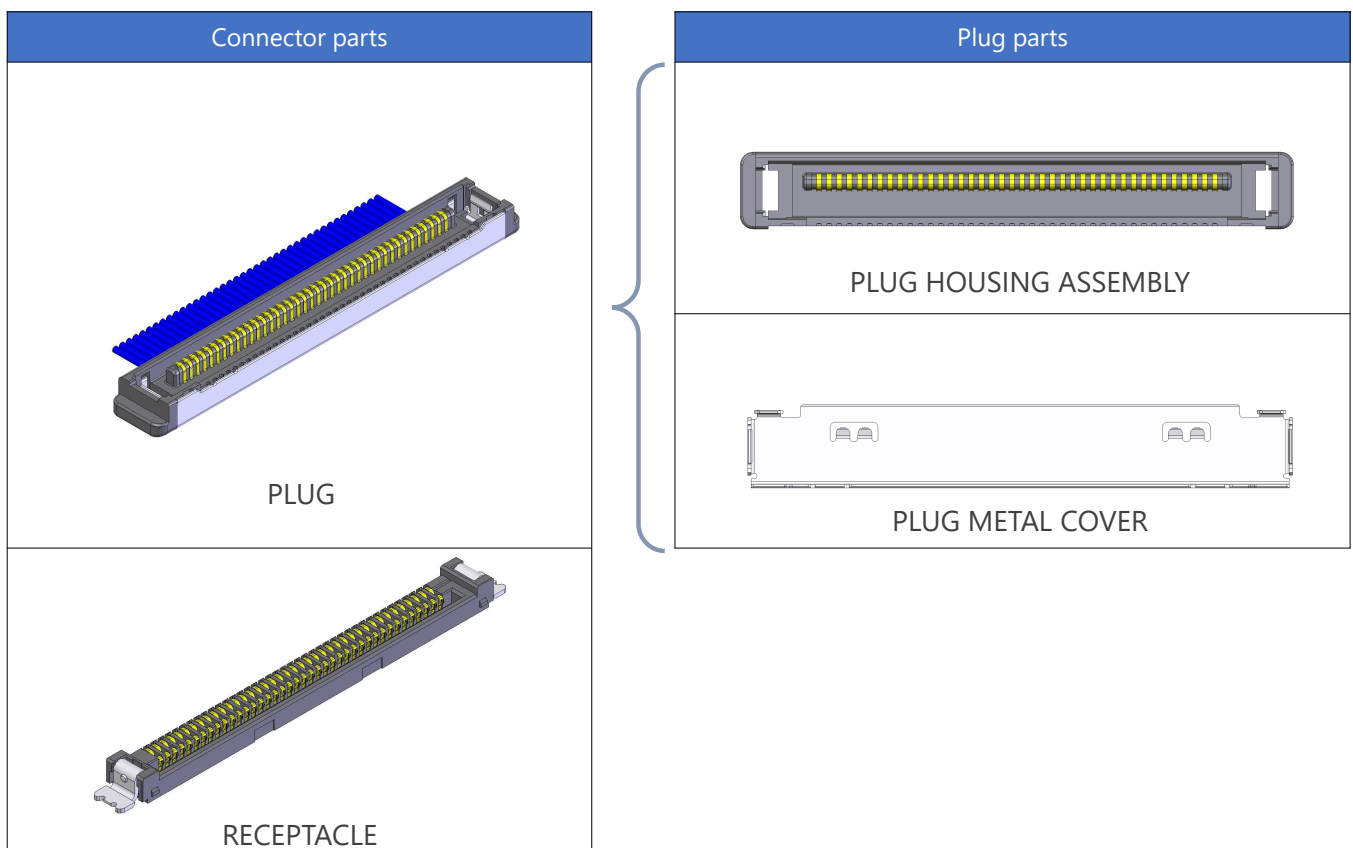
► Durable to high temperature/humidity (autoclavable) option available

Suitable for sterilization environment of medical equipment,
autoclave compatible



Component Parts Details

Component Parts



Plug for Cable Assembly

Recommended P/N	20380-R**T-06	20380-R**T-16 (40P / 50P)
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P/N	CABLE	PLUG HOUSING ASSY : 20373-***T-0*-*							
		METAL COVER : 2182-0**-*							
		10P	14P	20P	30P	32P	35P	40P	50P
20380-***T	Micro-Coax AWG#42		20373-014T-00 2182-014-00	20373-020T-00 2182-020-00	20373-030T-00 2182-030-00	20373-032T-00 2182-032-00	20373-035T-00 2182-035-00	20373-040T-01 2182-040-00	20373-050T-00 2182-050-00
20380-***T-02	Micro-Coax AWG#42						20373-040T-01 2182-035-02		
20380-***T-03	Micro-Coax AWG#40, #36 DISCRETE AWG#36	20373-010T-03 2182-010-03*	20373-014T-03 2182-014-03*	20373-020T-03 2182-020-03*	20373-030T-03 2182-030-03*			20373-040T-03 2182-040-03*	20373-050T-03 2182-050-03*
20380-***T-13								20373-040T-03 2182-040-04	20373-050T-03 2182-050-04
20380-R**T-06	Micro-Coax AWG#40, #36 DISCRETE AWG#36, #34	20373-R10T-06-*	20373-R14T-06-*	20373-R20T-06-*	20373-R30T-06-*	20373-R32T-06-*	20373-R35T-06-*	20373-R40T-06-*	20373-R50T-06-*
20380-R**T-16								20373-R40T-06-*	20373-R50T-06-*
								2182-040-04	2182-050-04

THE COMPOSITION OF PART No.
PART No. 20380-***T-***

NOTING : [NOMAL TYPE]
METAL COVER FINISH : Sn REFLOW 1.00 μ m MIN.
MATING RECEPTACLE Part No. : 20374-0**E-*** (EXCLUDE 20374-0**E-4*) (**POS)

02 : [METAL COVER Au TYPE]
METAL COVER FINISH : Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN. (35P/40P ONLY)
MATING RECEPTACLE Part No. : 20374-0**E-4* (**POS)

03.13 : [CENTER CONDUCTOR #36/#40TYPE]
METAL COVER FINISH : Sn REFLOW 1.00 μ m MIN.
MATING RECEPTACLE Part No. : 20374-0**E-*** or 20374-R**E-*** (EXCLUDE 20374-0**E-4*) (**POS)

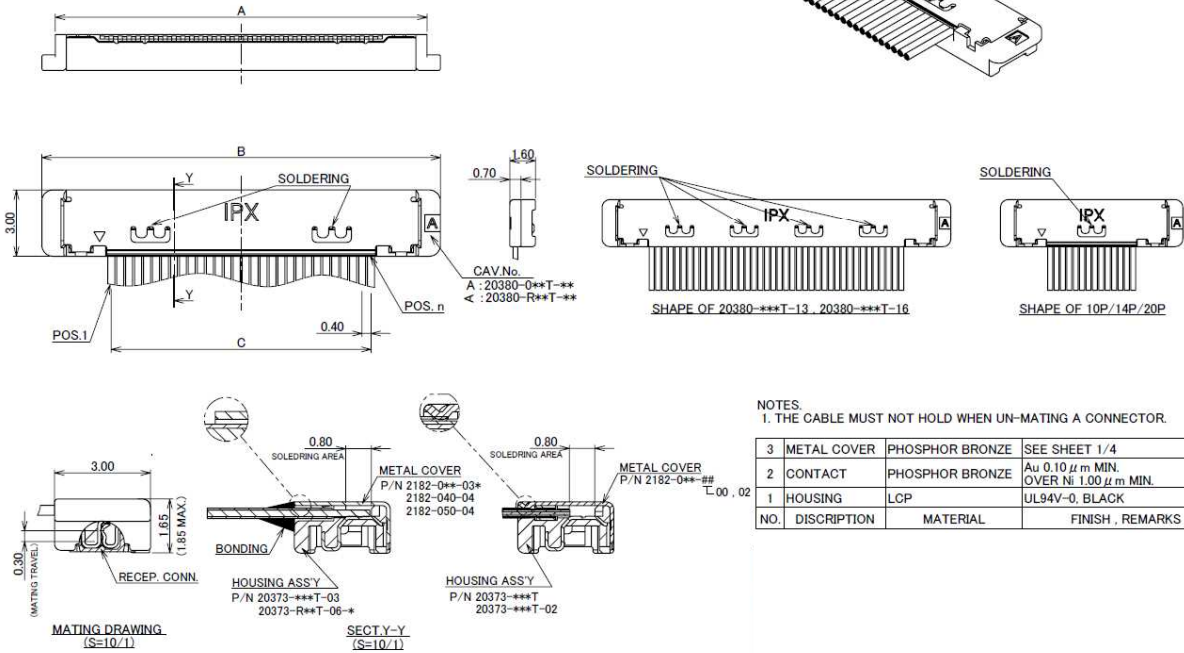
06.16 : [CENTER CONDUCTOR #34/#36/#40TYPE]
METAL COVER FINISH : Sn REFLOW 1.00 μ m MIN.
MATING RECEPTACLE Part No. : 20374-0**E-*** (EXCLUDE 20374-0**E-4*) (**POS)

Pos. 10:10P 14:14P 20:20P 30:30P 32:32P 35:35P 40:40P 50:50P

HOUSING MATERIAL
0 : LCP, UL94V-0, BLACK
PLUG HOUSING ASSEMBLY Part No. : 20373-0**T-00 or 20373-040T-01 or 20373-0**T-03 (**POS)
R : LCP, UL94V-0, BLACK (RED PHOSPHORUS IS NOT USED)
PLUG HOUSING ASSEMBLY Part No. : 20373-R**T-00 or 20373-R**T-03 or 20373-R**T-06-*** (**POS)

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Recommended P/N			20380-R**T-06		20380-R**T-16 (40P / 50P)	
PART NO.	POS.	MATING RECEPT P/N	A	B	C	
20380-10T-***	10	20374-010E-***	8.6	9.8	3.6	
20380-14T-***	14	20374-014E-***	10.2	11.4	4.2	
20380-20T-***	20	20374-020E-***	12.6	13.8	7.6	
20380-30T-***	30	20374-030E-***	16.6	17.8	11.6	
20380-32T-***	32	20374-032E-***	17.4	18.6	12.4	
20380-35T-***	35	20374-035E-***	18.6	19.8	13.6	
20380-40T-***	40	20374-040E-***	20.6	21.8	15.6	
20380-50T-***	50	20374-050E-***	24.6	25.8	19.6	



Rev.22

Plug Housing Assembly

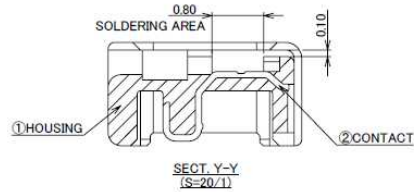
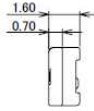
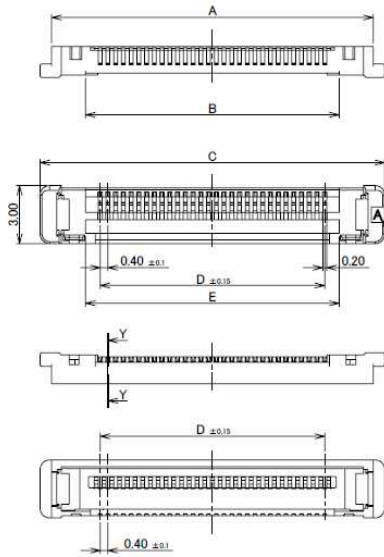
Recommended P/N		20373-R**T-06				
PART NO.	Pos.	A	B	C	D	E
20373-30T-00	30	16.60	13.10	17.80	11.60	13.10

THE COMPOSITION OF PART No.
PART No. 20373-***T-0*

Pos.
14 : 14P 20 : 20P 32 : 32P
35 : 35P 40 : 40P 50 : 50P

HOUSING MATERIAL
O : LCP, UL94V-0, BLACK
R : LCP, UL94V-0, BLACK
(RED PHOSPHORUS IS NOT USED/20P 32P 35P ONLY)

SHAPE OF 30P
FOR AWG #42



NOTES
2. THIS PART IS ASSEMBLED WITH METAL COVER(P/N 2182-0**~0*)
AFTER SOLDERED THE COAXIAL CABLE, AND IT BECOMES
P/N 20380-***T-**

2	CONTACT	PHOSPHOR BRONZE	Au 0.10 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

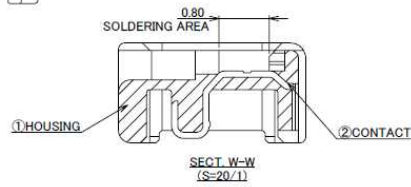
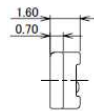
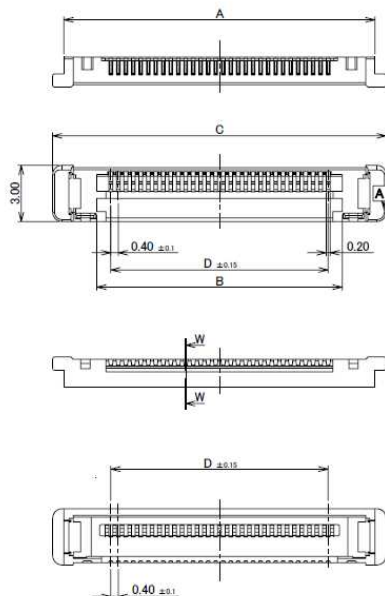
Rev.19

Recommended P/N		20373-R**T-06			
PART NO.	Pos.	A	B	C	D
20373-10T-03	10	8.60	5.10	9.80	3.60
20373-14T-03	14	10.20	6.70	11.40	5.20
20373-20T-03	20	12.60	9.10	13.80	7.60
20373-30T-03	30	16.60	13.10	17.80	11.60
20373-40T-03	40	20.60	17.10	21.80	15.60
20373-50T-03	50	24.60	21.10	25.80	19.60

THE COMPOSITION OF PART No.
PART No. 20373-***T-03

Pos.
10 : 10P, 14 : 14P, 20 : 20P, 30 : 30P, 40 : 40P, 50 : 50P

HOUSING MATERIAL
O : LCP, UL94V-0, BLACK
R : LCP, UL94V-0, BLACK
(RED PHOSPHORUS IS NOT USED)



NOTES
3. THIS PART IS ASSEMBLED WITH METAL COVER(P/N 2182-0**~0*)
AFTER SOLDERED THE COAXIAL CABLE, AND IT BECOMES
P/N 20380-***T-03

2	CONTACT	PHOSPHOR BRONZE	Au 0.10 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

Rev.19

Plug Housing Assembly

Recommended P/N		20373-R**T-06			
PART NO.	Pos.	A	B	C	D
20373-R10T-06**	10	8.60	5.10	9.80	3.60
20373-R14T-06**	14	10.20	6.70	11.40	5.20
20373-R20T-06**	20	12.80	9.10	13.80	7.60
20373-R30T-06**	30	16.60	13.10	17.80	11.60
20373-R32T-06**	32	17.40	13.90	18.60	12.40
20373-R35T-06**	35	18.90	15.10	19.80	13.60
20373-R40T-06**	40	20.80	17.10	21.80	15.80
20373-R50T-06**	50	24.60	21.10	25.80	19.80

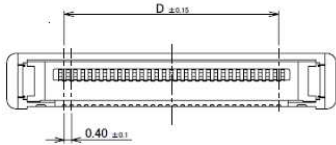
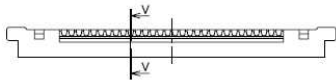
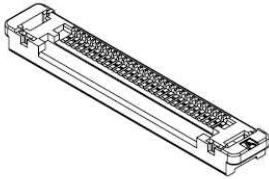
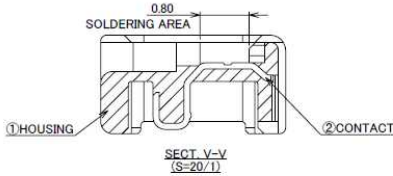
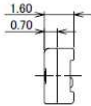
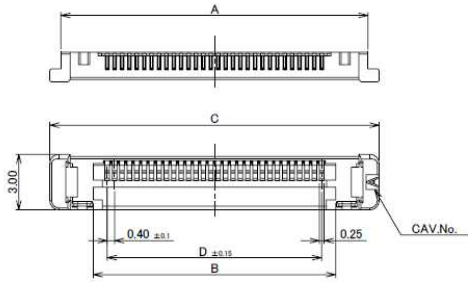
THE COMPOSITION OF PART No.
PART No. 20373-R**T-06**

FOR AWG #34,#36,#40



NOTHING: Minimum order quantity is 3200pcs.
S: Minimum order quantity is 480pcs.

Pos.
10 : 10P, 14 : 14P, 20 : 20P, 30 : 30P,
32 : 32P, 35 : 35P, 40 : 40P, 50 : 50P



NOTES
4. THIS PART IS ASSEMBLED WITH METAL COVER (P/N 2182-0**03)
AFTER SOLDERED CABLE, AND IT BECOMES P/N 20380-R**T-06

2	CONTACT	PHOSPHOR BRONZE	Au 0.10 μ m MIN. OVER Ni 1.00 μ m MIN.
1	HOUSING	LCP (RED PHOSPHORUS IS NOT USED)	UL94V-0 BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.19

Plug Metal Cover

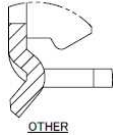
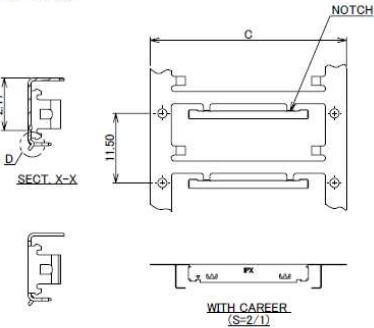
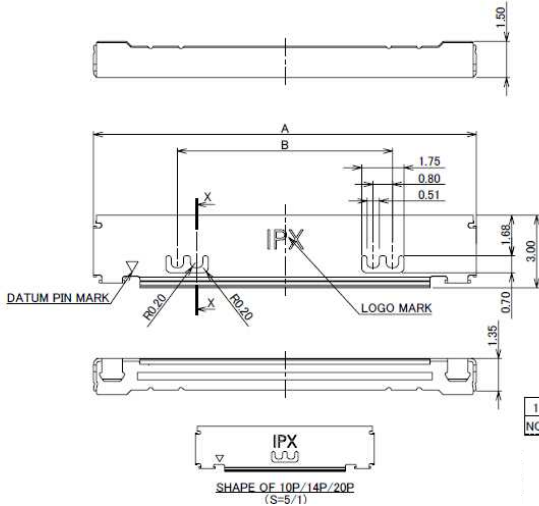
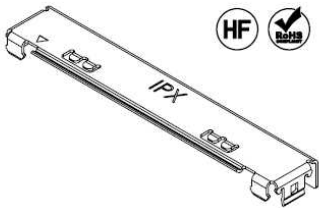
Recommended P/N		2182-0**03		2182-0**04 (40P / 50P)	
PART NO.	POS.	A	B	C	
2182-010-03**	10	7.84	-	24.50	
2182-014-03**	14	9.44	-	24.50	
2182-020-03**	20	11.84	-	24.50	
2182-030-03**	30	15.84	8.90	28.50	
2182-032-03**	32	16.64	9.70	29.30	
2182-035-03**	35	17.84	10.90	30.50	
2182-040-03**	40	19.84	12.90	32.50	
2182-050-03**	50	23.84	16.90	36.50	

NOTES.1
THE COMPOSITION OF PART No.
PART No. 2182-0**03**

NOTHING: Minimum order quantity is 4,000 pcs.
S: Minimum order quantity is 480 pcs.
(2182-0**03 ONLY)

0: Sn REFLOW 1.00 μ m MIN.
2: Au 0.05 μ m MIN. OVER Ni 1.00 μ m MIN. (35P/40P ONLY)
3: Sn REFLOW 1.00 μ m MIN. (FOR AWG #34, #36, #40)
4: Sn REFLOW 1.00 μ m MIN. FOUR SOLDER AREAS(40P/50P ONLY)

Pos.
10 : 10P, 14 : 14P, 20 : 20P, 30 : 30P,
32 : 32P, 35 : 35P, 40 : 40P, 50 : 50P



2182-0**03**
(FOR AWG #34, #36, #40)
DETAIL D
(S=50/1)

1	METAL COVER	PHOSPHOR BRONZE	SEE ABOVE NOTES.1
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.17

Plug Metal Cover

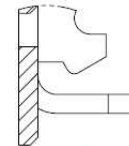
Recommended P/N		2182-0**-03		2182-0**-04 (40P / 50P)	
PART NO.	POS.	A	B	C	D
2182-040-04	40	19.84	12.90	32.50	4.84
2182-050-04	50	23.84	16.90	36.50	6.17

NOTES:
THE COMPOSITION OF PART No.

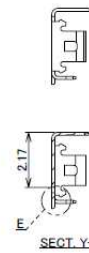
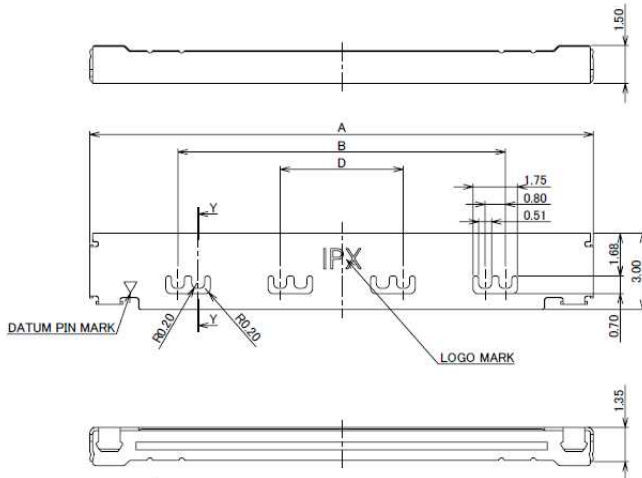
NOTES:
2. THE COMPOSITION OF PART No.
PART No. 2182-0**04

4: Sn REFLOW 1.00 μ m MIN.
FOUR SOLDER AREAS (40P/50P ONLY)

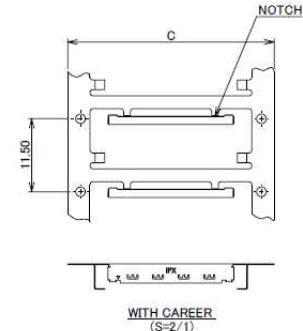
Pos:
40 : 40P 50 : 50P



DETAIL E
(S=50/1)



SECT Y-Y



WITH CAREER
(S=2/1)

1	METAL COVER	PHOSPHOR BRONZE	SEE ABOVE NOTES 2
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Rev.17

Receptacle Assembly

Recommended P/N		20374-R**E-31
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PART NO.	POS.	A	B	C	D	E
20374-10E-31	10	3.60	7.60	9.60	7.20	5.50
20374-14E-31	14	5.20	9.20	11.20	8.80	5.50
20374-20E-31	20	7.80	11.80	13.80	11.20	8.00
20374-30E-31	30	11.60	15.60	17.60	15.20	8.00
20374-32E-31	32	12.40	16.40	18.40	16.00	8.00
20374-35E-31	35	13.60	17.60	19.60	17.20	8.00
20374-40E-31	40	15.60	19.60	21.60	19.20	8.00
20374-50E-31	50	19.60	23.60	25.60	23.20	8.00

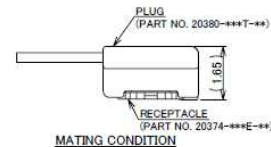
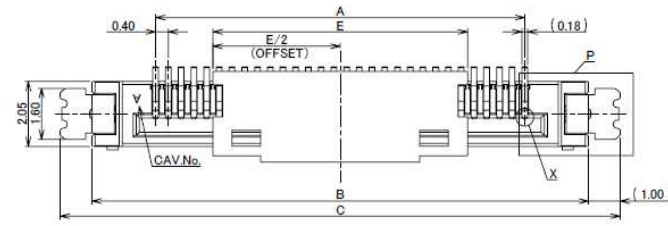
THE COMPOSITION OF PART No.
PART No. 20374-***E-31

SEE TABLE 1

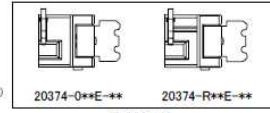
Pos:
HOUSING MATERIAL
D: LCP UL94V-0 BLACK
R: LCP UL94V-0 BLACK
(RED PHOSPHORUS IS NOT USED)

TABLE 1

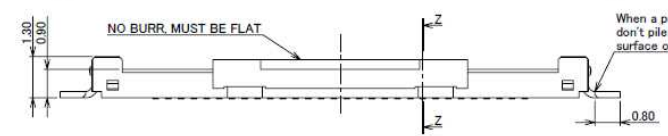
PART NO.	POS.	CONTACT TYPE	VACUUM CLIP	CONTACT FINISH	FIXING METAL FINISH
20374-0**E-31	30, 40, 50	ONE POINT CONTACT	WITH	Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	
20374-0**E-11	30, 32, 40, 50	ONE POINT CONTACT	WITH	CONTACT AREA Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN. Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	
20374-0**E-20	14, 30	TWO POINT CONTACT	WITHOUT	Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	Sn/Cu (0.2) (LUSTRE) 0.05 μ m MIN. COVER NO 1.00 μ m MIN.
20374-0**E-21	20, 30, 32, 40	TWO POINT CONTACT	WITHOUT	CONTACT AREA Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN. Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	
20374-0**E-30	ALL	TWO POINT CONTACT	WITH	CONTACT AREA Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN. Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	
20374-0**E-31	35, 40	TWO POINT CONTACT	WITH	CONTACT AREA Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN. Au 0.1 μ m MIN. COVER NO 1.00 μ m MIN.	Au 0.05 μ m MIN. COVER NO 1.00 μ m MIN.



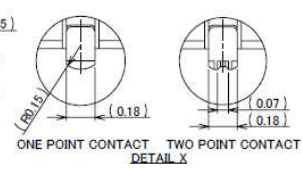
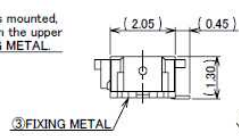
MATING CONDITION



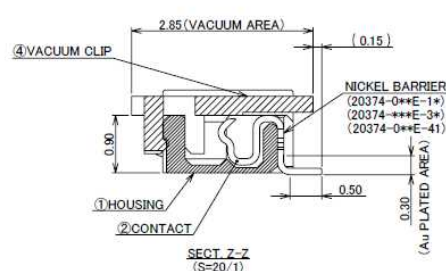
DETAIL P



When a product is mounted,
don't pile solder in the upper
surface of FIXING METAL.



ONE POINT CONTACT TWO POINT CONTACT
DETAIL X



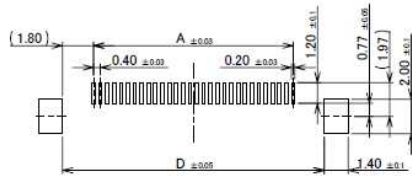
SECT Z-Z
(S=20/1)

4	VACUUM CRIP	LCP	UL94V-0, BEIGE
3	FIXING METAL	PHOSPHOR BROZE	SEE ABOVE TABLE 1
2	CONTACT	PHOSPHOR BROZE	SEE ABOVE TABLE 1
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

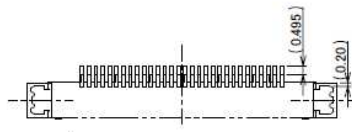
Rev.27

Receptacle Assembly

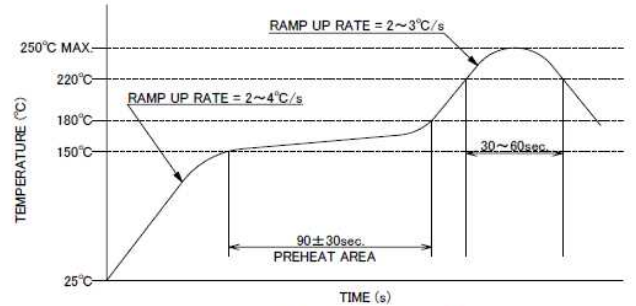
PART NO.	POS.	A	D
20374-10E-**-	10	3.60	7.20
20374-14E-**-	14	5.20	8.80
20374-20E-**-	20	7.60	11.20
20374-30E-**-	30	11.60	15.20
20374-32E-**-	32	12.40	16.00
20374-35E-**-	35	13.60	17.20
20374-40E-**-	40	15.60	19.20
20374-50E-**-	50	19.60	23.20



RECOMMENDED FOOTPRINT PATTERN (MOUNT SIDE)
Recommended Thickness of Metal Mask : t=0.13mm
Recommended Opening Ratio of Metal Mask : 79.6%



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



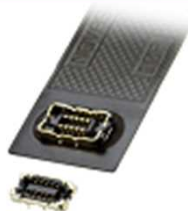
REFLOW TEMPERATURE PROFILE
SENJU METAL INDUSTRY CO., LTD. : M705-SHF(Sn96.5 Ag3.0 Cu0.5)

Rev.27

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO COAX : AWG# 42 , 40 , 36 DISCRETE : AWG# 36 , 34
RATING VOLTAGE	100V AC (PER A CONTACT)
RATING AMPERAGE (FOR CONTACT)	0.24A AC/DC [AWG#42] AVAILABLE TO 50 PIN 0.25A AC/DC [AWG#40] AVAILABLE TO 50 PIN 0.30A AC/DC [AWG#40] AVAILABLE TO 32 PIN 0.35A AC/DC [AWG#36] AVAILABLE TO 50 PIN 0.40A AC/DC [AWG#36] AVAILABLE TO 37 PIN 0.35A AC/DC [AWG#34] AVAILABLE TO 50 PIN 1.00A AC/DC [AWG#34] AVAILABLE TO 2 PIN
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 180mohm MAX. (AWG#34) / AFTER TEST : <140mohm MAX. 230mohm MAX. (AWG#36) 530mohm MAX. (AWG#40) 700mohm MAX. (AWG#42)
GROUND SHELL RESISTANCE	INITIAL : 50mohm MAX. / AFTER TEST : <140mohm MAX.
INSULATION RESISTANCE	INITIAL : 1000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	10P : 29.00N MAX. 32P : 33.40N MAX. 14P : 29.80N MAX. 35P : 34.00N MAX. 20P : 31.00N MAX. 40P : 35.00N MAX. 30P : 33.00N MAX. 50P : 38.00N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10P : INITIAL : 4.00N MIN. / AFTER 30 CYCLES : 2.87N MIN. 14P : INITIAL : 4.40N MIN. / AFTER 30 CYCLES : 3.23N MIN. 20P : INITIAL : 5.00N MIN. / AFTER 30 CYCLES : 3.76N MIN. 30P : INITIAL : 6.00N MIN. / AFTER 30 CYCLES : 4.65N MIN. 32P : INITIAL : 6.20N MIN. / AFTER 30 CYCLES : 4.84N MIN. 35P : INITIAL : 6.50N MIN. / AFTER 30 CYCLES : 5.07N MIN. 40P : INITIAL : 7.00N MIN. / AFTER 30 CYCLES : 5.50N MIN. 50P : INITIAL : 8.00N MIN. / AFTER 30 CYCLES : 6.41N MIN.
CABLE RETENTION FORCE	10P : 4.90N MIN. 32P : 15.68N MIN. 14P : 6.86N MIN. 35P : 17.15N MIN. 20P : 9.80N MIN. 40P : 19.60N MIN. 30P : 14.70N MIN. 50P : 24.50N MIN.
PRODUCT SPECIFICATION	PRS-1239
TEST REPORT	TR-04037
INSTRUCTION MANUAL	HIM-04001
ASSEMBLY MANUAL	ASM-04001
APPEARANCE CRITERIA No.	QLS-A***

Rev.22

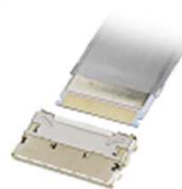
Board to
Board



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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