

# CABLINE®-UA II

Slim design suitable for through-hole solution, shielding and multi-point ground, 0.3 mm pitch, Right angle vertical mating type micro-coaxial connector

## Product Specifications:

Mating type		Right angle vertical
Board Pitch (mm)		0.6
Wiping Length (mm)		0.3
Mated size (mm)	Height	1.27 +/- 0.1
	Width	5.0 + (0.3*?p)
	Depth	2.9
Pin Counts	Range	Up to 50
	Available	26, 32, 40, 50

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

## Applicable Cable Size:

Maximum O.D. (mm)	0.3
Micro-Coaxial for Signal (AWG)	45ohm : #42 or smaller 50ohm : #44 or smaller
Twin Coaxial (AWG)	-
Discrete (AWG)	#39 or smaller

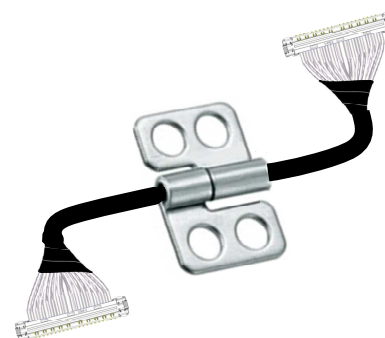
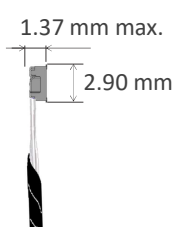
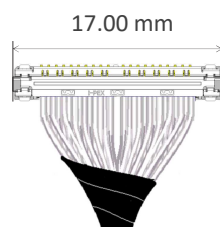
## Applicable Standards (Reference Only):

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

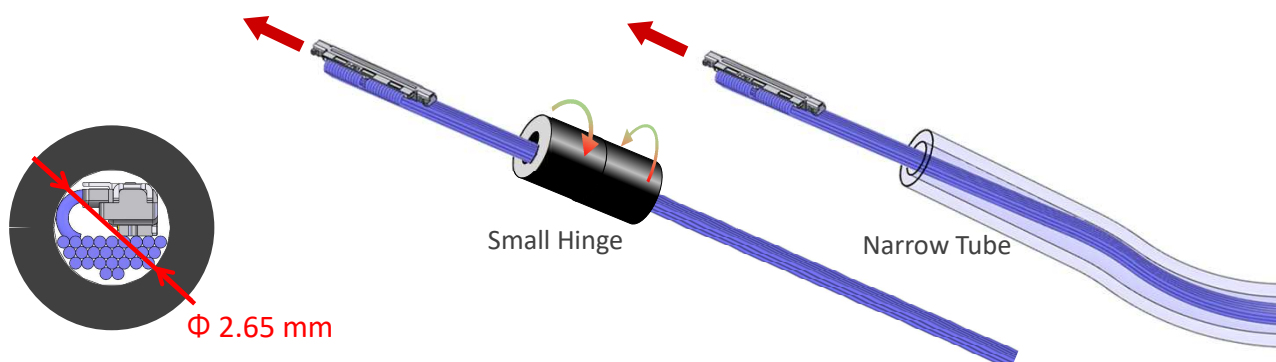


Flexible micro-coaxial cable harness is suitable for small applications with hinge design.

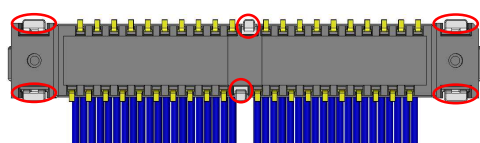
## Slim plug design, suitable for through-hinge assemblies

Simulation Reference Example:

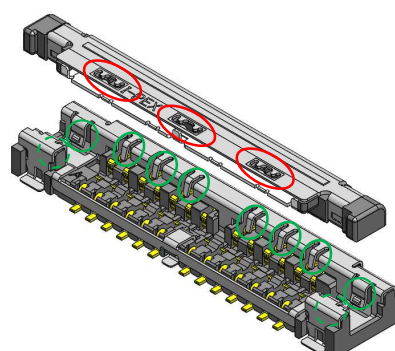
UA II 26p plug with 0.29 mm cable outer diameter harness can go through 2.65 mm inner diameter.



## EMI shielding and multi-point ground design



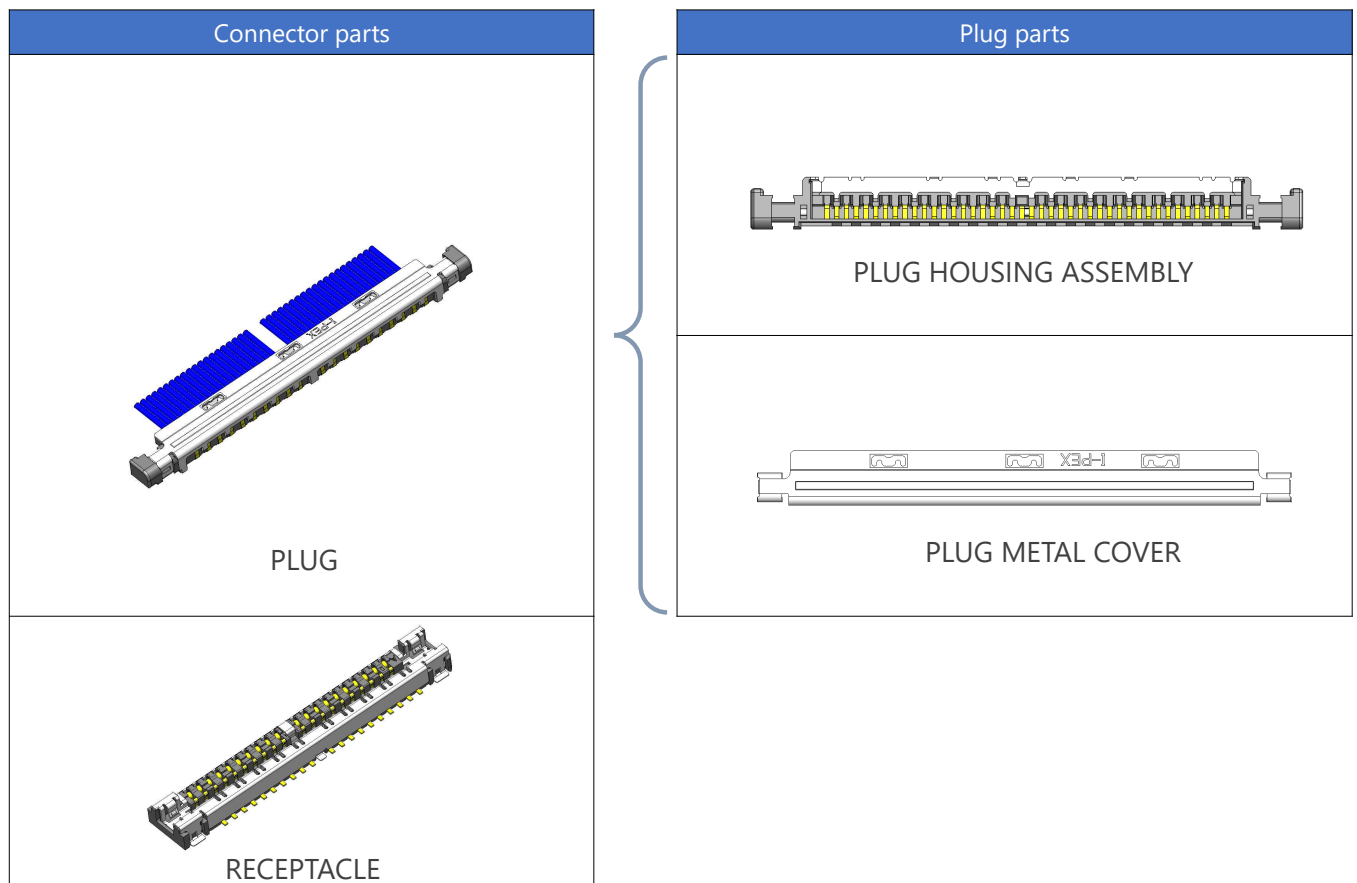
View From Underside



○ Soldered contacts  
○ Mechanical contacts

# Component Parts Details

## Component Parts



Rev.#

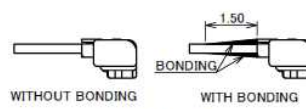
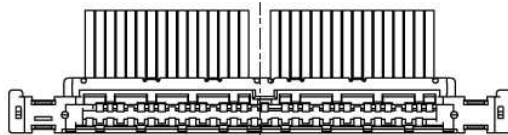
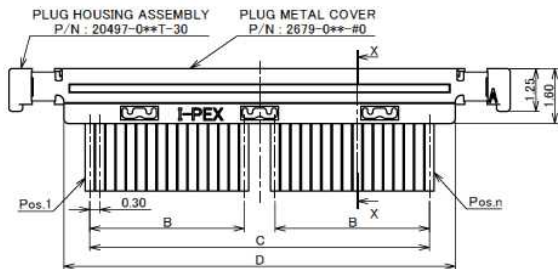
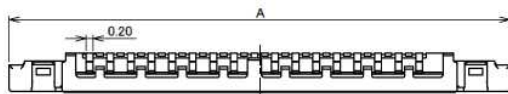
# Plug for Cable Assembly

Recommended P/N		20496-0**-40				
	PART No.	POS.	A	B	C	D
	20496-026-#0	26	12.8	3.6	8.1	9.6
	20496-032-#0	32	14.6	4.5	9.9	11.4
◆	20496-034-#0	34	15.2	4.8	10.5	12.0
	20496-040-#0	40	17.0	5.7	12.3	13.8
	20496-050-#0	50	20.0	7.2	15.3	16.8

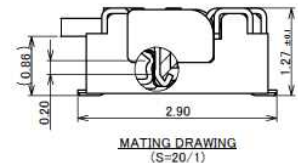
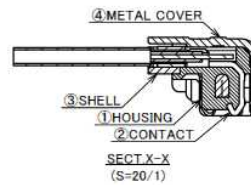
◆ MARK MEANS NOT AVAILABLE

20496-0\*\*-#0  
3: METAL COVER Au PLATING  
4: METAL COVER Sn PLATING  
Pos.

PART COMBINATION TABLE			
PLUG CABLE ASSEMBLY	HOUSING ASSEMBLY	METAL COVER	RECEPTACLE ASSEMBLY
20496-0**-30	20497-0**-T-30	2679-0**-00	20498-0**E-3#
20496-0**-40		2679-0**-10	20498-0**E-4#



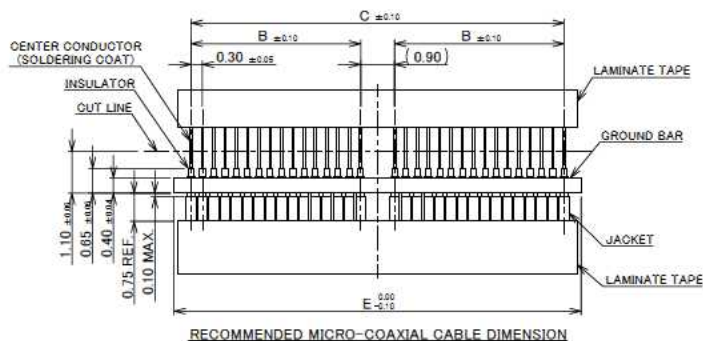
ASSEMBLY STATE  
※WE RECOMMEND BONDING THE CABLE AND CONNECTOR TO PROTECT THE CABLE.



4	METAL COVER	STAINLESS STEEL	P/N 20496-0**-30: Au 0.05 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. P/N 20496-0**-40: Sn 1.00 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
3	SHELL	PHOSPHOR BRONZE	Ni 1.00 $\mu$ m MIN.
2	CONTACT	PHOSPHOR BRONZE	Au 0.10 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO	DISCRIPTION	MATERIAL	FINISH, REMARKS

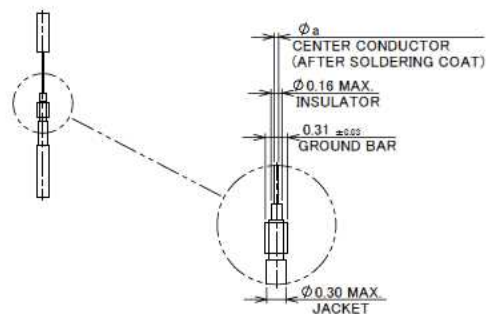
PART No.	POS.	B	C	E
20496-026-#0	26	3.6	8.1	9.0
20496-032-#0	32	4.5	9.9	10.8
20496-034-#0	34	4.8	10.5	11.4
20496-040-#0	40	5.7	12.3	13.2
20496-050-#0	50	7.2	15.3	16.2

◆ MARK MEANS NOT AVAILABLE



## MICRO-COAXIAL CABLE DIMENSION

	φ
#42	φ 0.075
#44	φ 0.063
#46	φ 0.048



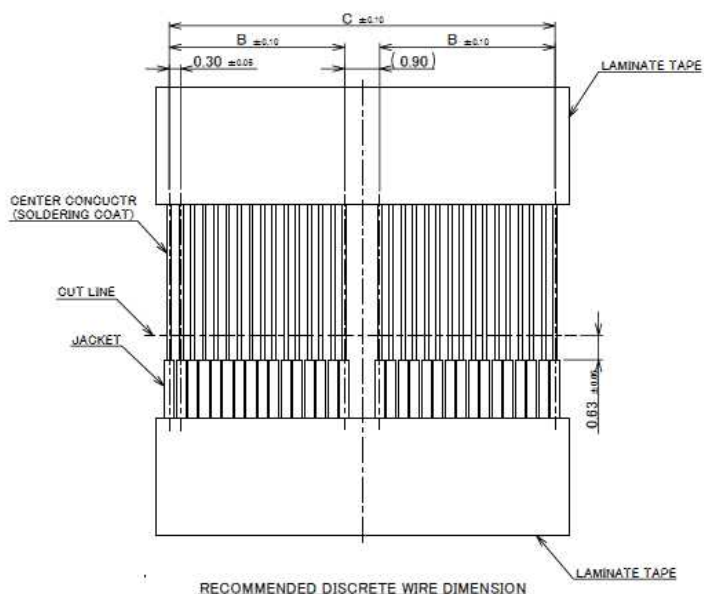
Rev.17

Rev.17

# Plug for Cable Assembly

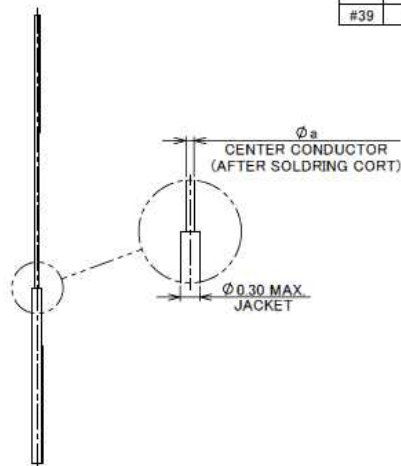
	PART No.	POS.	B	C
	20496-026-#0	26	3.6	8.1
	20496-032-#0	32	4.5	9.9
◆	20496-034-#0	34	4.8	10.5
	20496-040-#0	40	5.7	12.3
	20496-050-#0	50	7.2	15.3

◆ MARK MEANS NOT AVAILABLE



DISCRETE WIRE DIMENSION

	a
#39	Ø 0.102



RECOMMENDED DISCRETE WIRE DIMENSION

Rev.17

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46 , 44 , 42 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	50V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 10 CONTACTS) 0.15A AC/DC [AWG#46] 0.19A AC/DC [AWG#44] 0.20A AC/DC [AWG#42]
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX (NON-CONDENSING)
CONTACT RESISTANCE	INITIAL : 450mohm MAX.(AWG#39) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44) 1880mohm MAX.(AWG#46) AFTER TEST : <40mohm MAX.
GROUND CONTACT RESISTANCE	INITIAL : 100mohm MAX. / AFTER TEST : <40mohm MAX.
INSULATION RESISTANCE	INITIAL : 100Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC100V 1min
DURABILITY	20 CYCLES
MATING FORCE (INITIAL / 20 CYCLES)	26P : 28.0N MAX. 32P : 34.5N MAX. 40P : 40.0N MAX. 50P : 50.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	26P : 3.0N MIN. 32P : 3.0N MIN. 40P : 3.0N MIN. 50P : 3.0N MIN.
CABLE RETENTION FORCE	15.0N MIN. (AWG# 44)
PRODUCT SPECIFICATION	PRS-1469
TEST REPORT	TR-09032
INSTRUCTION MANUAL	HIM-09006
ASSEMBLY MANUAL	ASM-09004
APPEARANCE CRITERIA No.	QLS-A***

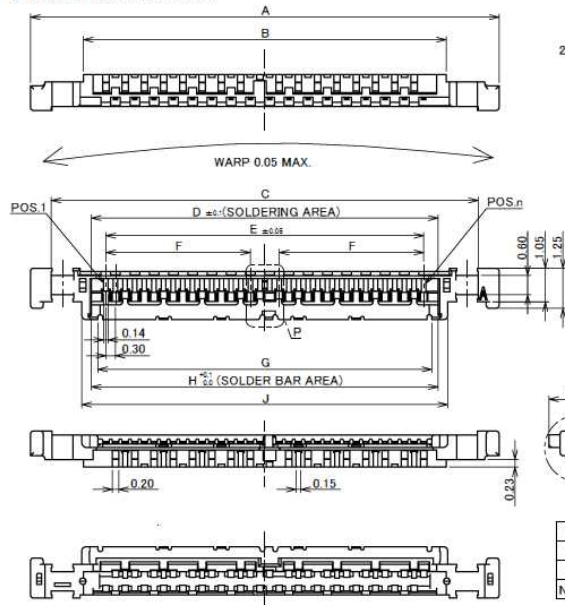
Rev.17



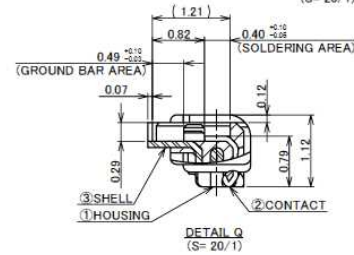
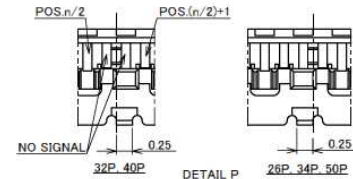
## Plug Housing Assembly

Recommended P/N		20497-0**T-30									
PART No.	POS.	A	B	C	D	E	F	G	H	J	
20497-026T-30	26	12.8	9.5	11.5	9.0	8.1	3.6	8.6	9.0	9.6	
20497-032T-30	32	14.6	11.3	13.3	10.8	9.9	4.5	10.4	10.8	11.4	
20497-034T-30	34	15.2	11.9	13.9	11.4	10.5	4.8	11.0	11.4	12.0	
20497-040T-30	40	17.0	13.7	15.7	13.2	12.3	5.7	12.8	13.2	13.8	
20497-050T-30	50	20.0	16.7	18.7	16.2	15.3	7.2	15.8	16.2	16.8	

◆ MARK MEANS NOT AVAILABLE.



PART COMBINATION TABLE		
PLUG CABLE ASS'Y	PLUG HOUSING ASS'Y	METAL COVER
20496-0**30	20497-0**T-30	2679-0**00
20496-0**40		2679-0**10



3	SHELL	PHOSPHOR BRONZE	Ni 1.00 μm MIN.
2	CONTACT	PHOSPHOR BRONZE	Au 0.1 μm MIN. OVER Ni 1.00 μm MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

### NOTES

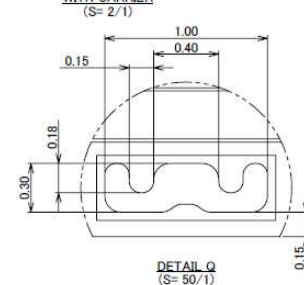
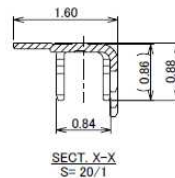
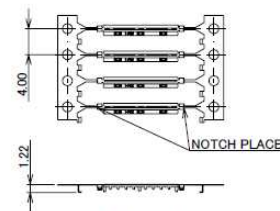
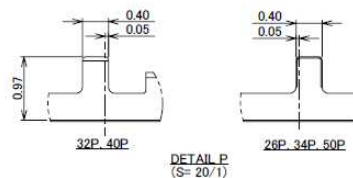
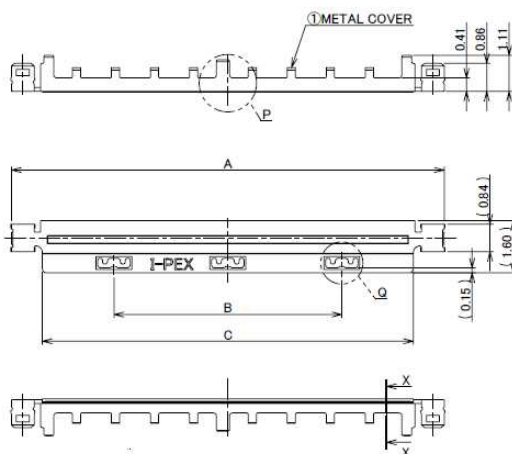
- THIS PART IS ASSEMBLED METAL COVER (P/N 2679-0\*\*00) AFTER SOLDERED THE COAXIAL CABLE, AND IT BECOMES P/N 20496-0\*\*00.
- PRODUCT SPECIFICATION : DOCUMENT No. PRS-1469  
ASSEMBLY MANUAL : DOCUMENT No. ASM-09004

Rev.13

## Plug Metal Cover

Recommended P/N		2679-0**00			
PART NO.	POS.	A	B	C	
2679-026-00	26	11.5	6.0	9.6	
2679-032-00	32	13.3	7.0	11.4	
2679-034-00	34	13.9	8.0	12.0	
2679-040-00	40	15.7	8.0	13.8	
2679-050-00	50	18.7	12.0	16.8	

◆ MARK MEANS NOT AVAILABLE.



1	METAL COVER	STAINLESS STEEL	F=0.12 P/N 2679-0**00: Au 0.05 μm MIN. OVER Ni 1.00 μm MIN. P/N 2679-0**10: Sn 1.00 μm MIN. OVER Ni 1.00 μm MIN.
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

### NOTES

- APPLICABLE PLUG HOUSING ASS'Y  
P/N 20497-0\*\*T-30
- PRODUCT SPECIFICATION : DOCUMENT No. PRS-1469  
ASSEMBLY MANUAL : DOCUMENT No. ASM-09004

Rev.8

## Receptacle Assembly

Recommended P/N		20498-0**E-41					
	PART No	Pos	A	B	C	D	E
	20498-026E-##	26	12.4	10.8	8.1	3.6	6.7
	20498-032E-##	32	14.2	12.6	9.9	4.5	10.9
◆	20498-034E-##	34	14.8	13.2	10.5	4.8	11.5
	20498-040E-##	40	16.6	15.0	12.3	5.7	10.9
	20498-050E-##	50	19.6	18.0	15.3	7.2	11.5

◆ MARK MEANS NOT AVAILABLE

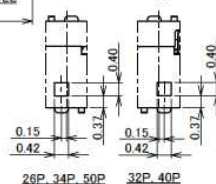
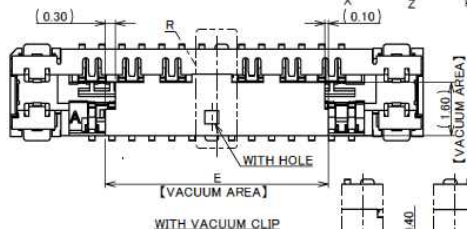
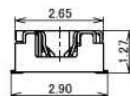
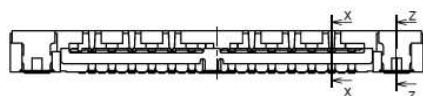
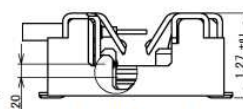
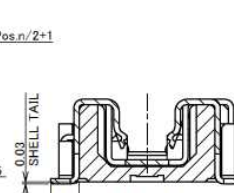
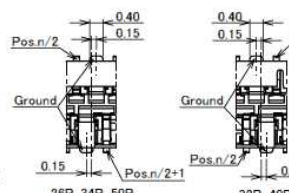
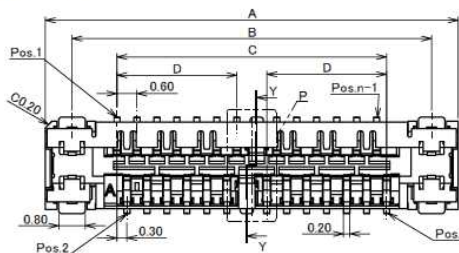
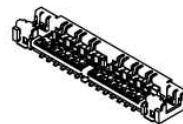
20498-0\*\*E-###

- 0 : WITHOUT VACUUM CLIP
- 1 : WITH VACUUM CLIP
- 3 : SHELL Au PLATING
- 4 : SHELL Sn PLATING

Pos.



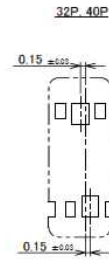
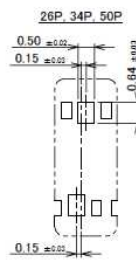
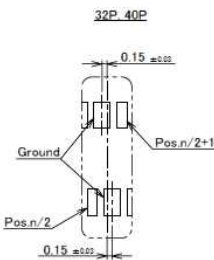
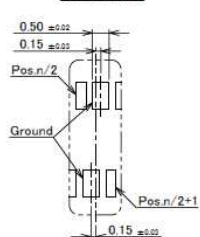
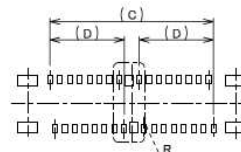
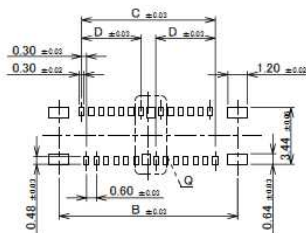
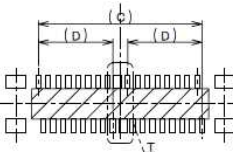
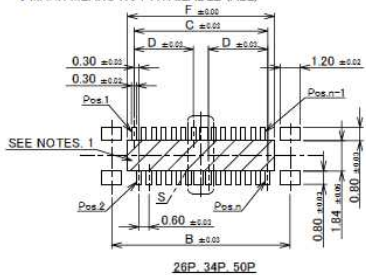
PART COMBINATION TABLE	
RECEPTACLE ASSEMBLY	PLUG CABLE ASSEMBLY
20498-0**E-3#	20496-0**-30
20498-0**E-4#	20496-0**-40



4	VACUUM CLIP	LCP	UL94V-0
3	SHELL	PHOSPHOR BRONZE	P/N 20498-0**E-3: Au 0.02 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN. P/N 20498-0**E-4E: Sn 2.00 $\mu$ m MIN. OVER Ni 1.00 $\mu$ m MIN.
2	CONTACT	PHOSPHOR BRONZE	ALL OVER: Ni 1.00 $\mu$ m MIN. CONTACT AREA: Au 0.1 $\mu$ m MIN. SOLDERING AREA: Au 0.05 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0
NO	DISCRPTION	MATERIAL	FINISH, REMARKS

	PART No.	Pos.	A	B	C	D	F
	20498-026E-##	26	12.4	10.8	8.1	3.6	8.9
	20498-032E-##	32	14.2	12.6	9.9	4.5	10.7
◆	20498-034E-##	34	14.8	13.2	10.5	4.8	11.3
	20498-040E-##	40	16.6	15.0	12.3	5.7	13.1
	20498-050E-##	50	19.6	18.0	15.3	7.2	16.1

◆ MARK MEANS NOT AVAILABLE (ALL)

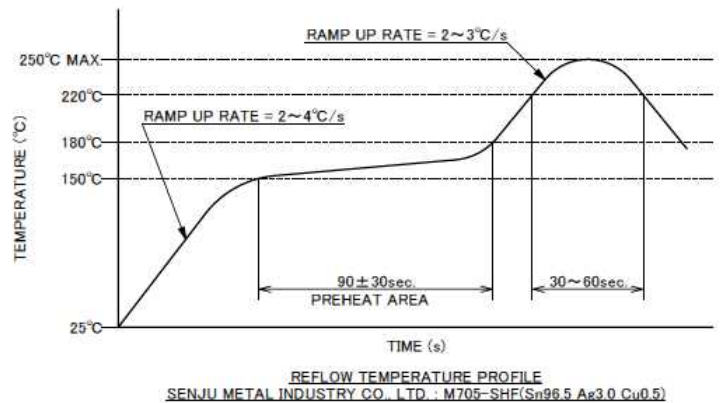
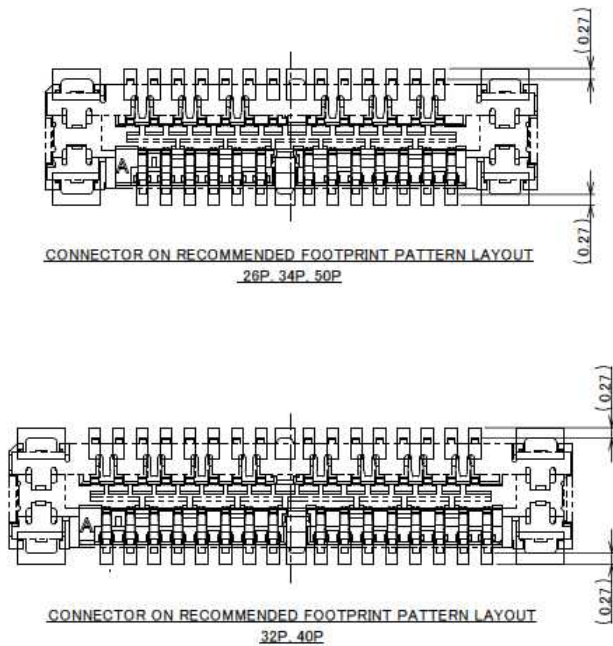


### RECOMMENDED FOOTPRINT PATTERN LAYOUT

**RECOMMENDED FOOTPRINT METAL MASK LAYOUT**  
METAL MASK THICKNESS :  $t=0.12\text{ mm}$

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

# Receptacle Assembly



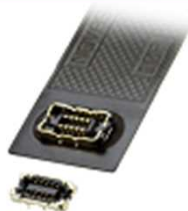
Rev.19

ITEMS	SPECIFICATION
APPLICABLE CABLE	MICRO-COAXIAL CABLE : AWG# 46 , 44 , 42 DISCRETE WIRE : AWG# 39
RATING VOLTAGE	50V AC (PER CONTACT PIN)
RATING AMPERAGE (FOR CONTACT)	0.50A AC/DC [AWG#39] (PER CONTACT PIN / UP TO 10 CONTACTS) 0.20A AC/DC [AWG#42] 0.19A AC/DC [AWG#44] 0.15A AC/DC [AWG#46] ※ 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 : 450mohm MAX.(AWG#39) 700mohm MAX.(AWG#42) 1080mohm MAX.(AWG#44) 1880mohm MAX.(AWG#46) AFTER TEST : 140mohm MAX.
GROUND CONTACT 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 / 20 CYCLES)	26P : 28.0N MAX. 32P : 34.5N MAX. 40P : 40.0N MAX. 50P : 50.0N MAX.
UNMATING FORCE (INITIAL / 20 CYCLES)	26P : 3.0N MIN. 32P : 3.0N MIN. 40P : 3.0N MIN. 50P : 3.0N MIN.
COPLANARITY	0.10MAX
CABLE RETENTION FORCE	15.0N MIN. (AWG# 44)
PRODUCT SPECIFICATION	PRS-1469
TEST REPORT	TR-09032
PACKING STANDARD	300-697
INSTRUCTION MANUAL	HIM-09006
ASSEMBLY MANUAL	ASM-09004
APPEARANCE CRITERIA No.	QLS-A***

Rev.19



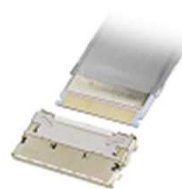
Board to  
Board



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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