Board-to-Board (FPC) Connector

H 자기장

10.0 GHz

NOVASTACK[®] 35-HDP

고속 전송 대응 (20+ Gbps/lane) 풀 쉴드 구조의 전원 단자 포함, 0.35 mm Pitch, 결합 높이 0.7 mm

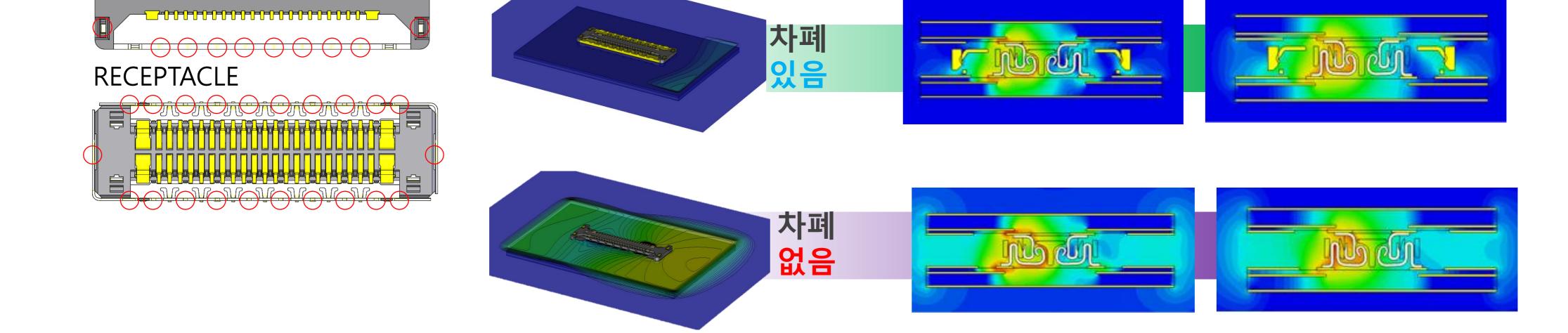
Product Spe	ecifications:		
Board Pitch (mm)		0.35	
Wiping Length (mm)		Signal contact : 0.11, Power contact : 0.13	
	Height	0.7 +/- 0.05	
Mated Size (mm)	Width	Formula: 4.89+(0.35*?p/2)	
(11111)	Depth	3.7	Applicable Standards (Reference Only):
Current	Signal	0.3 A/pin	USB4 (20 Gbps/lane) USB 3.1 Gen 2 (10 Gbps)
Rating	Power	2.2 A/pin x 4	eDP HBR 3 (8.1 Gbps) eDP HBR 2 (5.4 Gbps)
Pin Counts	Range	6 - 76 (signal) + 4 (power)	HDMI 2.0 (6 Gbps) V-By-One HS 1.4 (4 Gbps)
Fin Counts	Available	16, 28, 34, 42, 56, 62 /+ 4	MiPi standards

*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁 드립니다.

▶ 멀티 그라운드 접점에 의한 ZenShield® 풀 쉴드로 EMI 대책



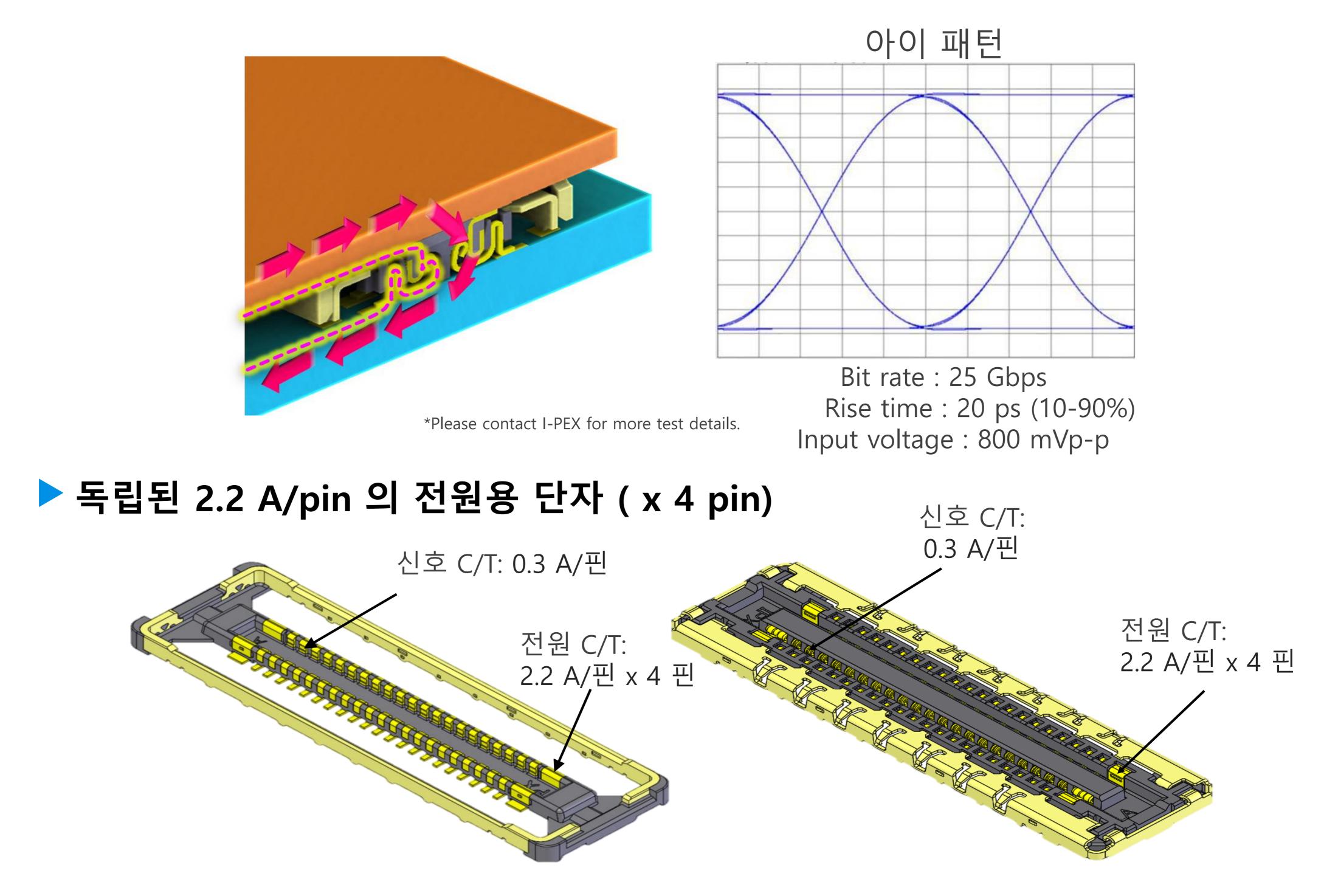
PLUG



전기장

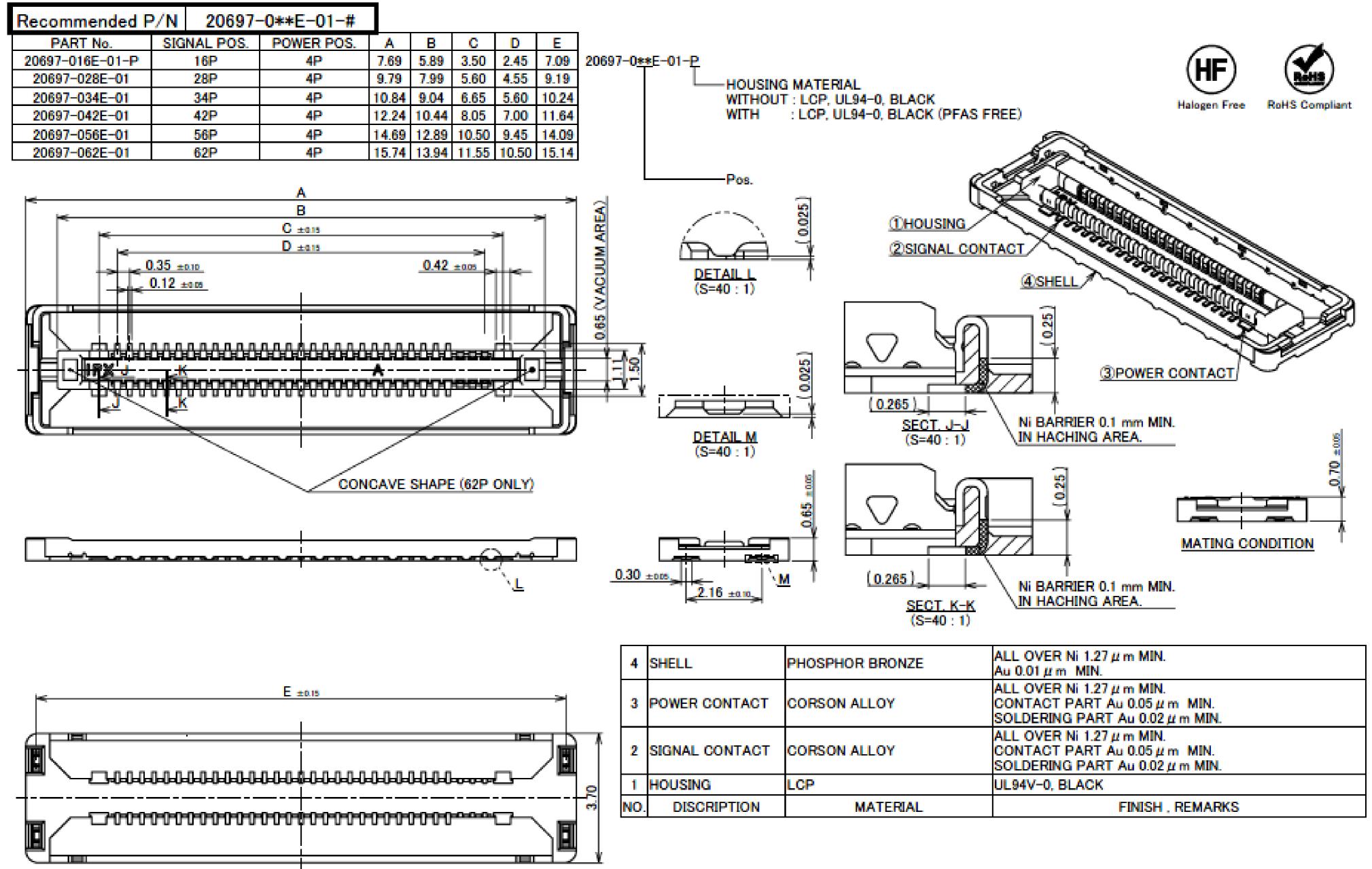
10.0 GHz

USB4 / Thunderbolt 4 (20+ Gbps / lane) 의 고속 전송 내부 접속에 최적



Component Parts Detail

Plug Assembly



4	SHELL		ALL OVER Ni 1.27 μ m MIN. Au 0.01 μ m MIN.
3	POWER CONTACT		ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.05 μ m MIN. SOLDERING PART Au 0.02 μ m MIN.
2	SIGNAL CONTACT		ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.05 μ m MIN. SOLDERING PART Au 0.02 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

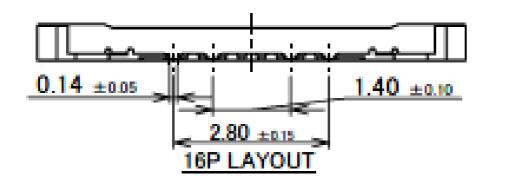
Rev.10

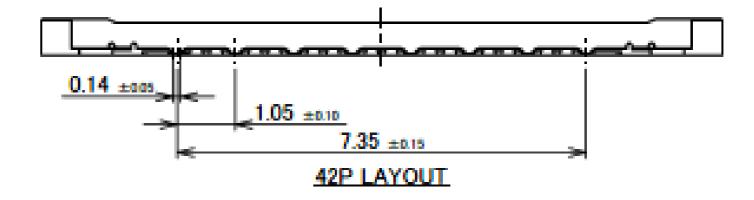
PART No.	SIGNAL POS.	POWER POS.
20697-016E-01-P	16P	4P
20697-028E-01	28P	4P
20697-034E-01	34P	4P
20697-042E-01	42P	4P
20697-056E-01	56P	4P
20697-062E-01	62P	4P

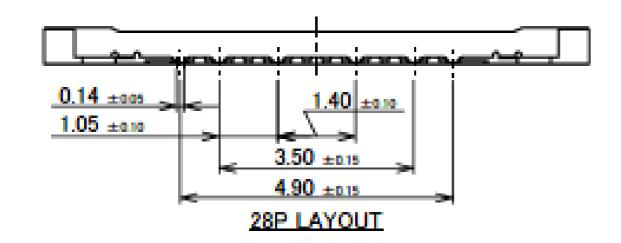
20697-0<u>**</u>E-01-P

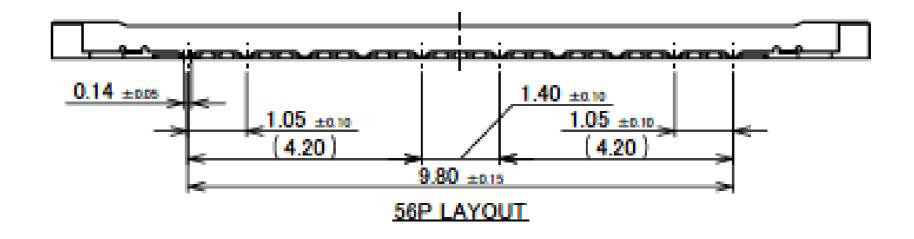
-Pos.

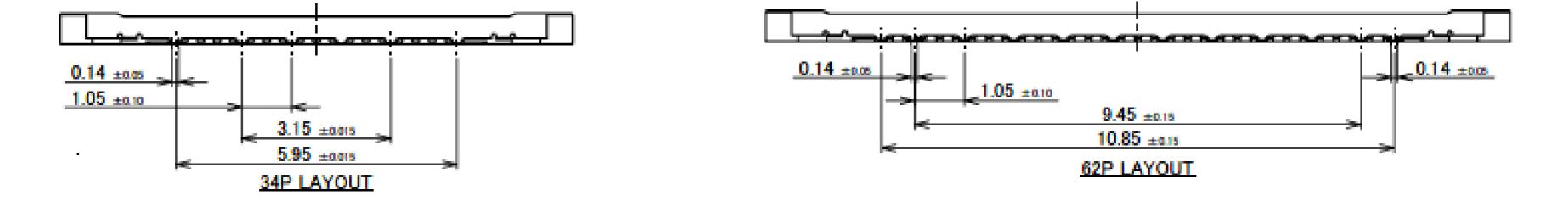
HOUSING MATERIAL WITHOUT : LCP, UL94-0, BLACK WITH : LCP, UL94-0, BLACK (PFAS FREE)



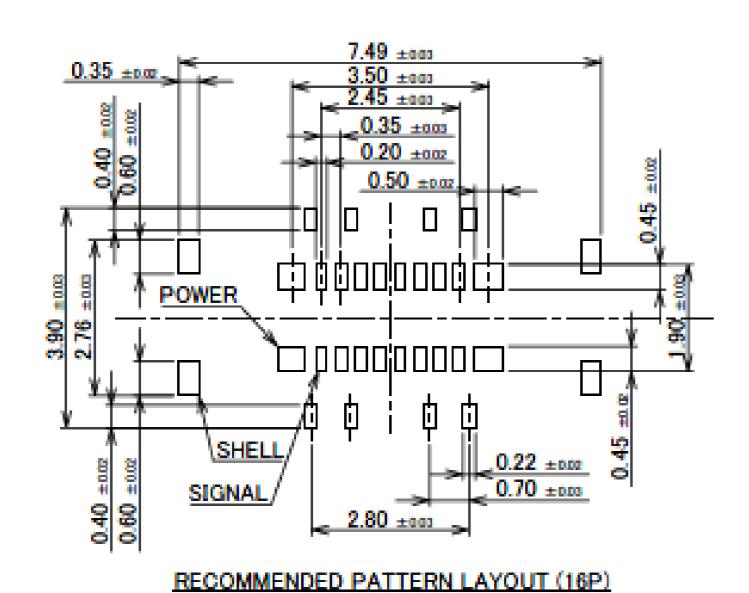


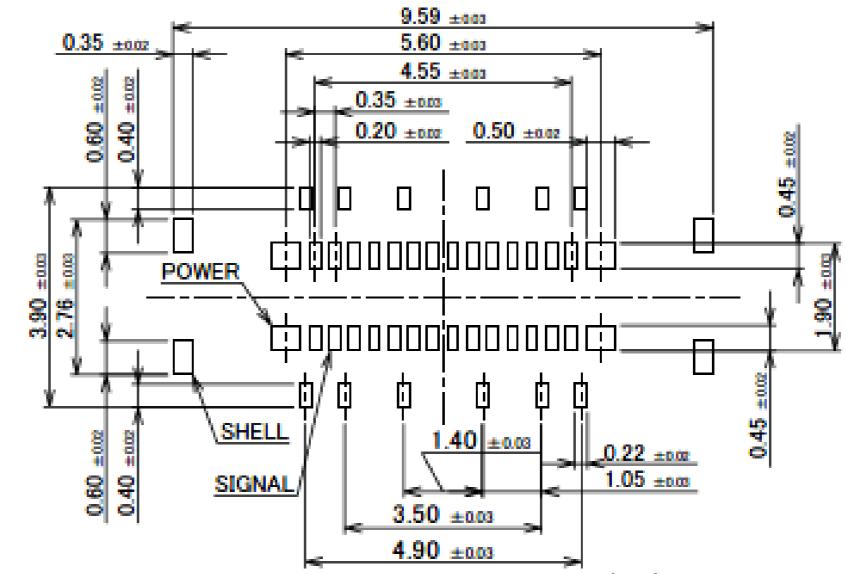




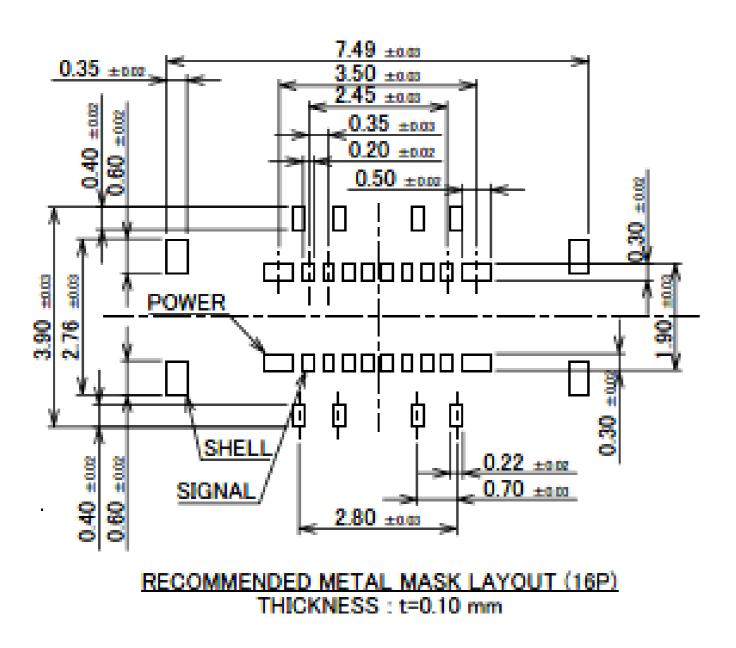


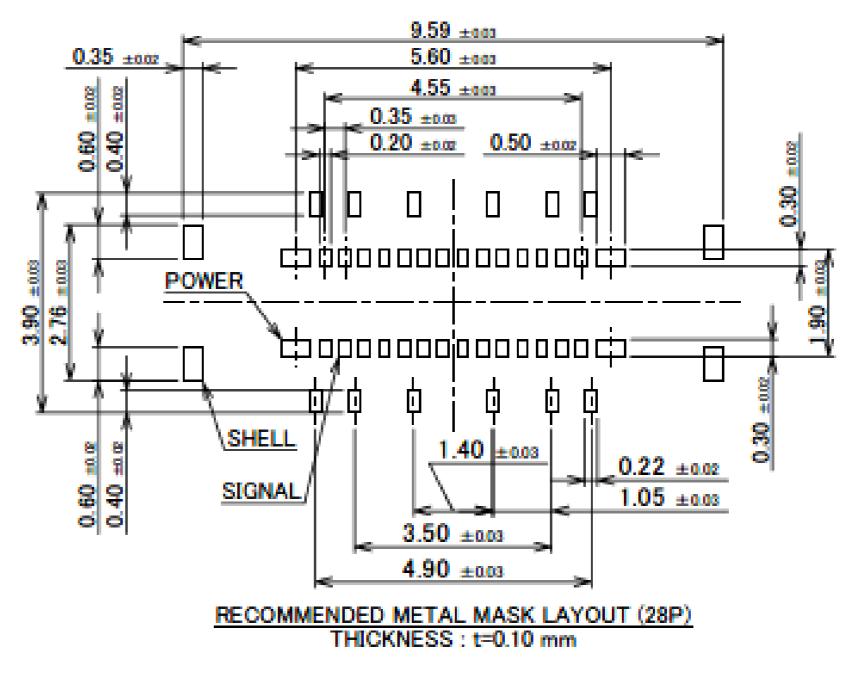
Rev.10





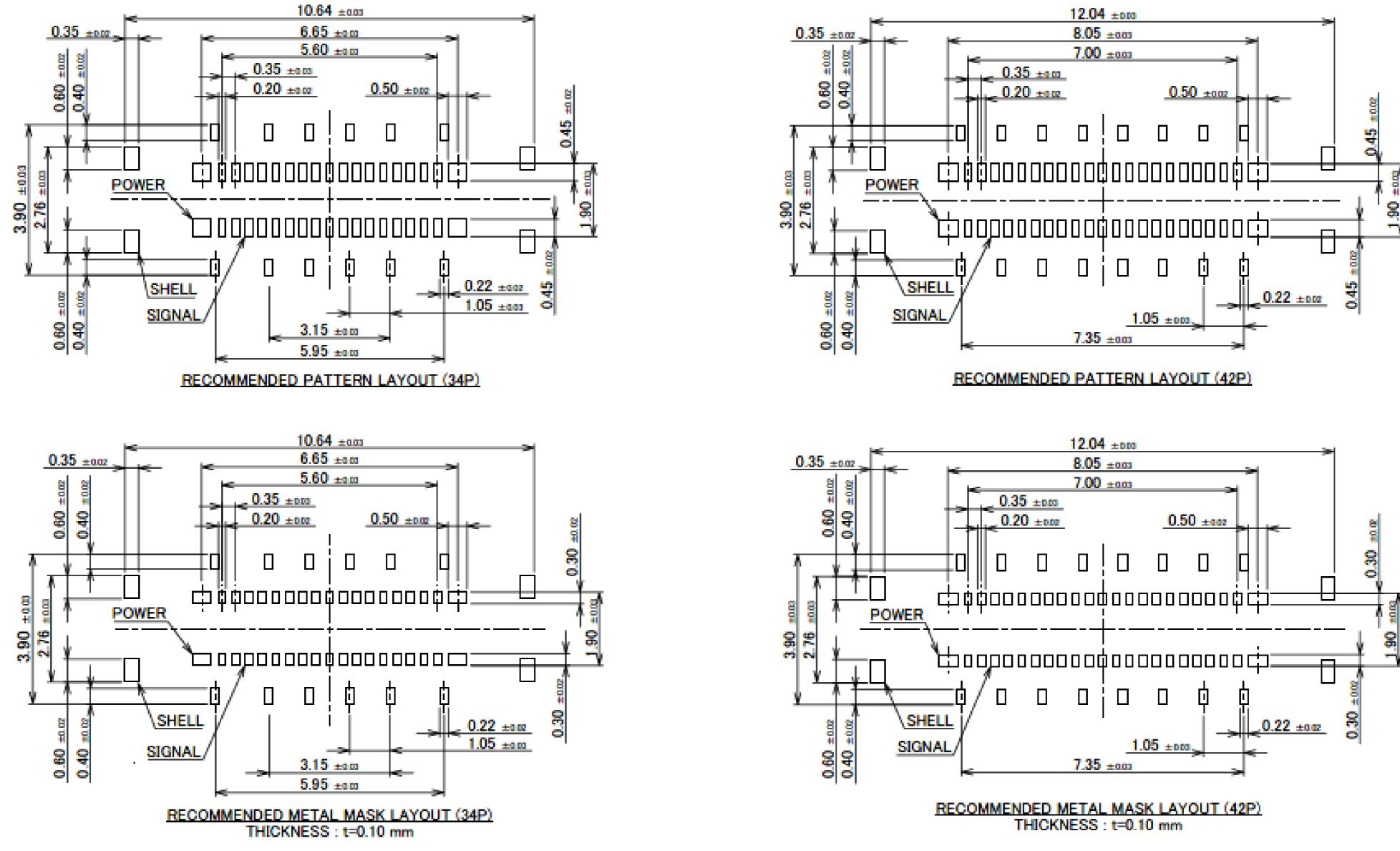
RECOMMENDED PATTERN LAYOUT (28P)

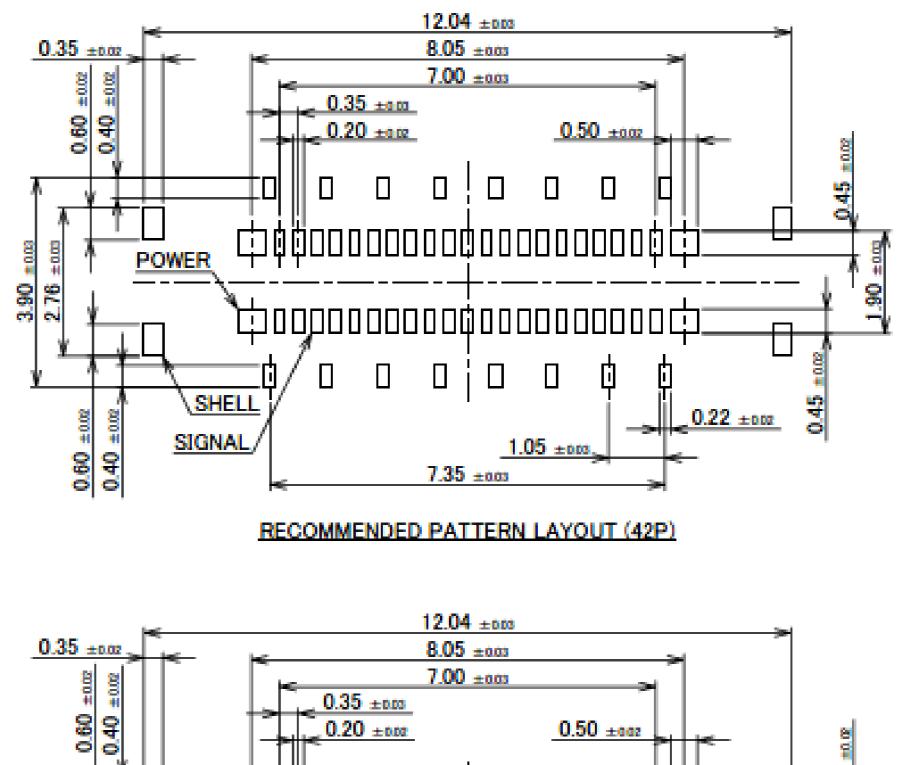




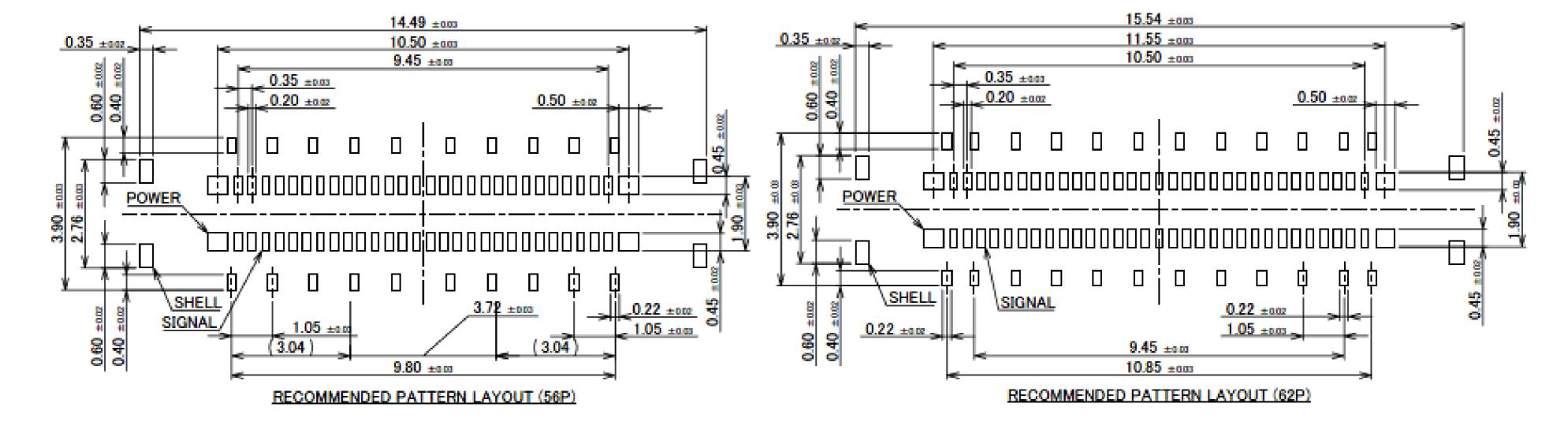
Rev.10

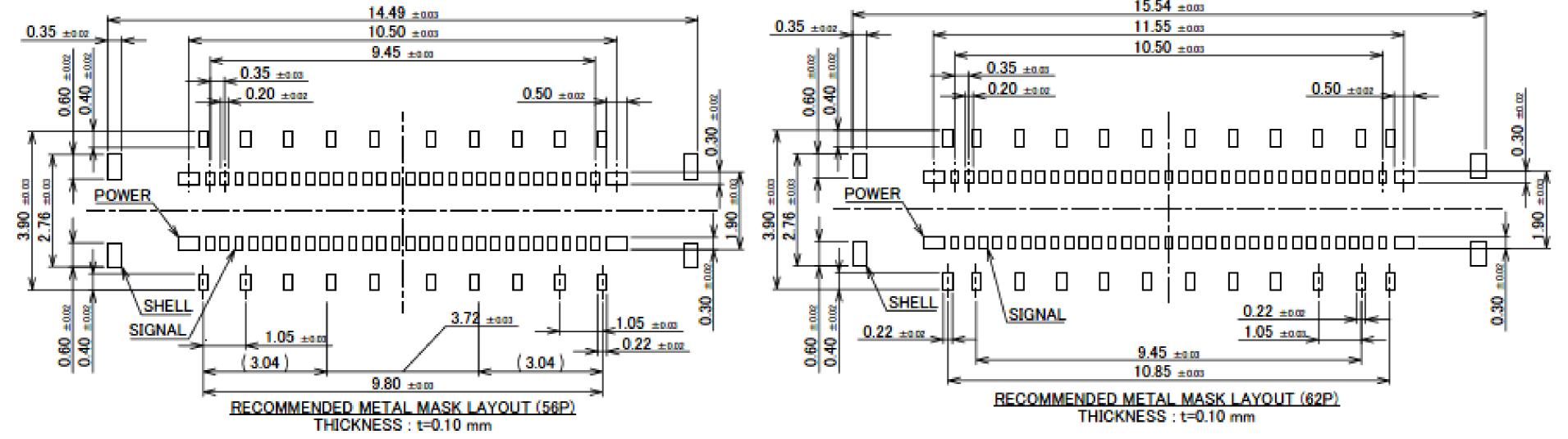




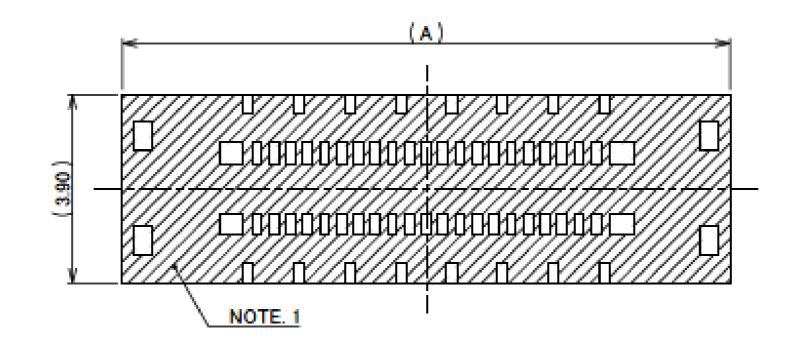




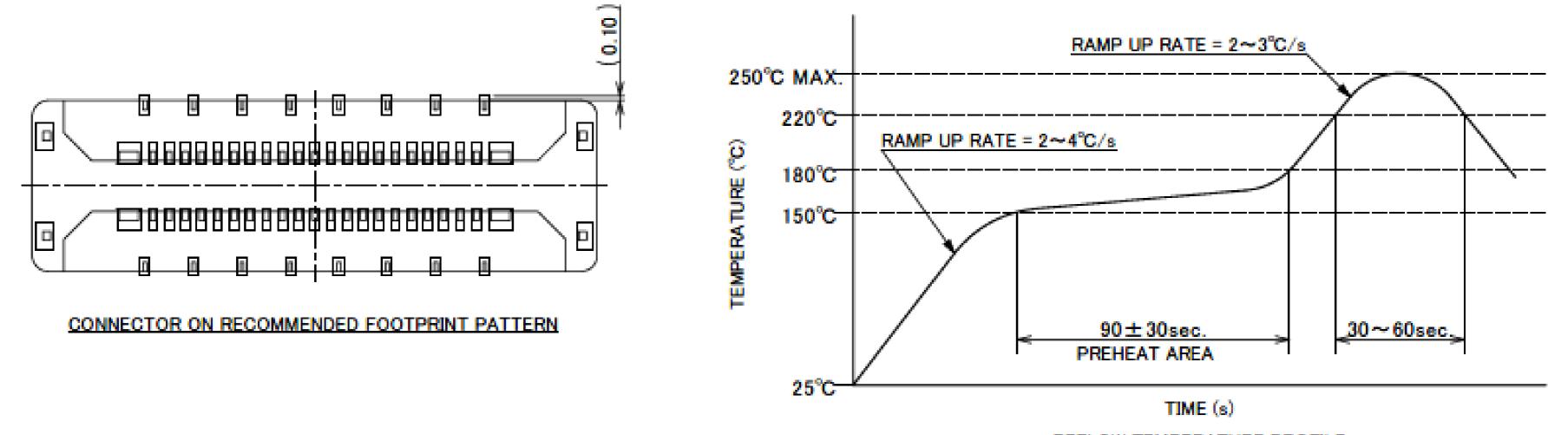




PART No.	SIGNAL POS.	POWER POS.	Α
20697-016E-01-P	16P	4P	7.99
20697-028E-01	28P	4P	10.09
20697-034E-01	34P	4P	11.14
20697-042E-01	42P	4P	12.54
20697-056E-01	56P	4P	14.99
20697-062E-01	62P	4P	16.04



NOTES. 1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.



Rev.10

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

ITEMS	SPECIFICATION		
APPLICABLE CONNECTOR PART No.	20698-0**E-01*		
RATING VOLTAGE	60V AC (PER CONTACT PIN)		
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A AC/DC (PER CONTACT PIN)/ 12.0A AC/DC(TOTAL)		
RATING AMPERAGE (FOR POWER CONTACT)	2.2A AC/DC (PER CONTACT PIN)/ 8.8A AC/DC(TOTAL)		
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)		
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)		
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 40mohm MAX. / AFTER TEST : 240mohm MAX.		
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 20mohm MAX. / AFTER TEST : 20mohm MAX.		
CONTACT RESISTANCE (FOR GROUND)	INITIAL : 20mohm MAX. / AFTER TEST : 20mohm MAX.		
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.		
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min		
DURABILITY	30 CYCLES		
MATING FORCE (INITIAL)	16P: 32.0N MAX. 28P: 32.0N MAX. 34P: 38.0N MAX. 42P: 46.0N MAX. 56P: 60.0N MAX. 62P: 66.0N MAX.		
UNMATING FORCE (AFTER TEST)	16P: 3.2N MIN. 28P: 3.2N MIN. 34P: 3.8N MIN. 42P: 4.6N MIN. 56P: 6.0N MIN. 62P: 6.6N MIN.		
COPLANARITY	CONTACT AND POWER CONTACT: 0.08 MAX. SHELL: 0.105 MAX.		
PRODUCT SPECIFICATION	PRS-2187		
TEST REPORT	TR-16014		
PACKING STANDARD	PST-15083 (10K/REEL)		
INSTRUCTION MANUAL	HIM-15020		
APPEARANCE CRITERIA No.	QLS-A***		

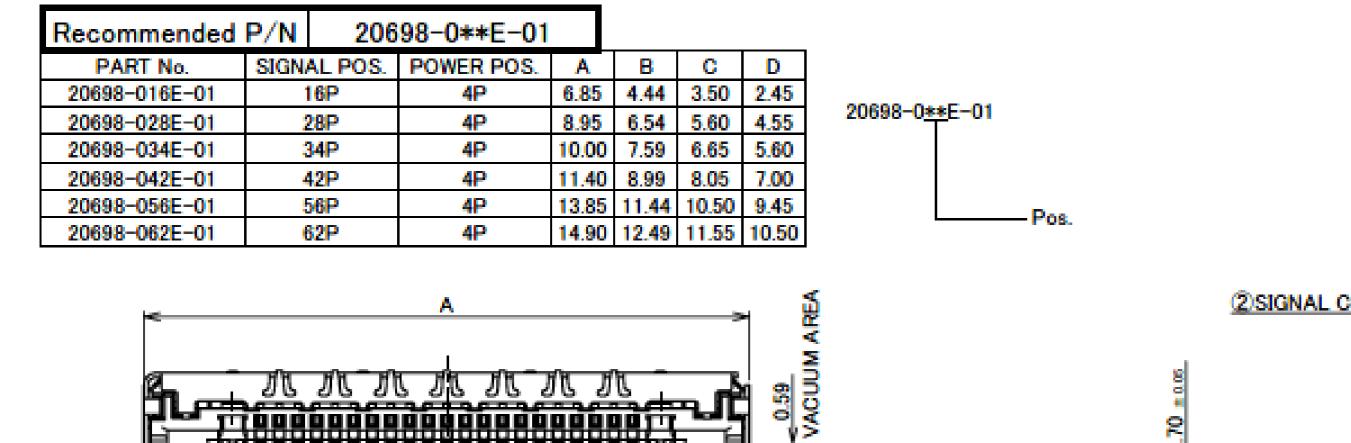
Receptacle Assembly

 $\mathbb{N}P$

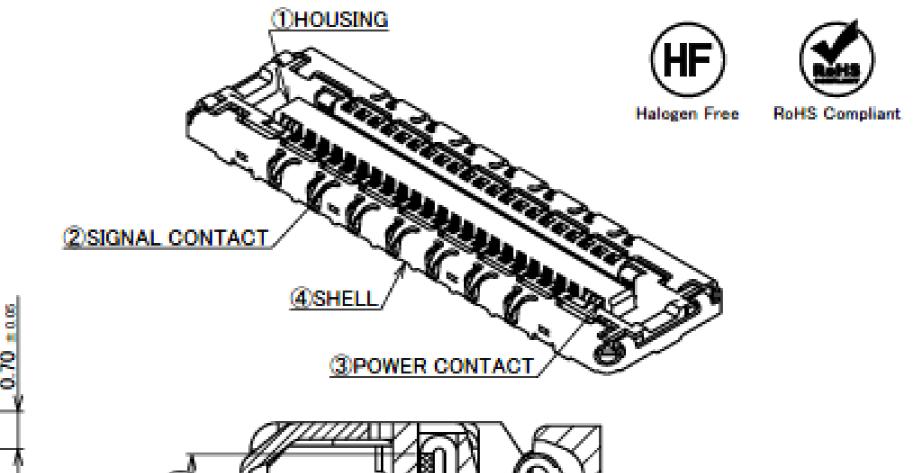
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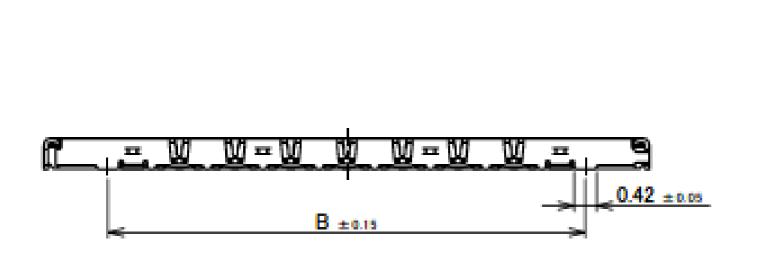
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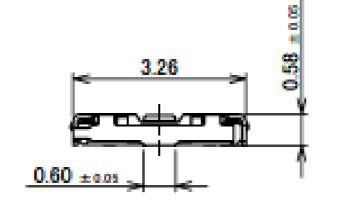




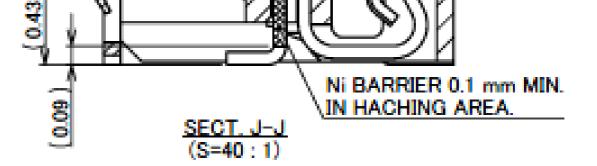
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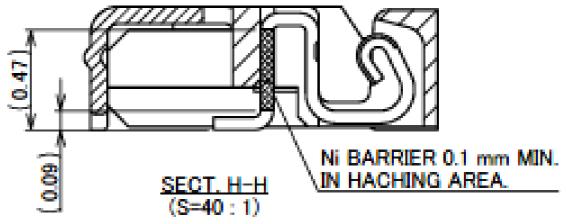
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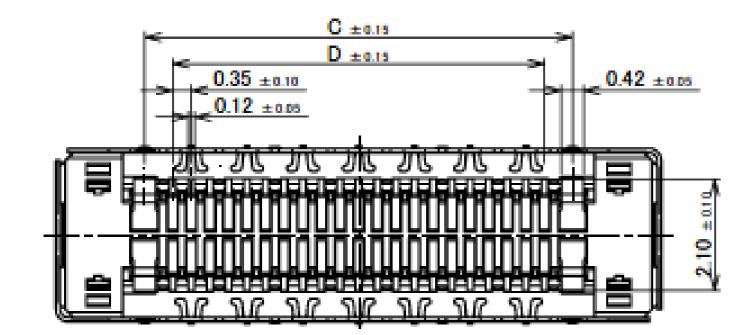
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MATING CONDITION

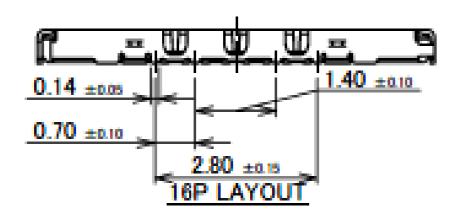


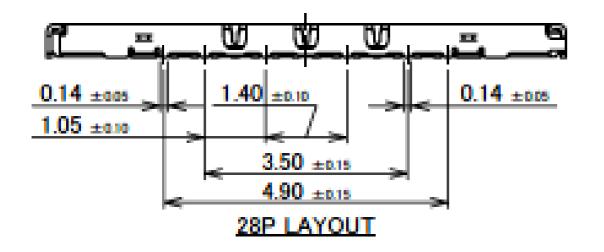


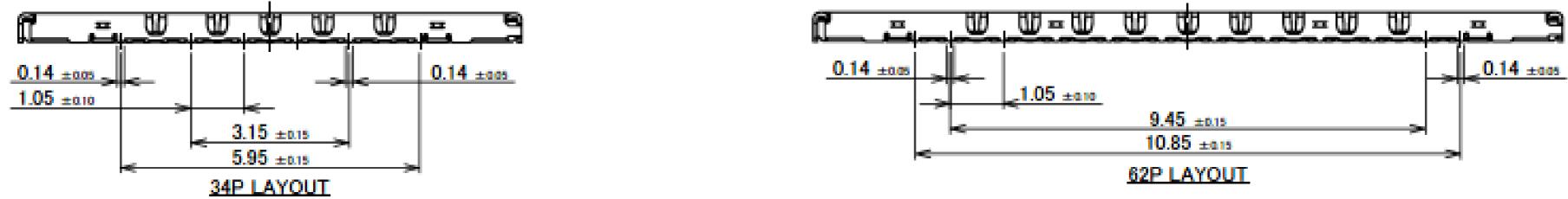


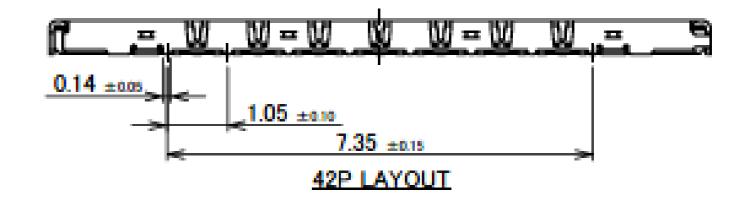
4	SHELL		ALL OVER Ni 1.27μm MIN. Au 0.01μm MIN.
3	POWER CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.05 μ m MIN. SOLDERING PART Au 0.02 μ m MIN.
2	SIGNAL CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.10 μ m MIN. SOLDERING PART Au 0.02 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

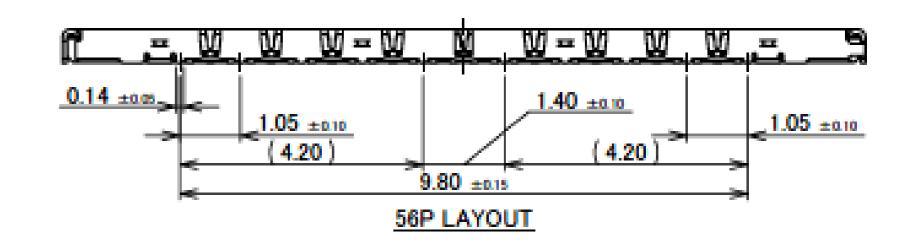
PART No.	SIGNAL POS.	POWER POS.]
20698-016E-01	16P	4P	20698-0**E-01
20698-028E-01	28P	4P	
20698-034E-01	34P	4P	
20698-042E-01	42P	4P	
20698-056E-01	56P	4P	Pos.
20698-062E-01	62P	4P]

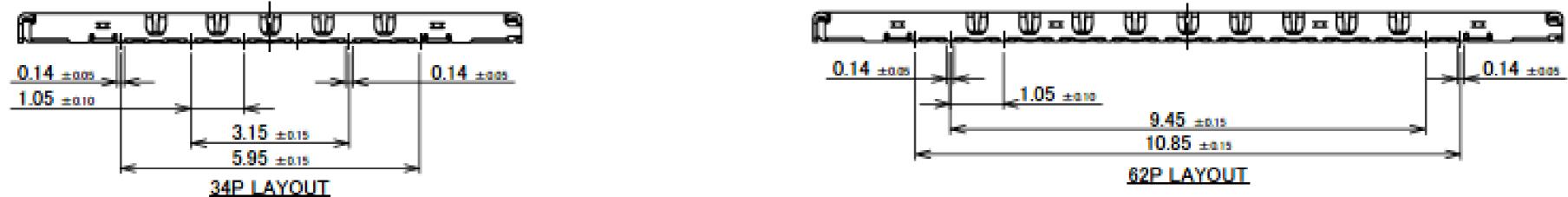




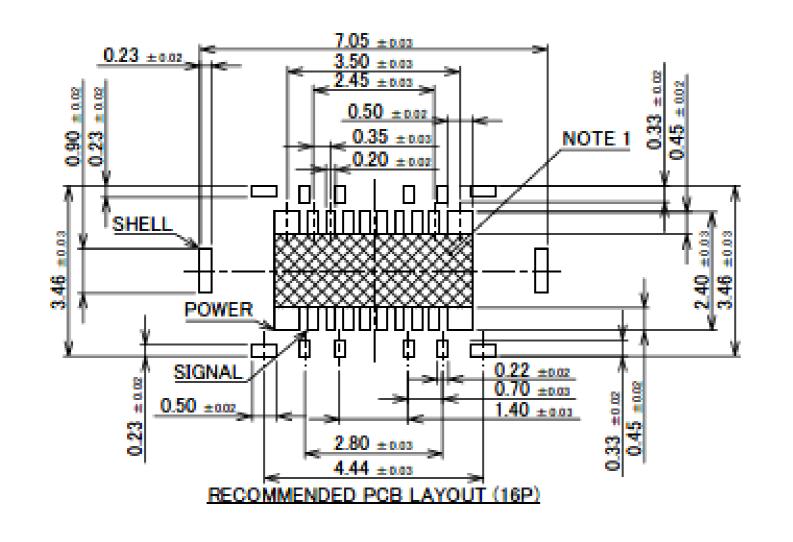


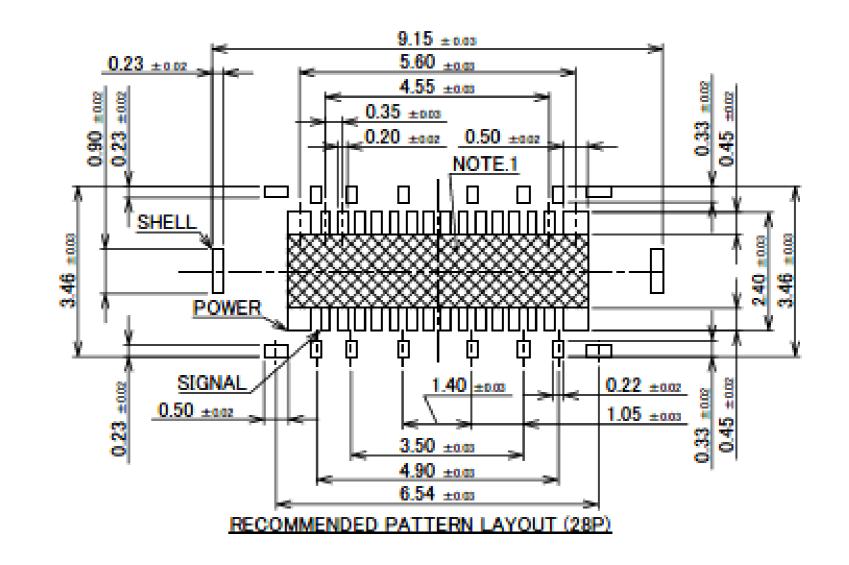




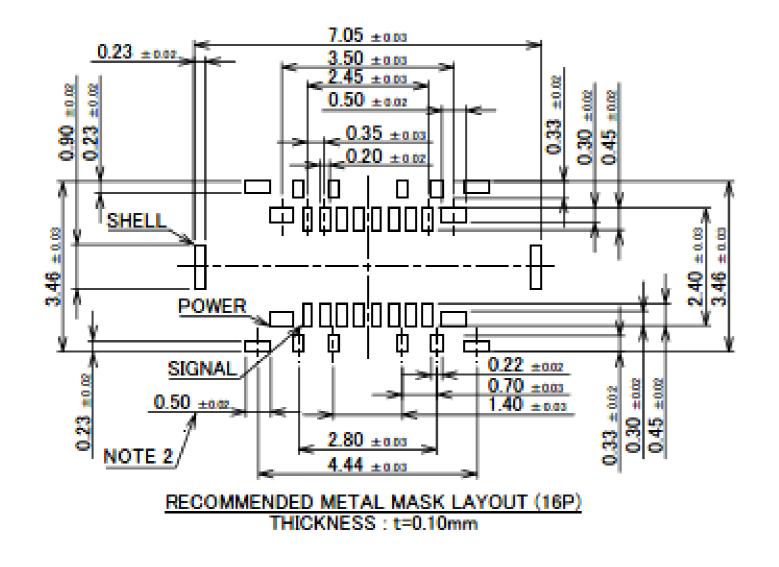


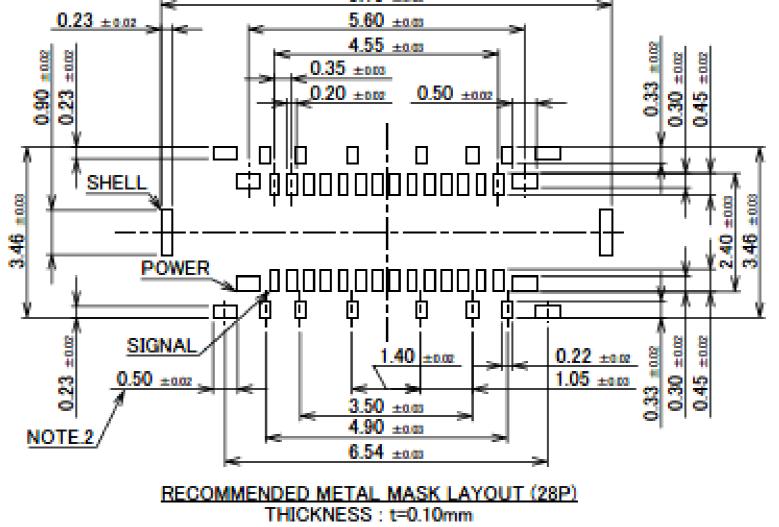
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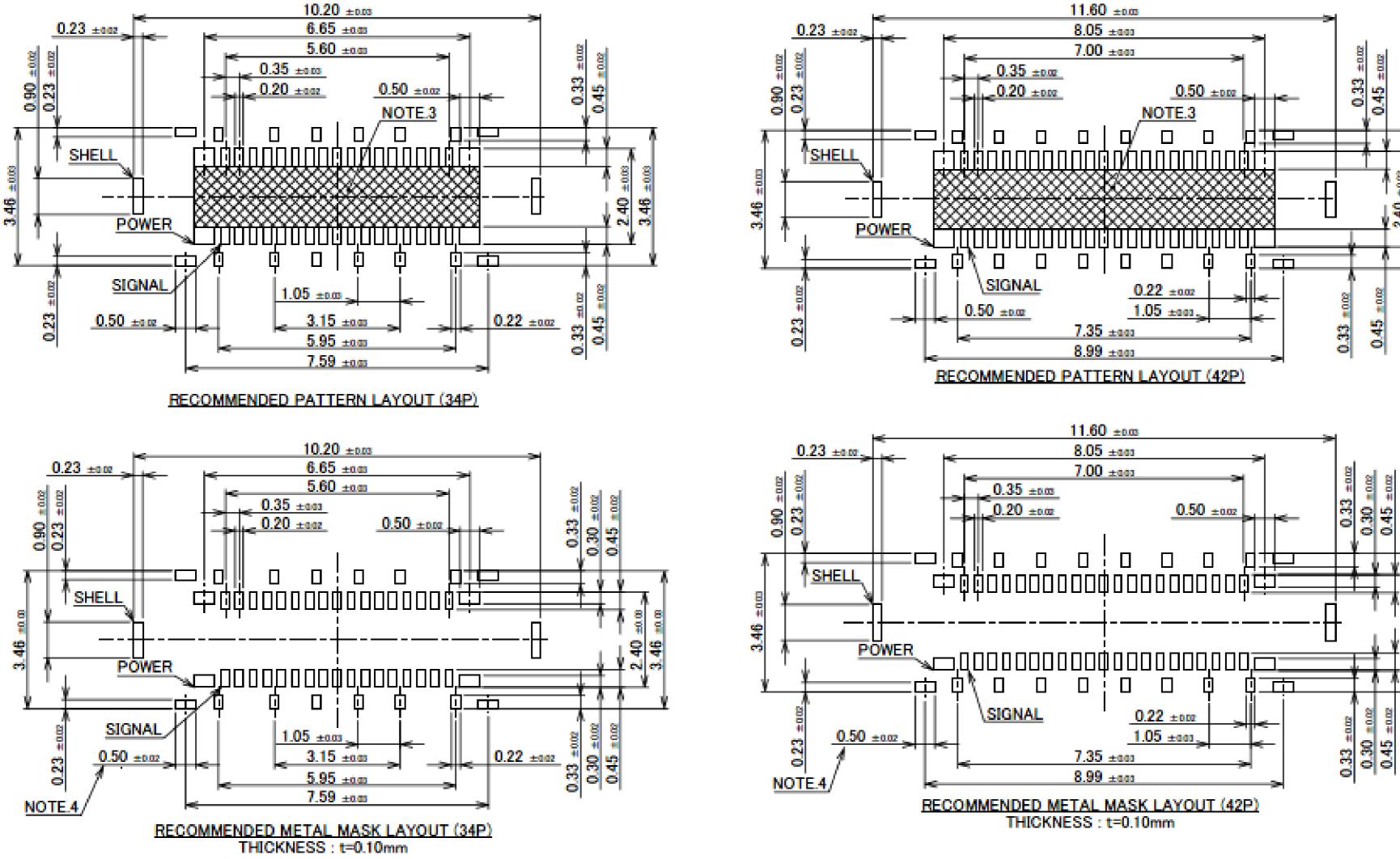


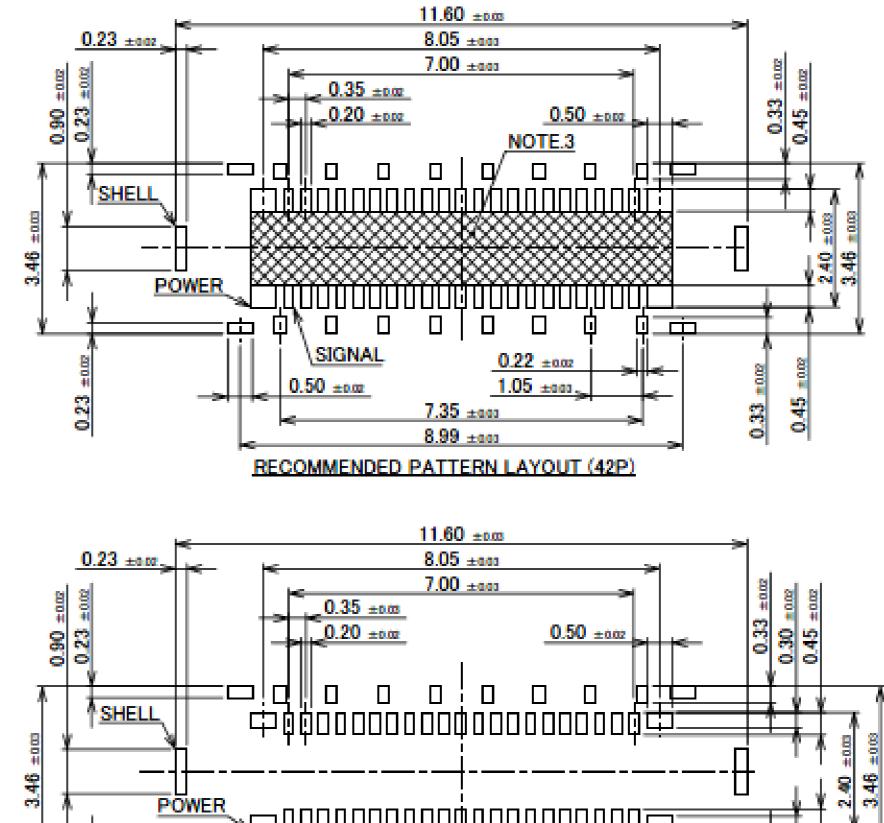


NOTES 1. SOLDER RESIST MUST BE APPLIED TO THIS AREA. 2. WHEN THE THICKNESS OF THE METAL MASK IS 0.12 mm, PLEASE SET IT TO 0.41 mm.

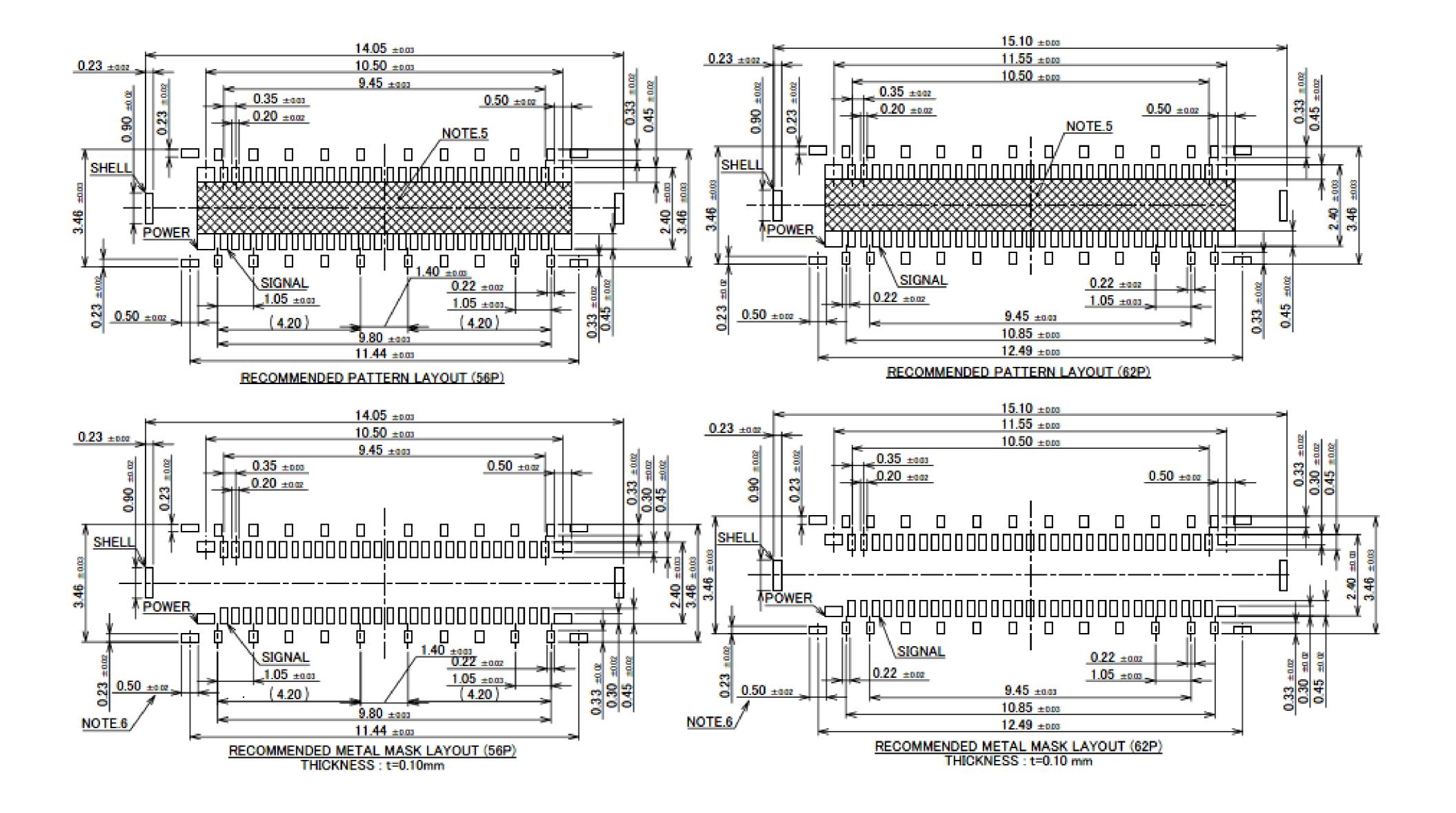
Rev.13







NOTES 3. SOLDER RESIST MUST BE APPLIED TO THIS AREA. 4. WHEN THE THICKNESS OF THE METAL MASK IS 0.12 mm, PLEASE SET IT TO 0.41 mm.



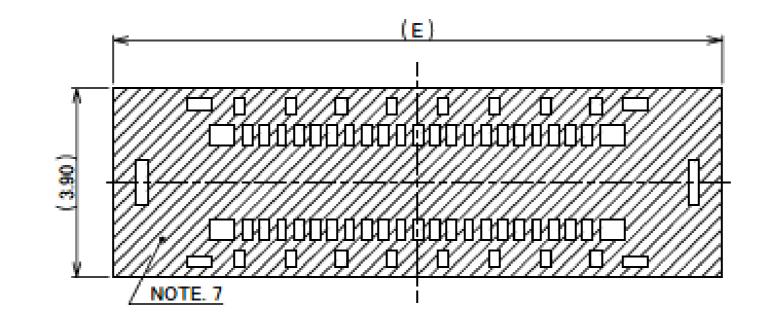
Rev.13

NOTES 5. SOLDER RESIST MUST BE APPLIED TO THIS AREA. 6. WHEN THE THICKNESS OF THE METAL MASK IS 0.12 mm, PLEASE SET IT TO 0.41 mm.

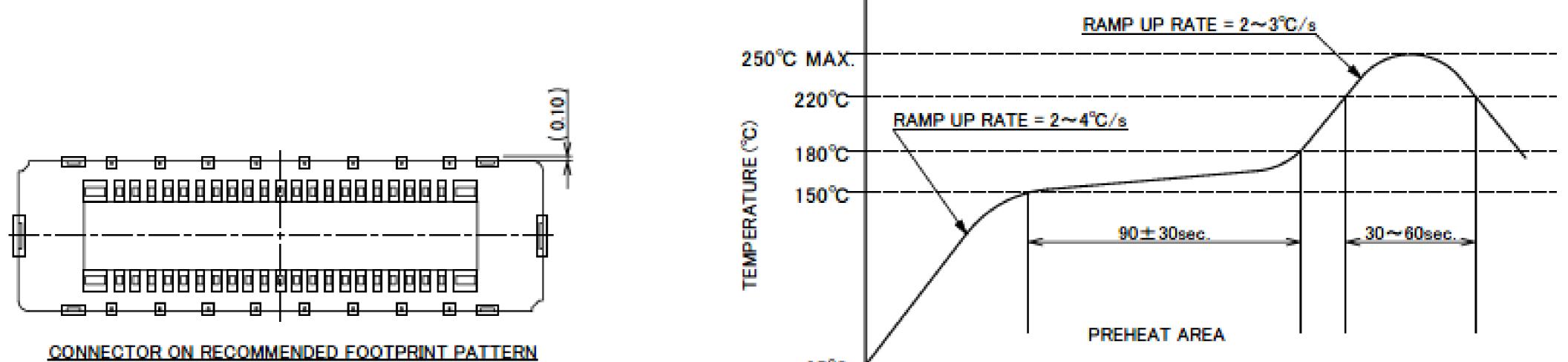
Rev.13



PART No.	SIGNAL POS.	POWER POS.	E
20698-016E-01	16P	4P	7.99
20698-028E-01	28P	4P	10.09
20698-034E-01	34P	4P	11.14
20698-042E-01	42P	4P	12.54
20698-056E-01	56P	4P	14.99
20698-062E-01	62P	4P	16.04



NOTES 7. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA.



Rev.13

Rev.13

PREHEAT AREA 25°C-TIME (s)

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

ITEMS	SPECIFICATION		
APPLICABLE CONNECTOR PART No.	20697-0**E-01-*		
RATING VOLTAGE	60V AC (PER CONTACT PIN)		
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A AC/DC (PER CONTACT PIN)/ 12.0A AC/DC(TOTAL)		
RATING AMPERAGE (FOR POWER CONTACT)	2.2A AC/DC (PER CONTACT PIN)/ 8.8A AC/DC(TOTAL)		
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)		
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)		
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 40mohm MAX. / AFTER TEST : ⊿40mohm MAX.		
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 20mohm MAX. / AFTER TEST : ∠20mohm MAX.		
CONTACT RESISTANCE (FOR GROUND)	INITIAL : 20mohm MAX. / AFTER TEST : 20mohm MAX.		
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.		
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min		
DURABILITY	30 CYCLES		
MATING FORCE (INITIAL)	16P: 32.0N MAX. 28P: 32.0N MAX. 34P: 38.0N MAX. 42P: 46.0N MAX. 56P: 60.0N MAX. 62P: 66.0N MAX.		
UNMATING FORCE (AFTER TEST)	16P: 3.2N MIN. 28P: 3.2N MIN. 34P: 3.8N MIN. 42P: 4.6N MIN. 56P: 6.0N MIN. 62P: 6.6N MIN.		
COPLANARITY	0.08 MAX.		
PRODUCT SPECIFICATION	PRS-2187		
TEST REPORT	TR-16014		
PACKING STANDARD	PST-15084 (10K/REEL)		
INSTRUCTION MANUAL	HIM-15020		
APPEARANCE CRITERIA No.	QLS-A***		

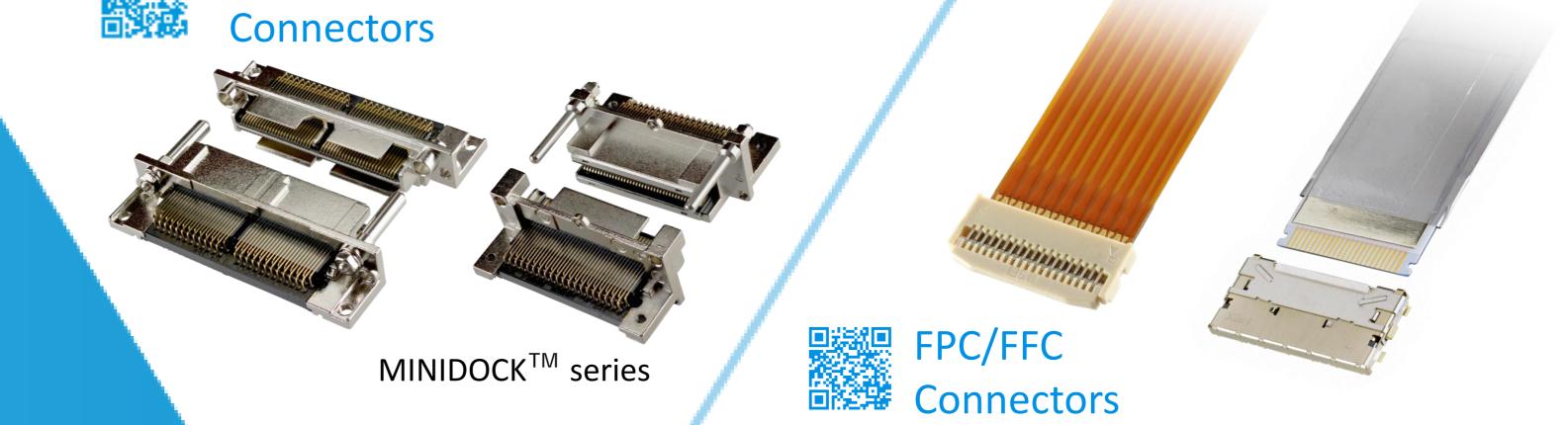
I-PEX



I/O

MINIFLEX[®] series E

EVAFLEX[®] series





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Contact your sales representative or more detailed information.

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