NOVASTACK® 35-PH

1.5 mm height connector with long effective contact wipe length, power contacts, 0.35 mm pitch, vertical mating

Product Specifications:				
Board Pitch (mm)		0.35		
Wiping Le	ngth (mm)	0.32		
	Height	1.5 +/- 0.06		
Mated Size (mm)	Width	Formula: 2.65 + (0.35*?p/2)		
	Depth	2.8		
Current Dating	Signal	0.3 A/pin		
Current Rating	Power	3.0 A/pin x 2		
Din Counts	Range	10 - 50 (signal) + 2 (power)		
Pin Counts	Available	10 30 40 50 /+ 2		

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



Dedicated high-profile design that promotes high-retention using a distinct clicking feeling

NOVASTACK 35-PH

0.35 mm Pitch, 1.5 mm Height Dedicated Board-to-Board connector

With deeper mating depth and contact wiping length.

2 depth

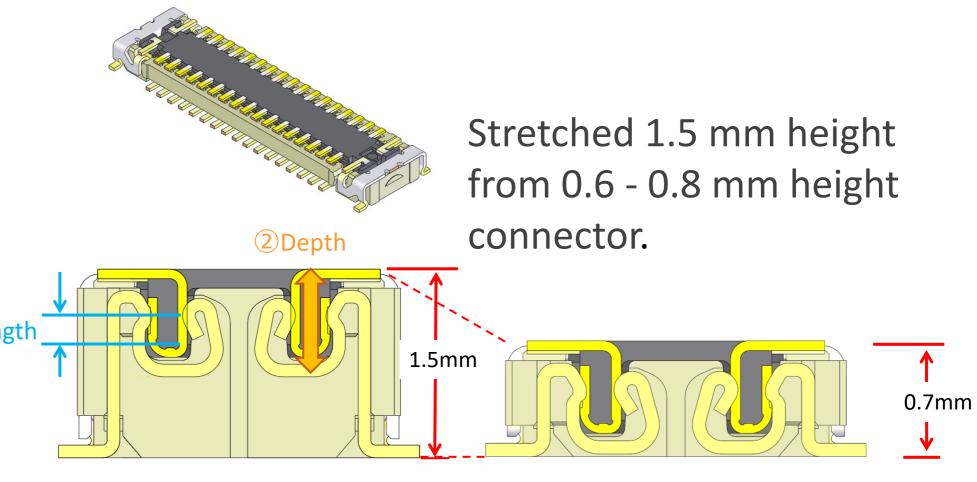
2 depth

1.5mm

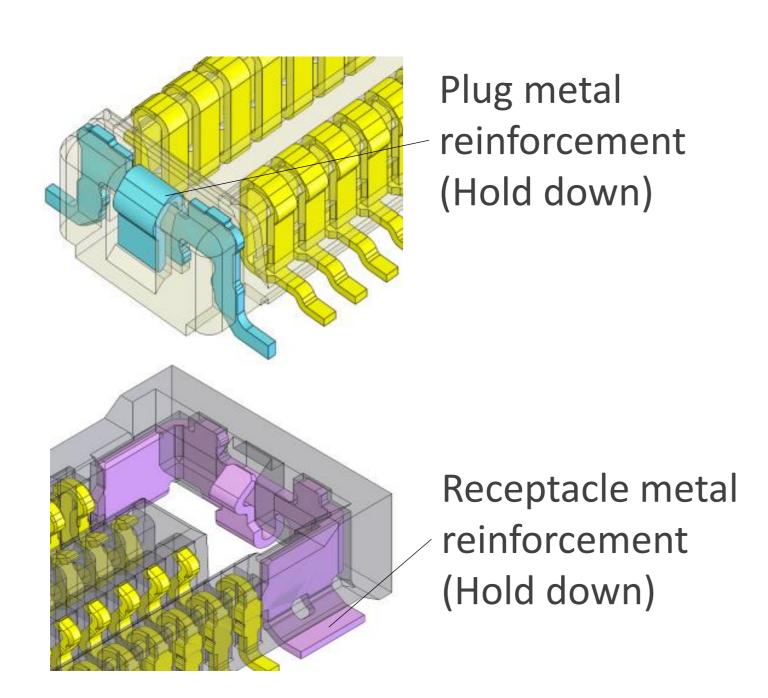
1 Contact wiping length

1 Contact wiping length

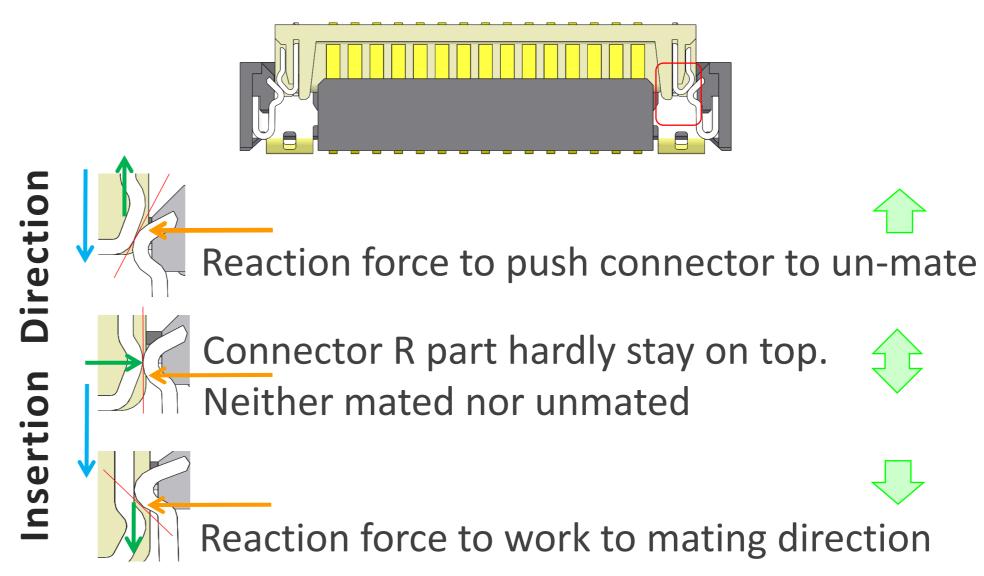
Ex: Typical H=1.5 mm 0.35 mm Board-to-Board connector



Robust design with hold down feature and prevents half-mating



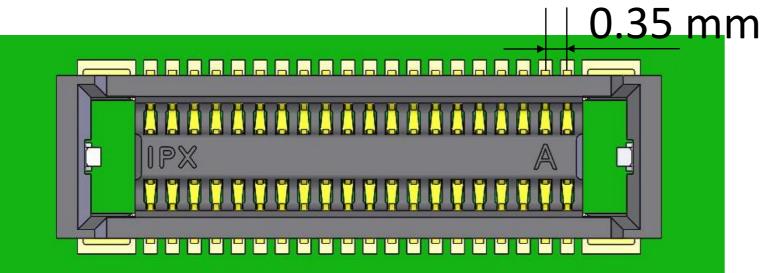
Metal hold down reaction when mating

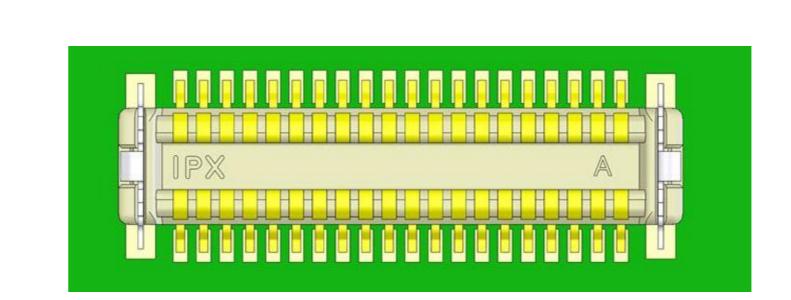


0.35 mm pitch contributes to space saving on the board Receptacle

receptacie				
Pin counts	10	30	40	50
I-PEX	4.40	7.90	9.65	11.40
Competitor	4.60	8.60	10.60	12.60
Decreasing Rate	4.3%	8.1%	9.0%	10%

Pin counts	10	30	40	50
I-PEX	3.27	6.77	8.52	10.27
Competitor	3.52	7.52	9.52	11.52
Decreasing Rate	7.1%	10%	10.5%	10.9%



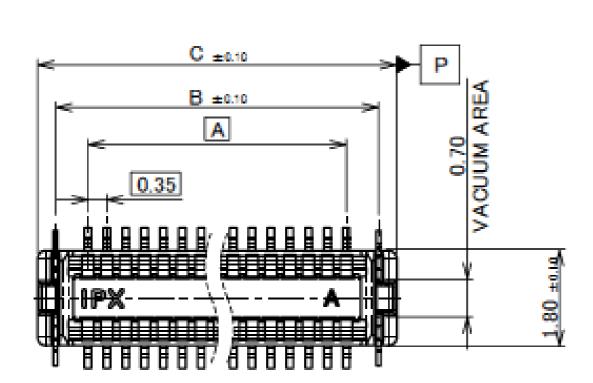


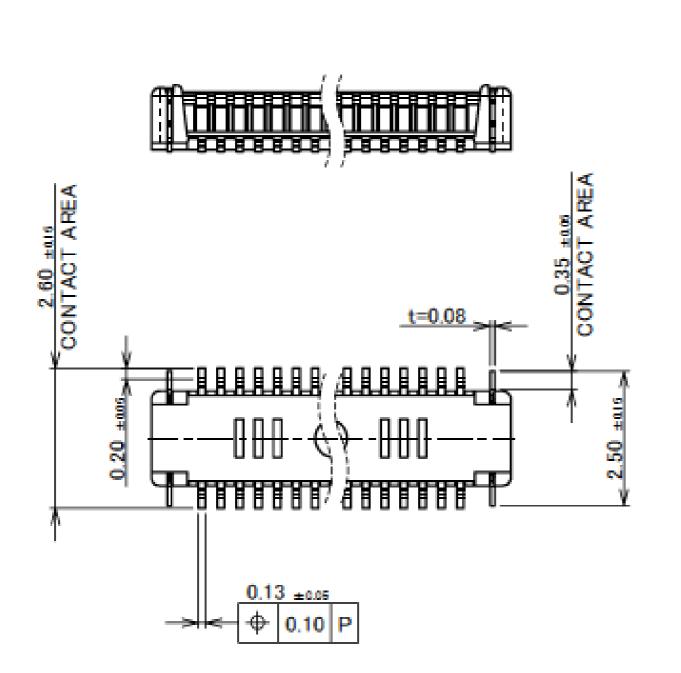
(Unit: mm²)

Component Parts Detail

Plug Assembly

Recommended F	P/N	20	842-	0**E	-21
PART No.	Pos	Α	В	С	
20842-010E-21	10	1.40	2.60	3.27	
20842-030E-21	30	4.90	6.10	6.77	
20842-040E-21	40	6.65	7.85	8.52	
20842-050E-21	50	8.40	9.60	10.27	

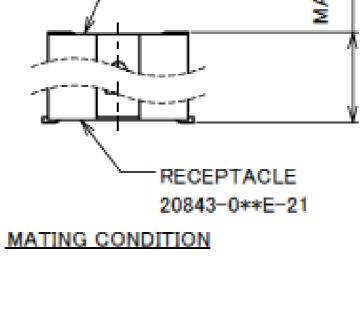






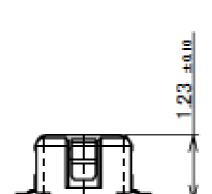


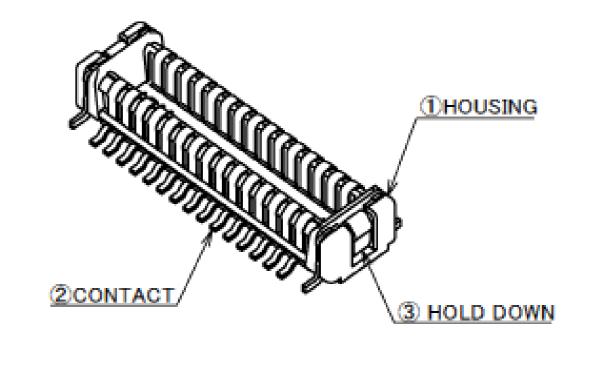




PLUG

20842-0**E-21



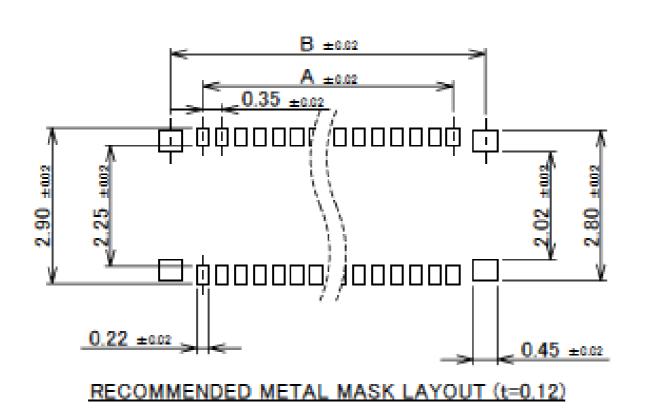


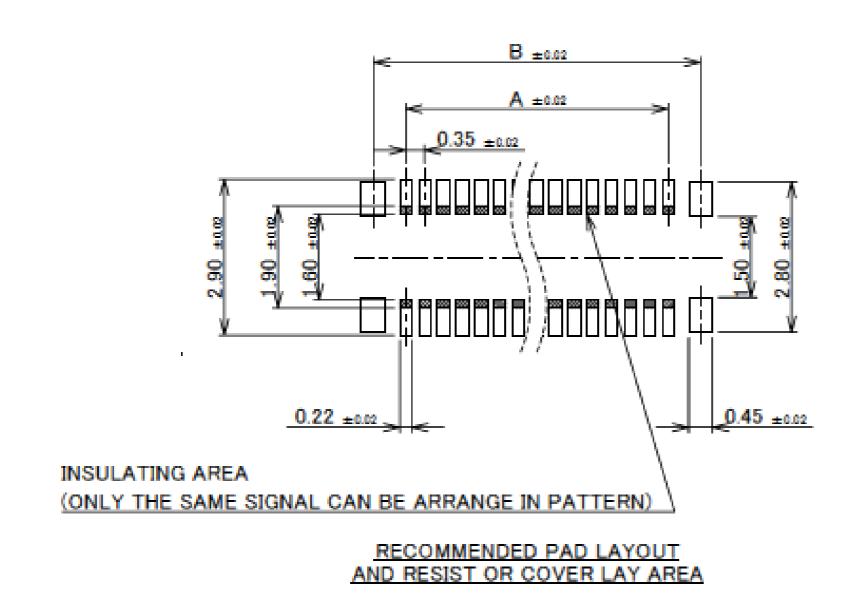
3	HOLD DOWN	CORSON ALLOY	ALL OVER Ni 1.27 μm MIN. CONTACT PART Au 0.10 μm MIN. SOLDERING PART Au 0.01 μm MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μm MIN. CONTACT PART Au 0.10 μm MIN. SOLDERING PART Au 0.01 μm MIN.
1	HOUSING	LCP	UL94V-0, BEIGE
NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS



Plug Assembly

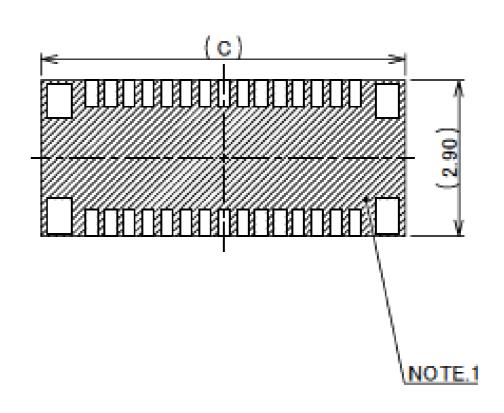
PART No.	Pos	Α	В	С
20842-010E-21	10	1.40	2.60	3.27
20842-030E-21	30	4.90	6.10	6.77
20842-040E-21	40	6.65	7.85	8.52
20842-050E-21	50	8.40	9.60	10.27

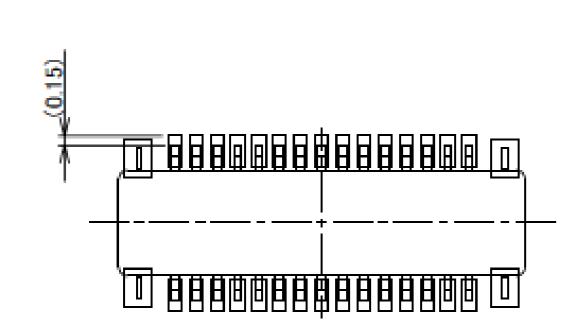




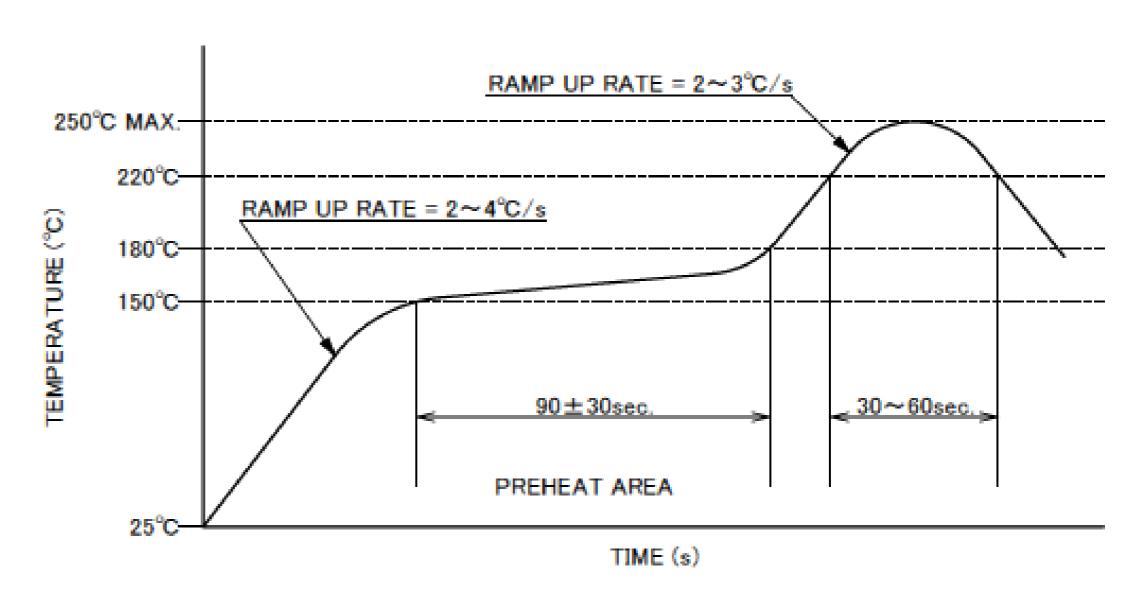
NOTES.

1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.





CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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



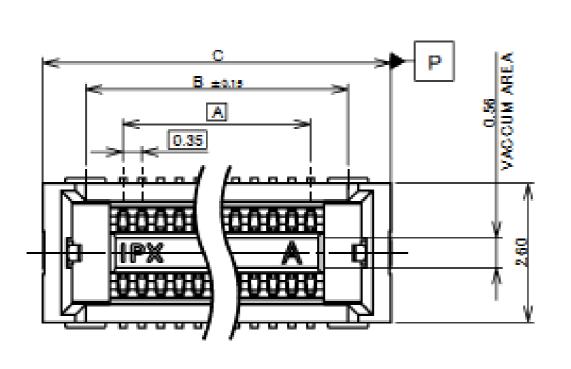
Plug Assembly

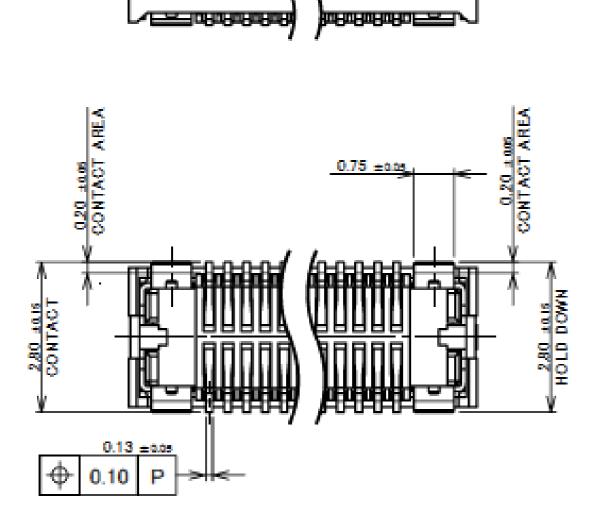
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20843-0**E-21
RATING VOLTAGE	50V AC (r.m.s)/DC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A MAX. AC/DC (PER CONTACT PIN) 40P AND OVER: 12.0A MAX. AC/DC(TOTAL)
RATING AMPERAGE (FOR POWER CONTACT)	3.0A MAX. AC/DC (PER CONTACT PIN)/ 6.0A MAX. AC/DC (TOTAL)
OPERATING TEMPERATURE	233~358K(-40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL: 80mohm MAX. / AFTER TEST: ∠120mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL: 80mohm MAX. / AFTER TEST: ∠120mohm MAX.
INSULATION RESISTANCE	INITIAL: 1,000Mohm MIN. / AFTER TEST: 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL)	1.0N/PIN MAX.
UNMATING FORCE (AFTER TEST)	0.15N/PIN MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2463
TEST REPORT	TR-18014
PACKING STANDARD	PST-17082
INSTRUCTION MANUAL	HIM-18017
APPEARANCE CRITERIA No.	QLS-A***

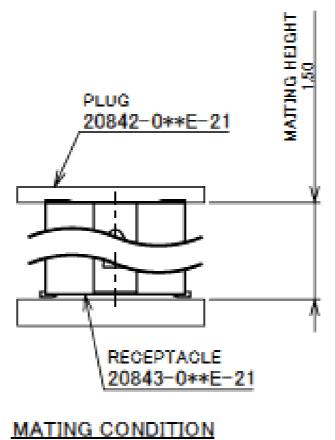
Rev.5

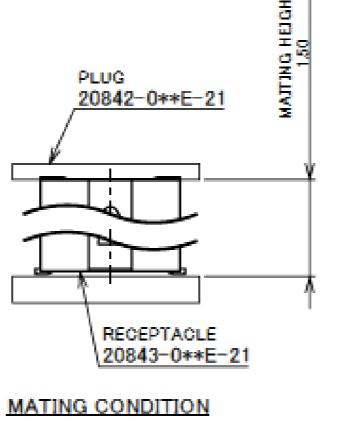
Receptacle Assembly

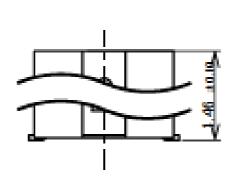
Recommended F	P/N	20843-0**E-21			
PART No.	Pos	Α	В	С	
20843-010E-21	10	1.40	2.80	4.40	
20843-030E-21	30	4.90	6.30	7.90	
20843-040E-21	40	6.65	8.05	9.65	
20843-050E-21	50	8.40	9.80	11.40	





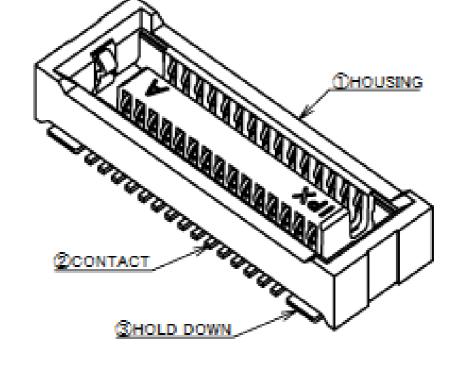










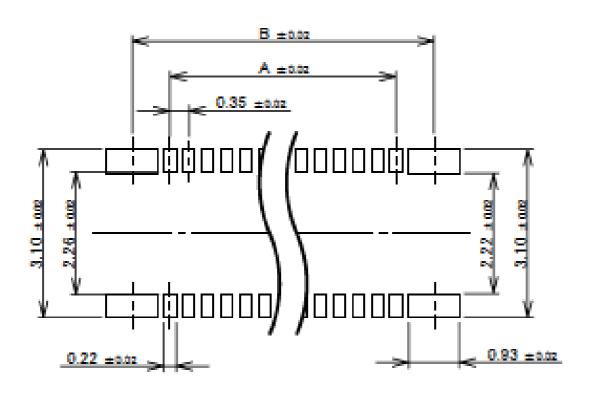


	3	HOLD DOWN	CORSON ALLOY	ALL OVER Ni 1.27 μm MIN. CONTACT PART Au 0.10 μm MIN. SOLDERING PART Au 0.01 μm MIN.
	2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μm MIN. CONTACT PART Au 0.10 μm MIN. SOLDERING PART Au 0.01 μm MIN.
	1	HOUSING	LCP	UL94V-0, BLACK
M	10.	DESCRIPTION	MATERIAL	FINISH , REMARKS

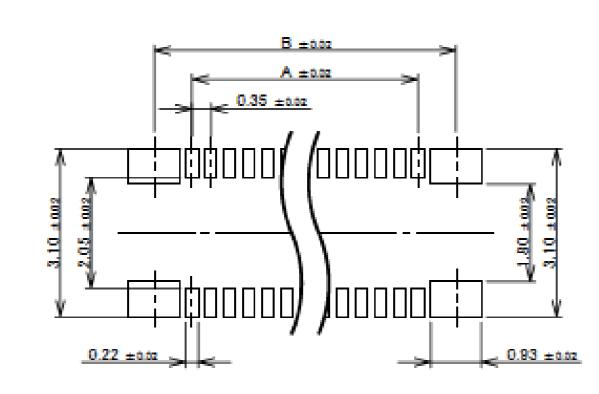


Receptacle Assembly

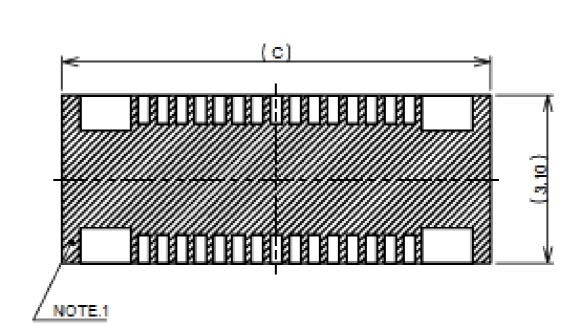
PART No.	Pos	A	В	C
20843-010E-21	10	1.40	2.80	4.40
20843-030E-21	30	4.90	6.30	7.90
20843-040E-21	40	6.65	8.05	9.65
20843-050E-21	50	8.40	9.80	11.40



RECOMMENDED METAL MASK LAYOUT (t=0.12)

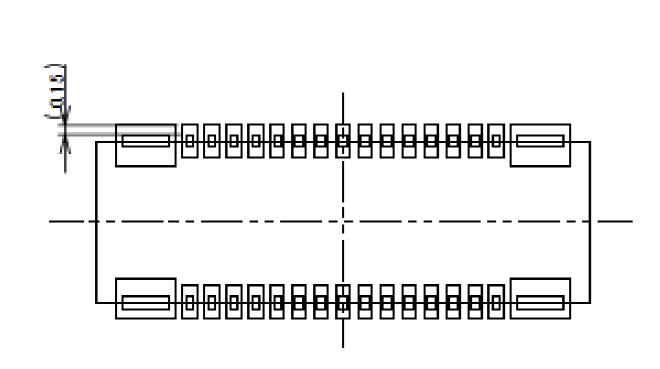


RECOMMENDED PAD LAYOUT

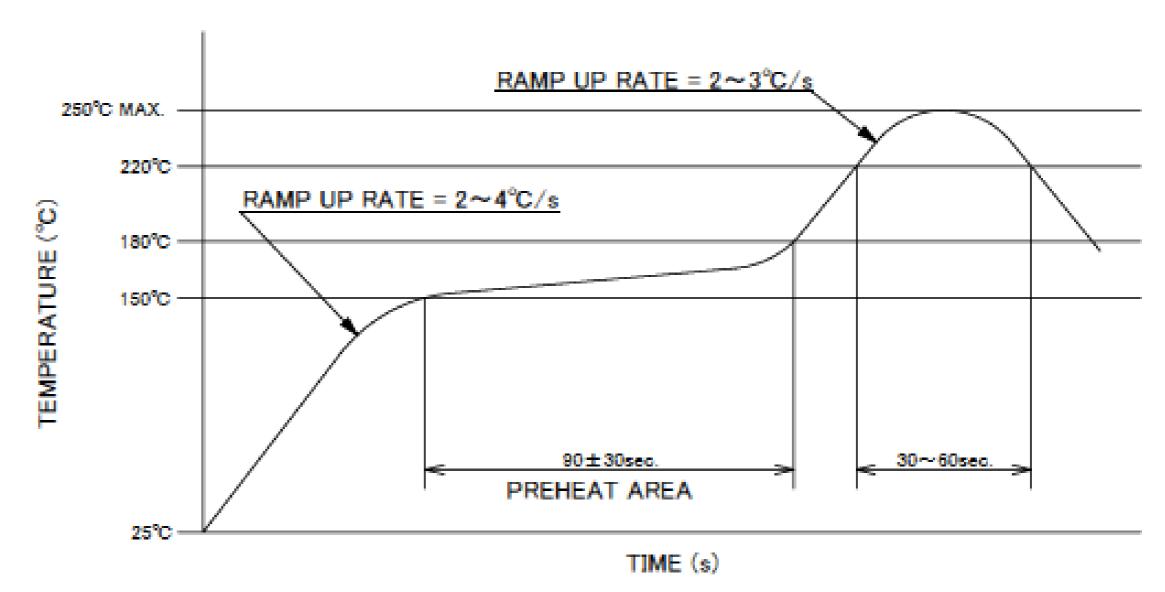


Rev.4

NOTES. 1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

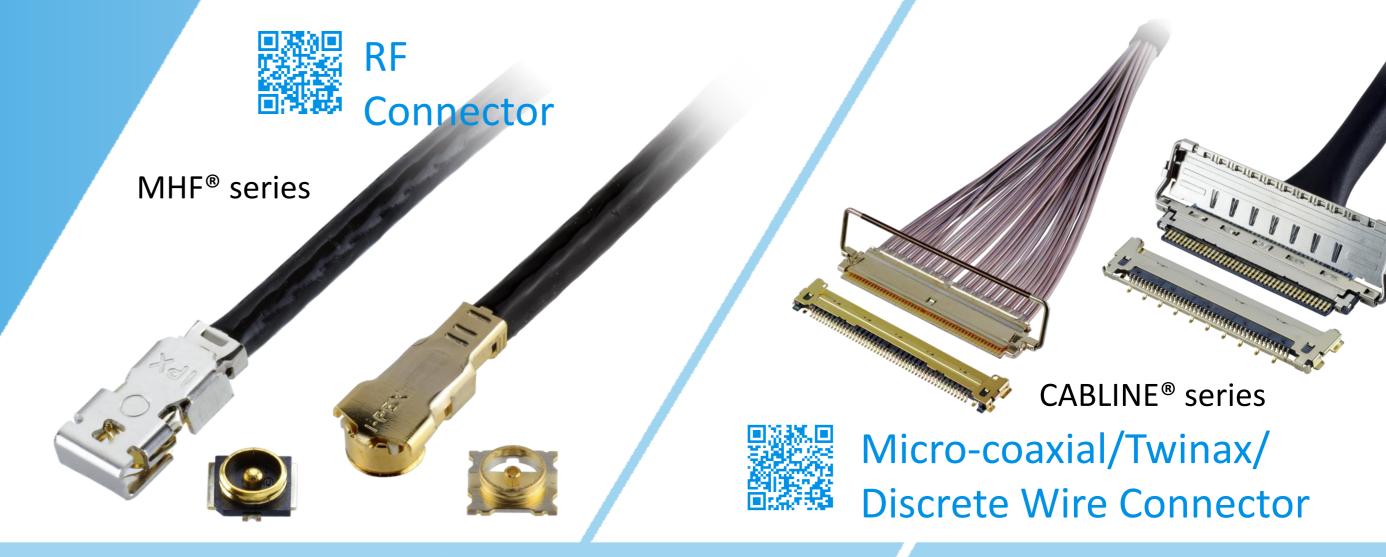


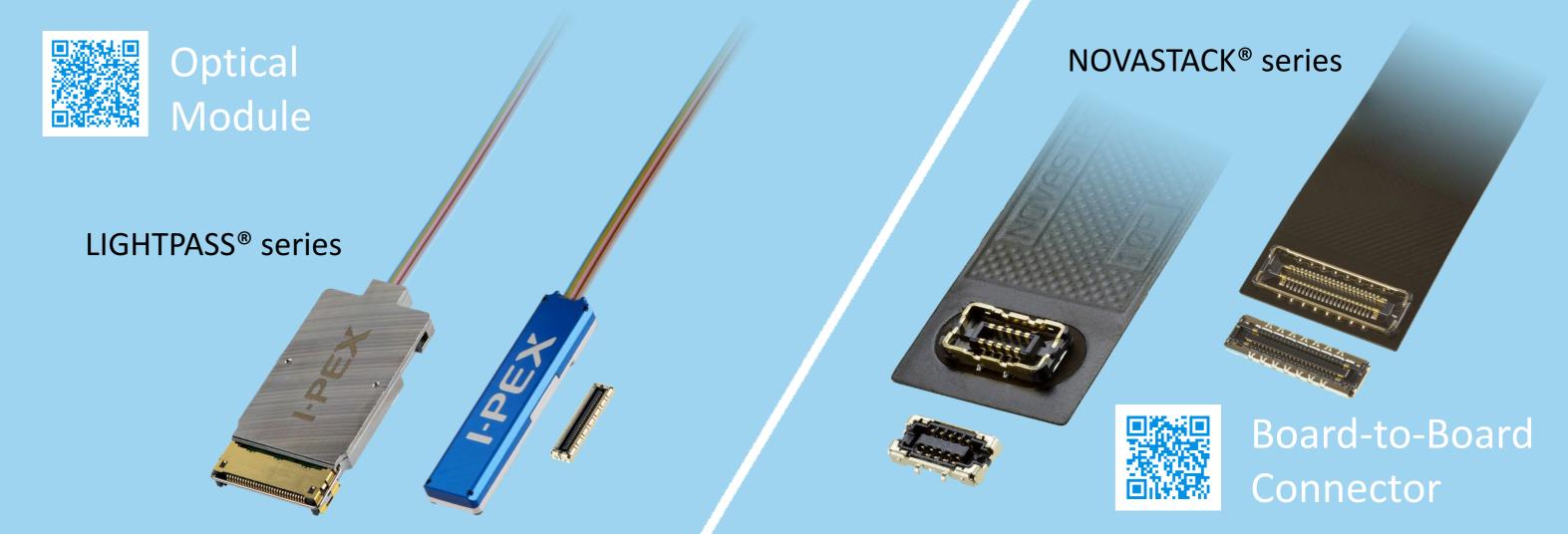
Receptacle Assembly

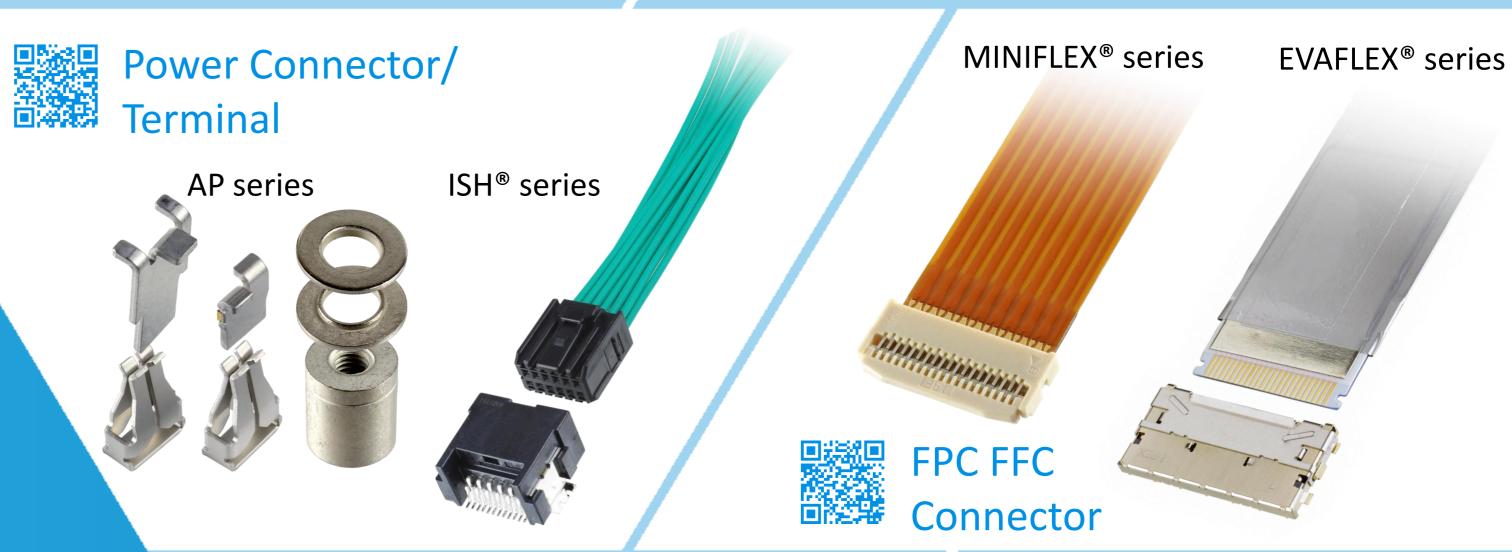
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20842-0**E-21
RATING VOLTAGE	50V AC (r.m.s)/DC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	0.3A MAX. AC/DC (PER CONTACT PIN) 40P AND OVER: 12.0A AC/DC MAX.(TOTAL)
RATING AMPERAGE (FOR POWER CONTACT)	3.0A MAX. AC/DC (PER CONTACT PIN)/ 6.0A MAX. AC/DC (TOTAL)
OPERATING TEMPERATURE	233~358K(−40°C~+85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENSING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL: 80mohm MAX. / AFTER TEST: ∠20mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL: 80mohm MAX. / AFTER TEST: ∠20mohm MAX.
INSULATION RESISTANCE	INITIAL: 1,000Mohm MIN. / AFTER TEST: 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC200V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL)	1.0N/PIN MAX.
UNMATING FORCE (AFTER TEST)	ALL PIN COUNT: 0.15N/PIN MIN.
COPLANARITY	0.10 MAX.
PRODUCT SPECIFICATION	PRS-2463
TEST REPORT	TR-18014
PACKING STANDARD	PST-17083
INSTRUCTION MANUAL	HIM-18017
APPEARANCE CRITERIA No.	QLS-A***

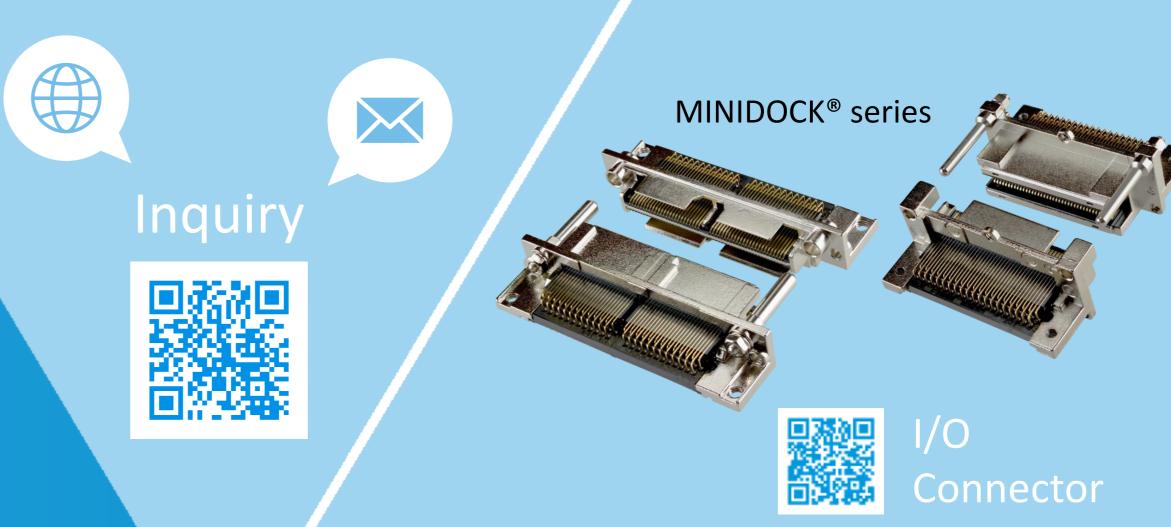


Custom Connectors Available









I-PEX, MHF, CABLINE, LIGHTPASS, NOVASTACK, ISH, IARPB, MINIFLEX, EVAFLEX, MINIDOCKS and ZenShield are registered trademarks of I-PEX Inc. Please note that the contents in the catalog might be changed without prior notification. I-PEX Inc. assumes no responsibility for any inaccuracies or obligation to update Information on these documents, Please be sure to read and understand the latest "Precautions for Use" and "Instruction" Manual" before you use our products. We shall not be responsible for any defects, damages or troubles in case you use our products without following the precautions for use. Please feel free to contact our sales representatives when you use our products for any applications that require very high reliability and safety, or that relate to human life (ex. nuclear power control, aerospace, transportation, medical equipment, safety equipment etc.).

Contact your sales representative or more detailed information.

www.i-pex.com

