

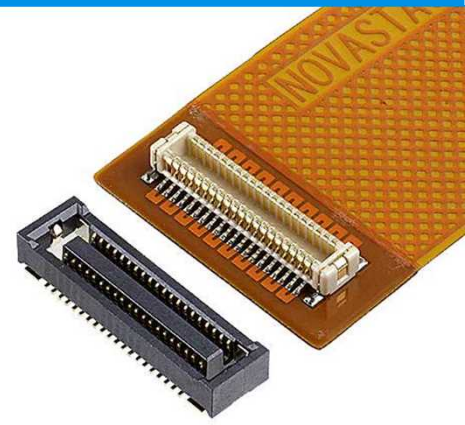
# NOVASTACK® 35-PH

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

## Product Specifications:

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

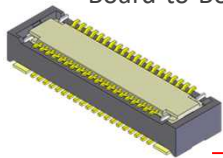
\* Please inquire for pin counts not listed or outside of the pin count range.



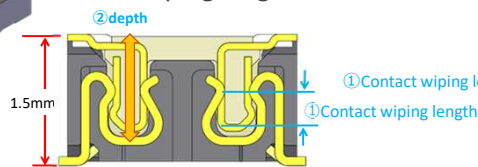
## ► Dedicated high-profile design that promotes high-retention using a distinct clicking feeling

### NOVASTACK 35-PH

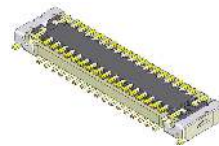
0.35 mm Pitch, 1.5 mm Height Dedicated Board-to-Board connector



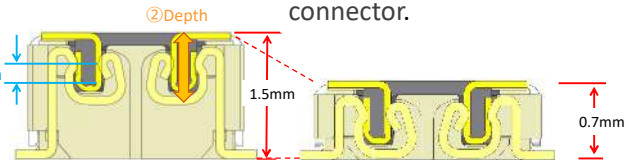
With deeper mating depth and contact wiping length.



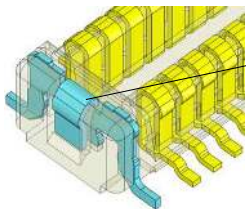
Ex : Typical H=1.5 mm 0.35 mm Board-to-Board connector



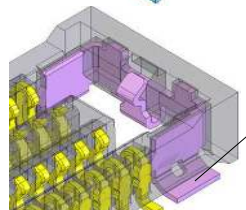
Stretched 1.5 mm height from 0.6 - 0.8 mm height connector.



## ► Robust design with hold down feature and prevents half-mating

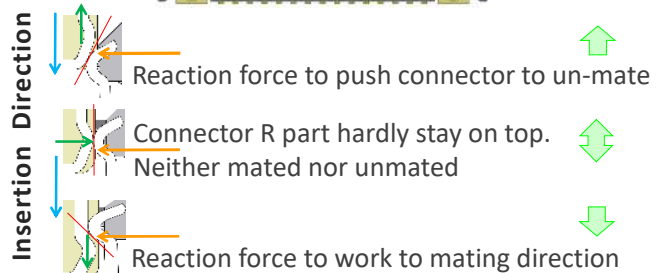
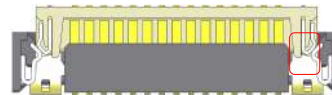


Plug metal reinforcement (Hold down)



Receptacle metal reinforcement (Hold down)

### Metal hold down reaction when mating



## ► 0.35 mm pitch contributes to space saving on the board

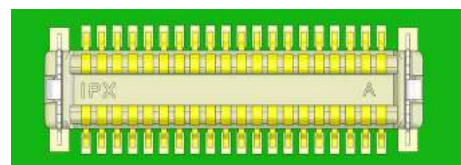
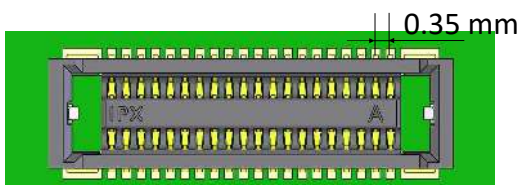
Receptacle

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%

Plug

(Unit: mm<sup>2</sup>)

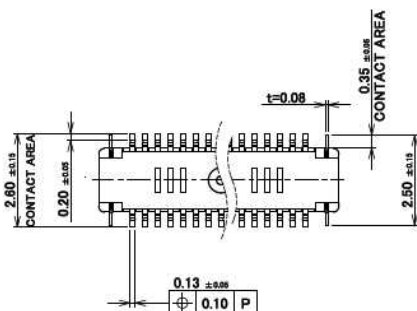
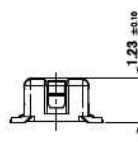
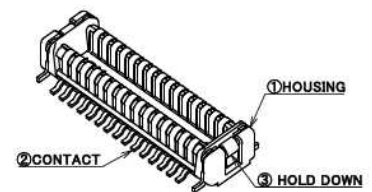
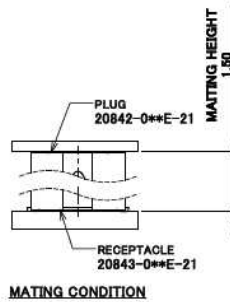
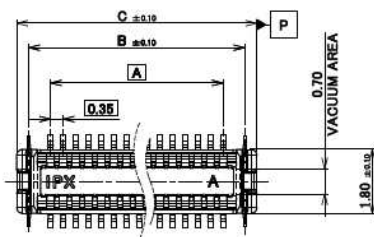
Pin counts	10	30	40	50
I-PEX	3.27	6.77	8.52	10.27
Competitor	3.52	7.52	9.52	11.52
Decreasing Rate	7.1%	10%	10.5%	10.9%



# Component Parts Detail

## Plug Assembly

Recommended P/N		20842-0**E-21		
PART No.	Pos	A	B	C
20842-010E-21	10	1.40	2.80	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

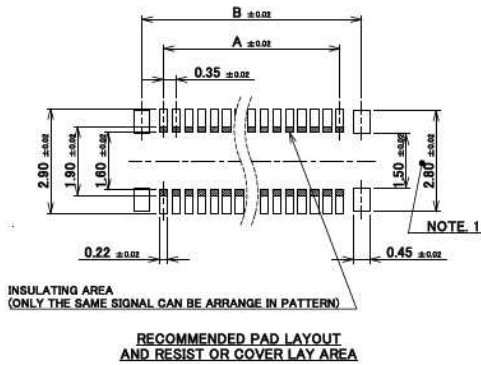
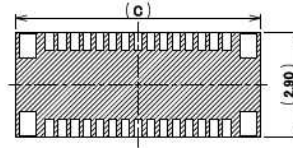
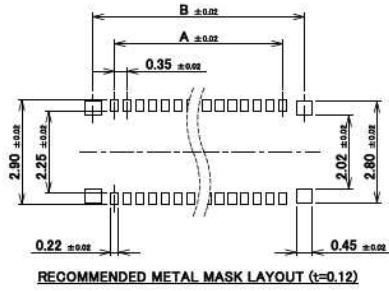


NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	HOLD DOWN	CORSON ALLOY	ALL OVER Ni 1.27 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN.
1	HOUSING	LCP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

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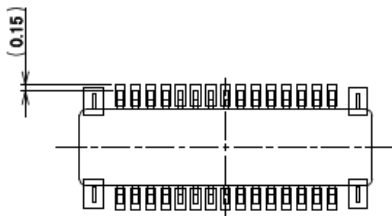
# Plug Assembly

PART No.	Pos	A	B	C
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

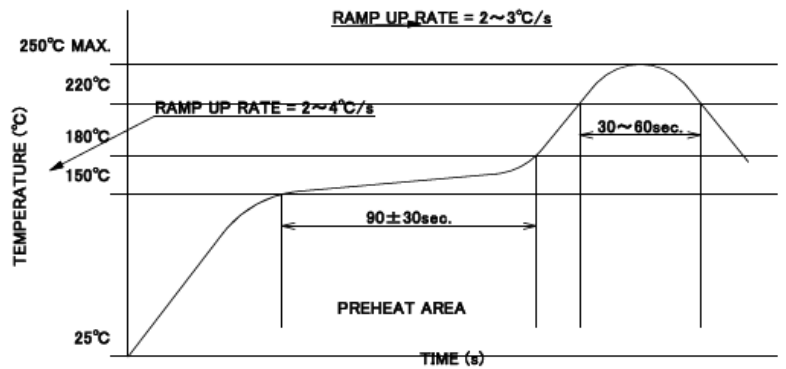


NOTES.  
1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

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**CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN**



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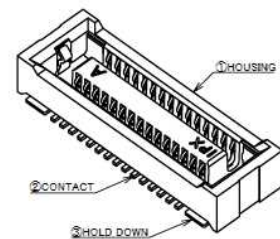
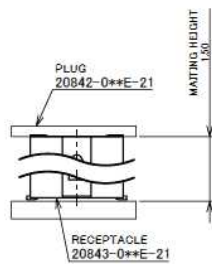
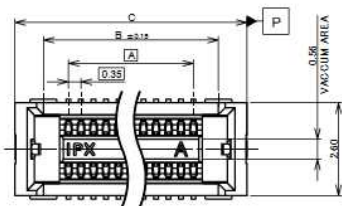
# Plug Assembly

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 : $\Delta$ 20mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 80mohm MAX. / AFTER TEST : $\Delta$ 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)	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**

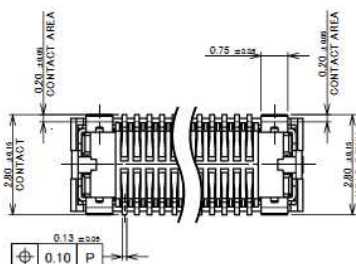
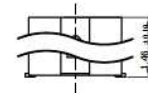
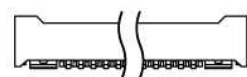
Rev.4

# Receptacle Assembly

Recommended P/N		20843-0**E-21		
PART No.	Pos	A	B	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



MATING CONDITION

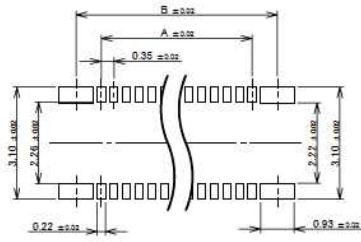


NO.	DESCRIPTION	MATERIAL	FINISH, REMARKS
3	HOLD DOWN	CORSON ALLOY	ALL OVER Ni 1.27 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN.
2	CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 $\mu$ m MIN. CONTACT PART Au 0.10 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN.
1	HOUSING	LCP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

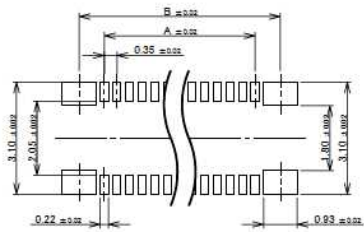
Rev.4

# Receptacle Assembly

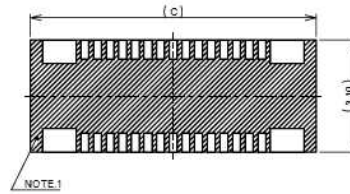
PART No.	Pos	A	B	C
20843-010E-21	10	1.40	2.80	4.40
20843-030E-21	30	4.90	6.30	7.90
20843-040E-21	40	6.65	8.05	9.65
20843-050E-21	50	8.40	9.80	11.40



RECOMMENDED METAL MASK LAYOUT (t=0.12)



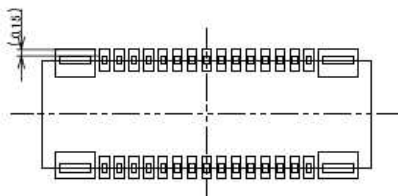
RECOMMENDED PAD LAYOUT



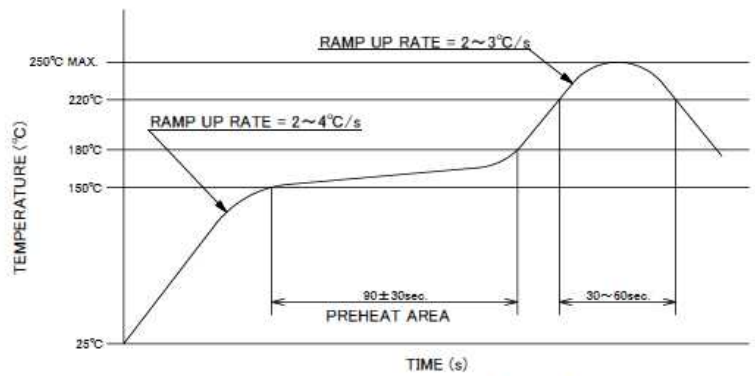
NOTE:1

NOTES:  
1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

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CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.4

## 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 : $\triangleleft$ 20mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 80mohm MAX. / AFTER TEST : $\triangleleft$ 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***

Rev.4

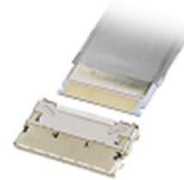
Board to Board



High-Density



Autolocking FPC/FFC



High-Density



FPC/FFC



Micro-Coaxial / Discrete Cable



High-Speed



RF



High-Frequency



Optical Module



High-Speed



Effector



Power



High-Power



I/O (Input/Output)



Quick charge



Inquiry



Custom Connectors Available



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