

- ✓ 6.0 A x 4 pins (USB power delivery applicable) with 4 signal pins
- ✓ Metal-to-metal guide offers easy mating
- ✓ Robust design with hold down feature

Pin counts:

Range	Up to 4 (Signal) +4 (Power)
Available	4 + 4

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

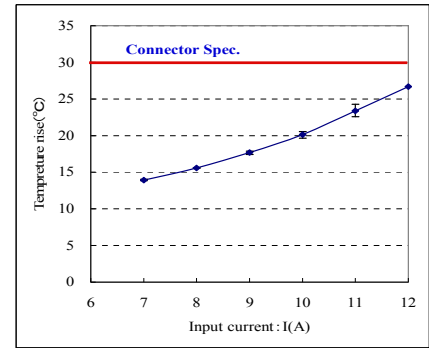
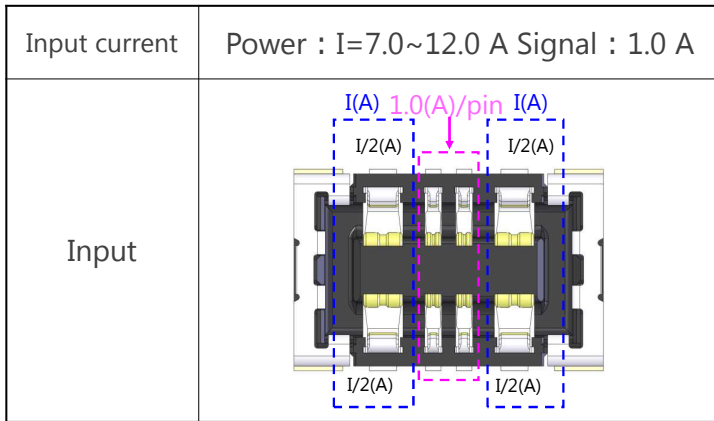
Receptacle P/N		20713-004E-0*
Plug P/N		20712-004E-0*
Pitch (mm)		0.4(signal), 1.7(power)
Mated Size (mm)	Stack height	0.6 +/- 0.1
	Width formula	3.20+(0.4*p/2)
	Depth	2.6
Current rating	Signal pin	1.0A/pin
	Power pin	6.0A/pin x 4
Footprint compatibility		Original

6.0 A x 4 pins (USB power delivery applicable) with 4 signal pins

Test result

Temperature rise Spec : $\Delta T=30$ degree MAX (at 12.0 A)

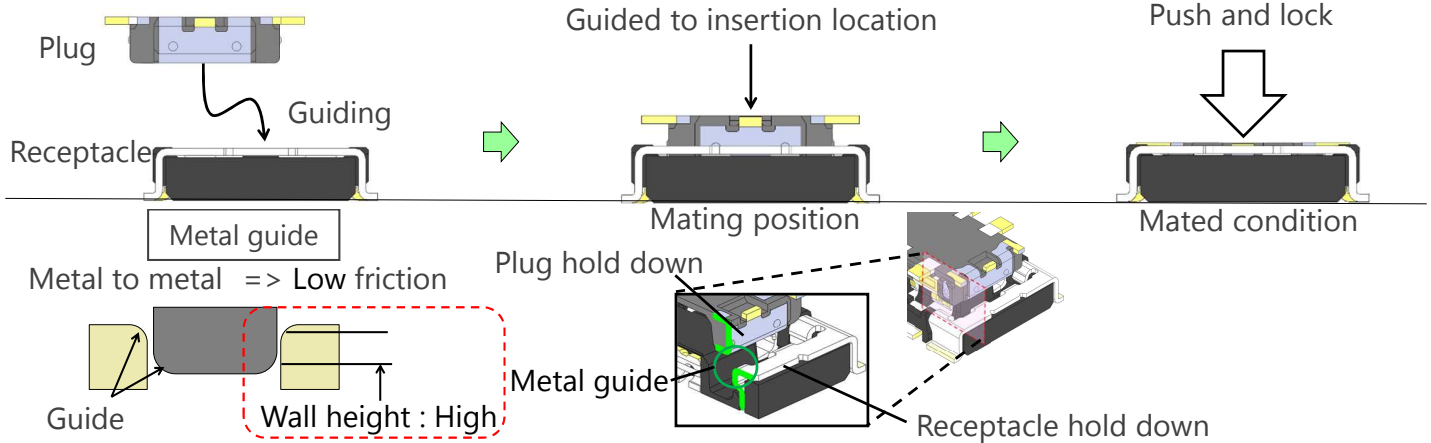
ΔT in measurement of temperature rise was MAX 27.1 degree (Celsius) and satisfied Spec.
NOVASTACK-B is applicable for high current of 12 A



Metal-to-metal guide offers easy mating

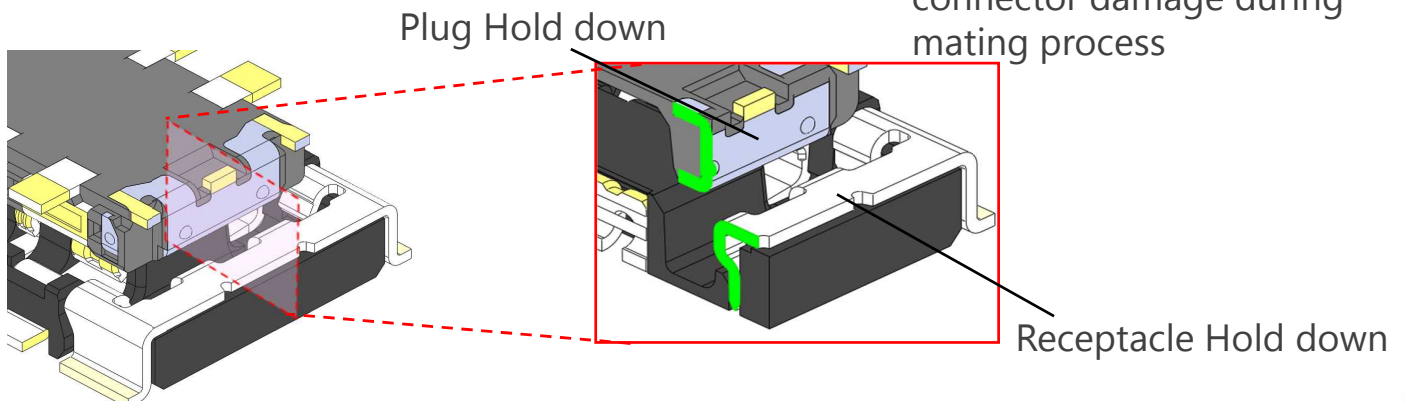
Mating Process

Easy "Lead-in" by metal <=> Metal low friction



Robust design with hold down feature

Metal hold down to reduce connector damage during mating process

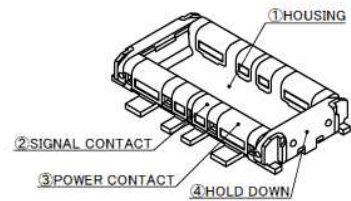
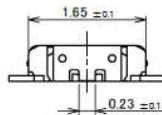
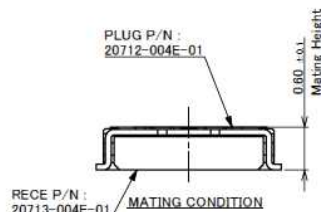
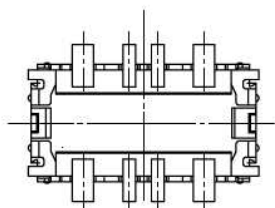
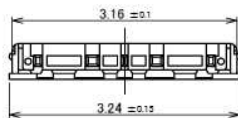
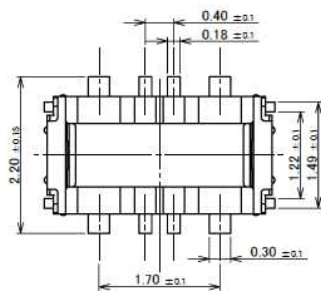


NOVASTACK®-B

Component Parts Detail

Plug Assembly :

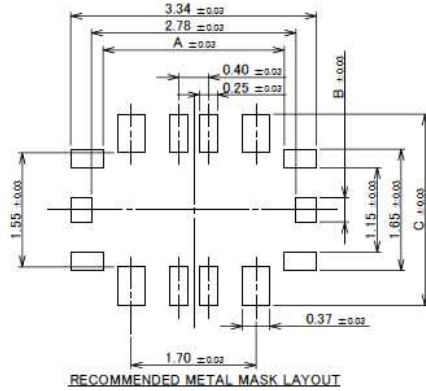
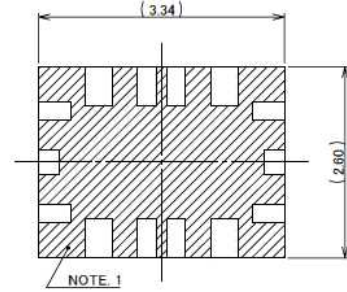
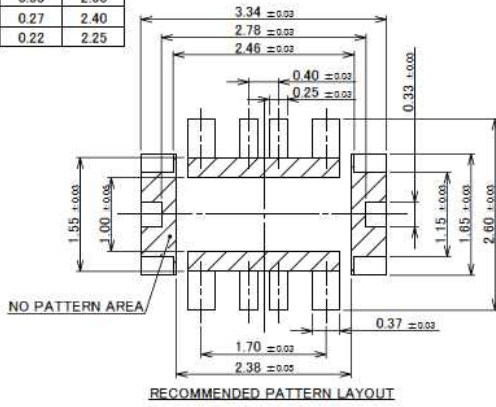
Recommended P/N		20712-004E-01
PART No.	Q'ty/REEL	
20712-004E-01	20K	
20712-004E-02	5K	



4	HOLD DOWN	PHOSPHOR BRONZE	ALL OVER Ni 1.27 μ m MIN. SOLDERING PART Au 0.02 μ m 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 0.05 μ m MIN / SOLDERING PART Au 0.02 μ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH , REMARKS

Plug Assembly :

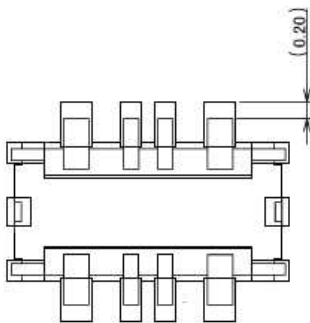
MASK THICKNESS	A	B	C
t=0.08	2.46	0.33	2.60
t=0.1	2.63	0.27	2.40
t=0.12	2.75	0.22	2.25



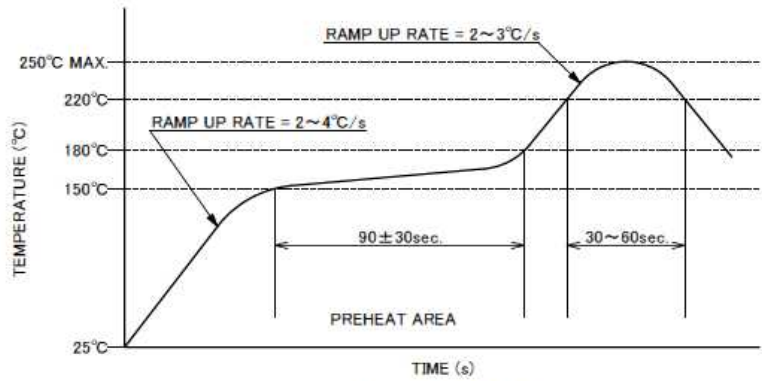
NOTES
1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

Rev. 3

Plug Assembly :



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev. 3

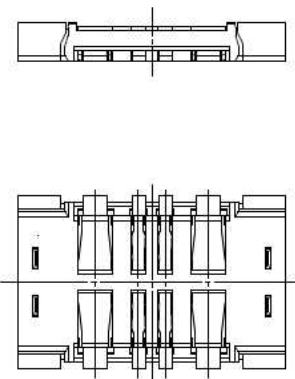
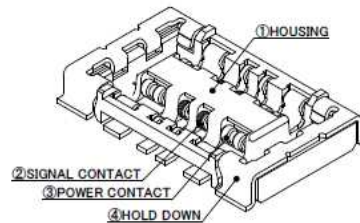
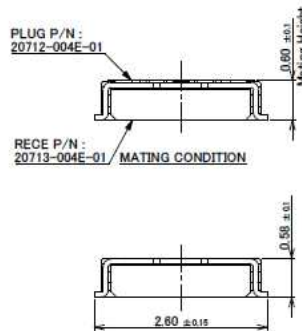
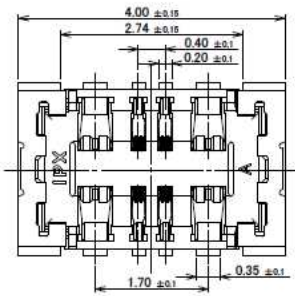
Plug Assembly :

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER A CONTACT)
RATING AMPERAGE (FOR SIGNAL CONTACT)	1.0A AC/DC (PER A CONTACT)/ 4.0A AC/DC(TOTAL)
RATING AMPERAGE (FOR POWER CONTACT)	6.0A AC/DC (PER A CONTACT)/ 24.0A 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 : \triangle 20mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 20mohm MAX. / AFTER TEST : \triangle 20mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	40N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 10N MIN. AFTER TEST: 7N MIN.
COPLANARITY	0.08 MAX.
PRODUCT SPECIFICATION	PRS-2284
TEST REPORT	TR-16098
PACKING STANDARD	PST-15122 (20K/REEL) PST-16056 (5K/REEL)
INSTRUCTION MANUAL	HIM-16033
APPEARANCE CRITERIA No.	QLS-A***

Rev. 3

Receptacle Assembly :

Recommended P/N	20713-004E-01
PART No.	Q'ty/REEL
20713-004E-01	20K
20713-004E-02	5K

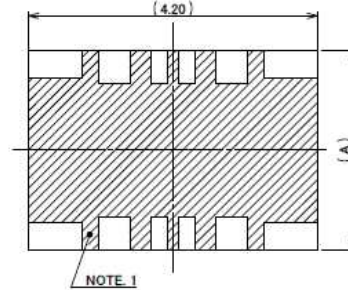
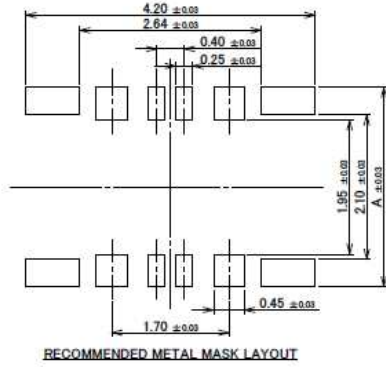
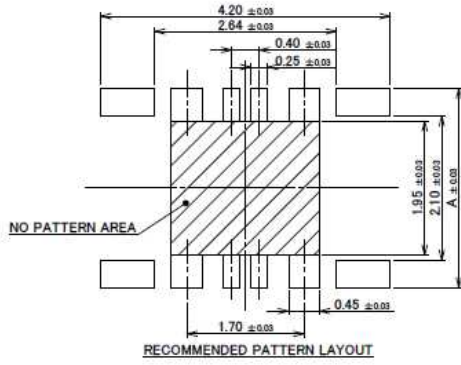


4	HOLD DOWN	PHOSPHOR BRONZE	ALL OVER Ni 1.27 μ m MIN. SOLDERING PART Au 0.01 μ m MIN.
3	POWER CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.05 μ m MIN./ SOLDERING PART Au 0.02 μ m MIN.
2	SIGNAL CONTACT	CORSON ALLOY	ALL OVER Ni 1.27 μ m MIN. CONTACT PART Au 0.05 μ m MIN./ SOLDERING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

Rev. 2

Receptacle Assembly :

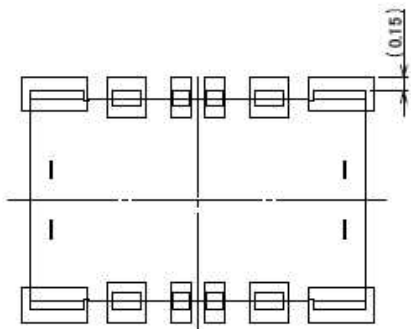
MASK THICKNESS	A
t=0.08	2.90
t=0.1	2.74
t=0.12	2.64



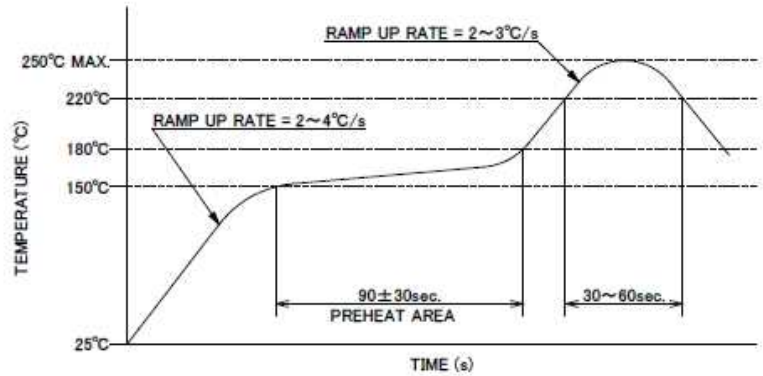
NOTES.
1. THIS AREA CANNOT MOUNT ANOTHER COMPONENTS.

Rev. 2

Receptacle Assembly :



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev. 2

Receptacle Assembly :

ITEMS	SPECIFICATION
RATING VOLTAGE	50V AC (PER A CONTACT)
RATING AMPERAGE (FOR SIGNAL CONTACT)	1.0A AC/DC (PER A CONTACT)/ 4.0A AC/DC(TOTAL)
RATING AMPERAGE (FOR POWER CONTACT)	6.0A AC/DC (PER A CONTACT)/ 24.0A 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 : Δ 20mohm MAX.
CONTACT RESISTANCE (FOR POWER CONTACT)	INITIAL : 20mohm MAX. / AFTER TEST : Δ 20mohm MAX.
INSULATION RESISTANCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 100Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	30 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	40N MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	INITIAL: 10N MIN. AFTER TEST: 7N MIN.
COPLANARITY	0.08 MAX.
PRODUCT SPECIFICATION	PRS-2284
TEST REPORT	TR-16098
PACKING STANDARD	PST-15123 (20K/REEL) PST-18057 (5K/REEL)
INSTRUCTION MANUAL	HIM-16033

Rev. 2



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