

# NOVASTACK® 35-HDN

5G mmWave 안테나 모듈, 5G 기기에 최적, 풀 실드 공간, 절약형 디자인, 콜슨 합금을 사용한 단자에 의한 전원 공급 가능, 0.35 mm Pitch, 결합 높이 0.7 mm

## Product Specifications:

Board Pitch (mm)		0.35
Wiping Length (mm)		0.14
Mated Size (mm)	Height	0.7 +/- 0.05
	Width	Formula: 4.15 (10 P), 5.90 (20 P), 7.90 (30 P)
	Depth	2.15 mm
Frequency		DC ~ 15 GHz
Current Rating	Signal	1.0 A / pin (Max. 10 P) (12 P and over : 12.0 A AC/DC (Total))
	Power	-
Pin Counts	Range	10 - 60
	Available	10, 20, 30

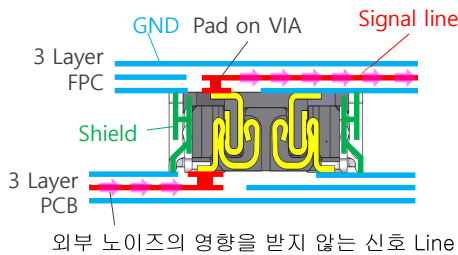
\*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁드립니다.

## Applicable Standards (Reference Only):

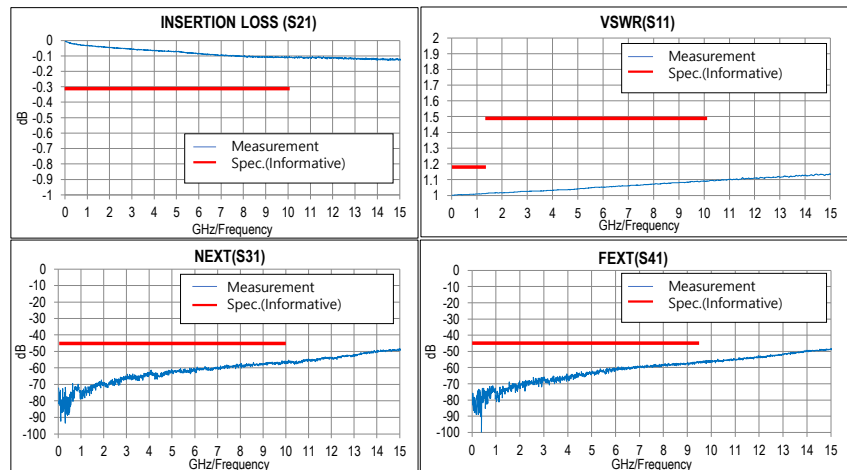
USB4 (20 Gbps/lane) USB 3.1 Gen 2 (10 Gbps)



## 고주파 Application에 최적 (5G mmWave, USB4 / Thunderbolt 4, etc.)

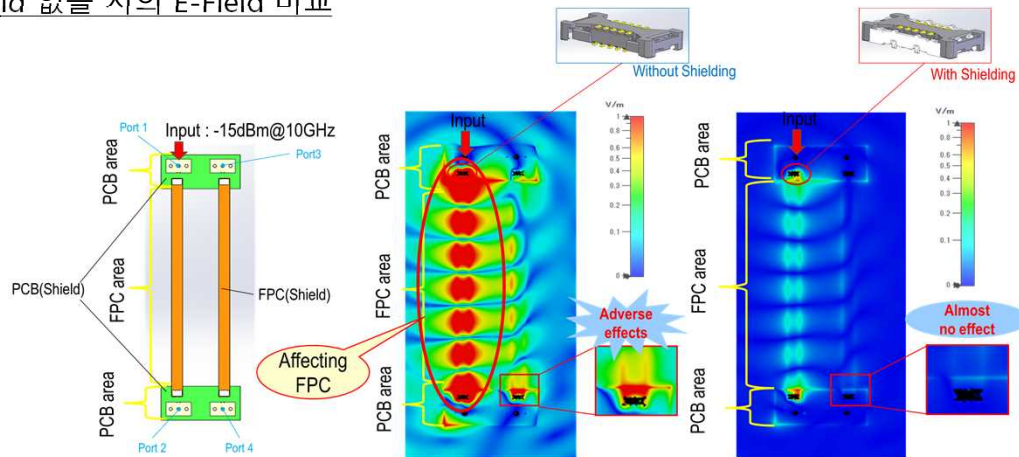


### Pin assignment



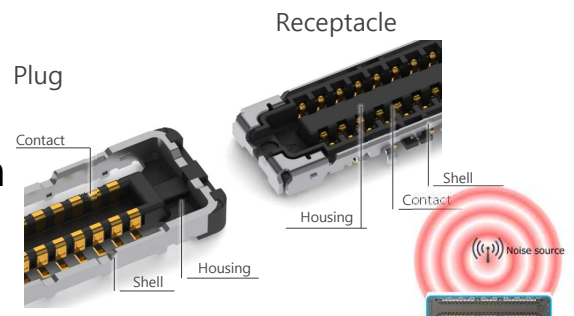
## 5G 기기 특유의 EMI 문제를 풀 실드 디자인 설계(ZenShield®)로 저감

Shield 있을 시, Shield 없을 시의 E-Field 비교



## 소형 · 저배의 제품 높이를 추구한 풀 실드 기판 대 기판 커넥터

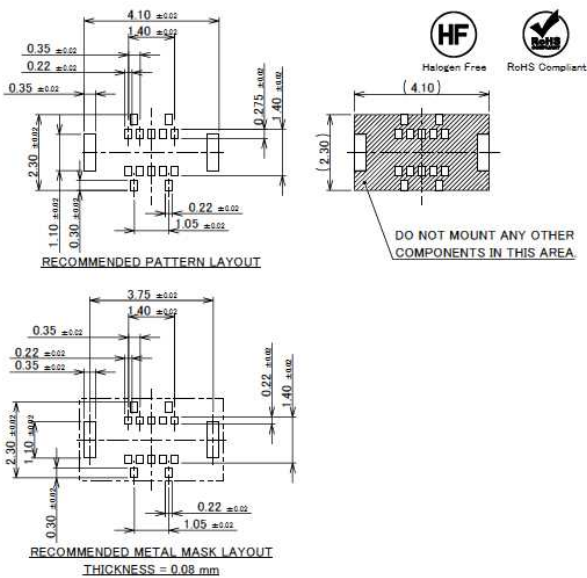
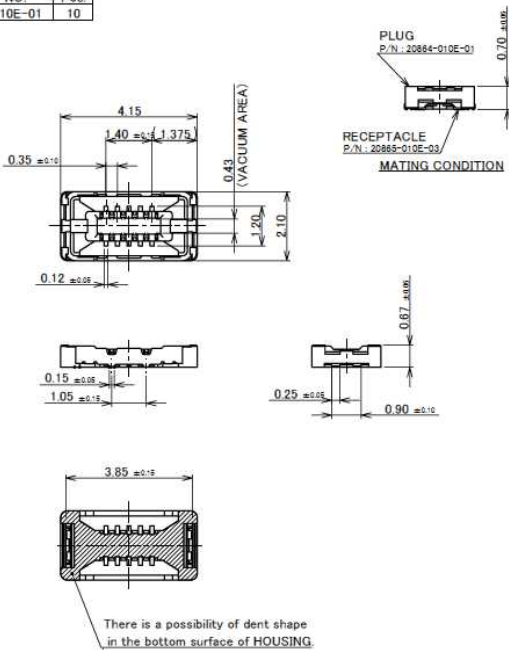
### Targeting Smartphone



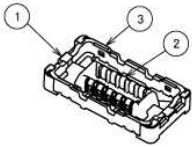
# Component Parts Detail

## Plug Assembly

Recommended P/N	
20864-010E-01	
PART NO.	Pos.
20864-010E-01	10

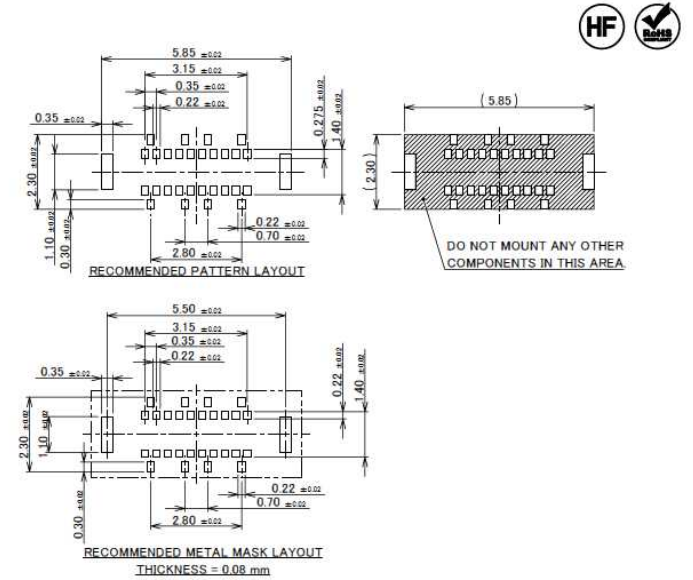
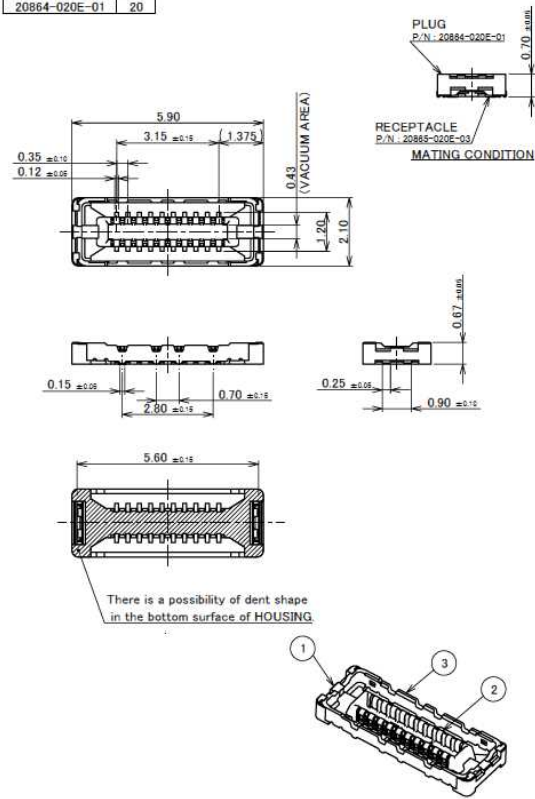


3	SHELL	COPPER ALLOY	SOLDERING PART Au 0.01 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN.
2	CONTACT	COPPER ALLOY	CONTACT PART Au 0.05 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0, BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS



Plug Assembly

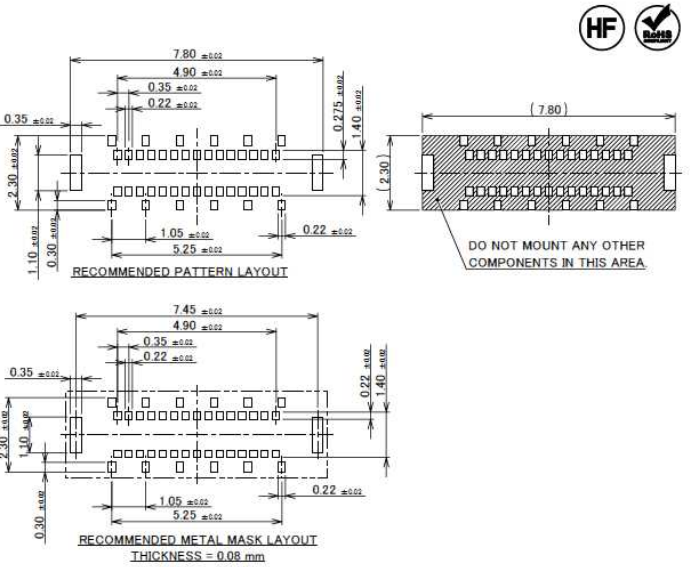
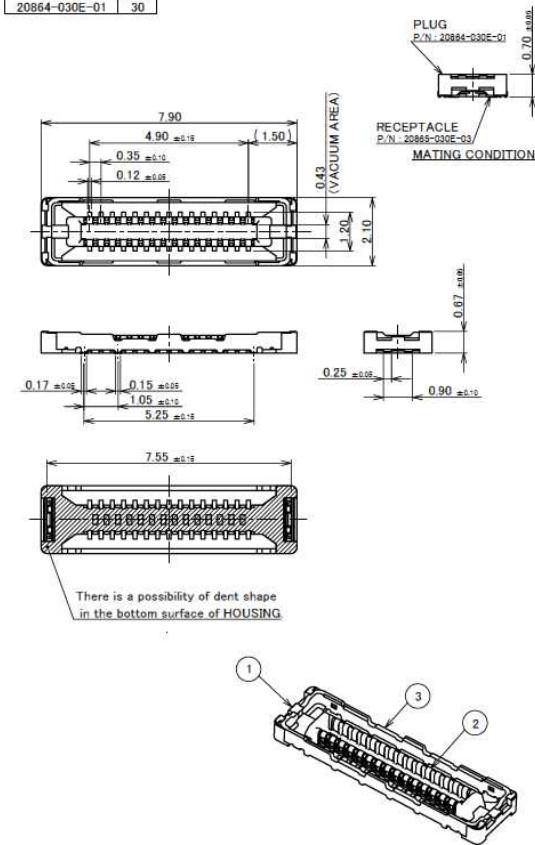
Recommended P/N		20864-020E-01
PART NO.	Pos.	
20864-020E-01	20	



3	SHELL	COPPER ALLOY	SOLDERING PART Au 0.01 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN.
2	CONTACT	COPPER ALLOY	CONTACT PART Au 0.05 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN. SOLDERING PART Au 0.01 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN.
1	HOUSING	LCP	UL94V-0. BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

Rev.9

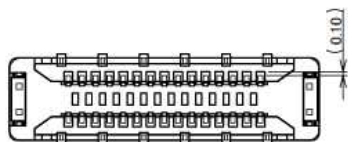
Recommended P/N		20864-030E-01
PART NO.	Pos.	
20864-030E-01	30	



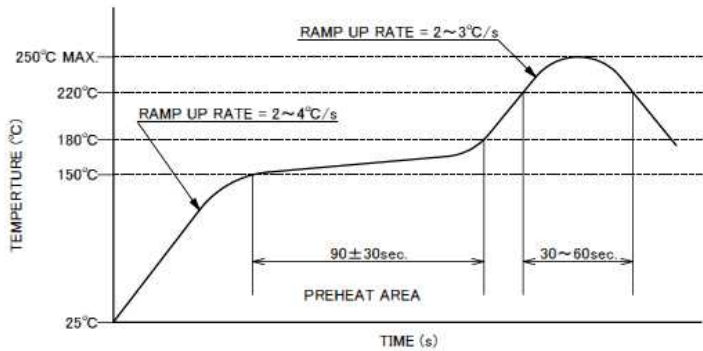
3	SHELL	COPPER ALLOY	SOLDERING PART Au 0.01 $\mu$ m MIN. OVER Ni 1.27 $\mu$ m MIN.
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1	HOUSING	LCP	UL94V-0. BLACK
NO.	DISCRIPTION	MATERIAL	FINISH, REMARKS

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Plug Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN



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

Rev.9

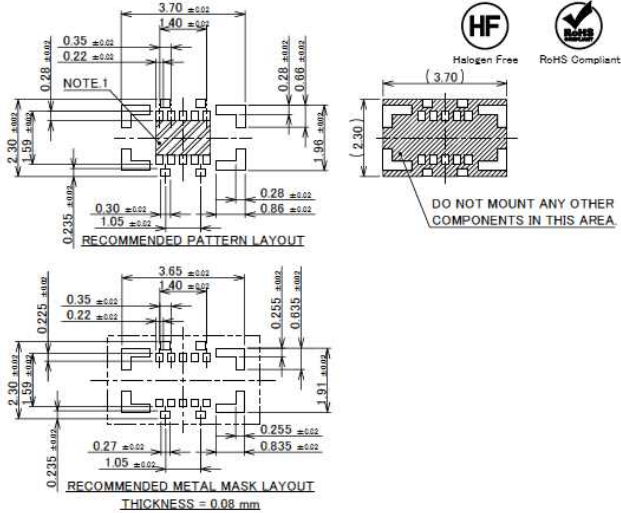
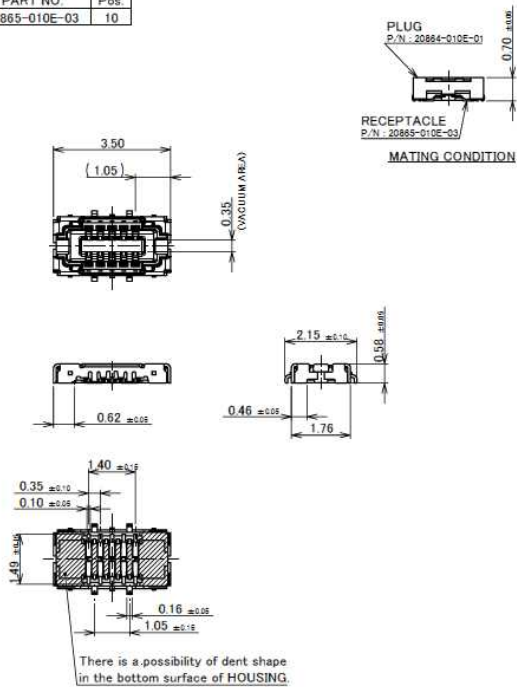
ITEMS	SPECIFICATION
APPLICABLE CONNECTOR PART No.	20865-0**E-**
RATING VOLTAGE	60V AC(r.m.s) / DC (PER CONTACT PIN)
RATING AMPERAGE (FOR SIGNAL CONTACT)	10P:1.0 A MAX. AC/DC x PIN COUNTS = 10.0 A (TOTAL) 12P AND OVER : 12.0 A AC/DC (TOTAL)
OPERARING TEMPERATURE	233~358K(-40°C~85°C)
OPERATING HUMIDITY	85% MAX.(NON-CONDENDING)
CONTACT RESISTANCE (FOR SIGNAL CONTACT)	INITIAL : 40mohm MAX. / AFTER TEST : ≦40mohm MAX.
CONTACT RESISTANCE (FOR GROUND)	INITIAL : 20mohm MAX. / AFTER TEST : ≦20mohm MAX.
INSULATION RESISTAMCE	INITIAL : 1,000Mohm MIN. / AFTER TEST : 500Mohm MIN.
DIELECTRIC WITHSTANDING VOLTAGE	AC250V 1min
DURABILITY	10 CYCLES
MATING FORCE (INITIAL / AFTER TEST)	INITIAL 2.0N/Pin MAX.
UNMATING FORCE (INITIAL / AFTER TEST)	10 CYCLES 0.15N/Pin MIN.
COPLANARITY	0.08 MAX
PRODUCT SPECIFICATION	PRS-2607
TEST REPORT	TR-19055
PACKING STANDARD	PST-18022
INSTRUCTION MANUAL	HIM-18019
APPEARANCE CRITERIA No.	QLS-A***

Rev.9



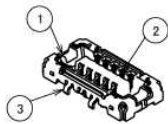
Receptacle Assembly

Recommended P/N		20865-010E-03
PART NO.	Pos.	
20865-010E-03	10	



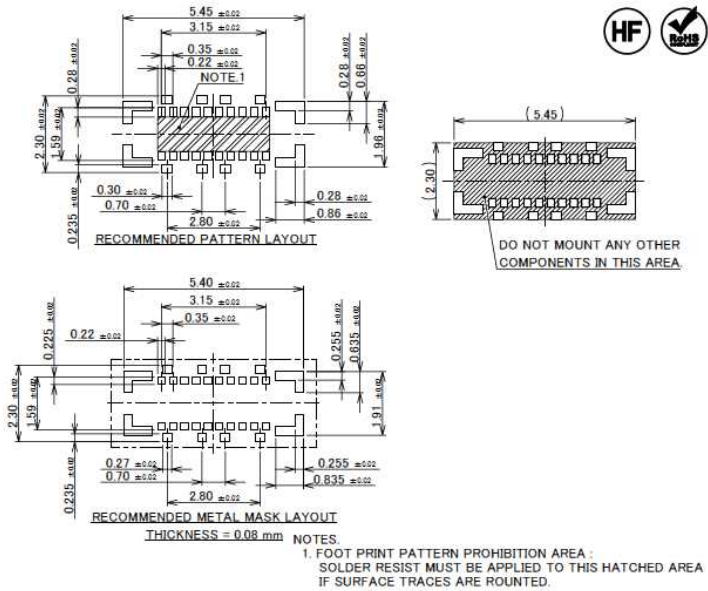
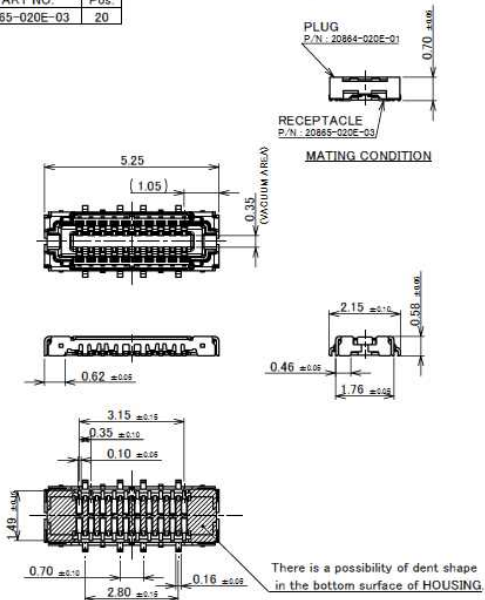
NOTES.  
1. FOOT PRINT PATTERN PROHIBITION AREA :  
SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA  
IF SURFACE TRACES ARE ROUNDED.

3	SHELL	COPPER ALLOY	SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.
2	CONTACT	COPPER ALLOY	CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN. SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN.
1	HOUSING	LCP	UL94V-0 BLACK
NO	DISCRIPTION	MATERIAL	FINISH, REMARKS



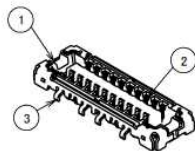
Rev.9

Recommended P/N		20865-020E-03
PART NO.	Pos.	
20865-020E-03	20	



NOTES.  
1. FOOT PRINT PATTERN PROHIBITION AREA :  
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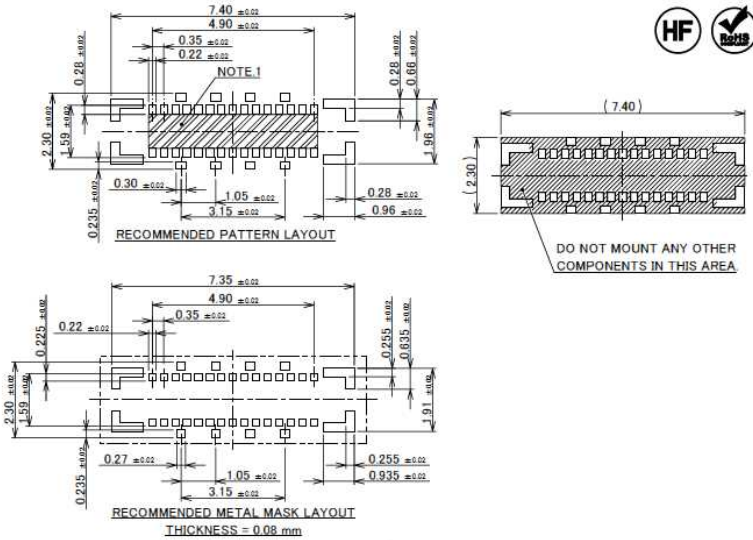
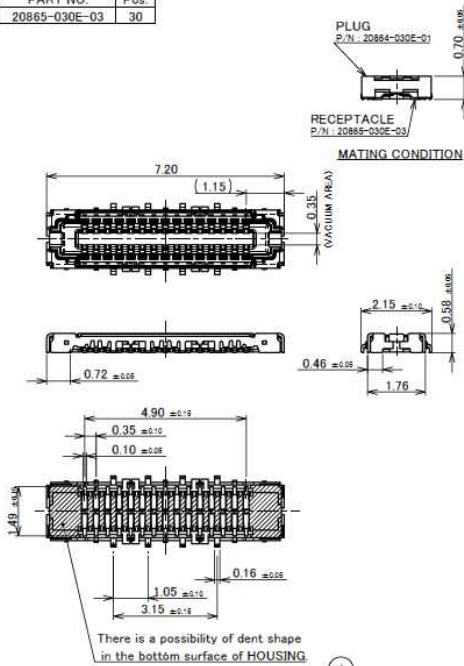
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NO	DISCRIPTION	MATERIAL	FINISH, REMARKS



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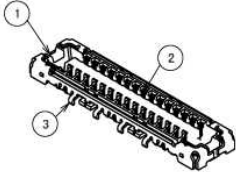
Receptacle Assembly

Recommended P/N		20865-030E-03
PART NO.	Pos.	
20865-030E-03	30	



NOTES.  
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IF SURFACE TRACES ARE ROUNDED.

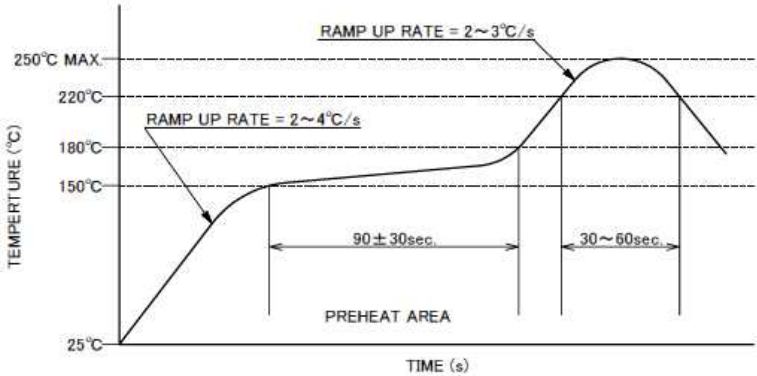
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NO.	DISCRPTION	MATERIAL	FINISH, REMARKS



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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.9

# Receptacle Assembly

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CONTACT RESISTANCE (FOR GROUND)	INITIAL : 20mohm MAX. / AFTER TEST : $\angle$ 20mohm MAX.
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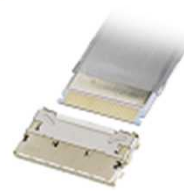
Board to  
Board



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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