

NOVASTACK® 35-HDN

Ideal for 5G mmWave antenna module and devices, fully-shielded and narrow design, Power supply is available with Corson Alloy contact, 0.35 mm pitch, 0.7 mm height

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 |

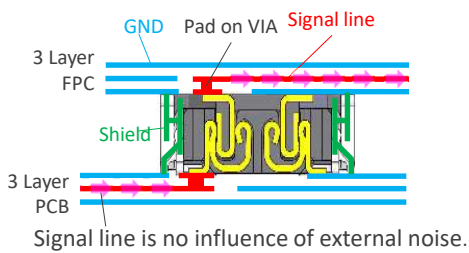
Applicable Standards (Reference Only):

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

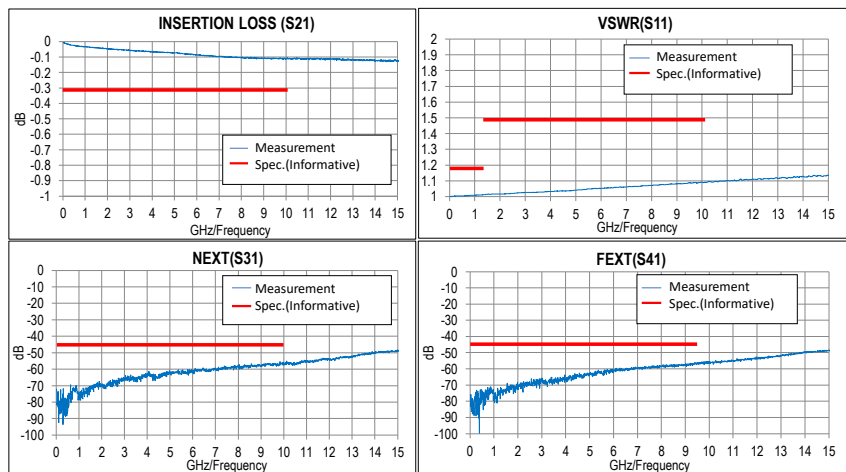
* Please inquire for pin counts not listed or outside of the pin count range.



► Ideal for high frequency applications (5G mmWave, USB4 / Thunderbolt 4, etc.)

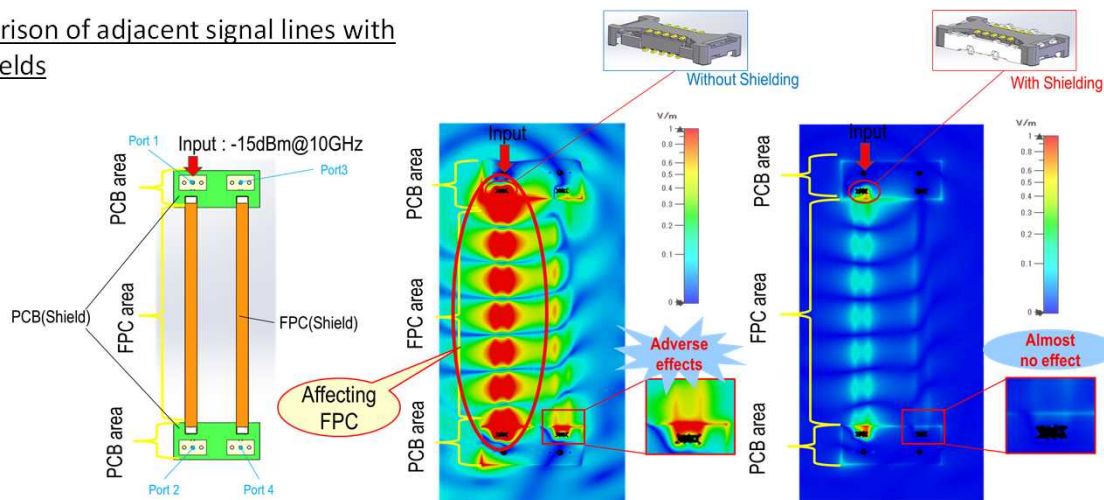


◆ Pin assignment

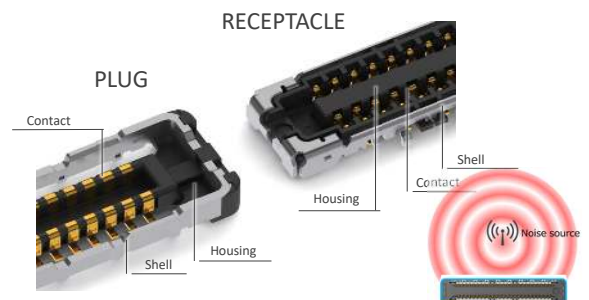


► ZenShield® fully-shielded design, decreases EMI issue caused by 5G applications

E-Field comparison of adjacent signal lines with or without shields



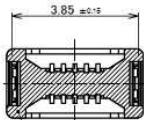
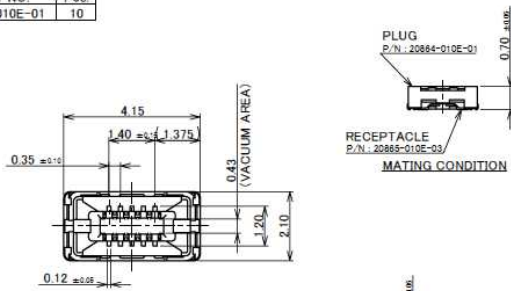
► Narrow depth and low height, fully-shielded board-to-board connector



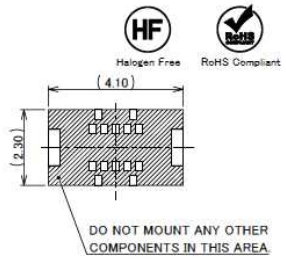
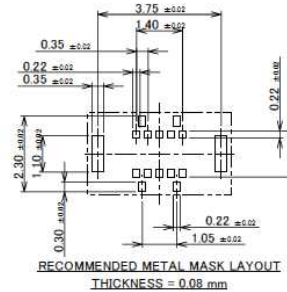
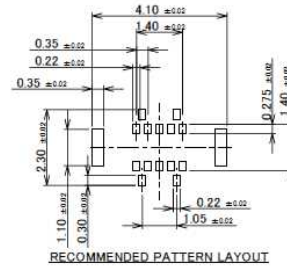
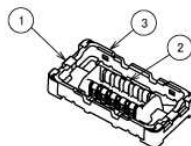
Component Parts Detail

Plug Assembly

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



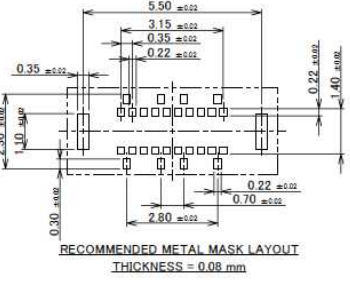
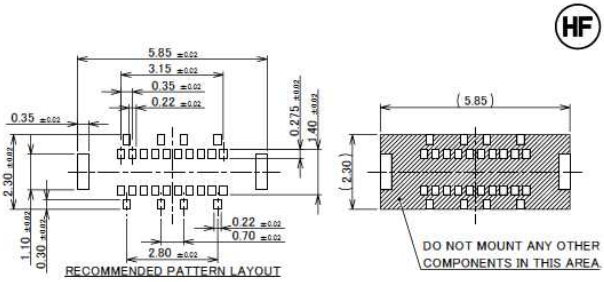
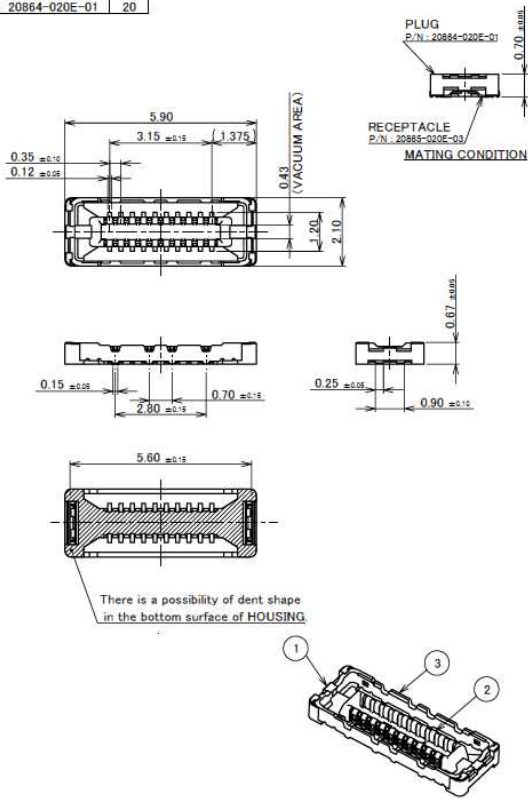
There is a possibility of dent shape in the bottom surface of HOUSING.



| NO. | DISCRIPTION | MATERIAL | FINISH, REMARKS |
|-----|-------------|--------------|---|
| 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 |

Plug Assembly

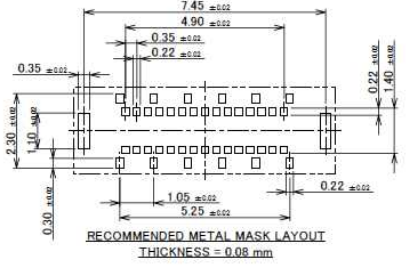
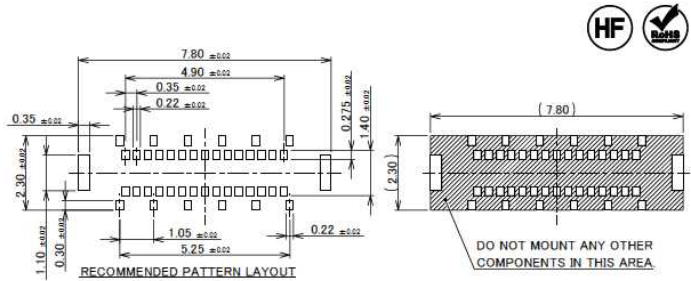
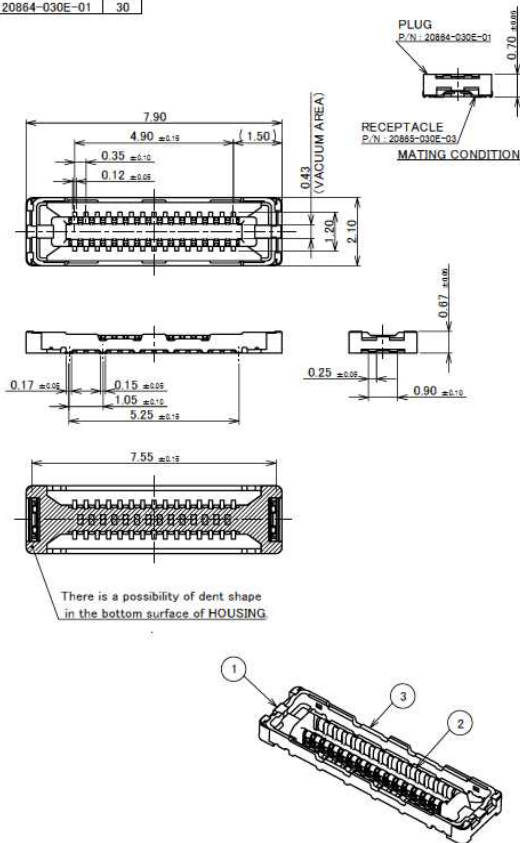
| Recommended P/N | | 20864-020E-01 |
|-----------------|------|---------------|
| PART NO. | Pos. | |
| 20864-020E-01 | 20 | |



| 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

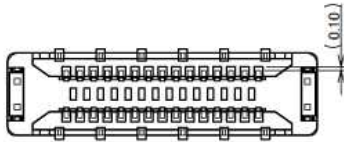
| Recommended P/N | | 20864-030E-01 |
|-----------------|------|---------------|
| PART NO. | Pos. | |
| 20864-030E-01 | 30 | |



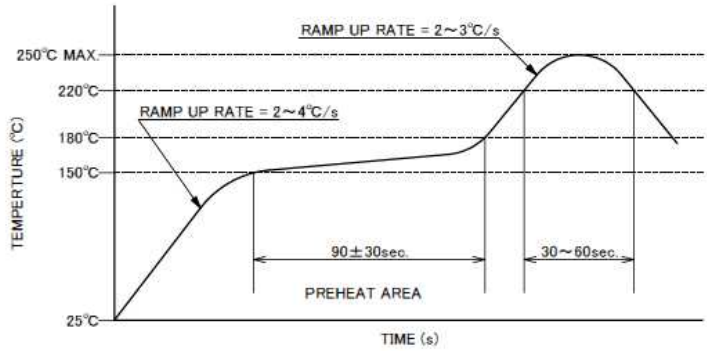
| 3 | SHELL | COPPER ALLOY | SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
|-----|-------------|--------------|---|
| 2 | CONTACT | COPPER ALLOY | CONTACT PART Au 0.05 μm MIN. OVER Ni 1.27 μm MIN. SOLDERING PART Au 0.01 μm MIN. OVER Ni 1.27 μm MIN. |
| 1 | HOUSING | LCP | UL94V-0. BLACK |
| NO.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

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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)

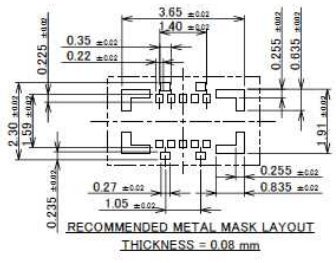
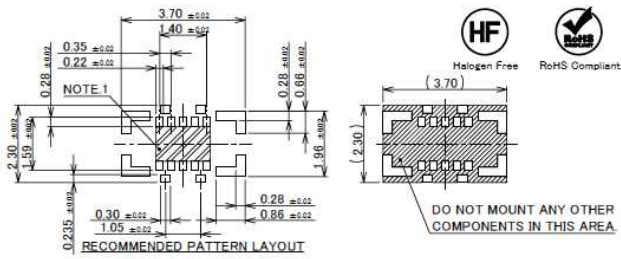
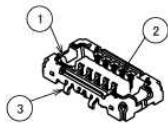
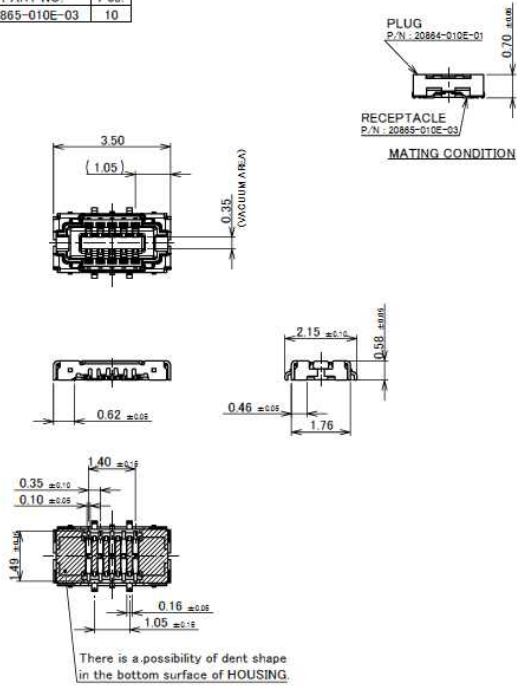
Rev.9

| 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) |
| OPERATING TEMPERATURE | 233~358K(-40°C~85°C) |
| OPERATING HUMIDITY | 85% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE (FOR SIGNAL CONTACT) | INITIAL : 40mohm MAX. / AFTER TEST : \triangleleft40mohm MAX. |
| CONTACT RESISTANCE (FOR GROUND) | INITIAL : 20mohm MAX. / AFTER TEST : \triangleleft20mohm MAX. |
| INSULATION RESISTANCE | 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*** |

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Receptacle Assembly

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

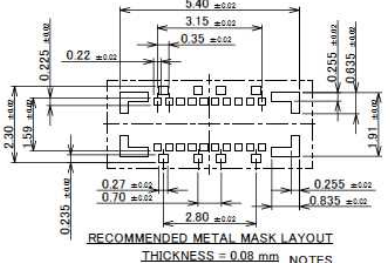
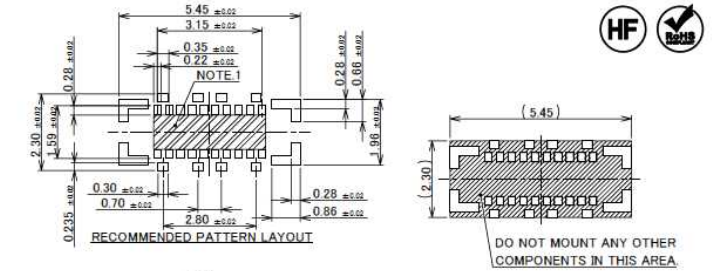
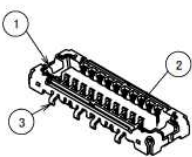
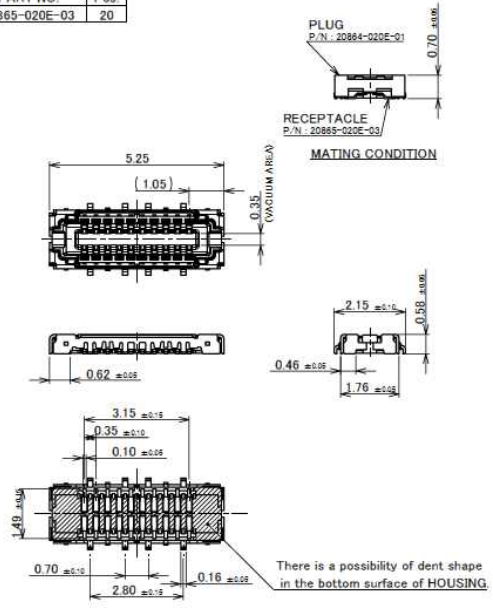


NOTES:
1. FOOT PRINT PATTERN PROHIBITION AREA :
SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA
IF SURFACE TRACES ARE ROUNDED.

| 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 |

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



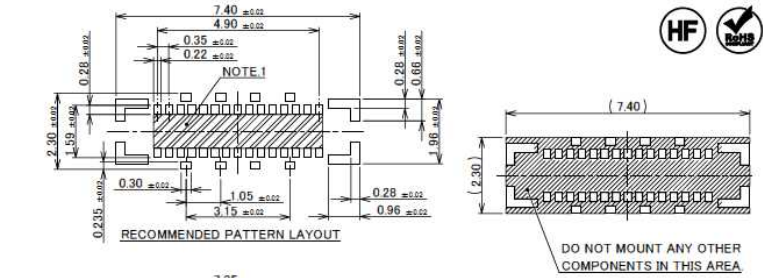
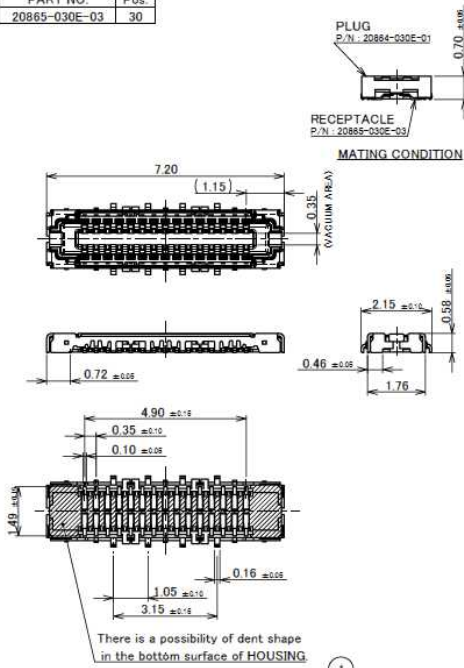
NOTES:
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| 1 | HOUSING | LCP | UL94V-0 BLACK |
| NO | DISCRIPTION | MATERIAL | FINISH, REMARKS |

Rev.9

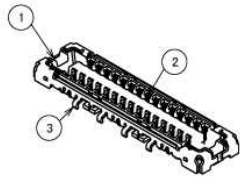
Receptacle Assembly

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

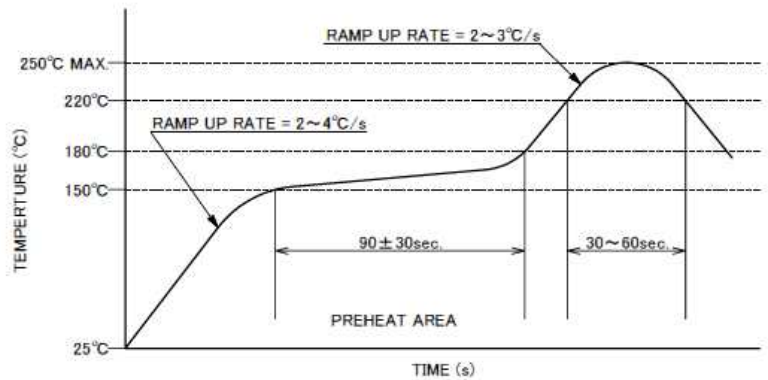
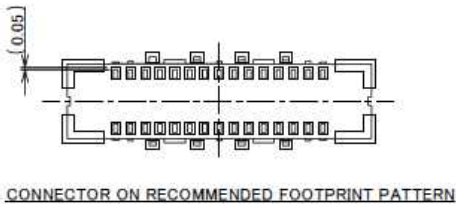


NOTES.
1. FOOT PRINT PATTERN PROHIBITION AREA :
SOLDER RESIST MUST BE APPLIED TO THIS HATCHED AREA
IF SURFACE TRACES ARE ROUNDED.

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|-----|------------|--------------|--|
| 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. | DISCRPTION | MATERIAL | FINISH, REMARKS |



Rev.9



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

Rev.9

Receptacle Assembly

| ITEMS | SPECIFICATION |
|---|---|
| APPLICABLE CONNECTOR PART No. | 20864-0***-** |
| 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 : \triangle 40mohm MAX. |
| CONTACT RESISTANCE (FOR GROUND) | INITIAL : 20mohm MAX. / AFTER TEST : \triangle 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-18023 |
| INSTRUCTION MANUAL | HIM-18019 |
| APPEARANCE CRITERIA No. | QLS-A*** |

Rev.9

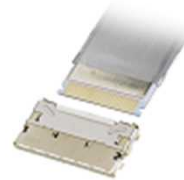
Board to Board



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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Contact your sales representative or more detailed information.

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