## CABLINE ${ }^{\circledR}$-CX II With Cover

협피치( 0.25 mm Pitch), 저배(높이 $=1.0 \mathrm{~mm}$ max.),
쉴드 커버 \& 멀티 그라운드 접점,수평 결합 타입 세선 동축 커넥터
Product Specifications:

| Mating type |  | Horizontal |
| :---: | :---: | :--- |
| Board Pitch $(\mathrm{mm})$ |  | 0.5 |
| Wiping Length $(\mathrm{mm})$ |  | 0.54 |
| Mated size <br> $(\mathrm{mm})$ | Height | 1.0 max. with cover |
|  | Width | Formula: $6.45+\left(0.25^{*} ? \mathrm{p}\right)$ |
| Pin Counts | Depth | 5.6 |
|  | Range | Up to 40 |
|  | Available | 40 |


| Applicable Cable Size: |  |
| :---: | :---: |
| Maximum O.D. (mm) | 0.25 |
| Micro-Coaxial for Signal (AWG) | 45 ohm: \#44 or smaller |
|  | 50 ohm: \#46 or smaller |
| Twinax (AWG) | - |
| Discrete (AWG) | \#39 or smaller |
| Applicable Standards (Reference Only): |  |
| USB 3.1 Gen 1 (5 Gbps), V-By-One HS 1.4 (4 Gbps), HDMI 1.3 (3.4 Gbps) Gbps |  |


*기재가 되어있지 않은 핀 수의 대응 여부에 대해서는 문의해 부탁 드립니다.
*Without Cover타입 CABLINE ${ }^{\circledR}$-CX II (체결 높이 최대 0.78 mm )도 있습니다.

## 협소한 공간에 최적

CABLINE-CX II 40p크기는 1센트 동전보다 작습니다.
체결 높이: 최대 1.0 mm


유연한 마이크로 동축 케이블 하네스는Hinge 디자인이 적용된 애플리케이션에 적합합니다.

## 기계식 Lock 커버에 의한 쉴드 구조의 EMI 대책




## EMI 쉴드 및 멀티 그라운드 접점 설계



## Component Parts Details

## Component Parts



## Plug for Cable Assembly

| Recommended P/N |  | 20977-040T-01 |
| :---: | :---: | :---: |
| PART NO. | Pos. |  |
| 20977 -040T-01 | 40 |  |



TOP VIEW


## 为



| 7 | COVER | PHOSPHOR BRONZE | ALL OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| :---: | :---: | :---: | :---: |
| 6 | LOCK BAR | Sus | - |
| 5 | SHELL B | sus | PARTIAL A $0.003 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| 4 | SHELL A | SuS | PARTIAL Au $0.003 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{mmIN}$. |
| 3 | CONTACT B | CORSON ALLOY | CONTACT AREA : Au $0.25 \mu \mathrm{~m}$ MIN. OVER Ni $2.00 \mu \mathrm{~m}$ MIN. SOLDERING AREA: Au 0.03 um MIN . OVER Ni 1.00 um MIN . |
| 2 | CONTACT A | CORSON ALLOY | CONTACT AREA : A $0.25 \mu \mathrm{~m}$ MIN. OVER Ni $2.00 \mu \mathrm{~m}$ MIN. SOLDERING AREA: A $0.03 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |



## Plug for Cable Assembly

| ITEMS | SPECIFICATION |
| :---: | :---: |
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG\# 46.44,39 DISCRETE WIRE : AWG\# 39 |
| RATING VOLTAGE | 100 V AC (PER CONTACT PIN) |
| RATING AMPERAGE (FOR CONTACT) | 0.10A AC/DC [AWGH46] PER CONTACT PIN/UP TO 40 CONTACTS $0.15 A ~ A C / D C ~[A W G H 44] ~ P E R ~ C O N T A C T ~ P I N / U P ~ T O ~$ 40 CONTACTS |
| OPERATING TEMPERATURE | $233 \sim 358 \mathrm{~K}\left(-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}\right.$ ) (CONTAINING TEMPERATURE RISE BY CURRENT) |
| OPERATING HUMIDITY | 85\% MAX(NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL: 388 mohm MAX(AWG\#39) / AFTER TEST : $\triangle 440 \mathrm{mohm}$ MAX <br> INITIAL: 1.080 mohm MAX(AWG\#44) <br> INITIAL : 1.830 mohm MAX (AWG\#46) |
| GROUND SHELL RESISTANCE | INITIAL : 50 mohm MAX / AFTER TEST : $\triangle 40 \mathrm{mohm} \mathrm{MAX}$ |
| INSULATION RESISTANCE | INITIAL : $1,000 \mathrm{Mohm} \mathrm{MIN}. \mathrm{/} \mathrm{AFTER} \mathrm{TEST} \mathrm{:} \mathrm{500Mohm} \mathrm{MIN}$. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC 250 V 1 min |
| DURABILITY | 20 CYCLES |
| MATING FORCE (INITIAL / 20 CYCLES) | 40P : 30.0 N MAX . |
| UNMATING FORCE (INITIAL / 20 CYCLES) | 40P : 4.0 N MIN. |
| CABLE RETENTION FORCE | 40P: 19.60 N MIN . |
| PRODUCT SPECIFICATION | PRS-2403 |
| TEST REPORT | TR-17063 |
| INSTRUCTION MANUAL | HIM-17035 |
| ASSEMBLY MANUAL | ASM-17008 |
| APPEARANCE CRITERIA No. | QLS-A*** |

## Plug Housing Assembly



## Plug Shell-A



BOTTOM VIEW


| 1 | SHELL-A | SUS | PARTIAL Au $0.003 \mu \mathrm{~m}$ MIN. OVER Ni $1.0 \mu \mathrm{~m}$ MIN. |
| :---: | :---: | :---: | :---: |
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |

## Plug Lock Bar Assembly

| Recommended P/N | 20975-040T-01 |
| :--- | :--- |

PART No.
20975-040T-01
(HF)



| 2 | COVER | PHOSPHOR BRONZE | ALL OVER Ni $1.00 ~ \mu \mathrm{~m}$ MIN. |
| :---: | :--- | :--- | :--- |
| 1 | LOCK BAR | SUS $\phi 0.40$ | - |
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |

## Receptacle Assembly




RECOMMENDED FOOTPRINT PATTERN LAYOUT


RECOMMENDED METAL MASK LAYOUT METAL MASK THICKNESS : $t=0.12 \mathrm{~mm}$

## Receptacle Assembly



CONNECTOR ON RECOMMENDED FOOTPRINT PATTERN


SENJU METAL INDUSTRY CO. LTD. M705-SHF(Sn96.5 AB3.0 Cu0.5)

| ITEMS | SPECIFICATION |
| :---: | :---: |
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG\# 46.44 DISCRETE WIRE : AWG\# 39 |
| RATING VOLTAGE | 100V AC (PER CONTACT PIN) |
| RATING AMPERAGE (FOR CONTACT) | 0.10 A AC/DC [AWG\#46] PER CONTACT PIN/UP TO 40 CONTACTS 0.15 A AC/DC [AWG\#44] PER CONTACT PIN/UP TO 40 CONTACTS $0.50 \mathrm{~A} \mathrm{AC/DC}$ [AWG\#39] <br> PLUG WITH COVER CABLE ASS'Y (P/N : 20977-040T-01) <br> PER CONTACT PIN/UP TO 8 CONTACTS <br> PLUG WITHOUT COVER CABLE ASS'Y (P/N: 20978-040T-01) PER CONTACT PIN/UP TO 7 CONTACTS <br> ※TESTING BY A REAL MACHINE IS RECOMMENDED BECAUSE <br> TEMPERTURE RISE MAY AFFECTED BY ACTUAL SITUATION |
| OPERATING TEMPERATURE | $233 \sim 358 \mathrm{~K}\left(-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}\right.$ ) (CONTAINING TEMPERATURE RISE BY CURRENT) |
| OPERATING HUMIDITY | 85\% MAX (NON-CONDENSING) |
| CONTACT RESISTANCE | INITIAL: 388 mohm MAX(AWG\#39) / AFTER TEST : $\triangle 40 \mathrm{mohm}$ MAX <br> INITIAL : 1.080 mohm MAX(AWG\#44) <br> INITLAL: 1.830 mohm MAX (AWG\#\#46) |
| GROUND SHELL RESISTANCE | INITIAL : 50 mohm MAX / AFTER TEST : $\triangle 40$ mohm MAX |
| INSULATION RESISTANCE | INITIAL : $1,000 \mathrm{Mohm}$ MIN. / AFTER TEST : 500 Mohm MIN. |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1 min |
| DURABILITY | 20 CYCLES |
| MATING FORCE (INITIAL / 20 CYCLES) | 40P: 30.0 N MAX . |
| UNMATING FORCE (INITIAL / 20 CYCLES) | 40P : 4.0 N MIN |
| CABLE RETENTION FORCE | $40 \mathrm{P}: 19.60 \mathrm{~N} \mathrm{MIN}$. |
| COPLANARITY | 0.10 MAX . |
| PRODUCT SPECIFICATION | PRS-2403 |
| TEST REPORT | TR-17063 |
| PACKING STANDARD | PST-17126 |
| INSTRUCTION MANUAL | HIM-17035 (WHEN PLUG WITH COVER CABLE ASS'Y IS USED) HIM-17040 (WHEN PLUG WITHOUT COVER CABLE ASS'Y IS USED) |
| APPEARANCE CRITERIA No. | QLS-A*** |



