## CABLINE ${ }^{\circledR}$-CBL

Low mating height (Height $=0.825 \mathrm{~mm}$ ), Mechanical lock with shielding and multi-point ground, 0.4 mm pitch, Horizontal mating type Micro-coaxial connector

| Product Specifications: |  |  | Applicable Cable Size: |  |
| :---: | :---: | :---: | :---: | :---: |
| Mating type |  | Horizontal | Maximum O.D. (mm) | 0.4 |
| Board Pitch (mm) |  | 0.4 | Micro-Coaxial for Signal (AWG) | 45 ohm: \#40 or smaller wire |
| Wiping Length (mm) |  | 0.44 |  | 50 ohm: \#40 or smaller wire |
| Mated size (mm) | Height | $0.825+/-0.15$ | Twinax (AWG) |  |
|  | Width | Formula: 6.44 + (0.4*?p) | Discrete (AWG) | \#36 or smaller wire |
|  | Depth | 5.44 | Applicable Standards (Reference Only): |  |
| Pin Counts | Range | Up to 40 | USB 3.1 Gen 1 (5 Gbps) V-By-One HS 1.4 (4 Gbps) HDMI 1.3 (3.4 Gbps) |  |
|  | Available | 30,40 |  |  |

Mating height: $\mathbf{0 . 9 7 5} \mathbf{~ m m}$ max. ( $\mathbf{0 . 8 2 5} \mathbf{~ m m}$ nominal)


## Mechanical locking bar prevents incomplete mating and back-out/un-mating



Mechanical locking bar only locks when plug is fully mated to receptacle.
Interference


Incomplete mating


Complete mating

## EMI shielding and multi-point ground design



## Component Parts Details

## Component Parts



## Plug for Cable Assembly

| Recommended P/N | $20472-0 * * T-10$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| PART NO. | POS. | A | B | C | D |  |
| P | P/N $: 20472-\# * * T-10 ~$ |  |  |  |  |  |
| $20472-030 \mathrm{~T}-10$ | 30 | 11.60 | 12.40 | 18.44 | 13.00 |  |
| $20472-040 \mathrm{~T}-10$ | 40 | 15.60 | 16.40 | 22.44 | 17.00 |  |
|  |  |  |  |  |  |  |



| LATCH MOVEMENTS |  |  | INSULATION TAPE RECOMMENDED DIMENSIONS |
| :---: | :---: | :---: | :---: |
| 5 | LATCH BAR | SUS |  |
| 4 | SHELL B | PHOSPHOR BRONZE | Au $0.05 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| 3 | SHELL A | PHOSPHOR BRONZE | Au $0.05 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| 2 | CONTACT | PHOSPHOR BRONZE | Au $0.1 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| 1 | HOUSING | LCP | UL94V-0, BLACK |
| NO. | DISCRIPTION | MATERIAL | FINISH , REMARKS |

## 

## WITH LATCH BAR



## Plug for Cable Assembly

| PART NO． | POS． | A |
| :---: | :---: | :---: |
| $20472-\# 30 \mathrm{~T}-10$ | 30 | 11.60 |
| $20472-\# 40 \mathrm{~T}-10$ | 40 | 15.60 |



RECOMMENDED MICRO－COAXIAL CABLE DIM


## Plug Housing Assembly

| Recommended P／N | 20473－0＊＊T－10 |  |
| :--- | :--- | :--- | :--- |


| PART NO． | POS． | A | B | C | D | E | F | G | H | J |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $20473-030 T-10$ | 30 | 1160 | 1240 | 1265 | 1508 | 1265 | 169 | 1524 | 000 | 11 |


| $20473-030 \mathrm{~T}-10$ | 30 | 11.60 | 12.40 | 12.65 | 15.08 | 12.65 | 16.94 | 15.34 | 9.00 | 11.88 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |


| $20473-040 \mathrm{~T}-10$ | 40 | 15.60 | 16.40 | 16.65 | 19.08 | 16.65 | 20.94 | 19.34 | 13.00 | 15.88 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |

ロロッド




$\frac{\sec , x-x}{(S=10 / 1)}$

NOTES
1．THIS PART IS ASSEMBLED WITH SHELL A（P／N 2618－0＊＊1） AND LATCH BAR（P／N $2619-\# * * 0)$ AFTER SOLDERED THE CABLE． AND IT BECOMES P／N 20472－0＊＊T－10

| 3 | SHELL B | PHOSPHOR BRONZE | Au $0.05 \mu \mathrm{~m}$ MIN．OVER $\operatorname{Ni} 1.00 \mu \mathrm{~m}$ MIN． |
| :---: | :--- | :--- | :--- |
| 2 | CONTACT | PHOSPHOR BRONZE | Au $0.1 \mu \mathrm{~m}$ MIN．OVER Ni $1.00 \mu \mathrm{~m}$ MIN． |
| 1 | HOUSING | LCP | UL． $94 \mathrm{~V}-0$, BLACK |
| NO． | DISCRIPTION | MATERIAL | FINISH．REMARKS |

## Plug Shell-A

| Recommended P/N | $2618-0 * * 1$ |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| PART NO. | POS. | A | B | C |
| $2618-0301$ | 30 | 16.94 | 3.60 | 11.88 |
| $2618-0401$ | 40 | 20.94 | 5.60 | 15.88 |




$\frac{\text { DETALM }}{(\mathrm{S}=10 / 1)}$


## Plug Latch Bar

| Recommended P/N | 2619-0**0 |
| :--- | :--- |



## Receptacle Assembly

| Recommended P/N | 20474-0**E-12 |
| :--- | :--- |


| PART NO. | POS. | A | B | C | G | S |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $20474-030 \mathrm{E}-12$ | 30 | 11.60 | 13.40 | 16.50 | 18.44 | 1240 |


| $20474-030 \mathrm{E}-12$ | 30 | 11.60 | 13.40 | 16.50 | 18.44 | 12.40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $20474-040 \mathrm{E}-12$ | 40 | 1560 | 17.40 | 20.50 | 2244 | 1640 |




| 3 | SHELL | PHOSPHOR BRONZE | Au $0.05 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. |
| :---: | :---: | :---: | :---: |
| 2 | CONTACT | PHOSPHOR BRONZE | CONTACT AREA : Au $0.1 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN. SOLDERING AREA : Au $0.03 \mu \mathrm{~m}$ MIN. OVER Ni $1.00 \mu \mathrm{~m}$ MIN |
| 1 | HOUSING | LCP | UL94V-0. BLACK |
| NO. | DISCRIPTION | MATERIAL | FIIISH , REMARKS |



[^0]2. IN CASE OF PLUG WITH LATCH BAR(20472-0**T-10), DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA
3. SODIER RESIST MUST BE APPLIED TO THIS AREA.

## Receptacle Assembly




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

| ITEMS | SPECIFICATION |
| :---: | :---: |
| APPLICABLE CABLE | MICRO-COAXIAL CABLE : AWG\# 40, 42, 44 DISCRETE WIRE: AWG\# 36 |
| RATING VOLTAGE | 100 V AC (PER CONTACT PIN) |
| RATING AMPERAGE (FOR CONTACT) | 0.1A AC/DC [AWG\#\#4] PER CONTACT PIN $0.24 \mathrm{~A} \mathrm{AC} / \mathrm{DC}$ [AWG\#42] PER CONTACT PIN 0.3 A AC/DC [AWG\#40] PER CONTACT PIN 0.8A AC/DC [AWG\#36] PER CONTACT PIN |
| OPERATING TEMPERATURE | $233 \sim 358 \mathrm{~K}\left(-40^{\circ} \mathrm{C} \sim+85^{\circ} \mathrm{C}\right)$ |
| OPERATING HUMIDITY | 85\% MAX.(NON-CONDENSING) |
| CONTACT RESISTANCE | $\begin{aligned} \text { INITIAL : } & 275 \text { mohm MAX. (AWG\#36)/ AFTER TEST : } \triangle 40 \text { mohm MAX } \\ & 600 \mathrm{mohm} \text { MAX. (AWG\#40) } \\ & 700 \mathrm{mohm} \text { MAX. (AWG\#42) } \\ & 1080 \mathrm{mohm} \text { MAX. (AWG\#44) } \end{aligned}$ |
| GROUND SHELL RESISTANCE | INITIAL : $50 \mathrm{mohm} \mathrm{MAX}. \mathrm{/} \mathrm{AFTER} \mathrm{TEST} \mathrm{:} \triangle 40 \mathrm{mohm} \mathrm{MAX}$. |
| INSULATION RESISTANCE | INITIAL : 1000 Mohm MIN. / AFTER TEST : 500 Mohm MIN . |
| DIELECTRIC WITHSTANDING VOLTAGE | AC250V 1 min |
| DURABILITY | 30 CYCLES |
| MATING FORCE (INITLAL / AFTER TEST) | $\begin{aligned} & 30 \mathrm{P}: 10 \mathrm{~N} \text { MAX } \\ & 40 \mathrm{P}: 12 \mathrm{~N} \mathrm{MAX} \end{aligned}$ |
| UNMATING FORCE (INITIAL / AFTER TEST) | $\begin{aligned} & 30 \mathrm{P}: 3.0 \mathrm{~N} \mathrm{MIN} \\ & 40 \mathrm{P}: 4.0 \mathrm{~N} \mathrm{MIN} \end{aligned}$ |
| CABLE RETENTION FORCE | $30 \mathrm{P}: 14.70 \mathrm{~N} \mathrm{MIN}$. 40P: 19.60 N MIN . |
| PRODUCT SPECIFICATION | PRS-1421 |
| TEST REPORT | TR-08030 |
| INSTRUCTION MANUAL | HIM-09002 |
| ASSEMBLY MANUAL | ASM-09002 |
| APPEARANCE CRITERIA No. | QLS-A*** |

## Custom Connectors Available

数触 a Connector
 Module

## LIGHTPASS ${ }^{\circledR}$ series



## $\mathrm{MHF}^{\circledR}$ series


[^0]:    1. DO NOT MOUNT ANOTHER COMPONENT IN THIS AREA
