CONNECTOR AND ADAPTER CATALOG

WITH THE RIGHT CONNECTIONS, ANYTHING IS POSSIBLE.
WITH THE RIGHT CONNECTIONS,
ANYTHING IS POSSIBLE.

The cables & RF components in your electronic system may not be the most important components to you, but they’re everything to us. We design and manufacture cables & RF components with the understanding that if a connection fails, it can take your whole system with it. That’s why our products are known for superior phase & amplitude stability, excellent measurement repeatability, and extra rugged mechanical strength. It’s why we developed a unique GrooveTube® outer conductor technology that wraps our cable in a flexible “armor.” And why every component shipped from MegaPhase is thoroughly tested and retested. We also provide a powerful warranty, the most responsive deliveries, and highly competitive pricing. Because doing one thing right just isn’t enough. Not for us; and not for you.

Call us at 1-877-634-2742 or 570-424-8400 or visit us online www.MegaPhase.com

WITH THE RIGHT CONNECTIONS,
ANYTHING IS POSSIBLE.

DON’T TAKE OUR WORD FOR IT.

“I wanted to take the moment to thank you for the hasty turn around on our cables that we ordered. The service was fantastic, as always, we will look toward MegaPhase for all of our continued cabling needs.”

A senior buyer at a leading space systems company.

“Thank you so much for your prompt response on this matter. I have made notes in our system to NEVER use [your competitor] again and to try MegaPhase for those needs. Just wanna say thanks again for your help! Have a great day!”

A buyer at a compliance test lab.

“We have always been very satisfied with the quick service and delivery we receive from MegaPhase.”

A test engineer at a large semiconductor OEM.

“My guys in [our corporate location] love these MegaPhase cables! We’ll buy more this year.”

A senior RF test system designer at a large mobile phone OEM.

Our cables, RF components, our exceptional value, and our incomparable service have our customers — and the entire industry talking. Give us a call or visit us online and we’ll have you talking too.

With the right connections, anything is possible.
Part Numbering

Adapters PN :

**CA-K2K2-01X***

(Product Type)-(Connector Type Left, Gender & Conf. Left)-(Connector Type Right, Gender & Conf. Right)-(Running Number)

Reading : Adaptor K Female to K Female Version 01

Naming Convention :
- Numerical connector type goes first. (CA-21K1-01 Not CA-K121-01)
- Smallest Numerical connector type goes first. (CA-1221-01 Not CA-1122-01)
- First alphabetical connector type goes first. (CA-C1K1-01 Not CA-K1C1-01)

The same rules applies to the gender in a second time.
- (CA-K1KC-01 Not CA-KCK1-01)
- (CA-1112-01 Not CA-1211-01)
- (CA-KFKR-01 Not CA-KRCF-01)

Connector PN :

**CN-K1-086-01X***

(Product Type)-(Connector Type, Gender & Conf.)-(Cable Type)-(Running Number)

Reading : Cable Connector K Male for 086 version 01

Board Connector PN :

**CP-K1-001X***

(Product Type)-(Connector Type, Gender & Conf.)-(Running Number)

Reading : Connector K Male for 01 version 01
**Precision Adapters**

**Matrix**

<table>
<thead>
<tr>
<th></th>
<th>1.0 mm</th>
<th>1.85 mm</th>
<th>2.4 mm (SMK)</th>
<th>SMP</th>
<th>SMPM</th>
<th>SMP3 (SMPS)</th>
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</thead>
<tbody>
<tr>
<td>1.0 mm</td>
<td>Pages: 6-7</td>
<td>Page: 18</td>
<td></td>
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<tr>
<td>1.85 mm</td>
<td>Page: 18</td>
<td>Pages: 8-9</td>
<td>Page: 19</td>
<td></td>
<td>Page: 14-15</td>
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<tr>
<td>2.4 mm</td>
<td>Page: 19</td>
<td>Pages: 10-11</td>
<td>Page: 20</td>
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<tr>
<td>2.92 mm (SMK)</td>
<td>Page: 20</td>
<td>Pages: 12-13</td>
<td>Page: 16-17</td>
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<tr>
<td>SMP</td>
<td></td>
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<td>Page: 16-17</td>
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<tr>
<td>SMPM</td>
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<td></td>
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<td>Page: 14-15</td>
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<tr>
<td>SMP3 (SMPS)</td>
<td></td>
<td></td>
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</tbody>
</table>
### Component | Material | Finish
--- | --- | ---
Contacts | Beryllium Copper Per C17300 | Gold Plated Per ASTM B: Type 2, Code C, 50-100 μm Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 μm Thick
Bodies | Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300 | Passivated
Insulators 1 | Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205 | None
Insulators 2 | Teflon, PTFE Per ASTM-D1710 | None
Nuts | Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300 | Passivated
Snap-Rings | Beryllium Copper Per C17300 | Heat Treated

---

### Description

**1.0 mm Jack - 1.0 mm Plug**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>CA-1111-01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td>Frequency: DC – 110 GHz, VSWR: 1.28:1, Max, I.L.: 0.7 dB, Max</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td>R/P to R/P: .534 [13.56]</td>
</tr>
</tbody>
</table>

---

**1.0 mm Plug - 1.0 mm Plug**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>CA-1112-01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td>Frequency: DC – 110 GHz, VSWR: 1.28:1, Max, I.L.: 0.7 dB, Max</td>
</tr>
<tr>
<td><strong>Mechanical</strong></td>
<td>R/P to R/P: .534 [13.56]</td>
</tr>
</tbody>
</table>

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**1.0 mm Jack - 1.0 mm Jack**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>CA-1212-01</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Electrical</strong></td>
<td>Frequency: DC – 110 GHz, VSWR: 1.28:1, Max, I.L.: 0.7 dB, Max</td>
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<tr>
<td><strong>Mechanical</strong></td>
<td>R/P to R/P: .534 [13.56]</td>
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</tbody>
</table>
# Precision Adapters

## 1.85 mm Interface

### 1.85 mm Jack

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated</td>
</tr>
<tr>
<td></td>
<td>ASTM-A-585 UNS NO. S30300</td>
<td>SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Insulators 1</td>
<td>Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205</td>
<td>None</td>
</tr>
<tr>
<td>Insulators 2</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated</td>
</tr>
<tr>
<td></td>
<td>ASTM-A-585 UNS NO. S30300</td>
<td>SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Snap-Rings</td>
<td>Beryllium Copper Per C17300</td>
<td>Heat Treated</td>
</tr>
</tbody>
</table>

### 1.85 mm Plug

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
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<tr>
<td>Contacts</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
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<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated</td>
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<td>ASTM-A-585 UNS NO. S30300</td>
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<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated</td>
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<tr>
<td></td>
<td>ASTM-A-585 UNS NO. S30300</td>
<td>SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Snap-Rings</td>
<td>Beryllium Copper Per C17300</td>
<td>Heat Treated</td>
</tr>
</tbody>
</table>

## Precision Adapters

### 1.85 mm Plug - 1.85 mm Plug

**Part Number:** CA-VIV1-01

**Electrical**
- Frequency: DC – 65 GHz
- VSWR: 1.28:1, Max
- I.L.: 0.35 dB, Max

**Mechanical**
- R/P to R/P: 0.659 [16.73]

### 1.85 mm Jack - 1.85 mm Plug

**Part Number:** CA-VIV2-01

**Electrical**
- Frequency: DC – 65 GHz
- VSWR: 1.28:1, Max
- I.L.: 0.35 dB, Max

**Mechanical**
- R/P to R/P: 0.659 [16.73]

### 1.85 mm Jack - 1.85 mm Jack

**Part Number:** CA-V2V2-01

**Electrical**
- Frequency: DC – 65 GHz
- VSWR: 1.28:1, Max
- I.L.: 0.35 dB, Max

**Mechanical**
- R/P to R/P: 0.659 [16.73]
**Component** | **Material** | **Finish**
---|---|---
Contacts | Beryllium Copper Per C17300 | Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick

Bodies | Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300 | Passivated

Insulators 1 | Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205 | None

Insulators 2 | Teflon, PTFE Per ASTM-D1710 | None

Nuts | Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300 | Passivated

Snap-Rings | Beryllium Copper Per C17300 | Heat Treated

**Description**

2.4 mm Jack - 2.4 mm Plug

Part Number | CA-2121-01

Electrical

Frequency: DC – 50 GHz

VSWR: 1.28:1, Max

I.L.: 0.3 dB, Max

Mechanical

R/P to R/P: .659 [16.73]

---

2.4 mm Jack - 2.4 mm Plug

Part Number | CA-2122-01

Electrical

Frequency: DC – 50 GHz

VSWR: 1.28:1, Max

I.L.: 0.3 dB, Max

Mechanical

R/P to R/P: .659 [16.73]

---

2.4 mm Jack - 2.4 mm Jack

Part Number | CA-2222-01

Electrical

Frequency: DC – 50 GHz

VSWR: 1.28:1, Max

I.L.: 0.3 dB, Max

Mechanical

R/P to R/P: .659 [16.73]
## 2.92 mm Interface

### 2.92 mm Jack

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
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<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 μin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 μin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated, SAE - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Insulators 1</td>
<td>Polyetherimide Resin General Electric</td>
<td>None</td>
</tr>
<tr>
<td>Insulators 2</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated, SAE - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Snap-Rings</td>
<td>Beryllium Copper Per C17300</td>
<td>Heat Treated</td>
</tr>
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</table>

### 2.92 mm Plug

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<tr>
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<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 μin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 μin Thick</td>
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<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated, SAE - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Insulators 1</td>
<td>Polyetherimide Resin General Electric</td>
<td>None</td>
</tr>
<tr>
<td>Insulators 2</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
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<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic</td>
<td>Passivated, SAE - AMS - 2700 Method 1, Type 2</td>
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### Precision Adapters

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Electrical</th>
<th>Mechanical</th>
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</thead>
<tbody>
<tr>
<td>2.92 mm Plug - 2.92 mm Plug</td>
<td>CA-K1K1-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: 0.659 [16.73]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VSWR: 1.20:1, Max</td>
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<tr>
<td></td>
<td></td>
<td>I.L.: 0.25 dB, Max</td>
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<tr>
<td>2.92 mm Jack - 2.92 mm Plug</td>
<td>CA-K1K2-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: 0.659 [16.73]</td>
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<td></td>
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<td>VSWR: 1.20:1, Max</td>
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<td>I.L.: 0.25 dB, Max</td>
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<tr>
<td>2.92 mm Jack - 2.92 mm Jack</td>
<td>CA-K2K2-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: 0.659 [16.73]</td>
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<td>VSWR: 1.20:1, Max</td>
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<tr>
<td></td>
<td></td>
<td>I.L.: 0.25 dB, Max</td>
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</tbody>
</table>
Precision Adapters

SMPM Interface

**SMPM Female**

- **Contacts**: Beryllium Copper Per C17300
  - Material: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick

- **Bodies 1**: Beryllium Copper Per C17300
  - Material: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick

- **Bodies 2**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
  - Material: Passivated SEA - AMS - 2700 Method 1, Type 2

- **Insulators**: Teflon, PTFE Per ASTM-D1710
  - Finish: None

- **Nuts**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
  - Material: Passivated SEA - AMS - 2700 Method 1, Type 2

- **Snap-Rings**: Beryllium Copper Per C17300
  - Finish: Heat Treated

**SMPM Male**

- **Contacts**: Beryllium Copper Per C17300
  - Material: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick

- **Bodies 1**: Beryllium Copper Per C17300
  - Material: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick

- **Bodies 2**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
  - Material: Passivated SEA - AMS - 2700 Method 1, Type 2

- **Insulators**: Teflon, PTFE Per ASTM-D1710
  - Finish: None

- **Nuts**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
  - Material: Passivated SEA - AMS - 2700 Method 1, Type 2

- **Snap-Rings**: Beryllium Copper Per C17300
  - Finish: Heat Treated

---

**Technical Specifications**

**SMPM Male - 1.85mm Plug**

- **Part Number**: CA-GS1V1-01

**Electrical**

- **Frequency**: DC – 65 GHz
- **VSWR**: 1.35:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- **R/P to R/P**: .659 [16.73]

**Description**

- **SMPM Male - 1.85mm Jack**
  - **Part Number**: CA-GS1V2-01
  - **Electrical**
    - **Frequency**: DC – 65 GHz
    - **VSWR**: 1.35:1, Max
    - **I.L.**: 0.35 dB, Max
  - **Mechanical**
    - **R/P to R/P**: .659 [16.73]

**SMPM Female - 1.85mm Plug**

- **Part Number**: CA-GS2V1-01

**Electrical**

- **Frequency**: DC – 65 GHz
- **VSWR**: 1.35:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- **R/P to R/P**: .659 [16.73]

**Description**

- **SMPM Female - 1.85mm Jack**
  - **Part Number**: CA-GS2V2-01
  - **Electrical**
    - **Frequency**: DC – 65 GHz
    - **VSWR**: 1.35:1, Max
    - **I.L.**: 0.35 dB, Max
  - **Mechanical**
    - **R/P to R/P**: .659 [16.73]
### SMP Interface

#### Component | Material | Finish  
--- | --- | ---  
Contacts | Beryllium Copper Per C17300 | Gold Plated Per ASTM B-201, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick  
Bodies 1 | Beryllium Copper Per C17300 | Gold Plated Per ASTM B-201, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick  
Bodies 2 | Steel Corrosion Resistant, Non Magnetic, ASTM-A-555 UNS NO. S30300 | Passivated, SEA - AMS - 2700 Method 1, Type 2  
Insulators | Teflon, PTFE Per ASTM-D1710 | None  
Nuts | Steel Corrosion Resistant, Non Magnetic, ASTM-A-555 UNS NO. S30300 | Passivated, SEA - AMS - 2700 Method 1, Type 2  
Snap-Rings | Beryllium Copper Per C17300 | Heat Treated  
Anti-Rock Ring | Beryllium Copper Per C17300 | Gold Plated Per ASTM B-201, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick  

#### Description

**SMP Male - 2.92 mm Plug**  
Part Number: CA-G1K1-01  
**Electrical**  
Frequency: DC – 40 GHz  
VSWR: 1.20:1, Max  
I.L.: 0.25 dB, Max  
**Mechanical**  
R/P to R/P: 0.659 [16.73]  

**SMP Male - 2.92 mm Jack**  
Part Number: CA-G1K2-01  
**Electrical**  
Frequency: DC – 40 GHz  
VSWR: 1.20:1, Max  
I.L.: 0.25 dB, Max  
**Mechanical**  
R/P to R/P: 0.659 [16.73]  

**SMP Female - 2.92 mm Plug**  
Part Number: CA-G2K1-01  
**Electrical**  
Frequency: DC – 40 GHz  
VSWR: 1.20:1, Max  
I.L.: 0.25 dB, Max  
**Mechanical**  
R/P to R/P: 0.659 [16.73]  

**SMP Female - 2.92 mm Jack**  
Part Number: CA-G2K2-01  
**Electrical**  
Frequency: DC – 40 GHz  
VSWR: 1.20:1, Max  
I.L.: 0.25 dB, Max  
**Mechanical**  
R/P to R/P: 0.659 [16.73]
**Description**
1.0mm Plug - 1.85mm Plug

**Part Number**
CA-11V1-01

**Electrical**
Frequency: DC – 65 GHz
VSWR: 1.35:1, Max
I.L.: 0.35 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.0mm Plug - 1.85mm Jack

**Part Number**
CA-11V2-01

**Electrical**
Frequency: DC – 65 GHz
VSWR: 1.35:1, Max
I.L.: 0.35 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.0mm Jack - 1.85mm Plug

**Part Number**
CA-12V1-01

**Electrical**
Frequency: DC – 65 GHz
VSWR: 1.35:1, Max
I.L.: 0.35 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.0mm Jack - 1.85mm Jack

**Part Number**
CA-12V2-01

**Electrical**
Frequency: DC – 65 GHz
VSWR: 1.35:1, Max
I.L.: 0.35 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.85mm Plug - 2.4mm Plug

**Part Number**
CA-21V1-01

**Electrical**
Frequency: DC – 50 GHz
VSWR: 1.28:1, Max
I.L.: 0.3 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.85mm Jack - 2.4mm Plug

**Part Number**
CA-21V2-01

**Electrical**
Frequency: DC – 50 GHz
VSWR: 1.28:1, Max
I.L.: 0.3 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.85mm Plug - 2.4mm Jack

**Part Number**
CA-22V1-01

**Electrical**
Frequency: DC – 50 GHz
VSWR: 1.28:1, Max
I.L.: 0.3 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]

---

**Description**
1.85mm Jack - 2.4mm Jack

**Part Number**
CA-22V2-01

**Electrical**
Frequency: DC – 50 GHz
VSWR: 1.28:1, Max
I.L.: 0.3 dB, Max

**Mechanical**
R/P to R/P : .659 [16.73]
## Precision Adapters

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Electrical</th>
<th>Mechanical</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.4mm Jack - 2.92 mm Jack</td>
<td>CA-21K1-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: .659 [16.73]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VSWR: 1.28:1, Max</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IL: 0.3 dB, Max</td>
<td></td>
</tr>
<tr>
<td>2.4mm Jack - 2.92 mm Plug</td>
<td>CA-21K2-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: .659 [16.73]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VSWR: 1.28:1, Max</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>IL: 0.3 dB, Max</td>
<td></td>
</tr>
<tr>
<td>2.4mm Jack - 2.92 mm Plug</td>
<td>CA-22K1-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: .659 [16.73]</td>
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<td>2.4mm Jack - 2.92 mm Plug</td>
<td>CA-22K2-01</td>
<td>Frequency: DC – 40 GHz</td>
<td>R/P to R/P: .659 [16.73]</td>
</tr>
<tr>
<td></td>
<td></td>
<td>VSWR: 1.28:1, Max</td>
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</tr>
<tr>
<td></td>
<td></td>
<td>IL: 0.3 dB, Max</td>
<td></td>
</tr>
</tbody>
</table>
Cable Connectors

SMP3/SMPS Interface

**SMP3 Female**

- Contacts: Beryllium Copper Per C17300
- Bodies: Beryllium Copper Per C17300
- Insulators: Teflon, PTFE Per ASTM-D1710
- Nuts: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300

**SMP3 Male**

- Contacts: Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick
- Bodies: Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick
- Insulators: None
- Nuts: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
  
  **Component** | **Material** | **Finish**
  |----------------|----------------|
  Contacts | Beryllium Copper Per C17300 | Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick |
  Bodies | Beryllium Copper Per C17300 | Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick |
  Insulators | Teflon, PTFE Per ASTM-D1710 | None |
  Nuts | Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300 | Passivated SEA - AMS - 2700 Method 1, Type 2 |

**Electrical**

- **Frequency**: DC – 70 GHz
- **VSWR**: 1.30:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- Interface Detent: F.D., S.B.

**Description**

SMP3 Male for .047 Cable

**Part Number**

CN-G31-047-01

**Electrical**

- **Frequency**: DC – 70 GHz
- **VSWR**: 1.30:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- Interface Detent: F.D., S.B.

**Description**

SMP3 Female for .047 Cable

**Part Number**

CN-G32-047-01

**Electrical**

- **Frequency**: DC – 70 GHz
- **VSWR**: 1.30:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- Interface Detent: F.D., S.B.

**Description**

SMP3 Male for .047 Cable

**Part Number**

CN-G3C-047-01

**Electrical**

- **Frequency**: DC – 70 GHz
- **VSWR**: 1.30:1, Max
- **I.L.**: 0.35 dB, Max

**Mechanical**

- Interface Detent: F.D., S.B.
### SMP3/SMPS Gang Connector

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cable connector</td>
<td>See : CN-G31-047-01</td>
<td></td>
</tr>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick</td>
</tr>
<tr>
<td>Insulators</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated - SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Pins</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick</td>
</tr>
<tr>
<td>Screws</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated - SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Retaining Plate</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated - SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
</tbody>
</table>
## Cable Connectors

### 1.85 mm Interface

#### 1.85 mm Jack

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Insulators 1</td>
<td>Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205</td>
<td>None</td>
</tr>
<tr>
<td>Insulators 2</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
<tr>
<td>Snap-Rings</td>
<td>Beryllium Copper Per C17300</td>
<td>Heat Treated</td>
</tr>
</tbody>
</table>

#### 1.85 mm Glug

#### Description

- **Part Number**: CN11-047-01

#### Electrical

- **Frequency**: DC – 65 GHz
- **VSWR**: 1.35:1, Max
- **I.L.**: 0.35 dB, Max

#### Mechanical

- **Part Number**: CN12-047-01

#### Description

- **Part Number**: CN12-047-01

#### Electrical

- **Frequency**: DC – 65 GHz
- **VSWR**: 1.35:1, Max
- **I.L.**: 0.35 dB, Max

#### Mechanical

- **Part Number**: CN12-047-01
## Cable Connectors

### 2.4 mm Interface

#### 2.4 mm Jack

- **Contacts**: Beryllium Copper Per C17300
- **Bodies**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Or Bodies**: Brass Per C36000, 1/2 Hard
- **Insulators 1**: Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205
- **Insulators 2**: Teflon, PTFE Per ASTM-D1710
- **Solder Adaptors**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Nuts**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Snap-Rings**: Beryllium Copper Per C17300

#### 2.4 mm Plug

- **Contacts**: Beryllium Copper Per C17300
- **Bodies**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Or Bodies**: Brass Per C36000, 1/2 Hard
- **Insulators 1**: Polyetherimide Resin General Electric Ultem 1000 ASTM D-5205
- **Insulators 2**: Teflon, PTFE Per ASTM-D1710
- **Solder Adaptors**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Nuts**: Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300
- **Snap-Rings**: Beryllium Copper Per C17300

### Description

- **2.4mm Jack for .086 Cable**
- **Part Number**: CN-21-086-01
  - **Electrical**: Frequency: DC – 50 GHz, VSWR: 1.35:1, Max, I.L.: 0.3 dB, Max
  - **Mechanical**

- **2.4mm Plug for .086 Cable**
- **Part Number**: CN-22-086-01
  - **Electrical**: Frequency: DC – 50 GHz, VSWR: 1.35:1, Max, I.L.: 0.3 dB, Max
  - **Mechanical**

- **2.92 mm Jack for .141 Cable**
- **Part Number**: CN-21-141-01
  - **Electrical**: Frequency: DC – 40 GHz, VSWR: 1.30:1, Max, I.L.: 0.25 dB, Max
  - **Mechanical**

- **2.4mm Plug for .141 Cable**
- **Part Number**: CN-22-141-01
  - **Electrical**: Frequency: DC – 40 GHz, VSWR: 1.30:1, Max, I.L.: 0.25 dB, Max
  - **Mechanical**
Waterproof 2.4mm designs offer a compact connector envelope, watertight in unmated conditions, with the ability to withstand rain, 100% condensation, and water submersion up to 1m depth. Every potential water ingestion path is mitigated with at least two waterproofing methods to maintain long-lasting performance under extreme environmental conditions.

### Component

<table>
<thead>
<tr>
<th>Contacts</th>
<th>Beryllium Copper Per C17300</th>
<th>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bodies</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated</td>
</tr>
<tr>
<td>Hermetic Bead</td>
<td>Glass, Corning 7070 &amp; Kovar</td>
<td>None</td>
</tr>
<tr>
<td>Solder Adaptors</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated</td>
</tr>
<tr>
<td>Snap-Rings</td>
<td>Beryllium Copper Per C17300</td>
<td>Heat Treated</td>
</tr>
<tr>
<td>Gasket</td>
<td>Silicon Rubber per A-A-69588, Class 2B, Graded 50, 50±5 Durometre</td>
<td>None</td>
</tr>
<tr>
<td>O-Rings</td>
<td>Silicon Rubber per A-A-69588, Class 1B, Graded 70</td>
<td>None</td>
</tr>
</tbody>
</table>
### 2.4 mm Ruggedized

#### 2.4 mm Jack
- **Component**: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick
- **Material**: Beryllium Copper Per C17300
- **Finish**: Heat Treated

#### 2.4 mm Plug
- **Component**: Gold Plated Per ASTM B- Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick
- **Material**: Beryllium Copper Per C17300
- **Finish**: Heat Treated

### Description
- **Part Number**: CN-21-086-02H
- **Electrical**
  - Frequency: DC – 50 GHz
  - VSWR: 1.35:1, Max
  - I.L.: 0.3 dB, Max
- **Mechanical**

### Description
- **Part Number**: CN-22-086-02H
- **Electrical**
  - Frequency: DC – 50 GHz
  - VSWR: 1.35:1, Max
  - I.L.: 0.3 dB, Max
- **Mechanical**
### Cable Connectors

#### 2.92 mm Interface

**2.92 mm Jack**

![Image of 2.92 mm Jack]

**2.92 mm Plug**

![Image of 2.92 mm Plug]

**Components**
- **Contacts**: Beryllium Copper Per C17300
- **Material**
  - Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick
- **Finish**
  - Gold Plated Per ASTM B

**Bodies**
- Steel Corrosion Resistant, Non Magnetic
  - ASTM-A-585 UNS NO. S30300
- **Finish**
  - Passivated
  - SEA - AMS - 2700 Method 1, Type 2

**Insulators 1**
- Polyetherimide Resin General Electric
  - Ultem 1000 ASTM D-5205
- **Finish**
  - None

**Insulators 2**
- Teflon, PTFE Per ASTM-D1710
- **Finish**
  - None

**Solder Adaptors**
- Steel Corrosion Resistant, Non Magnetic
  - ASTM-A-585 UNS NO. S30300
- **Finish**
  - Gold Plated Per ASTM B: Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I. 50-100 µin Thick

**Nuts**
- Steel Corrosion Resistant, Non Magnetic
  - ASTM-A-585 UNS NO. S30300
- **Finish**
  - Passivated
  - SEA - AMS - 2700 Method 1, Type 2

**Snap-Rings**
- Beryllium Copper Per C17300
- **Finish**
  - Heat Treated

#### Description
- **2.92 mm Plug for .086 Cable**
- **Part Number**
  - CN-K1-086-01
- **Electrical**
  - **Frequency**: DC – 40 GHz
  - **VSWR**: 1.25:1, Max
  - **I.L.**: 0.25 dB, Max
- **Mechanical**
  - **Description**
  - **2.92 mm Jack for .086 Cable**
  - **Part Number**
    - CN-K2-086-01
  - **Electrical**
    - **Frequency**: DC – 40 GHz
    - **VSWR**: 1.25:1, Max
    - **I.L.**: 0.25 dB, Max
  - **Mechanical**
    - **Description**
    - **2.92 mm Plug for .141 Cable**
    - **Part Number**
      - CN-K1-141-01
    - **Electrical**
      - **Frequency**: DC – 40 GHz
      - **VSWR**: 1.25:1, Max
      - **I.L.**: 0.25 dB, Max
    - **Mechanical**
      - **Description**
      - **2.92 mm Jack for .141 Cable**
      - **Part Number**
        - CN-K2-141-01
      - **Electrical**
        - **Frequency**: DC – 40 GHz
        - **VSWR**: 1.25:1, Max
        - **I.L.**: 0.25 dB, Max
      - **Mechanical**
### PCB Connectors

#### Strong Grounding For High Reliability System

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<thead>
<tr>
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<th>Edge Mount</th>
<th>Surface Mount</th>
</tr>
</thead>
<tbody>
<tr>
<td>SMP</td>
<td>Pages: 40-41</td>
<td>Pages: 42-43</td>
</tr>
<tr>
<td>SMPM</td>
<td>Pages: 44-45</td>
<td>Pages: 46</td>
</tr>
</tbody>
</table>

---

**Matrix**
PCB Connectors

SMP Male Edge Mount

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Insulators</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
</tbody>
</table>

PCB Connectors

Description

SMP Male Edge Mount Full Detente
Part Number
CP-GE1-01F

Electrical
Frequency: DC – 40 GHz

Mechanical
N/A

Description

SMP Male Edge Mount Limited Detente
Part Number
CP-GE1-01L

Electrical
Frequency: DC – 40 GHz

Mechanical
N/A

Description

SMP Male Edge Mount Smooth Bore
Part Number
CP-GE1-01S

Electrical
Frequency: DC – 40 GHz

Mechanical
N/A
## PCB Connectors

### SMP Male Surface Mount

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Insulators</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
<tr>
<td>Nuts</td>
<td>Steel Corrosion Resistant, Non Magnetic ASTM-A-585 UNS NO. S30300</td>
<td>Passivated SEA - AMS - 2700 Method 1, Type 2</td>
</tr>
</tbody>
</table>

**Electrical**
- **Frequency**: DC – 40 GHz

**Mechanical**
- **Part Number**: CP-GE3-01L
- **N/A**
# PCB Connectors

## SMPM Male Edge Mount

<table>
<thead>
<tr>
<th>Component</th>
<th>Material</th>
<th>Finish</th>
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</thead>
<tbody>
<tr>
<td>Contacts</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µm Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µm Thick</td>
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<tr>
<td>Bodies</td>
<td>Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B: Type 2, Code C, 50-100 µm Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µm Thick</td>
</tr>
<tr>
<td>Insulators</td>
<td>Teflon, PTFE Per ASTM-D1710</td>
<td>None</td>
</tr>
</tbody>
</table>

**Description**

SMPM Male Edge Mount

- **Part Number**: CP-GSE1-01F
- **Electrical**
  - Frequency: DC – 65 GHz
- **Mechanical**: N/A

**Description**

SMPM Male Edge Mount

- **Part Number**: CP-GSE1-01S
- **Electrical**
  - Frequency: DC – 65 GHz
- **Mechanical**: N/A
### PCB Connectors

**SMPM Male Surface Mount**

---

#### Component

<table>
<thead>
<tr>
<th>Material</th>
<th>Finish</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contacts: Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Bodies: Beryllium Copper Per C17300</td>
<td>Gold Plated Per ASTM B, Type 2, Code C, 50-100 µin Thick Over Nickel Plated Per SAE-AMS-QQ-N-290, Class I, 50-100 µin Thick</td>
</tr>
<tr>
<td>Insulators: Teflon, PTFE Per ASTM D1710</td>
<td>None</td>
</tr>
</tbody>
</table>

#### Description

- **SMPM Male Surface Mount**
- Smooth Bore

#### Part Number

- CP-GSE3-01S

#### Electrical

- Frequency: DC – 65 GHz

#### Mechanical

- N/A

---

Because your style matters

---

![Image of PCB Connectors]