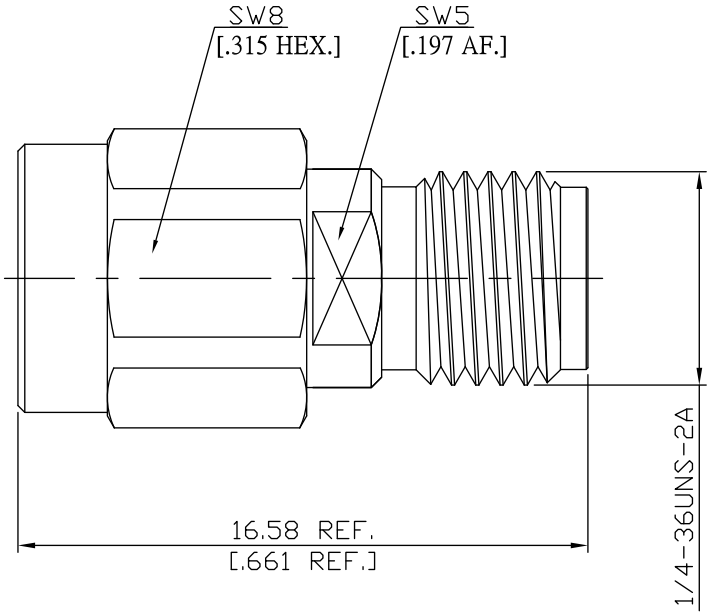
ROSNOL® RF/Microwave Interconnect

# Technical Data Sheet

## Precision SMA Plug (Male) to Precision SMA Jack (Female) Adapter DC-27GHz VSWR1.15

# AD-PCA1PCA25C / 9XX-9X




All dimensions are in mm [inch]
Tolerances according to DIN ISO 2768-mH

## Interface

| | |
|---|---|
| Mechanically compatible with | 2.92mm, 3.5mm |
| According to | IEC 60169-15, MIL-STD-348B/310 |

## Electrical Data

| | |
|---|---|
| Impedance | 50 Ω |
| Frequency | DC to 27 GHz |
| VSWR (Return Loss) | ≤ 1.15 (≥ 23.13 dB) |
| Insertion Loss | ≤ 0.04 x √F (GHz) dB |
| Insulation Resistance | ≥ 5 GΩ |
| Center Contact Resistance | ≤ 3mΩ |
| Outer Contact Resistance | ≤ 2mΩ |
| Test Voltage (at sea level) | 1000 V rms |
| Working Voltage (at sea level) | 480 V rms |
| Power handling (at 20 °C, sea level, VSWR 1.0) | ≤ 200 W @ 2 GHz |
| RF Leakage | ≥ 100 dB up to 1 GHz |

## Material And Plating

| Piece Parts (Precision SMA) | Material | Plating |
|---|---|---|
| Centre contact | Beryllium Copper | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Body | Stainless Steel | Passivated |
| Insulator | PTFE | |
| Gasket | Silicone Rubber | |
| Coupling nut | Stainless Steel | Passivated |
| **Piece Parts (Precision SMA)** | **Material** | **Plating** |
| Centre contact | Beryllium Copper | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Body | Stainless Steel | Passivated |
| Insulator | PTFE | |





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# AD-PCA1PCA25C / 9XX-9X

## Mechanical Data

| | |
|---|---|
| Coupling mechanisms | Screw-lock |
| Mating Cycles | ≥ 500 |
| Coupling Nut Retention | ≥ 270 N |
| Center Contact Captivation: axial | ≥ 20 N |
| radial | ≥ 3 N.cm. |
| Weight | N/A |
| Coupling Test Torque | 1.70 Nm max. |
| Recommended Torque | 0.9 Nm |

## Environmental Data

| | |
|---|---|
| Temperature Range | -55°C to +165°C |
| Thermal shock | MIL-STD-202, Method 107, Condition B |
| Corrosion | MIL-STD-202, Method 101, Condition B |
| Vibration | MIL-STD-202, Method 204, Condition D |
| Shock | MIL-STD-202, Method 213, Condition I |
| Moisture Resistance | MIL-STD-202, Method 106 |
| RoHS | compliant |

## Packing

Single or 100





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