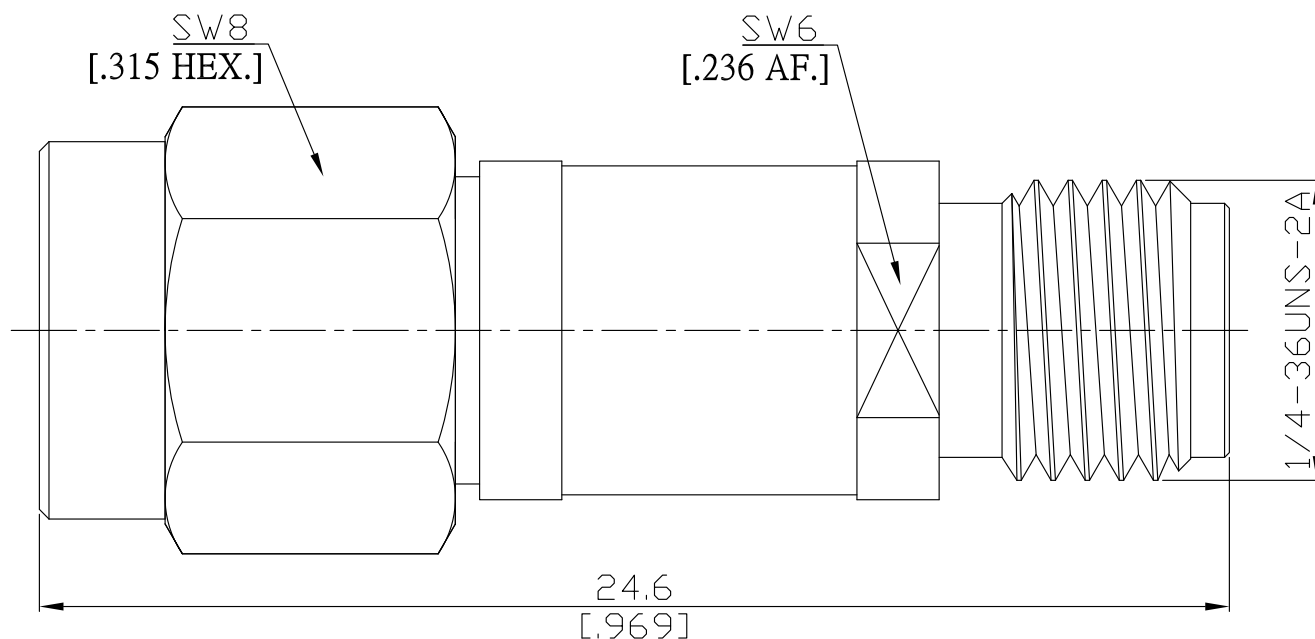


SMA Plug (Male) to SMA Jack (Female)  
DC-BLOCK DC-3 GHz

**DB-A1A25A-3G50V / H44-H4**



All dimensions are in mm [inch]

Tolerances according to DIN ISO 2768-mH

**Interface**

Mechanically compatible with

SMA

According to

IEC 60169-19, MIL-STD-348B/310

**Electrical Data**

Impedance

50 Ω

Frequency

DC to 3 GHz

VSWR (Return Loss)

≤ 1.67 (≥ 12 dB)

Insertion Loss

≤ 1 dB

Insulation Resistance

≥ 5 GΩ

Voltage Rating

50 Volts

**Electrical Specifications AT 25 °C**

| Parameter       | Condition (GHz) | Min. | Typ. | Max. | Units |
|-----------------|-----------------|------|------|------|-------|
| Frequency Range |                 | 0.01 |      | 18   | GHz   |
| Insertion Loss  | 0.01-0.1        | -    | 0.02 | 0.2  | dB    |
|                 | 0.1-1.0         | -    | 0.07 | 0.3  |       |
|                 | 1.0-4.0         | -    | 0.15 | 0.65 |       |
|                 | 4.0-8.0         | -    | 0.38 | 1.0  |       |
|                 | 8.0-18          | -    | 1.00 |      |       |
| Return Loss     | 0.01-0.1        | 20   | 26   | -    | dB    |
|                 | 0.1-1.0         | 20   | 36   | -    |       |
|                 | 1.0-4.0         | 20   | 24   | -    |       |
|                 | 4.0-8.0         | 15   | 18   | -    |       |
|                 | 8.0-18          | -    | 12   | -    |       |

## SMA Plug (Male) to SMA Jack (Female) DC-BLOCK DC-3 GHz

### DB-A1A25A-3G50V / H44-H4

#### Material And Plating

| Piece Parts (Plug) | Material        | Plating                                                                          |
|--------------------|-----------------|----------------------------------------------------------------------------------|
| Centre Contact     | Phosphor Bronze | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Body               | Brass           | Copper-Tin-Zinc Alloy                                                            |
| Insulator          | PEI             |                                                                                  |
| Gasket             | Silicone Rubber |                                                                                  |
| Coupling Nut       | Brass           | Copper-Tin-Zinc Alloy                                                            |
| Piece Parts (Jack) | Material        | Plating                                                                          |
| Centre Contact     | Phosphor Bronze | Gold plating, 3 μinch<br>(Non-magnetic nickel-phosphorus underplating, 80 μinch) |
| Body               | Brass           | Copper-Tin-Zinc Alloy                                                            |
| Insulator          | PEI             |                                                                                  |

#### Mechanical Data

|                                   |              |
|-----------------------------------|--------------|
| Coupling mechanisms               | Screw-lock   |
| Mating Cycles                     | ≥ 500        |
| Coupling Nut Retention            | N/A          |
| Center Contact Captivation: axial | ≥ 27 N       |
| radial                            | ≥ 3 Ncm      |
| Weight                            | 0.0040 kg    |
| Coupling Test Torque              | 1.70 Nm max. |
| Recommended Torque                | 0.9 Nm       |

#### Environmental Data

|                     |                                      |
|---------------------|--------------------------------------|
| Temperature Range   | -60°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