1.0 MM PRECISION FIXED ATTENUATOR

1.0 mm Precision Fixed Attenuator Series

2 W | DC–110 GHz | 50 Ω



110 GHz	2 W
MAX FREQUENCY	POWER RATING
1.0 mm M–F	**≤ 1.60**
CONNECTOR CONFIGURATION	MAX VSWR

General Description: The Vinstronics VST-U-10XX0201-110G is a 1.0 mm precision fixed attenuator series covering DC–110 GHz. Available in 3, 6, 10, and 20 dB values, the series features 2 W power handling, 50 Ω impedance, passivated stainless-steel construction, and gold-plated beryllium-copper inner contacts.

Core Features

- **DC–110 GHz Coverage:** Broadband operation for RF and millimeter-wave test systems.
- **Multiple Attenuation Values:** Available in 3, 6, 10, and 20 dB configurations.
- **2 W Power Rating:** Rated power handling across the series.
- **Passivated Stainless-Steel Construction:** Stainless-steel body and connector outer structure with passivated finish.
- **Gold-Plated BeCu Contacts:** Gold-plated beryllium-copper male and female inner contacts.

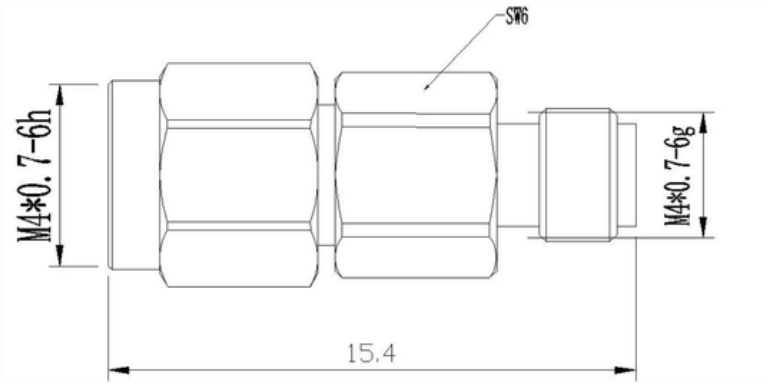
Target Applications

- **Millimeter-Wave Test Systems:** Signal level control in DC–110 GHz measurement paths.
- **VNA Measurement Chains:** Fixed attenuation for high-frequency measurement setups.
- **RF Module & Device Testing:** Fixed attenuation for component and subsystem evaluation.
- **1.0 mm Interconnect Systems:** Inline attenuation in millimeter-wave test assemblies.

ELECTRICAL PERFORMANCE	
Frequency Range	DC–110 GHz
Available Attenuation	3 / 6 / 10 / 20 dB
VSWR (Max)	1.60 : 1
Impedance	50 Ω
Power Rating	2 W
Temperature Range	-55°C to +125°C

MECHANICAL & MATERIALS	
Connector Configuration	1.0 mm Male-to-Female (1.0-JK)
Connector Outer Material	Stainless steel, passivated
Male Inner Contact	Beryllium copper, gold-plated
Female Inner Contact	Beryllium copper, gold-plated
Body Material	Stainless steel, passivated
Overall Size	Ø4 × 15.4 mm ±2%

MECHANICAL OUTLINE



ATTENUATION OPTIONS & TOLERANCES				
Nominal Attenuation	3 dB	6 dB	10 dB	20 dB
Attenuation Tolerance	-1.0 / +2.0 dB	-1.0 / +2.0 dB	-1.0 / +2.0 dB	-2.0 / +2.0 dB

Part-number logic: XX denotes the attenuation value in the VST-U-10XX0201-110G series.

ENGINEERING SUMMARY

15.4 mm	Ø4 mm	SW6	1.0 mm M–F
OVERALL LENGTH	BODY DIAMETER	HEX	CONFIGURATION

- Passivated stainless steel
- Gold-plated BeCu contacts
- 50 Ω
- RoHS

ORDERING INFORMATION

VST-U-10XX0201-110G

1.0 mm Male-to-Female Precision Fixed Attenuator,
2 W, DC–110 GHz, 50 Ω.

3 dB	6 dB	10 dB	20 dB

XX denotes the attenuation value in the series part number.

Engineering Support: Attenuation selection, configuration review, and RF test documentation.

TEST & VERIFICATION

RF Test Report

Available upon request.