2.92 MM PRECISION FIXED ATTENUATOR

2.92 mm Precision Fixed Attenuator Series

2 W | DC–40 GHz | 50 Ω



40 GHz
MAX FREQUENCY

2 W
POWER RATING

2.92 mm M–F
CONNECTOR CONFIGURATION

≤ 1.40
MAX VSWR

General Description: The Vinstronics VST-U-292XX0201-40G is a 2.92 mm precision fixed attenuator series covering DC–40 GHz. The series supports attenuation values from 1 to 10 dB, plus 20 and 30 dB options, with 2 W power handling, 50 Ω impedance, and a maximum VSWR of 1.40. Passivated stainless-steel construction and gold-plated beryllium-copper inner contacts support precision RF and microwave test applications.

Core Features

- **DC–40 GHz Coverage:** Broadband operation for RF and microwave test systems.
- **Wide Attenuation Selection:** Available from 1 to 10 dB, plus 20 and 30 dB options.
- **Tight Attenuation Tolerance:** ±0.8 dB for 1–10 dB models.
- **2 W Power Rating:** Rated power handling across the series.
- **Low VSWR:** Maximum VSWR of 1.40 across the specified frequency range.
- **Precision Metal Construction:** Passivated stainless-steel body with gold-plated BeCu inner contacts.

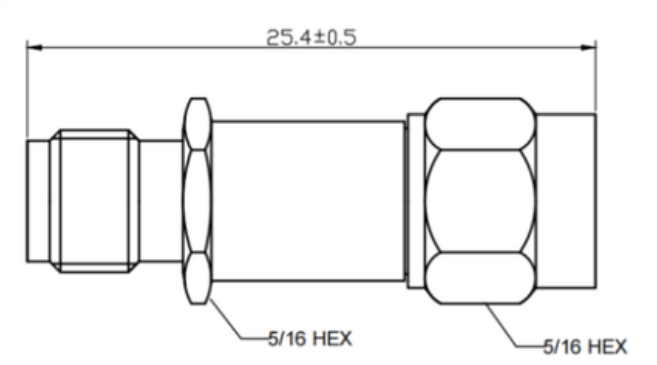
Target Applications

- **RF & Microwave Test Systems:** Signal level control in DC–40 GHz measurement paths.
- **VNA Measurement Chains:** Fixed attenuation for high-frequency measurement setups.
- **RF Module & Device Testing:** Fixed attenuation for component and subsystem evaluation.
- **2.92 mm Interconnect Systems:** Inline attenuation in precision RF and microwave assemblies.

ELECTRICAL PERFORMANCE	
Frequency Range	DC–40 GHz
Available Attenuation	1–10 dB / 20 dB / 30 dB
VSWR (Max)	≤ 1.40
Impedance	50 Ω
Power Rating	2 W
Temperature Range	-55°C to +125°C

MECHANICAL & MATERIALS	
Connector Configuration	2.92 mm Male-to-Female
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	Ø8 × 25.4 mm
Overall Length	25.4 ±0.5 mm
Hex	5/16 in.
Compliance	RoHS

MECHANICAL OUTLINE



ATTENUATION OPTIONS & TOLERANCES

Attenuation Range / Value	1–10 dB	20 dB	30 dB
Attenuation Tolerance	±0.8 dB	±1.5 dB	±1.5 dB

Part-number logic: XX denotes the attenuation value in the VST-U-292XX0201-40G series.

ENGINEERING SUMMARY

25.4 mm	Ø8 mm	1–10 / 20 / 30 dB	2.92 mm M–F
OVERALL LENGTH	BODY DIAMETER	ATTENUATION OPTIONS	CONFIGURATION

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

ORDERING INFORMATION

VST-U-292XX0201-40G

2.92 mm Male-to-Female Precision Fixed Attenuator, 2 W, DC–40 GHz, 50 Ω

1–10 dB	20 dB	30 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.