2.92 MM PRECISION FIXED ATTENUATOR

2.92 mm Precision Fixed Attenuator Series

2 W | DC–40 GHz | 50 Ω



40 GHz	2 W
MAX FREQUENCY	POWER RATING
2.92 mm M–F	**< 1.35**
CONNECTOR CONFIGURATION	MAX VSWR

General Description: The Vinstronics VST-U-292XX0202-40G is a 2.92 mm precision fixed attenuator series covering DC–40 GHz. The series supports attenuation values from 1 to 30 dB, plus a 40 dB option, with 2 W power handling, 50 Ω impedance, and a maximum VSWR below 1.35. Gold-plated connector interfaces and a passivated stainless-steel body provide a robust construction for 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 30 dB, plus a 40 dB option.
- **Tight Attenuation Tolerance:** ±1 dB for the 1–20 dB ranges specified.
- **2 W Power Rating:** Rated power handling across the series.
- **Low VSWR:** Maximum VSWR below 1.35 across the specified frequency range.
- **Precision Metal Construction:** Gold-plated connector interfaces with a passivated stainless-steel body.

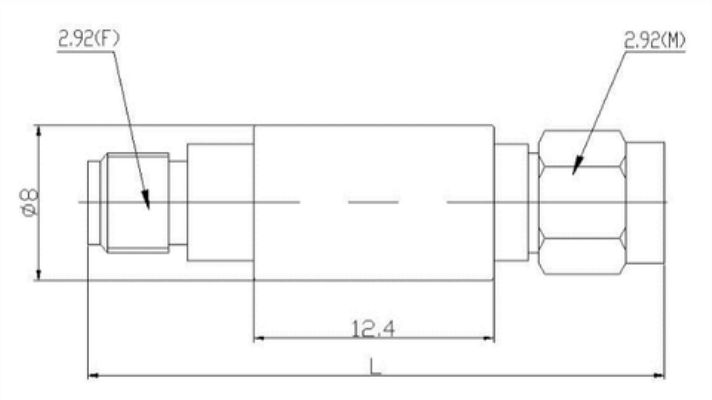
Target Applications

- **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	1–30 dB / 40 dB
VSWR (Max)	< 1.35
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	Brass, gold-plated
Male Inner Contact	Brass, gold-plated
Female Inner Contact	Bronze, gold-plated
Body Material	Passivated stainless steel
Size, ≤30 dB	Ø8 × 28.7 mm
Size, 40 dB	Ø8 × 47.6 mm
Weight, ≤30 dB	5 g
Weight, 40 dB	15 g
Compliance	RoHS

MECHANICAL OUTLINE



ATTENUATION OPTIONS & TOLERANCES				
Attenuation Range / Value	1–10 dB	10–20 dB	20–30 dB	40 dB
Attenuation Tolerance	±1 dB	±1 dB	-1 / +1.5 dB	-1 / +2 dB

Part-number logic: XX denotes the attenuation value in the VST-U-292XX0202-40G series.

ENGINEERING SUMMARY

28.7 / 47.6 mm	Ø8 mm	1–30 / 40 dB	2.92 mm M–F
OVERALL LENGTH	BODY DIAMETER	ATTENUATION OPTIONS	CONFIGURATION

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

ORDERING INFORMATION

VST-U-292XX0202-40G

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

1–30 dB / 40 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.

REPRESENTATIVE MEASURED PERFORMANCE

