

DRW500/40

Dielectric Rod Waveguide (DRW) Thru 40 mm

DRW500 is the first commercially ultra-broadband available dielectric rod waveguide (DRW) with flanged mating interface. The 40 mm long straight waveguide offers an exceptionally low insertion loss of under 0.15 dB/cm over the entire working frequency range of 50 to 500 GHz. Such broadband and low-loss performance is unmatched by standard rectangular waveguides. A precision metrology grade design ensures durability and repetitive connections.

DRW500 is part of LeapWave's connectivity ecosystem and is meant to provide connection between devices featuring LeapWave ports. The device is also ideal for connectivity in instrumentation and high-speed communications applications.



FEATURES

- Insertion loss < 0.15 db/cm in entire band
- Stable phase response
- Low dispersion
- Flange standard UG387/U compatible
- Instrumentation grade

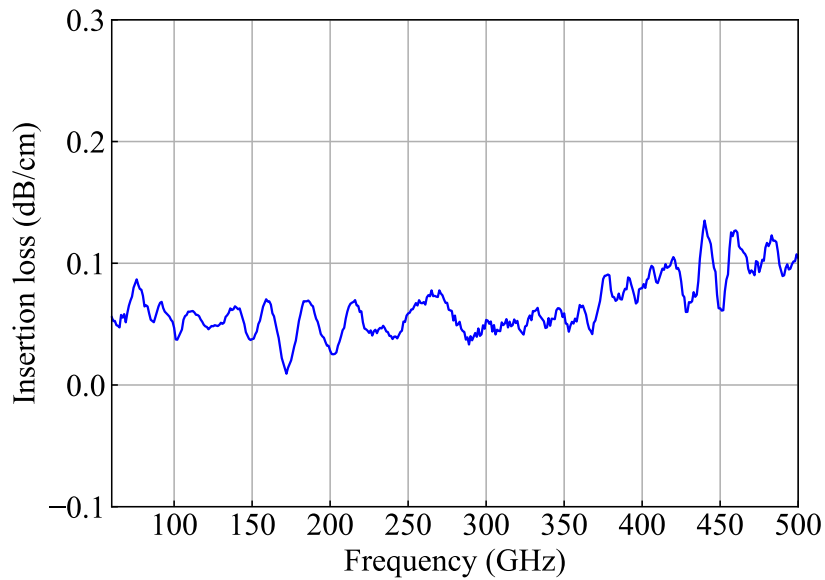
APPLICATIONS

- Instrumentation
- Device testing
- THz Systems



PERFORMANCE DATA

Insertion Loss



ELECTRICAL SPECIFICATIONS

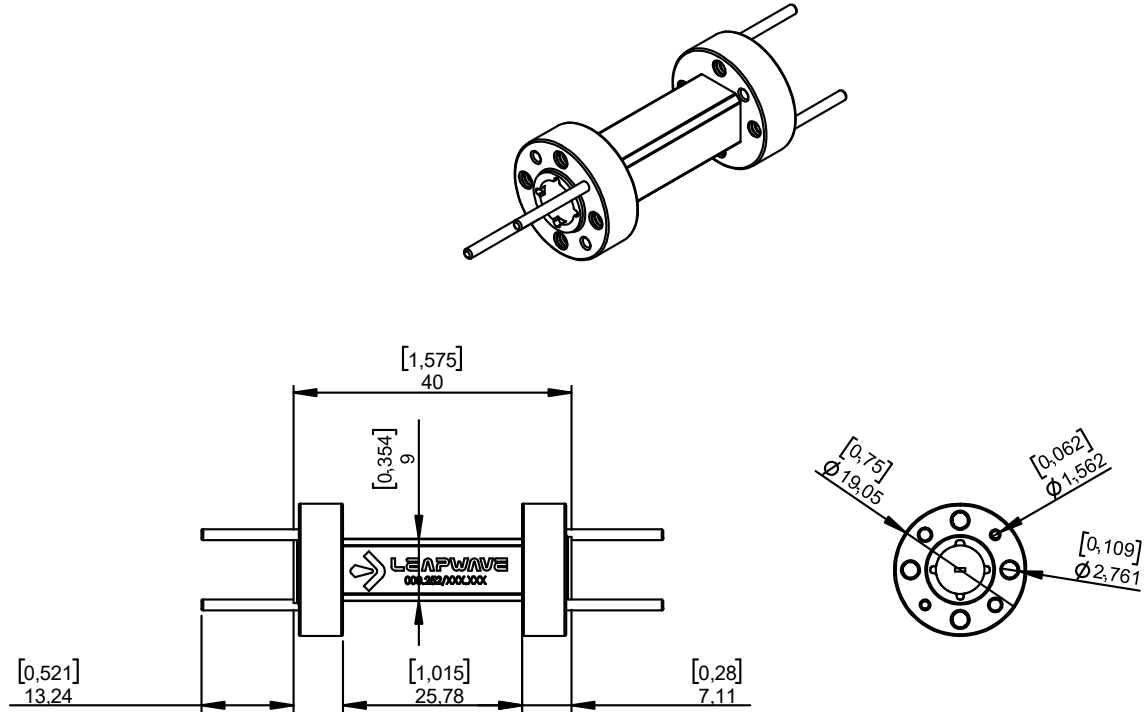
Item	Description
Frequency Range	50 GHz – 500 GHz
Insertion Loss	< 0.15 dB/cm
Total Loss	< 0.6 dB (in entire range)
Return Loss	< -15 dB (typical)
Specifications Temperature	25°C
Operating Temperature	Preliminary: 0°C to 50°C

MECHANICAL SPECIFICATIONS

Item	Description
Length	40 mm
Waveguide Interface	LeapWave port with UG 387/U flange
Waveguide Material	Intrinsic silicon
Body	Aluminium
Surface Finish	As machined (3 µm)
Weight	30 g
Accessories	Protective caps

DRAWINGS

Unless specified, all dimensions are in millimeters [inches].



CAUTION

Any contact between the LeapWave port interface and a foreign object may lead to either degradation of performance or destruction of the device.

Disclaimer: The product, performance and specifications may be subject to change without notice.

ORDERING INFORMATION

Product Code: DRW500/40

Please contact for pricing. Specifications are subject to change without prior notice.

Version 1.3