

• IR Applications

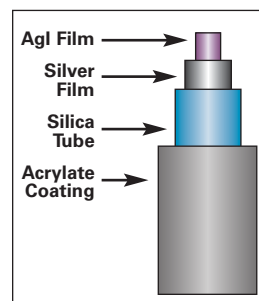
Characteristics

- Wavelength Range 2.9 μm past 10.6 μm
- High Laser Damage Threshold: > 1000W @ 10.6 μm
- Strong and Flexible
- Non-Toxic: Sterilizable*
- Low Insertion Loss
- No End Reflection
- Transmission Optimized for CO₂ or Er:YAG wavelengths

* The end manufacturer is responsible for bio-compatibility and sterilization testing and validation studies.

HWCA – CO₂ Hollow Waveguide with Acrylate Buffer

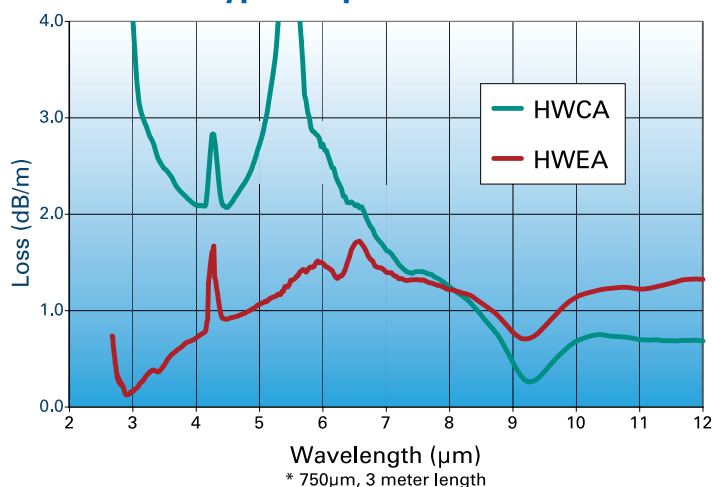
Description	ID (μm)	Glass OD (μm)	Buffer OD (μm)	Straight Loss (dB/m Max)	Bend Loss (dB Max)
HWCA300750	300 \pm 20	400 \pm 15	750 \pm 25	2.0	1.5
HWCA500850	500 \pm 25	650 \pm 20	850 \pm 30	0.8	1.5
HWCA7501200	750 \pm 30	950 \pm 25	1200 \pm 50	0.5	1.0
HWCA10001600	1000 \pm 50	1300 \pm 25	1600 \pm 50	0.5	1.0



HWEA – Er:YAG Hollow Waveguide with Acrylate Buffer

Description	ID (μm)	Glass OD (μm)	Buffer OD (μm)	Straight Loss (dB/m Max)	Bend Loss (dB Max)
HWEA300750	300 \pm 20	400 \pm 15	750 \pm 25	2.0	2.0
HWEA500850	500 \pm 25	650 \pm 20	850 \pm 30	1.5	2.0
HWEA7501200	750 \pm 30	950 \pm 25	1200 \pm 50	1.0	1.5
HWEA10001600	1000 \pm 50	1300 \pm 25	1600 \pm 50	1.0	1.5

HSW Typical Spectral Attenuation*



Terminations Available

Poly-Lok™:

- Removable, reusable connectors, ideal for prototyping
- SMA (905), SMA (906), STII, and FC (STII and FC not available for 1000 μm bore)
- Not for permanent installations

Permanent SMA (905), SMA (906), STII, and FC:

- Waveguide protrudes 1 to 2 mm from connector endface

Visit our website for the HSW User's Guide: <http://www.polymicro.com/images/hswguide.pdf>

This product is licensed and manufactured under the following patents: US: 5,440,664; 5,567,471; 4,930,863; 5,497,440; and 5,605,716; Israel: 86296; 105956; and 111904; Europe: 0344478.



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