



NEXT GENERATION WAVEGUIDE TECHNOLOGY

HIGH FREQUENCY • FLEXIBLE CABLE • SMALL FORM FACTOR • LOW LOSS DIELECTRIC

Samtec's new, high-frequency micro waveguide technology is designed to support the demands of next generation systems by targeting millimeter wave frequencies. Higher frequencies often require the use of rigid, metallic waveguides. However, Samtec's innovative technology provides an alternative solution that is **flexible**, **easier to use**, and **lower cost**, while also maintaining **low insertion loss**.

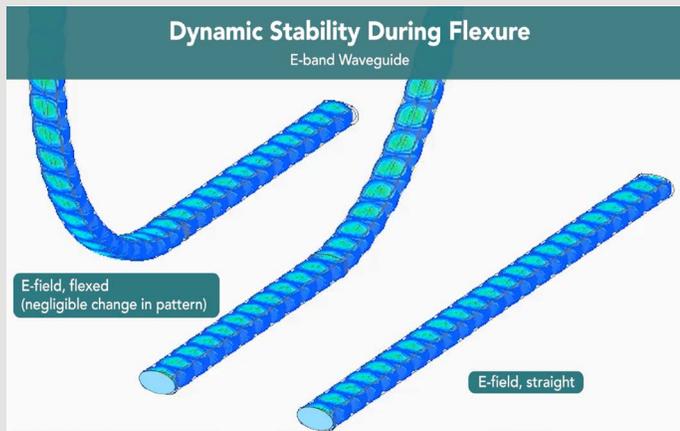
FEATURES

- E-Band: 60 GHz to 90 GHz
- Flexible Cable with Dynamic Stability
- Ultra-Small Form Factor
- Low Loss Dielectric

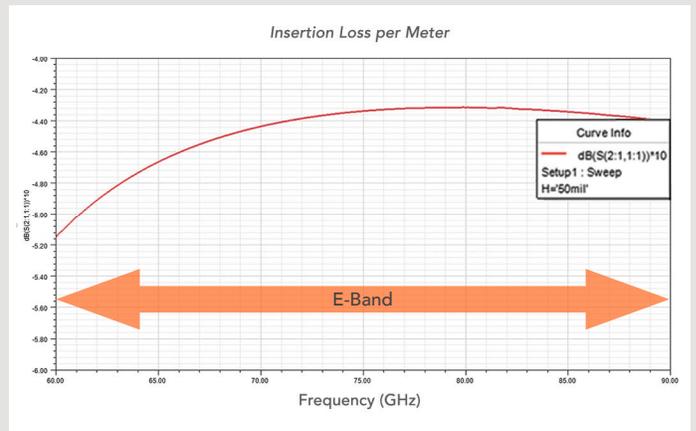


Flexible Cable Construction

E-Band (60 GHz to 90 GHz), In-Development



To view the e-field animation visit samtec.com/waveguide-dynamic-stability

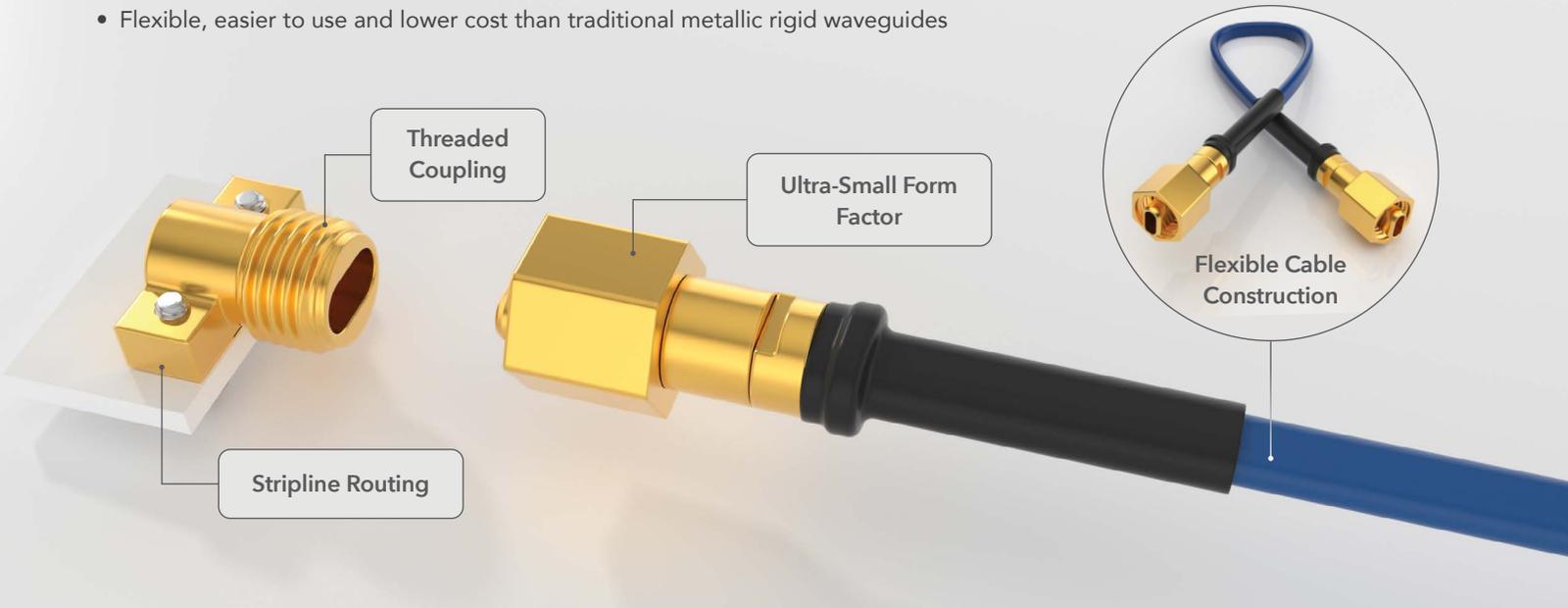


Recent simulated testing demonstrates an approximate 4.5 dB/m of loss.

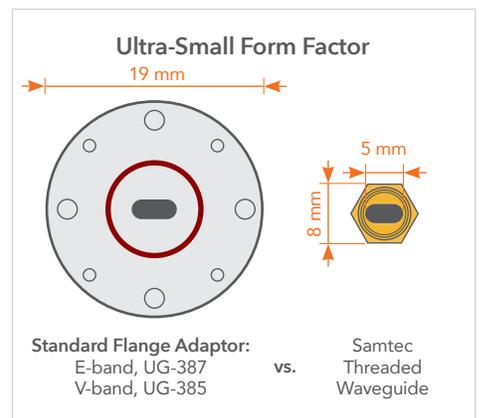
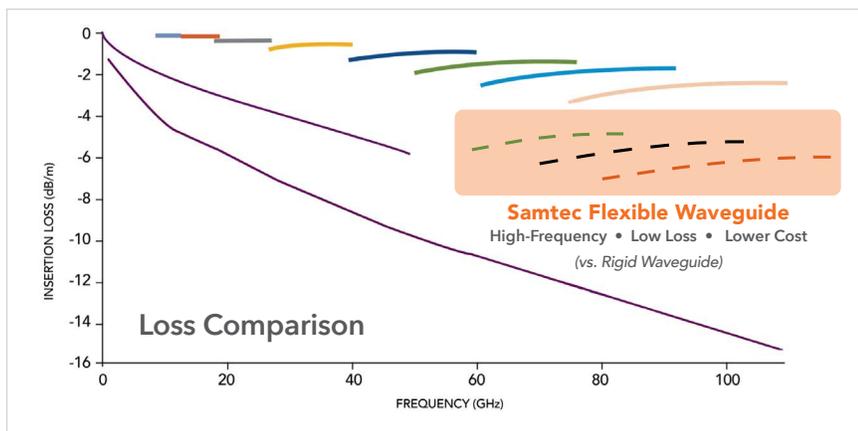
WAVEGUIDE COMPARISON

Samtec's Next Generation High-Frequency Micro Waveguide Technology offers a number of mechanical and electrical benefits compared to Rigid Waveguide and Standard Low-Loss Microwave Coax Cable Transmission Lines. These include:

- Less signal loss than standard microwave coax cable
- Flexible, easier to use and lower cost than traditional metallic rigid waveguides



PERFORMANCE COMPARISON (vs. Rigid Waveguide & Standard Low Loss Microwave Coax Cable)



Samtec Flexible Waveguide	Standard Coax Cable	Existing Rigid Waveguide Technology
High-Frequency, Low Loss, Lower Cost (vs. Rigid Waveguide)	Standard, High-Frequency Low Loss Cable Assemblies	WR90 WR28 WR12 WR62 WR19 WR10 WR42 WR15

