

TeraProbes RoboMat Material Measurement Data

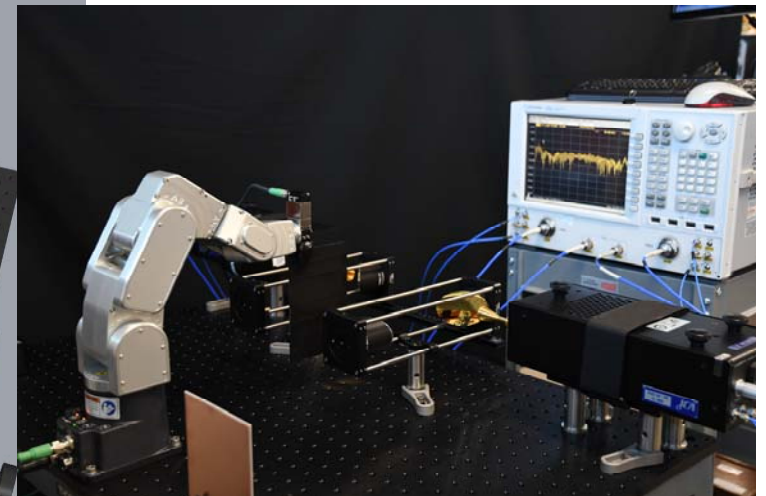
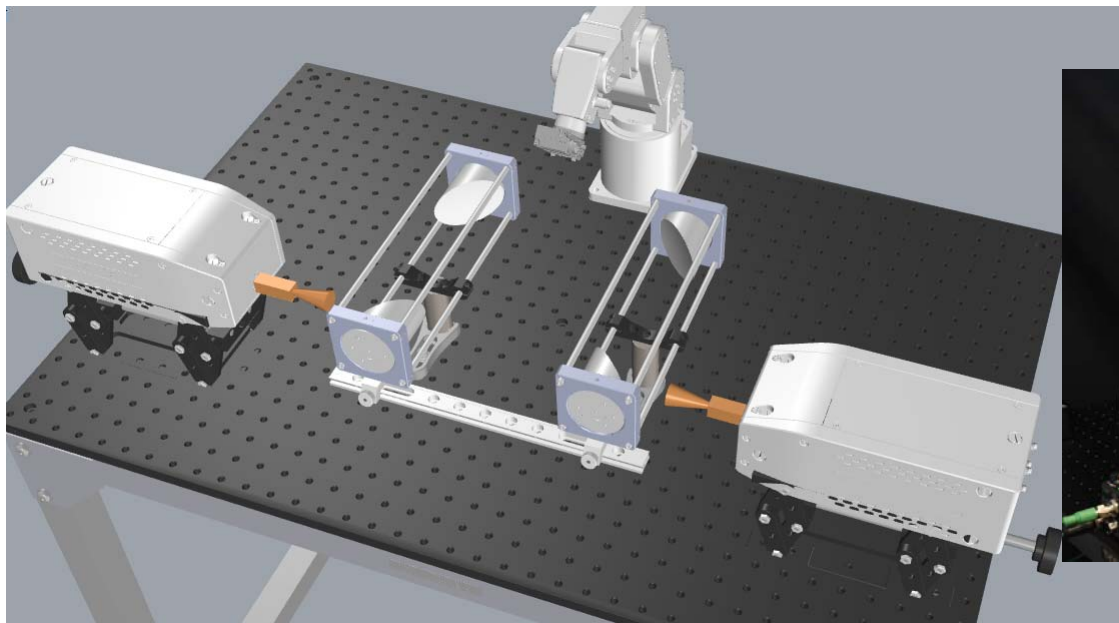
For Various Thin Material Films and Substrates

NOV. 11, 2021





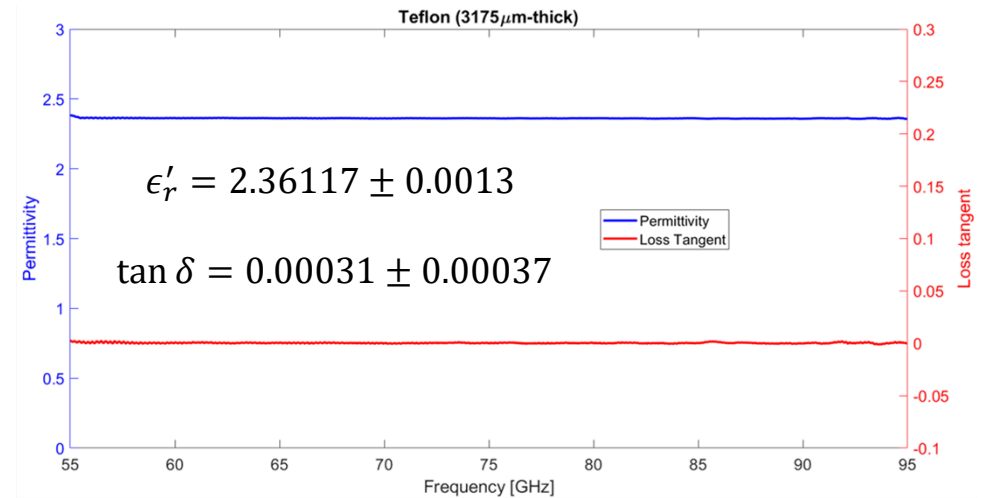
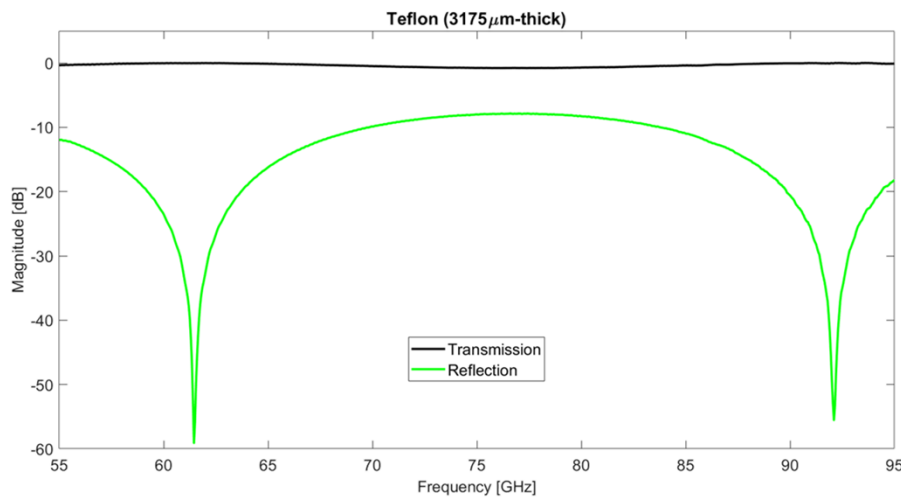
Automated Material Characterization and Imaging System: TP-RoboMat-42E-P



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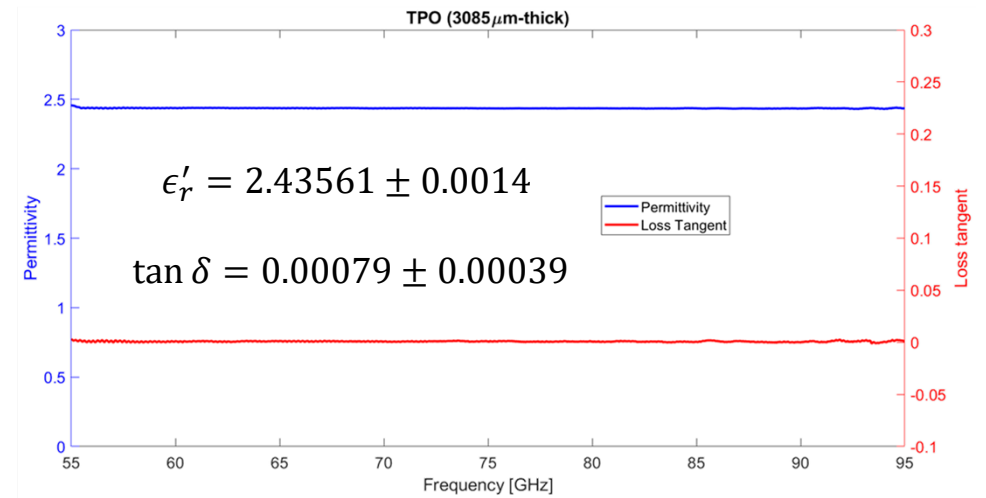
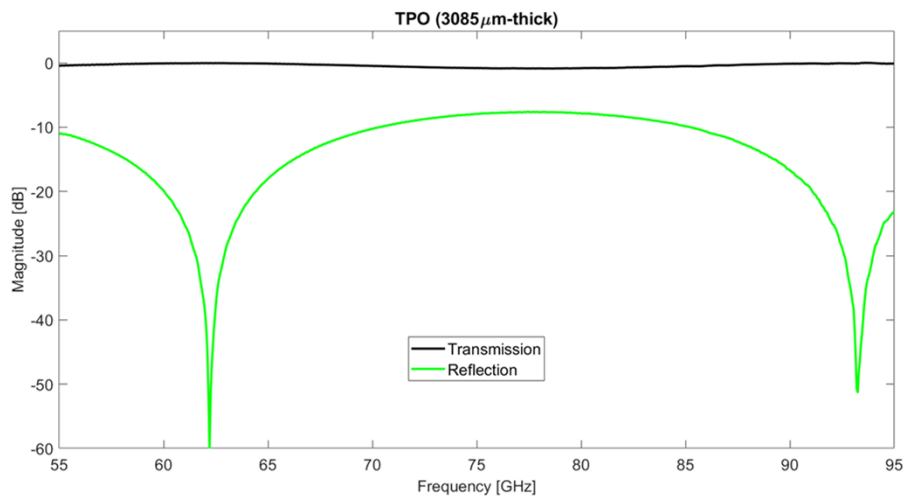


Polytetrafluoroethylene (PTFE) - Teflon - 3175um



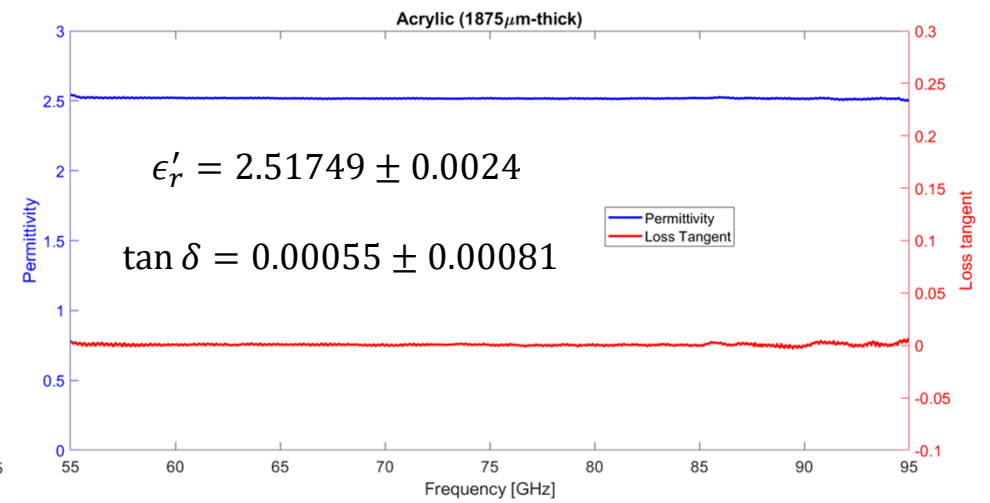
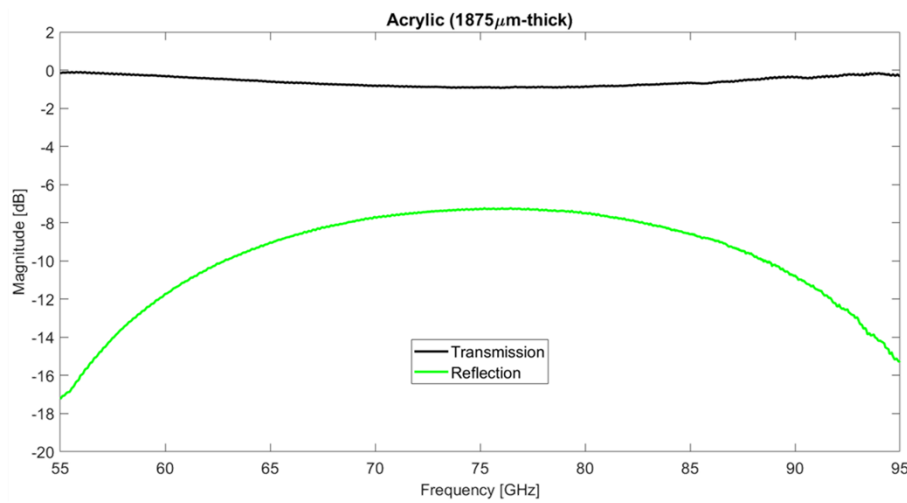


Thermoplastic Olefin Elastomer (TPO) - 3085um



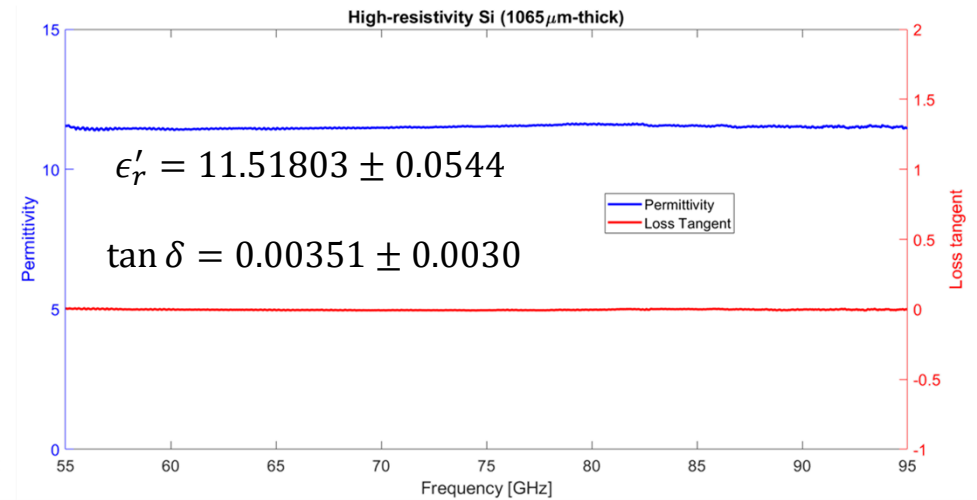
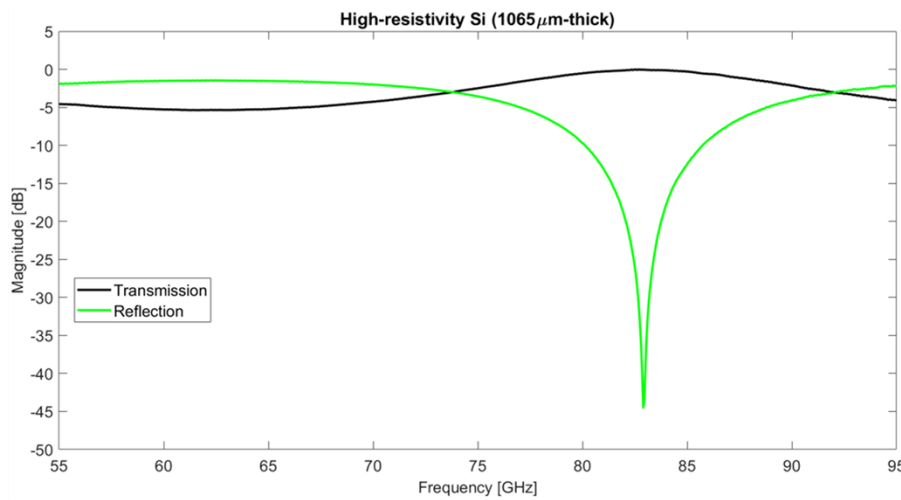


Acrylic - 1875um



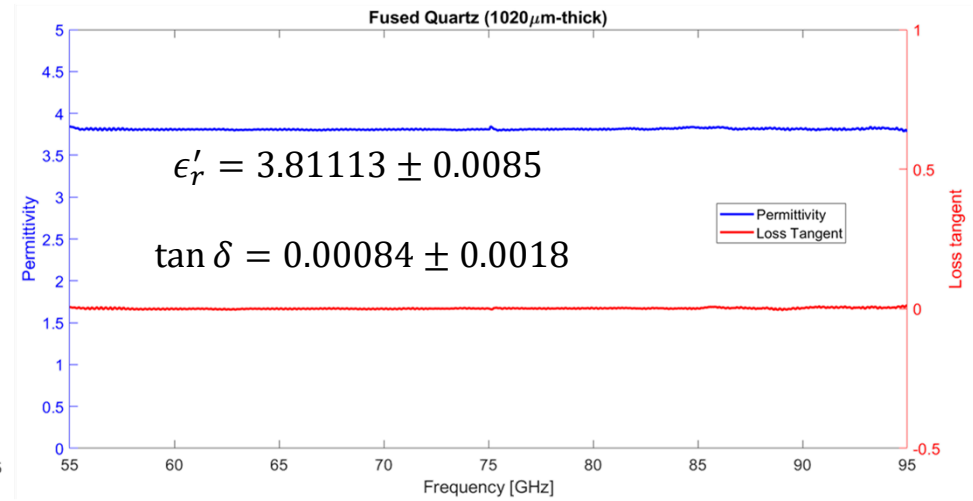
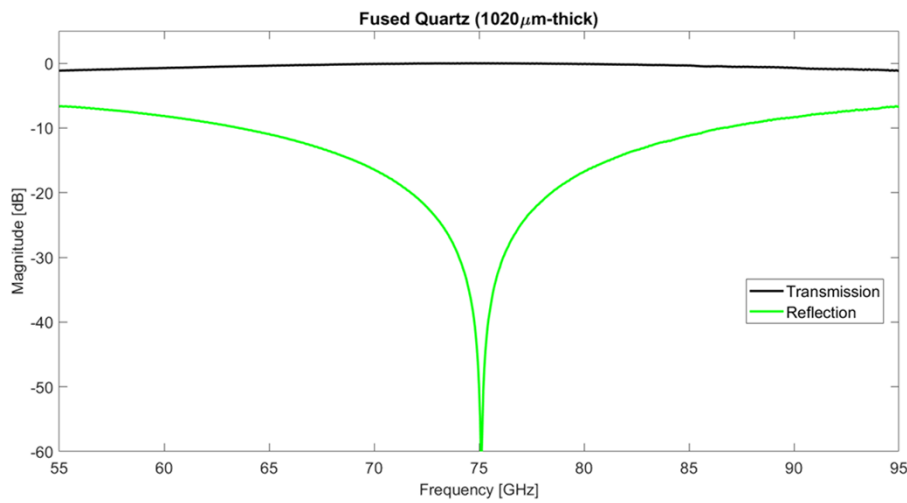


High-resistivity Si - 1065um



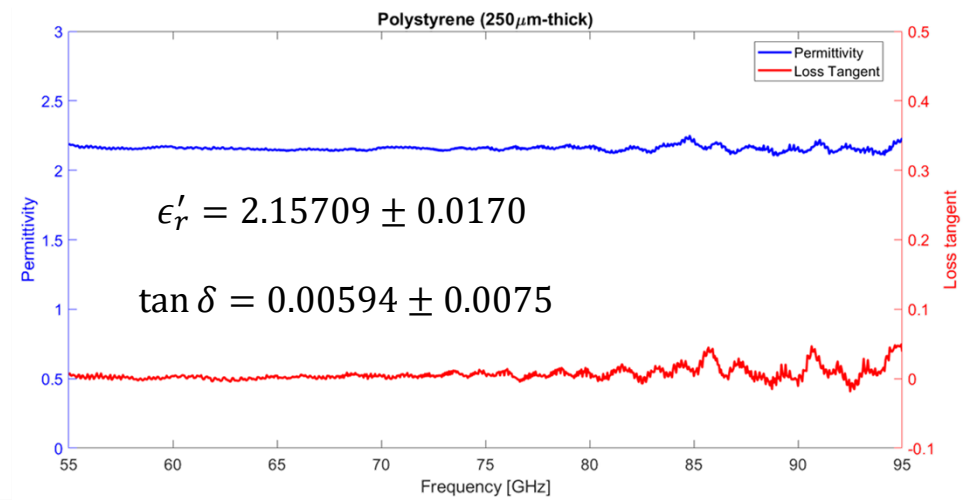
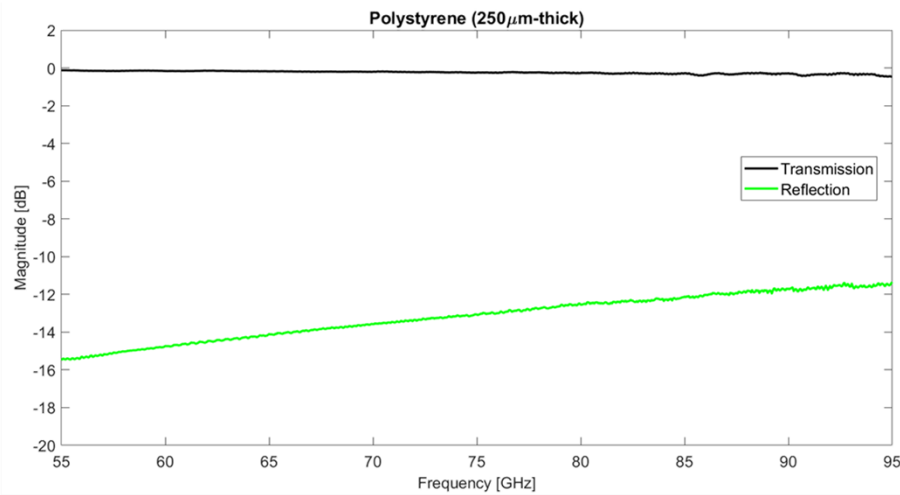


Fused Quartz - 1020um



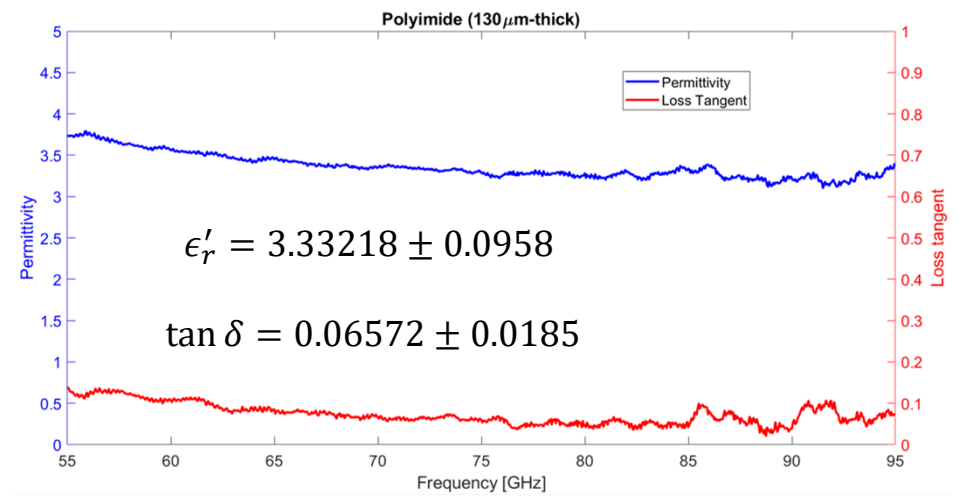
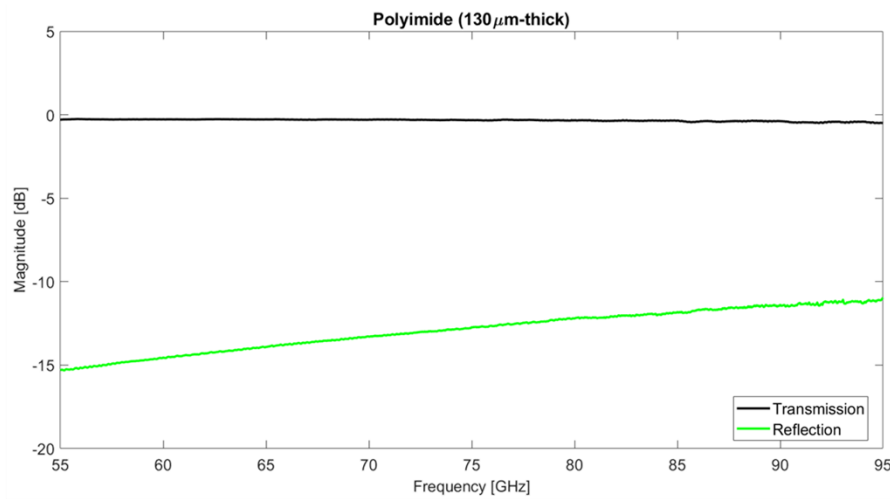


Polystyrene - 250um



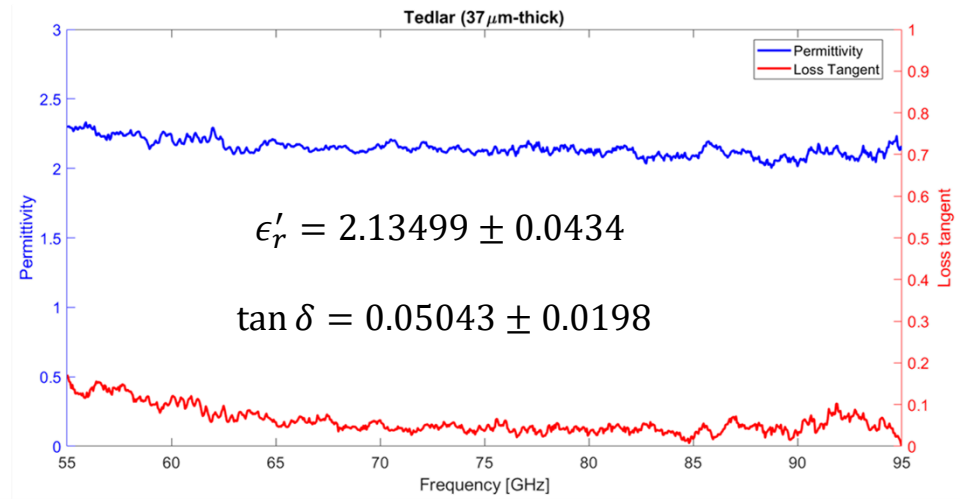
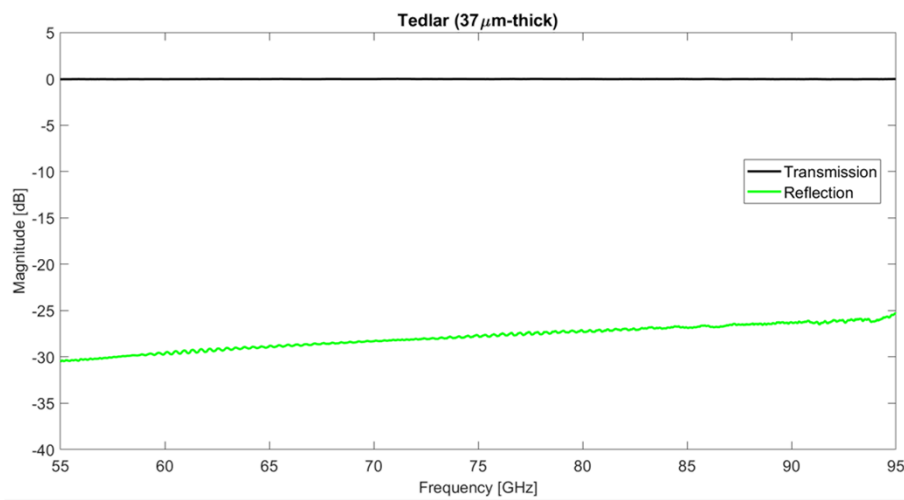


Polyimide - 130um





Tedlar - 37 μ m





TeraProbes TP-RoboMat-42E-P System Highlights

- Non-contact, non-destructive
- Self-calibrating (via unique and traceable calibration)
- No user experience needed!
- Consistent, repeatable results... first time, every time
- Robot-arm automation control software suite

- Pure polarization control
- 2-dimensional vector (amplitude and phase) imaging capability
- Rotational stage for anisotropic materials or textured sample panels
- Automated calibration using 1000+ measurement points for each frequency
- 100s of data points per sample per frequency
- Data processing and material property extraction software suite



Spot-focused, Automated, Free-space System

- Novel, automated, material characterization and imaging system using proprietary calibration that does not move the measurement setup
- Data processing and material property extraction software suite

System-level Performance Highlights:

Our System	What competition can offer
Fully-automated (takes few minutes)	Manually operated (takes hours)
Automated, self-defined Calibration	Manual Calibration
2-dimensional Imaging for the entire sample	Single measurement per sample
Broadband, high-accuracy (1-in-1000)	Accuracy depends on operator experience