

Basic Calibration and Normalization Techniques for Time Domain Reflectometry Measurements

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Abstract : The study of dielectric properties in a binary mixture of liquids is very useful to understand the liquid structure, molecular interaction, dynamics, and kinematics of the mixture. Time-domain reflectometry (TDR) is a powerful tool for studying the cooperation and molecular dynamics of the H-bonded system. In this paper, we discuss the basic calibration and normalization procedure for time-domain reflectometry measurements. Our approach is to explain the different types of error occur during TDR measurements and how these errors can be eliminated or minimized.

Keywords : time domain reflectometry measurement technique, cable and connector loss, oscilloscope loss, and normalization technique

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