



E4980A Precision LCR Meter and DPT-009 for sheet, liquid, gel

# Ideal solution for $\varepsilon r'/\tan\!\delta$ measurement of sheet, thin film, multi-layer thin film, liquid and gel

## **《ASTM, JIS Standard compliant》**

KEYCOM offers variety of highly accurate measurement systems for dielectric constant and dielectric loss tangent measurement of flat plane, liquid, or gel. Temperature characteristics measurement options between-70°C and +30°C are also available. Your Windows PC with the software controls your E4980A Precision LCR Meter and thermostat/humidistat chamber, automating time-consuming temperature/humidity characteristics measurements.

## **Compliance standards**

ASTM D-150, JIS C2101, JIS C2141, JIS K6911

#### **Features**

- DPT-009: allows you to measure samples of approx. 50µm ~ 2mm in thickness simply and easily, without your having to pasting or sputtering electrodes to the sample.
- DPT-2141: allows you to measure approx. 50µm ~ 2mm in thickness in conformity to the JIS Standard.
- Supports temperature characteristics measurement between -70°C and +300°C.
- · Automatic measurement by PC.

### **Applications**

- Material property evaluation for electronic components
- $\cdot$  Semiconductor property evaluation
- · Material deterioration evaluation
- · Chemical property evaluation

### **Specifications**

(when used with E4980A)

Frequency: 20Hz ~ 2MHz Permittivity: 1.05 ~ 1000

(Accuracy:  $\pm 3\%$ )

 $\tan \delta$ : 0.001~0.1 (Accuracy:  $\pm 5\%$ )

## **Measurement Process**

- 1. Connect coaxial cables of the electrode to your E4980A.
- 2. Bring the high and low electrodes at the end of the coaxial cables into contact with each other to execute short calibration, and separate the two to execute open calibration.
- 3. Insert specimen between electrodes and start measurement.

## **Specimen examples**

- Prepreg
- · Semiconductor wafer
- · Thin film on wafer
- · PCB
- · Grease
- Water
- Fruit







# Capacitance Method, Dielectric Constant and Dielectric Loss Tangent Measurement System



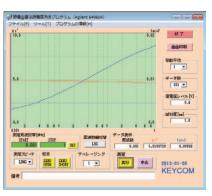
**DPT-080** for sheet



DPT-2141 for sheet, plate (JIS-C2141 compliant)



DPT-013 for liquid, powder



Measurement window

# **Ordering Information**

## Agilent Technologies

E4980A Precision LCR Meter

## **KEYCOM Corp.**

## System No. DPS17

 1. Measurement electrode
 20Hz – 1kHz
 DPT-080

 100Hz – 2MHz
 DPT-009

 1kHz – 100kHz
 DPT-012

 100Hz – 2MHz
 DPT-013-050 (for 50cc) -200 (for 200cc)

 1kHz – 1MHz
 DPT-2141

 2. Software
 DMP-00204070505-05

 3. Windows PC, Printer
 Available upon request

 4. GPIB interface
 GP-01

Product specifications and descriptions in this document subject to change without notice.

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©Agilent Technologies. Inc. 2013 Published in Japan, January 29. 2013 5991-1843EN 0000-08MS

