

# SPECIFICATION

## 1. SCOPE

This specification covers the piezoelectric ceramics for radial mode vibration application.

## 2. MODEL

PED50T30F44R (Piezo ceramic material type QA)

## 3. SPECIFICATION

### 3.1. Dimensions

As the per drawing no. DW-PED50T30-02

### 3.2. Electrical specification

#### 3.2.1. Resonant frequency $f_r$ :

$$f_r = 44\text{KHz} \pm 2\text{KHz}$$

#### 3.2.2. Resonant impedance $Z_m$ :

$$Z_m \leq 8\Omega$$

#### 3.2.3. Electromechanical coupling coefficient $K_p$ :

$$K_p \geq 60\%$$

#### 3.2.4. Static capacitance $C_s$ :

$$C_s = 7200\text{pF} \pm 15\% @ 1\text{kHz}$$

## 4. Testing Procedure

### 4.1. Testing condition :

$23 \pm 3^\circ\text{C}$ 、 $40 \sim 70\% \text{R.H.}$

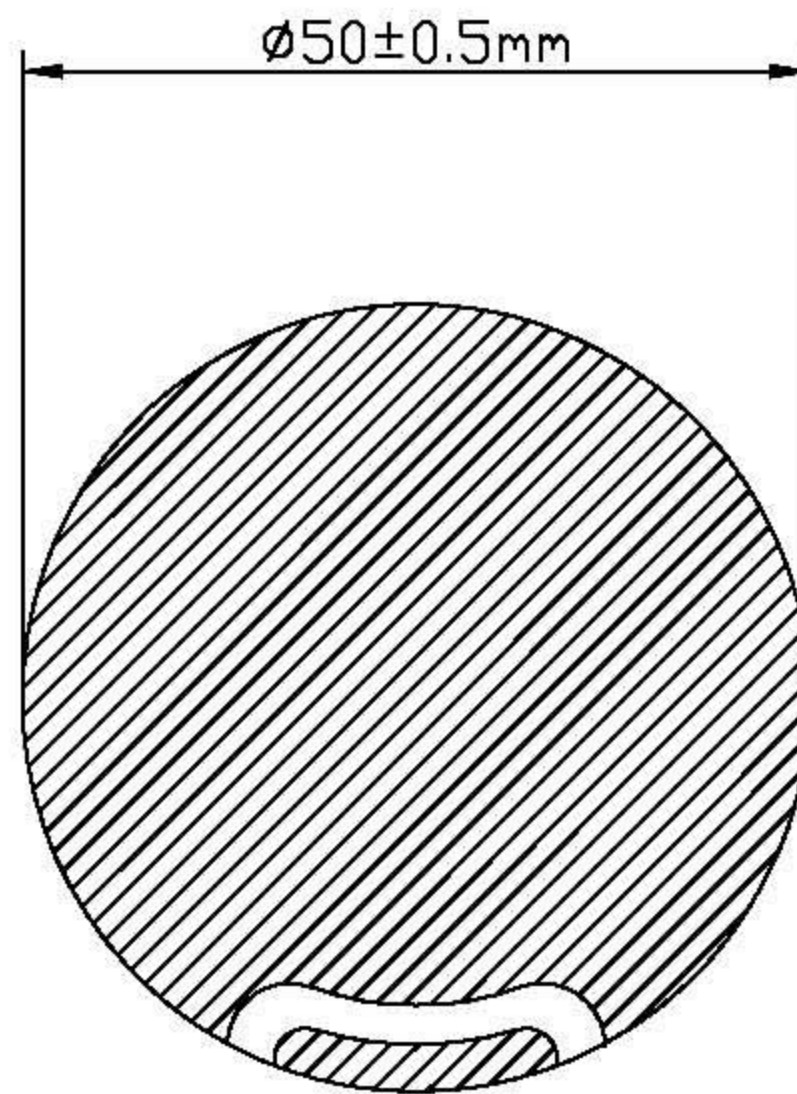
### 4.2. $f_r$ 、 $Z_m$ 、 $K_p$ :

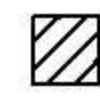
Radial mode by impedance analyzer


### 4.3. $C_s$ :

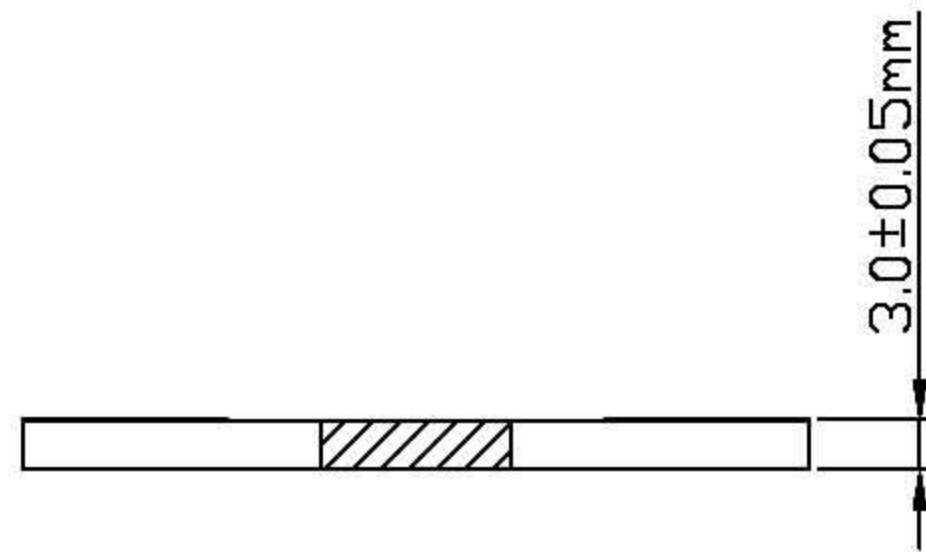
LCR meter at 1KHz、 $1V_{\text{rms}}$

Design Chien Chen	Check Clement Chou	Approval Clement Chou	Model PED50T30F44R
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 Fired on silver electrode

 Positive poling direction



Design <b>Daniel Lin</b>	Checked Clement Chou	Approval Clement Chou	Model <b>PED50T30F44R</b>
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