



DT SENSORS

SPECIFICATIONS

- ◆ **Piezoelectric film sensor without lead attachments**
- ◆ **Silver ink electrode**
- ◆ **Available in different sizes and thicknesses**
- ◆ **Great for making your own sensor**

The DT series of piezo film sensors elements are rectangular elements of piezo film with silver ink screen printed electrodes. They are available in a variety of different sizes and thicknesses.

The DT film element produces more than 10 millivolts per microstrain, about 60 dB higher than the voltage output of a foil strain gauge. The capacitance is proportional to the area and inversely proportional to the thickness of the element.

The DT series sensors are the simplest form of piezo film sensors, used primarily as dynamic strain gages and contact microphones for vibration or impact detection. These are available without any leads for those applications where the customer wants to make their own lead attachment. The sensor can be readily adhered to a surface with double-sided tape or epoxy. Lead attachment can be achieved by compressive clamping, crimps, eyelets, conductive epoxy or low temperature solders

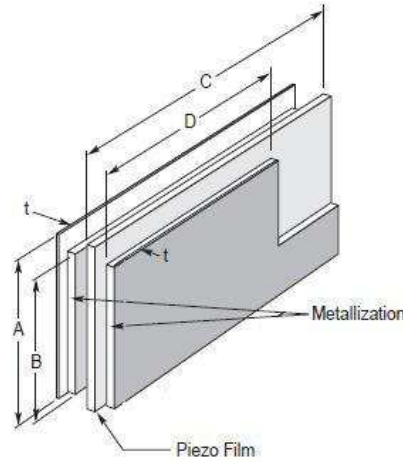
FEATURES

- ◆ Thin Piezo polymer w/ high piezo activity
- ◆ Flexible silver ink metallization
- ◆ Min. input impedance: 1 M Ω , recommended: 10 M Ω
- ◆ Output voltage- mV to 100s of volts
- ◆ Operating temp: -40 to 60°C

APPLICATIONS

- ◆ Sensing contact forces
- ◆ Recording the time of an event
- ◆ Counting the number of impacts
- ◆ Make your own sensor element

DIMENSIONS and PART NUMBERS



Dimensions in inches (mm)

| Model Number | Part Number | Film Thickness | A Film | B Electrode | C Film | D Electrode | Total Thickness (µm) | Cap (nF) |
|--------------|-------------|----------------|----------|-------------|------------|-------------|----------------------|----------|
| DT1-028K | 1-1002608-0 | 28 µm | .64 (16) | .484 (12) | 1.63 (41) | 1.19 (30) | 40 | 1.38 |
| DT1-052K | 2-1002608-0 | 52 µm | .64 (16) | .484 (12) | 1.63 (41) | 1.19 (30) | 64 | .740 |
| DT2-028K | 1-1002145-0 | 28 µm | .64 (16) | .484 (12) | 2.86 (73) | 2.42 (62) | 40 | 2.78 |
| DT2-052K | 2-1002145-0 | 52 µm | .64 (16) | .484 (12) | 2.86 (73) | 2.42 (62) | 64 | 1.44 |
| DT4-028K | 1-1002149-0 | 28 µm | .86 (22) | .740 (19) | 6.72 (171) | 6.13 (156) | 40 | 11.00 |
| DT4-052K | 2-1002149-0 | 52 µm | .86 (22) | .740 (19) | 6.72 (171) | 6.13 (156) | 64 | 5.70 |

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