## **DT Series Elements**





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

## DESCRIPTION

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.

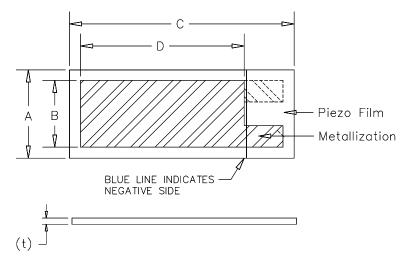
The DT film element produces more than 10 millivolts per microstrain, about 60 dB higher than the voltage output of a foil strain gauge. The capacitance is proportional to the area and inversely proportional to the thickness of the element.

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

FEATURES	APPLICATIONS
Thin piezo polymer with high piezo activity	Sensing dynamic strain
<ul> <li>Flexible silver ink metallization</li> </ul>	<ul> <li>Recording time of an event</li> </ul>
<ul> <li>Min impedance: 1 MΩ; recommended 10 MΩ.</li> </ul>	<ul> <li>Counting number of impacts</li> </ul>
<ul> <li>Output voltage: mV to 100's of volts</li> </ul>	<ul> <li>Make your own sensor element</li> </ul>
• Operating temperature: -40 to 140 °F (-40 to 60 °C)	



## **MECHANICAL DIMENSIONS** in inches (mm)



Model Number	Part Number	A Film	B Electrode	C Film	D Electrode	Total Thickness (µm)	Cap (nF)
DT1-028K	1-1002608-0	.64 (16)	.484 (12)	1.63 (41)	1.19 (30)	40	1.4
DT1-052K	2-1002608-0	.64 (16)	.484 (12)	1.63 (41)	1.19 (30)	64	0.7
DT2-028K	1-1002145-0	.64 (16)	.484 (12)	2.86 (12)	2.42 (62)	40	2.8
DT2-052K	2-1002145-0	.64 (16)	.484 (12)	2.86 (12)	2.42 (62)	64	1.4
DT4-028K	1-1002149-0	.86 (22)	.740 (19)	6.72 (171)	6.13 (156)	40	11.0
DT4-052K	2-1002149-0	.86 (22)	.740 (19)	6.72 (171)	6.13 (156)	64	5.7

### **TECHNICAL CONTACT INFORMATION**

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