

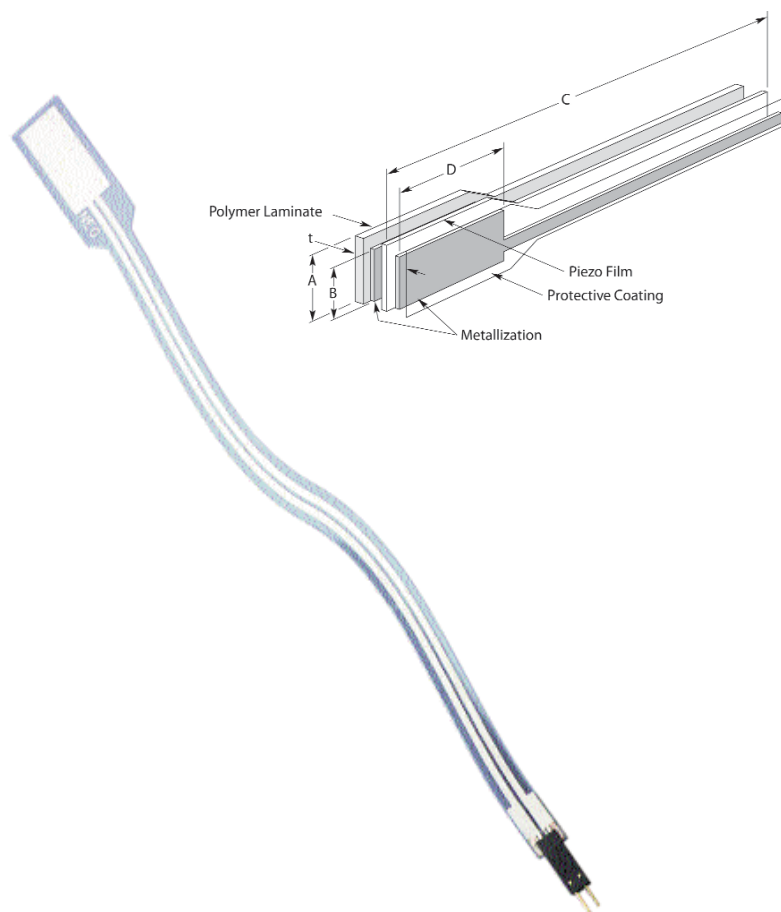
FDT Series Elements

with Lead Attachment

The "F" in FDT Series stands for 'Flexible Leads'. These are rectangle elements of piezo film with silver ink screen printed electrodes. Rather than making the lead attachment near the sensor, the piezo polymer tail extends from the active sensor area as flex circuit material with offset traces. This gives a very flat, flexible lead, with a connector at the end.

The FDT elements are available in a variety of different sizes and thicknesses. They are available without a laminate (FDT), with a laminated (0.005" mylar) on one side (FLDT) or with tape release layer adhesive (FDT with adh) in the sensor area.

The connector pins on the FDT sensors can be directly soldered to a PCB with a reasonable level of care. This component cannot withstand high temperatures ($> 80^{\circ}\text{C}$), and therefore cold charring of the pins to a PCB must be done quickly. A heatsink clamped to the interface area between the film and the crimps will take the heat away from the film. Pre-tin the pins and then quickly solder them to the board. Do not allow the soldering iron to touch the film, and do not use a dwell time of over 5 seconds on the pins. Low temperature solder can also be used.



DIMENSIONS in INCHES (mm)

Description	A Film	B Electrode	C Film	D Electrode	t (μm)	Cap (nF)	Part Number	Low Volume Price (US \$)
FDT1-028K	.620 (16)	.485 (12)	9.25 [235]	1.16 (30)	55	1.37	1-1002785-1	\$6.00
FDT1-052K	.620 (16)	.485 (12)	9.25 [235]	1.16 (30)	85	.740	2-1002785-1	\$6.50
FLDT1-028K	.620 (16)	.485 (12)	9.25 [235]	1.16 (30)	205	1.37	1-1002786-1	\$6.00
FLDT1-052K	.620 (16)	.485 (12)	9.25 [235]	1.16 (30)	230	.740	2-1002786-1	\$6.50
FLDT1-028K w/adh-F	.650 (17)	.485 (12)	5.51 [140]	1.18 (30)	125	1.37	1001777	\$6.00