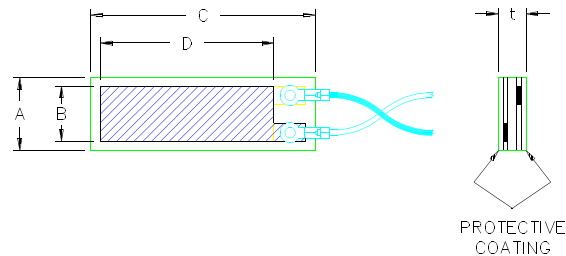


LDT Series Elements with Lead Attachment and Lamination

The 'L' in LDT stands for 'laminated' sensor. Typically, a 0.005" (125 μm) polyester layer is laminated to a 28 μm or 52 μm piezo film element. When used in a 'bending' mode, laminated film elements develop much higher voltage output when flexed than a non-laminated (i.e., DT series) elements. The piezo film is off the neutral axis in the laminate, and is strained more when flexed.



LDT Series with wire leads

Applications for this include beam-type vibration sensors for vehicle alarms and solid state switches for counters and momentary contact closure type switches. Piezo film sensor LDT elements are available in a variety of lead attachment options. The LDT0-028K has crimped-on pins, 0.200" on center, suitable for soldering. For significantly increased sensitivity, the LDTM-028K (M-Mass) combines an LDT0-028K form factor with the addition of a .72 gram round mass (located E (.14") from the edge on the opposite side of the crimps in the center of the A (.26") dimension.) The LDT1, 2 and 4 have 12" of 26 gauge twisted pair wire. The capacitance is proportional to the area and inversely proportional to the thickness of the element.

The LDT0-028K and LDTM-028K with solder tabs can be soldered directly to a PCB with a reasonable level of care. Piezo film cannot withstand high temperatures (> 80 °C), and therefore soldering 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 PCB and then quickly solder the sensor 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 solders can also be used. For tight tolerated sensitivity requirements, please consult MSI Sensors for techniques used to control variations of boundary conditions in production.

Dimensions in INCHES (mm)								Low Volume Price (SFr.
Description	A Film	B Electrode	C Film	D Electrode	t (μm)	Cap (nF)	Part #	
LDT0-028K/L w/crimps	.520 (13.00)	.400 (10.20)	.980 (25.00)	.580 (14.70)	205	.500	0-1002794-1	Fr. 1.50
LDT1-028K/L w/rivets	.640 (16.26)	.484 (12.29)	1.63 (41.40)	1.19 (30.17)	205	1.38	1-1002910-0	Fr. 5.00
LDT2-028K/L w/rivets	.640 (16.26)	.484 (12.29)	2.86 (72.64)	2.42 (61.47)	205	2.78	1-1003745-0	Fr. 8.90
LDT4-028K/L w/rivets	.860 (21.84)	.740 (18.79)	6.72 (170.69)	6.13 (155.70)	205	11.0	1-1002405-	Fr. 14.80
LDTM-028K w/crimps	.520 (13.00)	.400 (10.20)	.980 (25.00)	.580 (14.70)	205	.420	0-1005447-1	Fr. 2.00

Please contact factory for custom part quotations and volume pricing.