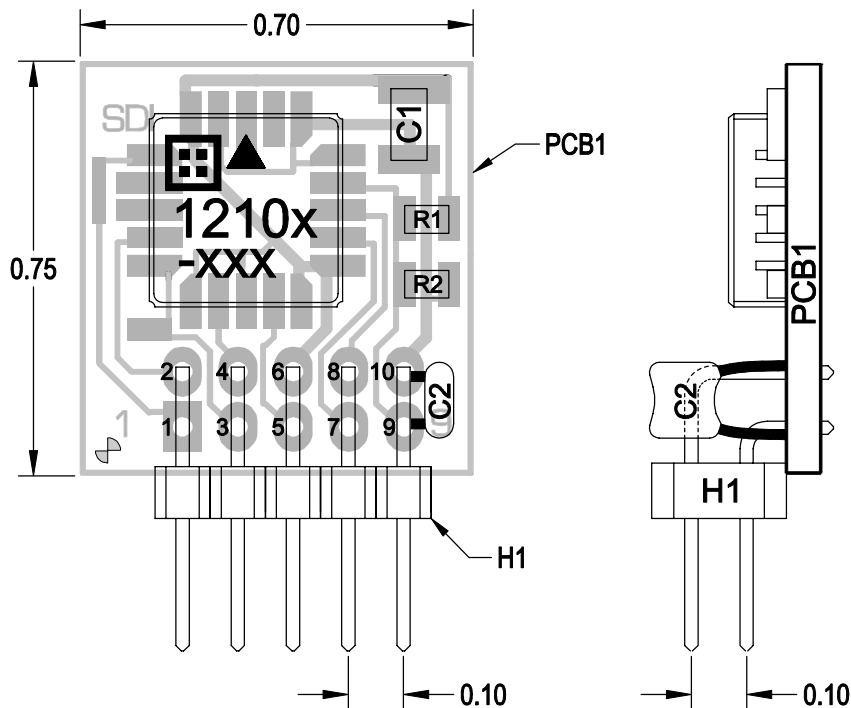




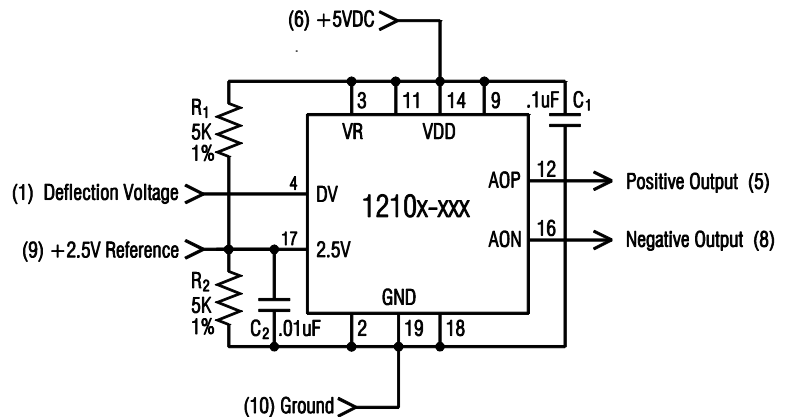
PARTS LIST

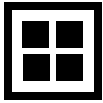
QTY	REFERENCE DESIGNATION	PART NUMBER	PART DESCRIPTION
1	-	Model 1210L or 1210J or 1221L or 1221J	Model 1210 Accelerometer (Sold Separately) or Model 1221 Accelerometer (Sold Separately)
1	PCB1	100-00023-01	Printed Circuit Board
1	C1	753-00001-23	Capacitor, Surface Mount Chip, Size 1205, 0.1uF
1	C2	753-10001-01	Capacitor, Ceramic Leaded, 0.01uF (Blue)
2	R1 & R2	773-00001-01	Resistor, Surface Mount Chip, Size 0805, 1%, 4.99K
1	H1	702-00001-10	Header, Right Angle, 2x5 pins



SIGNALS

HEADER PIN	SIGNAL NAME	SIGNAL DESCRIPTION
1	DV	Deflection Voltage input (not used)
2	-	(leave open or tie to +5V)
3	-	(not used)
4	-	(not used)
5	AOP	Analog Output, Positive
6	VDD	+5V Power
7	-	(not used)
8	AON	Analog Output, Negative
9	+2.5V	+2.5V Reference
10	GND	Ground





TB1010 & TB1210 SOLDER ASSEMBLY TIPS

Reflow using a hotplate is the preferred method for assembling the model TB1010 or TB1210 and Sn62 or Sn63 type solder is recommended. Hand soldering using a fine tipped soldering iron is possible but difficult without a steady hand and some form of visual magnification due to the small size of the connections. When using the hand solder iron method, it's best to purchase the J-Leaded version (1010J or 1210J) for easier visual inspection of the finished solder joints.

Pre-Tinning of Accelerometer Leads is Recommended: To prevent gold migration embrittlement of the solder joints, it is best to pre-tin the accelerometer leads. The solder bath method of pre-tinning is not recommended due to the high degree of heat the interior of the device gets subjected to which may cause permanent shifts in the bias and scale factor. Instead, we recommend tinning one lead at a time, to prevent excessive heating of the accelerometer, using a fine-tipped solder iron and solder wire.

Hotplate Attach Method using Solder Paste or Solder Wire: Apply solder to the circuit board's pads using Sn62 or Sn63 solder paste or pre-tin the pads using solder and a fine tipped soldering iron. If pre-tinning with an iron, apply flux to the tinned pads prior to placing the components. Place the accelerometer & C1 (R1 & R2 also for TB1210) in their proper positions onto the pasted or tinned pads then place the entire assembly onto a hotplate that has been pre-heated to around 200°C. Leave on hotplate only long enough for the solder to flow on all pads (**DO NOT OVERHEAT!**)

Solder Iron Attach Method using Solder Paste: Apply solder paste to the circuit board's pads where the accelerometer & C1 (R1 & R2 also for TB1210) will be attached. Place the components in their proper positions onto their pasted pads. Press gently on the top of the accelerometer with an appropriate tool to keep it from moving and heat one of the corner pads, then an opposite corner pad with the soldering iron. Make sure the accelerometer is positioned so all 20 of its connections are centered on the board's pads. Once the two opposite corner pads are soldered, the part is secure to the board and you can work your way around soldering the remaining 18 connections. Allow the accelerometer to cool in between soldering each pin to prevent overheating. Solder the remaining passive component(s) to the board one at a time by pressing on their tops with an appropriate tool and applying heat to each pad. Once the part has seated on its tinned pad, solder the other end of the part to the board.

Solder Iron Attach Method using Solder Wire: Solder pre-tin two opposite corner pads on the circuit board where the accelerometer will be attached and one of the two pads for C1 (R1 & R2 also for TB1210). Place the accelerometer in its proper position onto the board. Press gently on the top of the accelerometer and heat one of the corner pads that was tinned and the part will drop down through the solder and seat on the board. Do the same at the opposite corner pad that was tinned. Make sure the accelerometer is positioned so all 20 of its connections are centered on the board's pads. Once the two opposite corner pads are soldered, the part is secure to the board and you can work your way around soldering the remaining 18 connections. Allow the accelerometer to cool in between soldering each pin to prevent overheating. Solder the remaining component(s) by gently pressing on their top(s) with an appropriate tool and applying heat to the tinned pad end only. Once the part has seated on its tinned pad, solder the other end of the part to the board. For the TB1210 only, cut the leads of C2 so that it will only stand as high as shown on page 1 of the TB12101 data sheet then solder attach C2 to pins 9 & 10 of header (H1).