

CSA-1 Test Board

Single channel operation:

Solder the CSA-1V (U1) and 0.1uF ceramic (SMD 0806) capacitor on the top layer of the test board. Output can be measured between A-OUT1 and CO-OUT1 for a differential output or between A-OUT1 and GND for single ended output. Current in the direction shown, will produce a positive going output. Current in the opposite direction will produce a negative going output. AC current will produce an AC analog output.

Dual Channel operation:

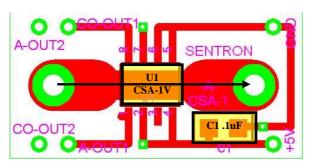
Solder the CSA-1V (U1) and 0.1uF ceramic (SMD 0806) capacitor on the top layer of the test board. Solder the other CSA-1V on the bottom layer as shown. Summing the two outputs from A-OUT1 and A-OUT2 will produce a 2X output and will cancel out any common mode stray signals. This configuration is recommended for lower current operation and where stray fields can create noise signals at the outputs.

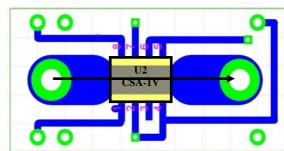
Notes: 1) Holes are laid out for .024 square pins or 24 awg flex wire.

- 2) See application note AN_102 for current sensing applications
- 3) In this test board, the current is split between the top and bottom traces, therefore the "effective" distance from the conductor centerline to the bottom of the IC has increased by 0.4 mm (1/2 thickness of the PCB) which will have the effect of decreasing the signal level by approximately 25% from a level you would normally measure with just one layer next to the IC.

CSA-1V's are ESD sensitive devices and can be permanently damaged with static discharge. Use standard ESD handling procedures.

Top View





Bottom View

