

Description:

The VC2 Voltage Clamp is designed to condition the output of voltage based air flow meters, MAP sensors and mass air flow sensors. Under normal operating conditions, the VC2 outputs a signal that is identical to the signal present at its input. When the voltage of the flow signal reaches the internally set clamp level, the VC2 maintains a constant output voltage at the clamp level as the input voltage rises.

The VC2 differs from the VC1 by offering a hard clamp function that is user adjustable. The hard clamp allows the output to track the input right up to the clamp voltage. Once in clamp, the VC2 maintains the clamp level with high accuracy regardless of overdrive.

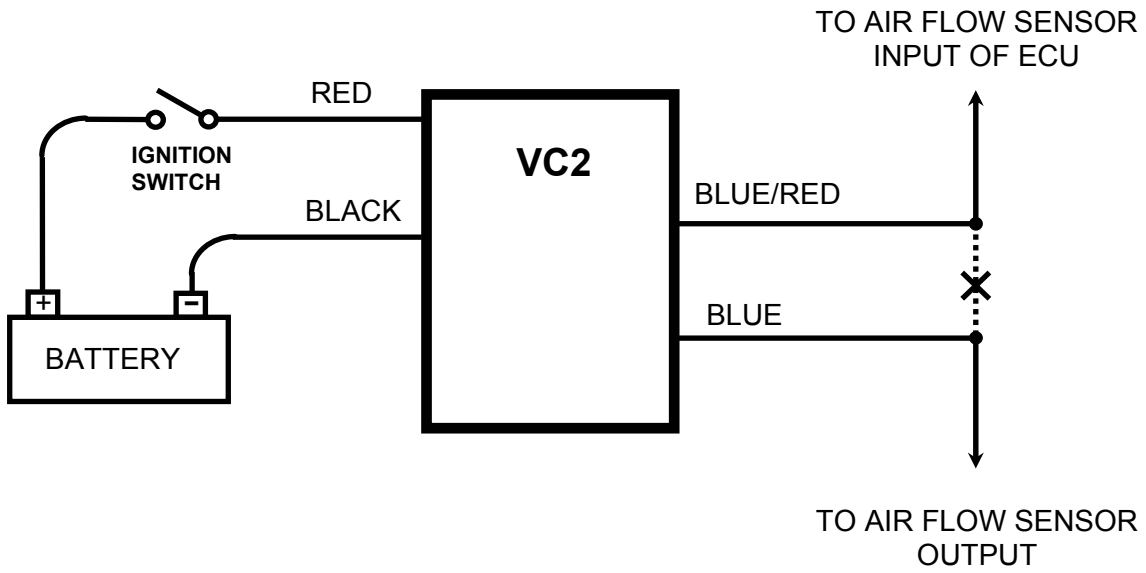
The VC2 is especially useful for forced induction conversions where a supercharger or turbocharger is fitted to an engine that is normally naturally aspirated. Under boost the engine can generate higher flow or pressure levels than normal. The clamping function of the VC2 maintains the input to the ECU within normal levels. Throughout its entire tracking and clamping range, the VC2 always produces a clean, undistorted signal that the ECU can reliably read.

The VC2 allows the conversion to forced induction on engines with modern fuel injection including those with OBDII on-board diagnostics. The stock ECU programming may be used without activation of fault codes under boost.

Features:

- Hard clamp limits to a precise level
- User adjustable from 2.5V to 6V
- Can be ordered from the factory
- with a preset voltage
- Avoids fault codes due to excess flow readings
- Compatible with OBDII systems
- Clean, undistorted output signal
- Internal transient voltage suppression for high reliability

Typical Connections:

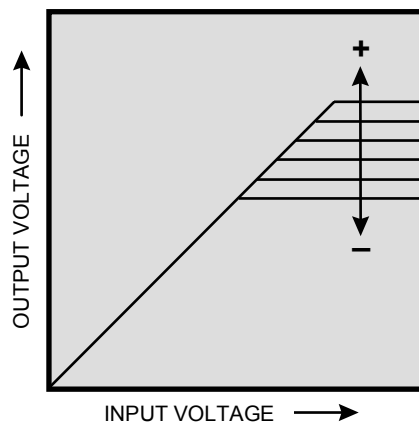


Note: For highest accuracy, the Black wire should be tied to sensor ground.

Wire Assignments:

WIRE COLOR	CONNECT TO	LABEL
Red	Switched battery positive (+12V)	BATT +
Black	Battery negative (chassis ground)	BATT -
Blue	Air flow sensor output	FLOW IN
Blue/Red	Air flow sensor input to the ECU	FLOW OUT

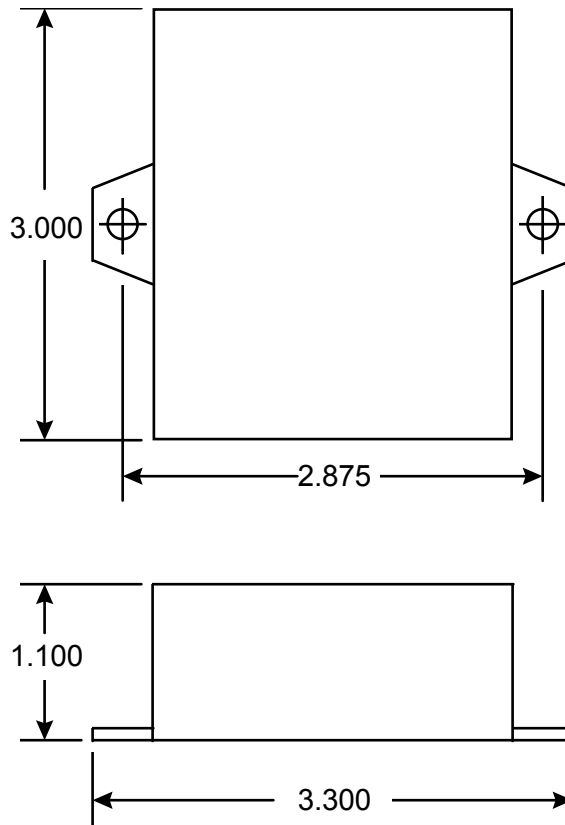
Clamp Function (User adjustable):



Electrical Characteristics:

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
Supply Voltage	BATT+ to BATT-	10	13.5	16	V
Input Voltage	Signal Input to BATT-			9	V
Clamp Range	Signal Output to BATT-	2.5		6	V
Input Resistance	Signal Input to BATT-		20		k Ω
Output Resistance	Output to BATT-		100		Ω
Supply Current	BATT+ To BATT-		6		mA

Mechanical Characteristics:



(dimensions in inches)



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