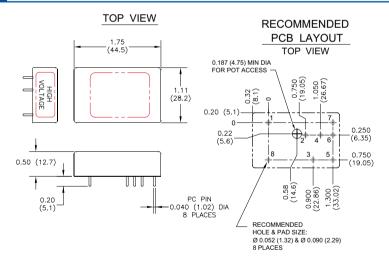


### **Models & Ratings**

| Output Voltage | Output Current <sup>(1)</sup> | Regulation |         | Pinnlo   | Fraguency  | Input Voltage | Model Number |
|----------------|-------------------------------|------------|---------|----------|------------|---------------|--------------|
|                |                               | Load       | Line    | Ripple   | Frequency  | Input Voltage | woder Number |
| 0 to -200V     | 5mA                           | <0.05%     | <0.01%  | <0.01%   | 80-230kHz  | 12V           | CA02N        |
| 0 to -200V     | 5mA                           | <0.005%    | <0.003% | <0.01%   | 100-250kHz | 5V            | CA02N-5      |
| 0 to +200V     | 5mA                           | <0.05%     | <0.01%  | <0.01%   | 80-180kHz  | 12V           | CA02P        |
| 0 to +200V     | 5mA                           | <0.01%     | <0.01%  | <0.01%   | 100-250kHz | 5V            | CA02P-5      |
| 0 to -500V     | 2mA                           | <0.01%     | <0.01%  | <0.01%   | 100-250kHz | 12V           | CA05N        |
| 0 to -500V     | 2mA                           | <0.005%    | <0.002% | <0.005%  | 87-350kHz  | 5V            | CA05N-5      |
| 0 to +500V     | 2mA                           | <0.01%     | <0.01%  | <0.01%   | 200-400kHz | 12V           | CA05P        |
| 0 to +500V     | 2mA                           | <0.003%    | <0.002% | <0.005%  | 100-250kHz | 5V            | CA05P-5      |
| 0 to -1000V    | 1mA                           | <0.005%    | <0.001% | <0.001%  | 100-250kHz | 12V           | CA10N        |
| 0 to -1000V    | 1mA                           | <0.005%    | <0.001% | <0.001%  | 100-250kHz | 5V            | CA10N-5      |
| 0 to +1000V    | 1mA                           | <0.005%    | <0.001% | <0.001%  | 80-250kHz  | 12V           | CA10P        |
| 0 to +1000V    | 1mA                           | <0.005%    | <0.001% | <0.001%  | 80-250kHz  | 12V           | CA10PR       |
| 0 to +1000V    | 1mA                           | <0.005%    | <0.001% | <0.001%  | 100-250kHz | 5V            | CA10P-5      |
| 0 to -1250V    | 0.8mA                         | <0.005%    | <0.001% | <0.0005% | 80-250kHz  | 12V           | CA12N        |
| 0 to -1250V    | 0.8mA                         | <0.005%    | <0.001% | <0.001%  | 150-300kHz | 5V            | CA12N-5      |
| 0 to +1250V    | 0.8mA                         | <0.005%    | <0.001% | <0.0005% | 80-250kHz  | 12V           | CA12P        |
| 0 to +1250V    | 0.8mA                         | <0.005%    | <0.001% | <0.001%  | 150-300kHz | 5V            | CA12P-5      |
| 0 to -2000V    | 0.5mA                         | <0.01%     | <0.01%  | <0.001%  | 100-250kHz | 12V           | CA20N        |
| 0 to -2000V    | 0.5mA                         | <0.001%    | <0.001% | <0.001%  | 100-250kHz | 5V            | CA20N-5      |
| 0 to +2000V    | 0.5mA                         | <0.01%     | <0.01%  | <0.001%  | 80-250kHz  | 12V           | CA20P        |
| 0 to +2000V    | 0.5mA                         | <0.005%    | <0.003% | <0.001%  | 45-250kHz  | 5V            | CA20P-5      |

# **Mechanical Details**



| Pin | Function | Description   | 5Vin               | 12Vin            |  |
|-----|----------|---|--------------------|------------------|--|
| 1   | VOUT     | High Voltage Output                                   | Ground to Pin 8    |                  |  |
| 2   | VPGM     | Voltage Programming Input, <150uA                     | 0 to +2.048V       | 0 to +5V         |  |
| 3   | SGND     | Signal Ground [For VPGM, VIN, VMON]                   | Low Voltage Ground |                  |  |
| 4   | VREF     | Voltage Reference Output, +/- 1% , 1 mA               | +2.048V            | +5V              |  |
| 5   | CGND     | Case Ground   | Case Ground        |                  |  |
| 6   | VIN      | Input Voltage   | +4.75 to +5.25V    | +11.5V to +15.5V |  |
| 7   | VMON     | Voltage Monitor Output, 1mA, scales to 0 to 100% Vout | 0 to +2.048V       | 0 to +5V         |  |
| 8   | HV RTN   | HV Output Return                                      | Ground for Pin 1   |                  |  |

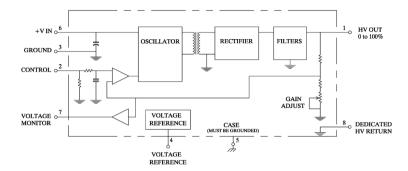
#### Notes

- 1. All dimensions are in inches (mm)
- 2. Weight: 1.4oz (39.6g)
- 3. Tolerance: X.XX±0.02 (0.51)
- 4. Pin Tolerance: ±0.005 (0.127)

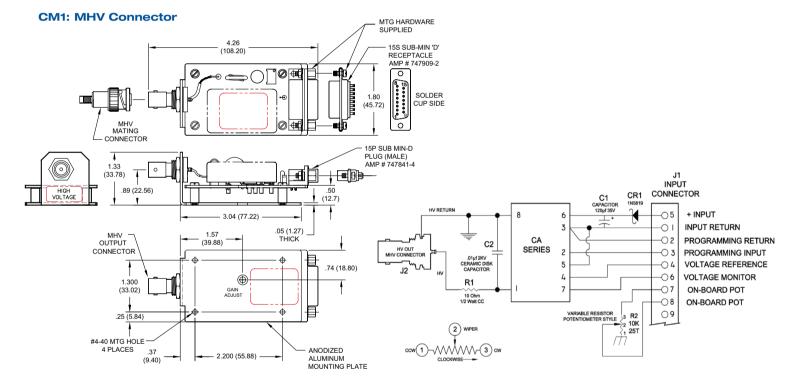
- All grounds internally connected except case. Case Ground (Pin5) must be connected to ground, with no more than 50V between case ground (Pin 5) and circuit ground (Pin 3).
- On negative output models, voltage monitor is buffered representation of programming voltage.



## **Block Diagram**



### Mounting Kit



### **Product Description**

These adapters provide convenient prototyping and evaluation during system development and integration. They allow C Series modules to be mounted to a chassis instead of designed into a PC board. Extra filtering on the input and output improves performance. A schottky diode on the input provides reverse polarity protection. Input connector is via a 15P SUB MIN-D plug (mate supplied) and output is via an SHV style coaxial connector (mate supplied). Please note when ordering a CM3 the C Series is not included and must be ordered separately.

### **Programming Instructions**

Onboard Potentiometer: connect pins 7 to 4 and 8 to 3, turn potentiometer to adjust high voltage. Or Remote Potentiometer: connect wiper arm to pin 3, other sides to pins 4 and 2. Or Remote Analog Signal: apply programming voltage to pin 3, return to pin 2.