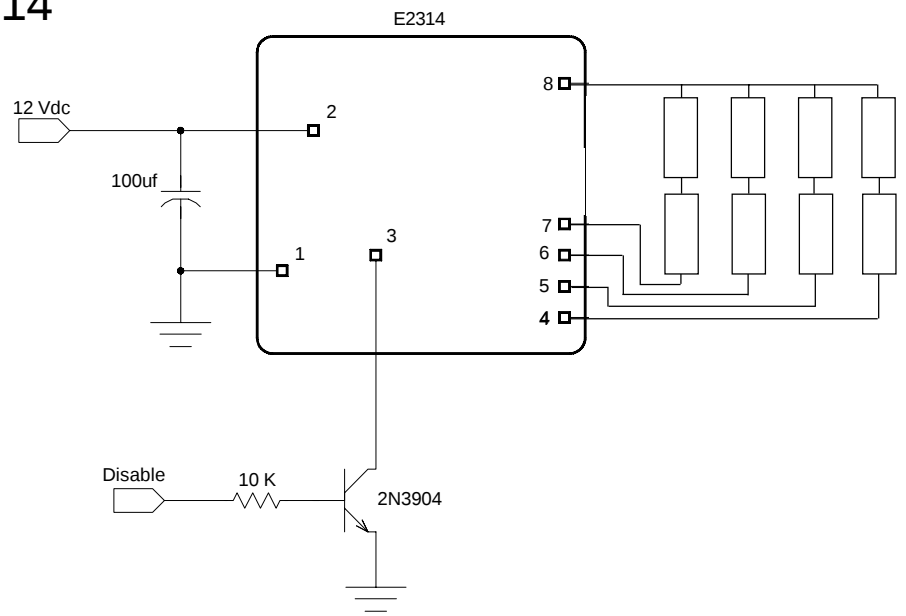
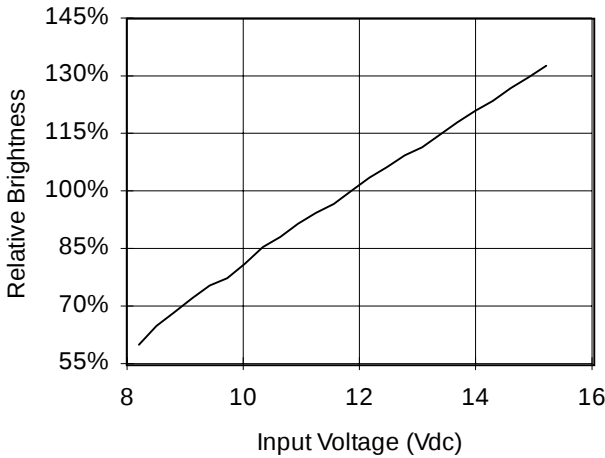


# E2314



Relative Brightness vs. Input Voltage



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# E2314

## Specifications and Applications Information

10/15/99

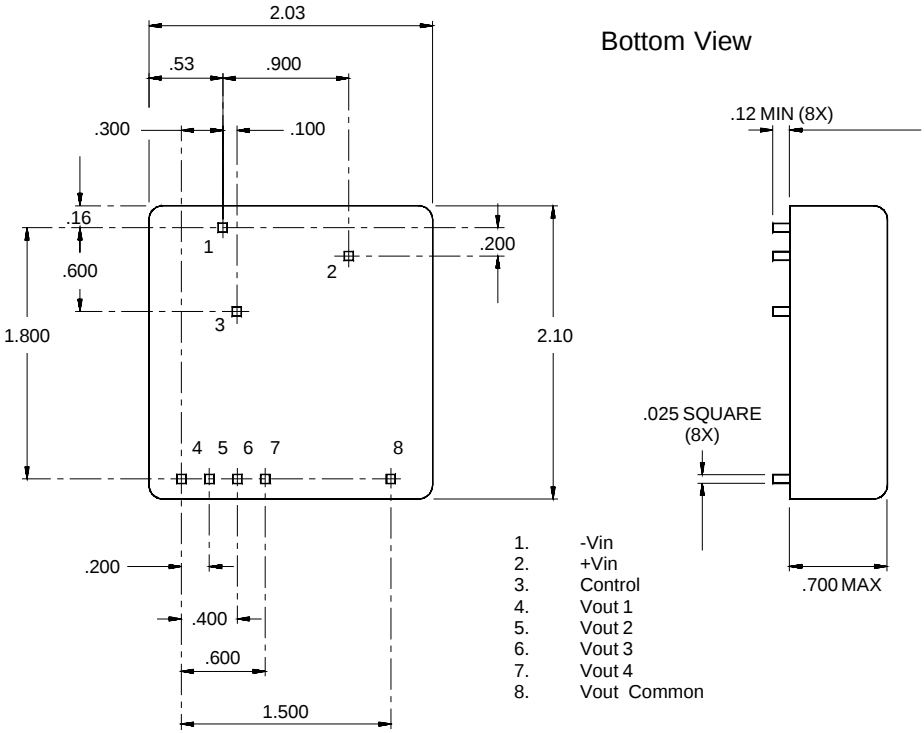
Preliminary

### Eight Tube DC to AC Inverter

The ERG E2314 dc to ac inverter is specifically designed to power all 8 CCF tubes contained in the EDI color display module to a nominal brightness level from a +12 volt dc source. Each output of the E2314 supplies current to two tubes in series.

The E2314's small size and encapsulated package makes it the ideal power source for applications where small size, high efficiency and reliability are critical.

Package Configuration



Absolute Maximum Ratings

| Rating                | Symbol | Value       | Units |
|-----------------------|--------|-------------|-------|
| Input Voltage Range   | Vin    | -0.3 to +15 | Vdc   |
| Operating Temperature | To     | -40 to +70  | °C    |
| Storage Temperature   | Tstg   | -55 to +85  | °C    |

Recommended Operating Conditions

| Rating        | Symbol | Value      | Units |
|---------------|--------|------------|-------|
| Input Voltage | Vin    | +6 to 13.2 | Vdc   |

Electrical Characteristics

Unless otherwise noted Vin = 12.00 Volts dc and Ta = 25 °C

| INVERTER SECTION  | Characteristic                                                               | Symbol   | Min  | Typ | Max  | Units |
|-------------------|------------------------------------------------------------------------------|----------|------|-----|------|-------|
|                   | Input Current                                                                | Iin      | -    | 1.3 | 1.45 | Adc   |
|                   | Operating Frequency                                                          | Fo       | 33   | 38  | 43   | KHz   |
|                   | Tube Starting Voltage *                                                      | Vstart   | 1200 | -   | -    | Vrms  |
|                   | Efficiency                                                                   | η        | -    | 85  | -    | %     |
|                   | Output Current (thru each of the 8 tubes in the EDI display)                 | Iout     | -    | 8.1 | -    | marms |
| SHUT-DOWN SECTION | Tube Sustaining Voltage ** (per each of 4 output pins on the E2314 inverter) | Vsustain | -    | 400 | -    | Vrms  |
|                   | CCFT Control Level (Pin 3)<br>CCFT Output Off<br>CCFT Output On              | -        | 2.2  | -   | 1.5  | Vdc   |
|                   | CCFT Control Pin Sink Current                                                | -        | -    | 1.1 | 1.4  | madc  |

After tube has been allowed to warm-up for 5 minutes  
Specifications subject to change without notice

\* Valid over entire operating temp. range  
\*\* Measured, not guaranteed.



Typical Performance Curves

