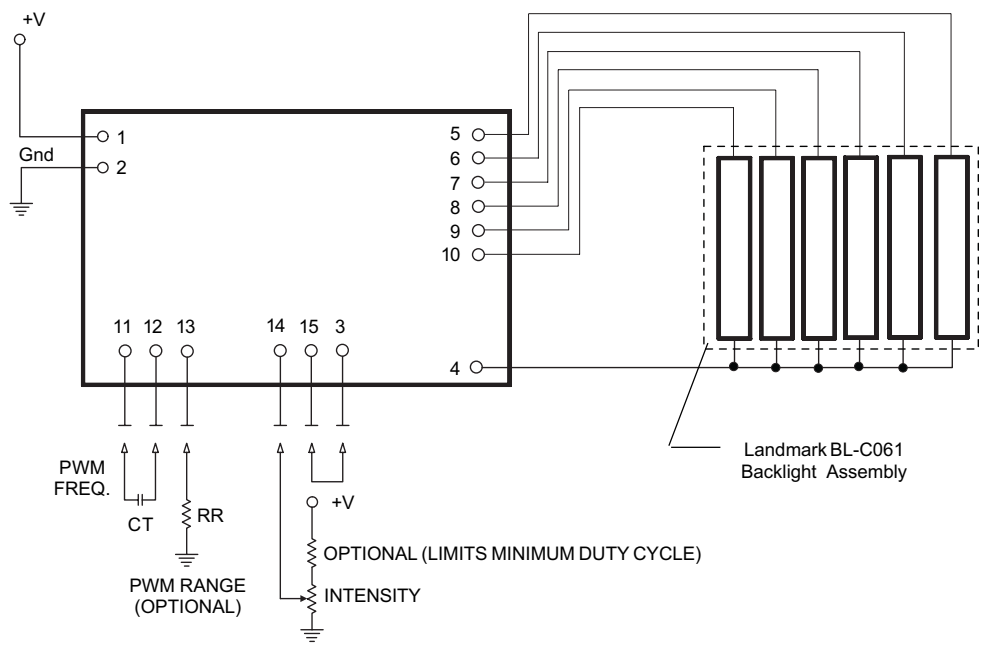


R262268

FIGURE 4  
TYPICAL CONNECTION UTILIZING INTERNAL PWM GENERATOR



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R262268

## Specifications and Applications Information

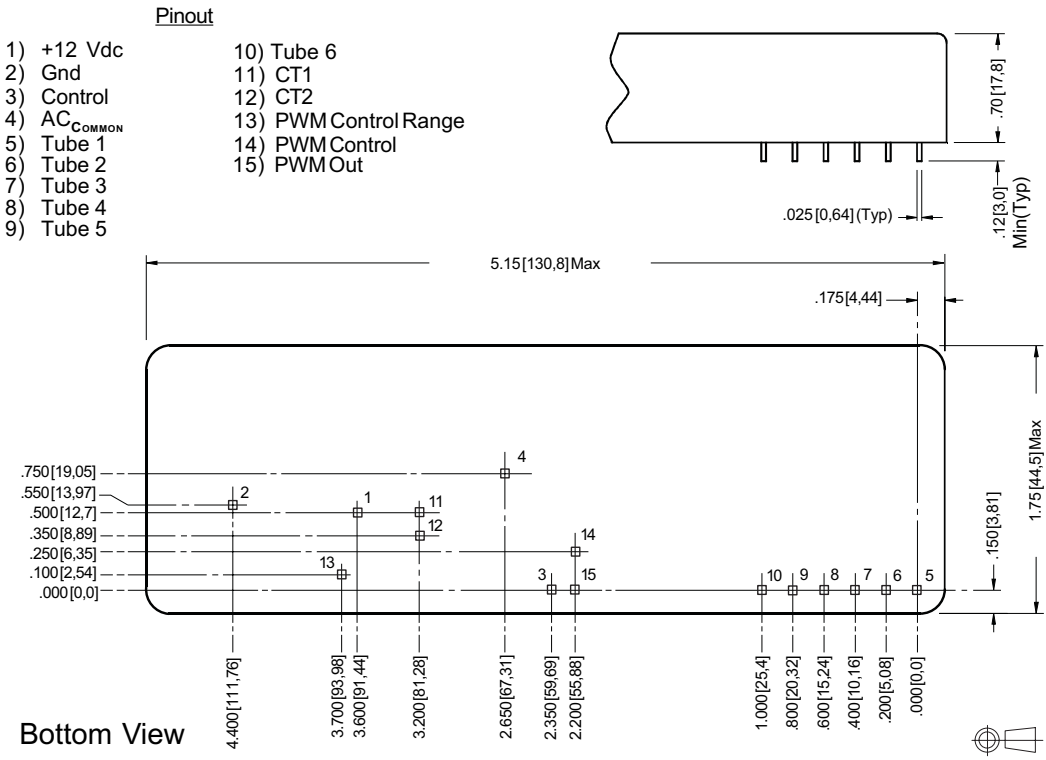
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Preliminary

6 Tube  
DC to AC Inverter

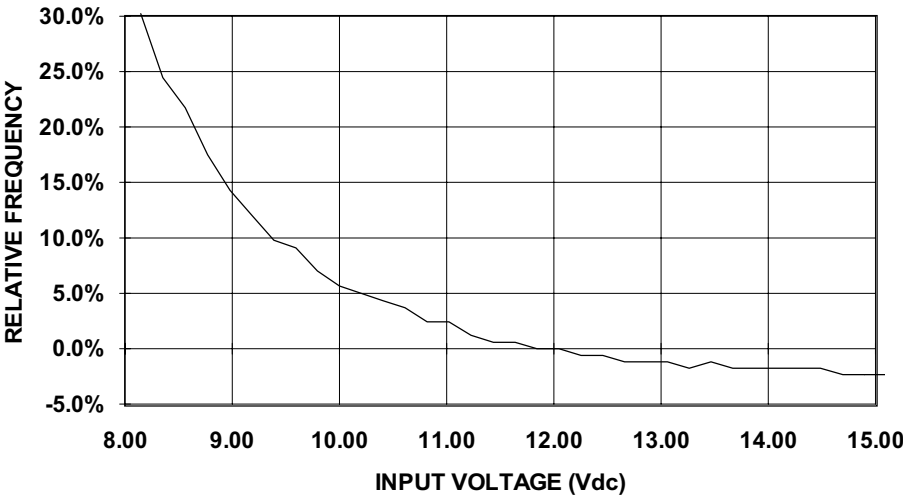
The ERG R262268 dc to ac inverter is specifically designed to power the Eldon Tech 6 tube LCD backlight module. It provides for flicker-free dimming from either an analog or digital control input.

The R262268's high power density, dimming control, and encapsulated package make it the ideal power source for applications where high efficiency and reliability in lighting multiple tube backlights are critical.

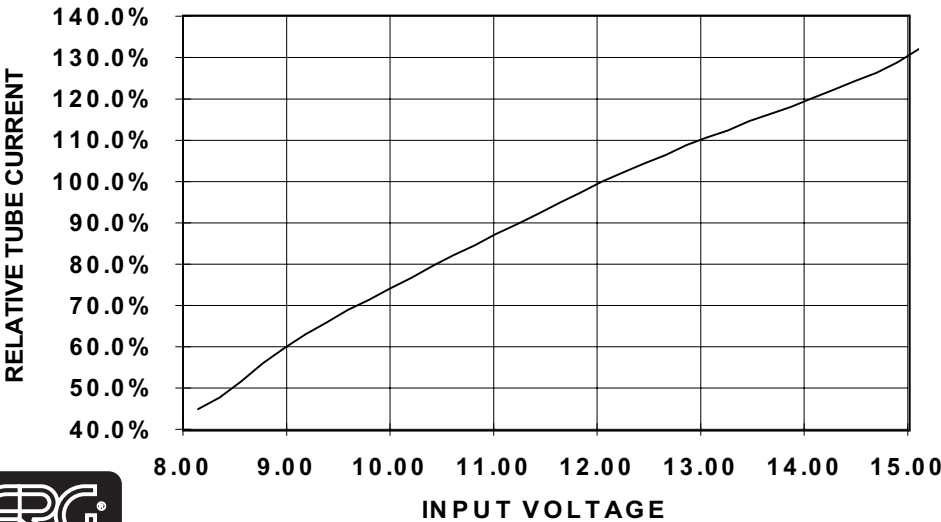


Typical Performance Curves  
(No Dimming)

FIGURE 6 - TUBE FREQUENCY VS. INPUT VOLTAGE



TUBE CURRENT vs. INPUT VOLTAGE



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FIGURE 1 - ELECTRICAL CHARACTERISTICS

Absolute Maximum Ratings

| Rating                | Symbol | Value       | Units |
|-----------------------|--------|-------------|-------|
| Input Voltage Range   | Vin    | -0.3 to +15 | Vdc   |
| Operating Temperature | To     | 0 to +70    | °C    |
| Storage Temperature   | Tstg   | -40 to +85  | °C    |

Recommended Operating Conditions

| Rating        | Symbol | Value         | Units |
|---------------|--------|---------------|-------|
| Input Voltage | Vin    | +10.8 to 13.2 | Vdc   |

Electrical Characteristics

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

| Characteristic         | Symbol                                                          | Min    | Typ           | Max    | Units       |
|------------------------|-----------------------------------------------------------------|--------|---------------|--------|-------------|
| INVERTER SECTION       | Input Current                                                   | Iin    | -             | 2.5    | Adc         |
|                        | Operating Frequency                                             | Fo     | -             | 30     | KHz         |
|                        | Tube Starting Voltage *                                         | Vstart | 1880          | -      | Vrms        |
|                        | Inverter Efficiency                                             | η      | -             | 83     | %           |
|                        | Tube Operating Current (per tube)                               | Io     | -             | 5.0    | marms       |
|                        | Tube Sustaining Voltage (per tube) **                           | Vs     | -             | 825    | Vrms        |
| SHUT-DOWN SECTION      | 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        |
| INTERNAL PWM GENERATOR | PWM Frequency Range                                             |        | 50            | 1000   | Hz          |
|                        | PWM Frequency                                                   |        | 180           |        | Hz          |
|                        | PWM Control Voltage (Pin 14)                                    |        | 0             | +Vin-2 | Vdc         |
|                        | Input Bias Current (Pin 14)                                     |        | 45            | 250    | nAdc        |
|                        | PWM Control Range<br>Program Resistance (Pin 13)                |        | 1             |        | Kohm        |
|                        | PWM Output Level (Pin 15)<br>Low<br>High                        |        | 10<br>5<br>11 | 50     | mVdc<br>Vdc |

\* Valid over entire operating temp. range

\*\* Measured, not guaranteed  
Specifications subject to change without  
notice



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