

Absolute Maximum Ratings

| Rating | Symbol | Value | Units |
|---------------------|-----------|--------------|-------|
| Input Voltage Range | V_{in} | -0.3 to +5.5 | Vdc |
| Storage Temperature | T_{stg} | -40 to +80 | °C |

Operating Characteristics

With a load simulating the referenced display and lamp warm-up of 5 minutes.
Unless otherwise noted $V_{in} = 5.00$ Volts dc and $T_a = 25^{\circ}\text{C}$.

| Characteristic | Symbol | Min | Typ | Max | Units |
|---|-----------------------|-------|-------|-------|-------|
| Input Voltage | V_{in} | +4.50 | +5.00 | +5.25 | Vdc |
| Component Surface Temperature (note 1) | T_s | -20 | - | +80 | °C |
| Input Current (note 2) | I_{in} | - | 0.11 | 0.13 | Adc |
| Operating Frequency | F_o | 30 | 35 | 40 | kHz |
| Minimum Output Voltage (note 3) | $V_{out}(\text{min})$ | 800 | - | - | Vrms |
| Efficiency | η | - | 69 | - | % |
| Output Current (per lamp) | I_{out} | - | 2.0 | - | mArms |
| Output Voltage | V_{out} | - | 190 | - | Vrms |
| Enable Pin Input Current Requirement (note 4) | I_{Enable} | - | 2 | - | mAdc |

Specifications subject to change without notice.

(Note 1) Surface temperature must not exceed 80 degrees C; thermal management actions may be required.

(Note 2) Input current in excess of maximum may indicate a load/inverter mismatch condition, which can result in reduced reliability. Please contact ERG technical support.

(Note 3) Provided data is not tested but guaranteed by design.

(Note 4) Required User Enable/Disable Interface Circuit is shown on page 3.

Application Notes:

- 1) The minimum distance from high voltage areas of the inverter to any conductive material should be .12 inches per kilovolt of starting voltage.
- 2) Mounting hardware to be non-conductive.
- 3) Open framed inverters should not be used in applications at altitudes over 10,000 feet.
- 4) Printed circuit boards to be free of traces beneath the inverter.
- 5) ACreturn should be left floating, not grounded.
- 6) Contact ERG for possible exceptions.



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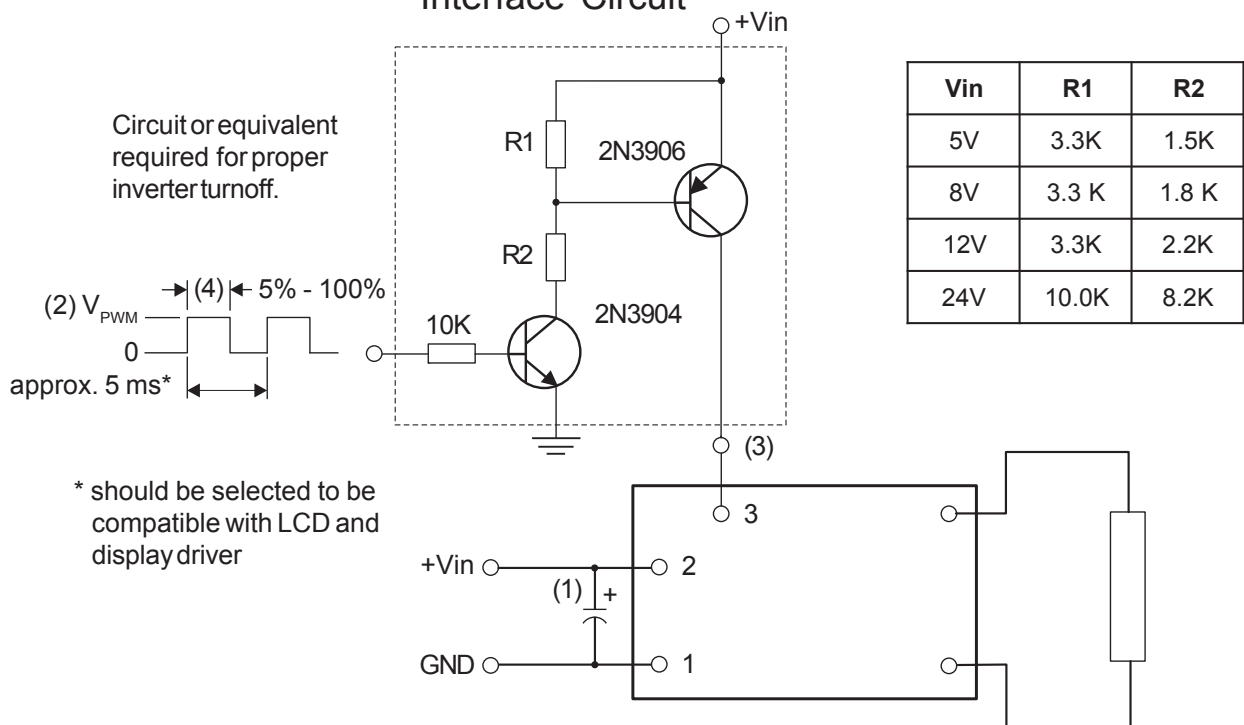
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PWM Dimming

Required User Enable/Disable Interface Circuit



- (1) Low ESR type input by-pass capacitor (22 uF - 100 uF) may be required to reduce reflected ripple.
- (2) $V_{P_{PWM}}$ from 2.4V to less than or equal to +Vin.
- (3) Full brightness without PWM control requires that pin 3 be tied to +Vin. Pin 3 must be at 0V to turn off.
- (4) Duty Cycle 5% - 100%.



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