



Preliminary

8m Class DC to AC Inverter

S-Series

Absolute Maximum Ratings

Rating	Symbol	Value	Units
Input Voltage Range	Vin	-0.3 to +5.5	Vdc
Storage Temperature	Tstg	-40 to +85	°C

Operating Characteristics

With the referenced dispaly and lamp warm-up of 5 minutes.
Unless otherwise noted Vin = 5.00 Volts dc and Ta = 25°C

Characteristic	Symbol	Min	Typ	Max	Units
Input Voltage	Vin	+4.50	+5.00	+5.25	Vdc
Component Surface Temperature (note 2)	Ts	-20	-	+80	°C
Input Current (note 1)	Iin	-	0.72	0.83	Adc
Operating Frequency	Fo	34	39	44	kHz
Minimum Output Voltage (note 3)	Vout (min)	1400	-	-	Vrms
Efficiency	η	-	92	-	%
Output Current (per lamp)	Iout	-	6.0	-	mArms
Output Voltage	Vout	-	550	-	Vrms
Enable Pin Input Current Requirement (note 4)	Iin	-	9.0	-	mAdc

Specifications subject to change without notice.

(Note 1) 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 2) Surface temperature must not exceed 80 degrees C; thermal management actions may be required.

(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) Printed circuit boards to be free of traces beneath the inverter.
- 2) The minimum distance from high voltage areas of the inverter to any conductive material should be .12 inches per kilovolt of starting voltage.
- 3) Contact ERG for possible exceptions.



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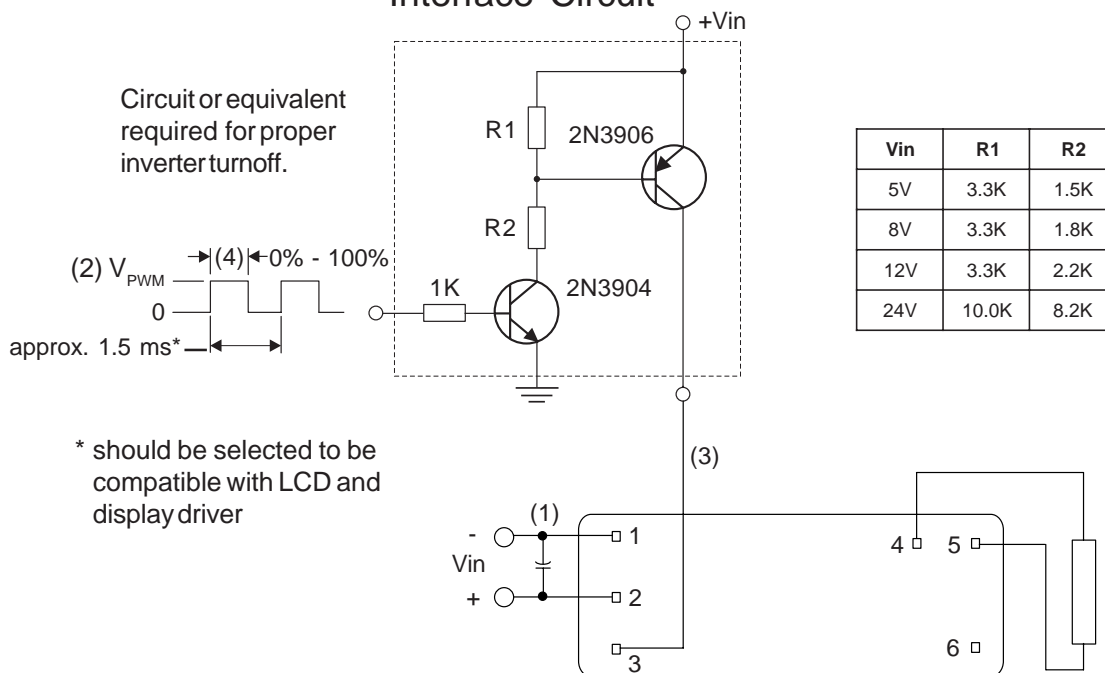
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Made in USA



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_{PWM} from 2.4V to less than or equal to 13.2V.
- (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 0% - 100%.



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