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E2495

Specifications and Applications Information

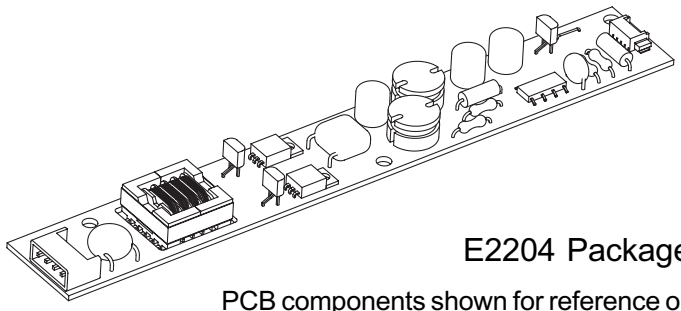
01/22/01 Preliminary

One Tube DC to AC Inverter

The ERG E2495 (E Series) DC to AC inverter features onboard connectors and can be powered by an unregulated input DC voltage. This unit is less than 9mm in height and the three mounting holes makes installation very straight forward.

Product Features

- ✓ Small Package Size, less than 9 mm in height.
- ✓ Wide input voltage range
- ✓ Designed, Manufactured and Supported in the USA

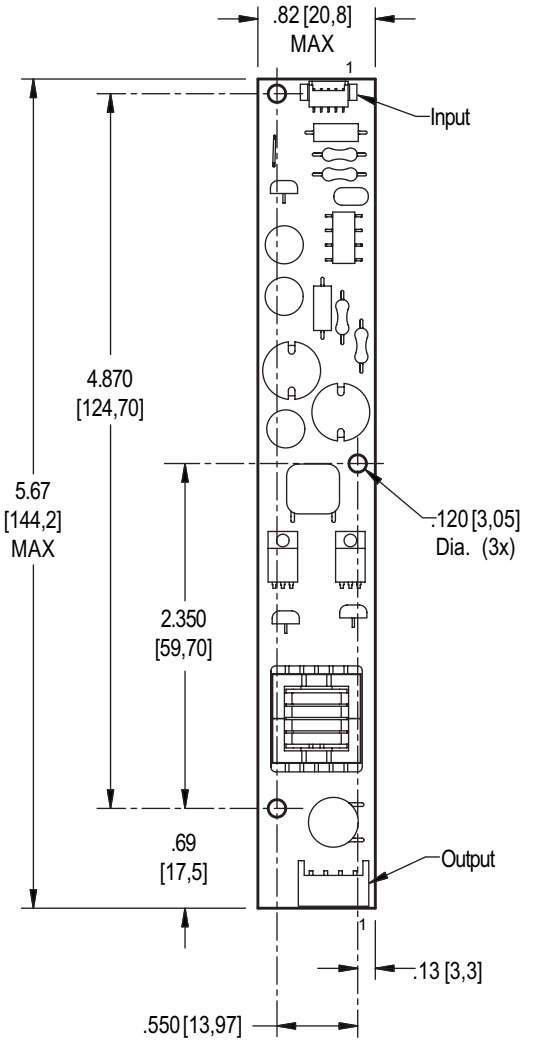


E2204 Package

PCB components shown for reference only. Actual product may differ from that shown.

Output Connector	Input Connector
JAE IL-G-4P-S3L2-E	Molex 53048-0510

Package Configuration



PCB components shown for reference only. Actual product may differ from that shown.

Weight: 25 grams

Pin Descriptions	
Input	Output
J2-1 OFF/ON J2-2 +12VDC J2-3 GND J2-4 Pot-HI J2-5 Pot-LO	J1-1 Lamp J1-2 NC J1-3 NC J1-4 AC Comm

E2495

Absolute Maximum Ratings (Note 1)

Rating	Symbol	Value	Units
Input Voltage	V_{in}	-0.3 to +24	V_{DC}
Operating Temperature	T_a	0 to +85	°C
Storage Temperature	T_s	-40 to +85	°C

Recommended Operating Conditions

Rating	Symbol	Value	Units
Input Voltage	V_{in}	8.0 to 18.0	V_{DC}
Operating Temperature (Note 2)	T_a	0 to +50	°C

Electrical Characteristics

Unless otherwise noted Vin = 12.00 Volts DC , T_a = 25 °C, and the unit has been running for 5 minutes.

Characteristic	Symbol	Min	Typ	Max	Units
Inverter					
Input Current	I_{in}	-	.30	.40	A_{DC}
Operating Frequency	F_o	32	37	43	KHz
Efficiency	η	-	55	-	%
Output Voltage (no load) (Note 3)	V_{start}	1060	-	-	V_{rms}
Output Voltage (with lamp)	V_{start}		360		V_{rms}
Output Current (Vin = 12v)	I_{out}	-	5.5	6.0	mArms
Output Current (Vin = 18v)	I_{out}	-	6.0	6.5	mArms
Output Current (Vin = 24v)	I_{out}	-	6.3	6.7	mArms

(Note 1) Reliable and predictable operation of the device is not guaranteed with applied stresses at or beyond those listed in "Absolute Maximum Ratings". Operation at these limits may reduce device reliability and is therefore not recommended. Please refer to "Recommended Operating Conditions" for reliable operation of the device.

(Note 2) Reliable operation above 50°C is possible if airflow is provided.

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