

### 8 Watts

- Regulated Single & Dual Output
- Ultra Wide 4:1 Input Range
- DIP16 Package
- 1500 VDC Isolation
- Operating Temperature -40 °C to +105 °C
- Full Power to +70 °C
- ITE Safety Approvals
- High Power Density
- Metal Case
- 3 Year Warranty



#### Dimensions:

**JWE08:**  
0.94 x 0.54 x 0.31" (23.8 x 13.7 x 8.0 mm)

### Models & Ratings

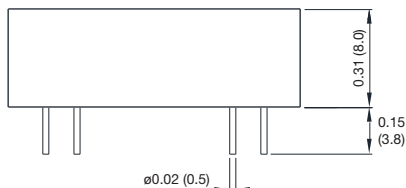
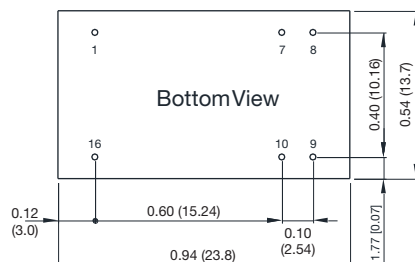
| Input voltage | Output voltage | Output current | Input current <sup>(1)</sup> |           | Max. capacitive load <sup>(2)</sup> | Efficiency | Model number |
|---------------|----------------|----------------|------------------------------|-----------|-------------------------------------|------------|--------------|
|               |                |                | No load                      | Full load |                                     |            |              |
| 9-36V         | 3.3 V          | 1600 mA        | 10 mA                        | 280 mA    | 680 µF                              | 78%        | JWE0824S3V3  |
|               | 5.0 V          | 1600 mA        |                              | 405 mA    | 680 µF                              | 82%        | JWE0824S05   |
|               | 12.0 V         | 665 mA         |                              | 390 mA    | 330 µF                              | 85%        | JWE0824S12   |
|               | 15.0 V         | 535 mA         |                              | 395 mA    | 330 µF                              | 85%        | JWE0824S15   |
|               | 24.0 V         | 335 mA         |                              | 390 mA    | 150 µF                              | 86%        | JWE0824S24   |
|               | ±12.0 V        | ±335 mA        |                              | 390 mA    | ±150 µF                             | 85%        | JWE0824D12   |
|               | ±15.0 V        | ±265 mA        |                              | 385 mA    | ±150 µF                             | 86%        | JWE0824D15   |
|               |                |                |                              |           |                                     |            |              |
| 18-75V        | 3.3 V          | 1600 mA        | 8 mA                         | 140 mA    | 680 µF                              | 78%        | JWE0848S3V3  |
|               | 5.0 V          | 1600 mA        |                              | 205 mA    | 680 µF                              | 81%        | JWE0848S05   |
|               | 12.0 V         | 665 mA         |                              | 195 mA    | 330 µF                              | 85%        | JWE0848S12   |
|               | 15.0 V         | 535 mA         |                              | 195 mA    | 330 µF                              | 85%        | JWE0848S15   |
|               | 24.0 V         | 335 mA         |                              | 195 mA    | 150 µF                              | 86%        | JWE0848S24   |
|               | ±12.0 V        | ±335 mA        |                              | 195 mA    | ±150 µF                             | 86%        | JWE0848D12   |
|               | ±15.0 V        | ±265 mA        |                              | 195 mA    | ±150 µF                             | 86%        | JWE0848D15   |
|               |                |                |                              |           |                                     |            |              |

### Notes

1. Input currents measured at nominal input voltage.

2. Maximum capacitive load is per output.

### Mechanical Details



| Pin Connections |               |               |
|-----------------|---------------|---------------|
| Pin             | Single        | Dual          |
| 1               | -Vin          | -Vin          |
| 7               | No Connection | No Connection |
| 8               | No Connection | Common        |
| 9               | +Vout         | +Vout         |
| 10              | -Vout         | -Vout         |
| 16              | +Vin          | +Vin          |

### Input

| Characteristic       | Minimum                            | Typical | Maximum | Units       | Notes & Conditions |
|----------------------|------------------------------------|---------|---------|-------------|--------------------|
| Input Voltage Range  | 9.0                                |         | 36      | VDC         | 24 V nominal       |
|                      | 18.0                               |         | 75      | VDC         | 48 V nominal       |
| Input Filter         | Internal Pi type                   |         |         |             |                    |
| Undervoltage Lockout | ON at $\geq 9$ V, OFF at $< 8$ V   |         |         |             | 24 V models        |
|                      | ON at $\geq 18$ V, OFF at $< 16$ V |         |         |             | 48 V models        |
| Input Surge          |                                    |         | 50      | VDC for 1 s | 24 V models        |
|                      |                                    |         | 100     |             | 48 V models        |

### Output

| Characteristic           | Minimum | Typical   | Maximum   | Units           | Notes & Conditions                                                                            |
|--------------------------|---------|-----------|-----------|-----------------|-----------------------------------------------------------------------------------------------|
| Output Voltage           | 3.3     |           | 30        | VDC             | See Models and Ratings table                                                                  |
| Initial Set Accuracy     |         |           | $\pm 2.0$ | %               | At full load                                                                                  |
| Output Voltage Balance   |         | $\pm 1.0$ | $\pm 2.0$ | %               | For dual output with balanced loads                                                           |
| Minimum Load             |         |           |           | A               | No minimum load required                                                                      |
| Line Regulation          |         | $\pm 0.2$ | $\pm 0.8$ | %               | From minimum to maximum input at full load                                                    |
| Load Regulation          |         | $\pm 0.5$ | $\pm 1.0$ | %               | From 0 to full load                                                                           |
| Cross Regulation         |         |           | $\pm 5.0$ | %               | On dual output models when one load is varied between 25% and 100% and other is fixed at 100% |
| Transient Response       |         | 3         | 5         | % deviation     | Recovery within 1% in less than 250 $\mu$ s for a 25% load change.                            |
| Ripple & Noise           |         |           | 55        | mV pk-pk        | 20 MHz bandwidth. Measured using 0.47 $\mu$ F ceramic capacitor.                              |
| Overload Protection      |         | 150       |           | %               |                                                                                               |
| Short Circuit Protection |         |           |           |                 | Continuous Trip & Restart (Hiccup mode), with auto recovery                                   |
| Maximum Capacitive Load  |         |           |           |                 | See Models and Ratings table                                                                  |
| Temperature Coefficient  |         |           | 0.02      | %/ $^{\circ}$ C |                                                                                               |

### General

| Characteristic             | Minimum   | Typical     | Maximum | Units             | Notes & Conditions                 |
|----------------------------|-----------|-------------|---------|-------------------|------------------------------------|
| Efficiency                 |           | 86          |         | %                 | See Models and Ratings table       |
| Isolation: Input to Output | 1500/1800 |             |         | VDC               | 60 s/1 s                           |
| Isolation Resistance       | $10^9$    |             |         | $\Omega$          | At 500 VDC                         |
| Isolation Capacitance      |           | 500         |         | pF                |                                    |
| Switching Frequency        |           | 370         |         | kHz               |                                    |
| Power Density              |           |             | 50.0    | W/in <sup>3</sup> |                                    |
| Mean Time Between Failure  |           |             |         | MHrs              | MIL-HDBK-217F, +25 $^{\circ}$ C GB |
| Weight                     |           | 0.013 (6.1) |         | lb (g)            |                                    |

### Environmental

| Characteristic        | Minimum        | Typical | Maximum | Units        | Notes & Conditions  |
|-----------------------|----------------|---------|---------|--------------|---------------------|
| Operating Temperature | -40            |         | +105    | $^{\circ}$ C | See Derating Curve. |
| Storage Temperature   | -50            |         | +125    | $^{\circ}$ C |                     |
| Case Temperature      |                |         | +105    | $^{\circ}$ C |                     |
| Humidity              |                |         | 95      | %RH          | Non-condensing      |
| Cooling               |                |         |         |              | Natural convection  |
| Case Flammability     | UL 94V-0 Rated |         |         |              |                     |

### EMC: Emissions

| Phenomenon | Standard | Test Level | Notes & Conditions |
|------------|----------|------------|--------------------|
| Conducted  | EN55032  | Class A    | No filter required |

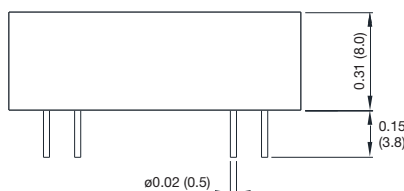
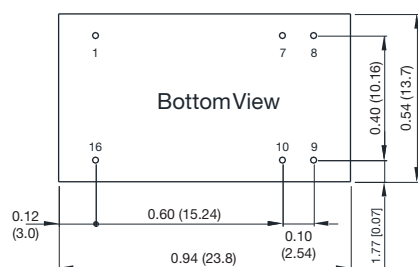
### EMC: Immunity

| Phenomenon      | Standard    | Test Level                         | Criteria | Notes & Conditions                                                 |
|-----------------|-------------|------------------------------------|----------|--------------------------------------------------------------------|
| ESD             | EN61000-4-2 | ±8 kV air discharge, ±6 kV contact | A        |                                                                    |
| Radiated        | EN61000-4-3 | 20 V/m                             | A        |                                                                    |
| EFT/Burst       | EN61000-4-4 | ±2 kV                              | A        | With external capacitor, suggested part is CHEMI-CON KY 330µF/100V |
| Surge           | EN61000-4-5 | ±1 kV                              | A        | With external capacitor, suggested part is CHEMI-CON KY 330µF/100V |
| Conducted       | EN61000-4-6 | 10 V rms                           | A        |                                                                    |
| Magnetic Fields | EN61000-4-8 | 100 A/m                            | A        |                                                                    |

### Safety Approvals

| Safety Agency | Safety Standard        | Notes & Conditions     |
|---------------|------------------------|------------------------|
| CB Report     | IEC60950-1, IEC62368-1 | Information Technology |
| UL            | UL60950-1, UL62368-1   | Information Technology |

### Mechanical Details



| Pin Connections |               |               |
|-----------------|---------------|---------------|
| Pin             | Single        | Dual          |
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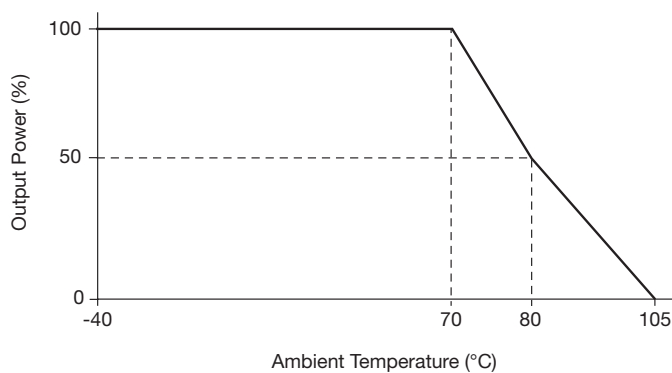
### Notes

- All dimensions are in inches (mm)
- Weight: 0.013 lbs (6.1 g) approx.

- Tolerance: X.XX±0.01 (X.X±0.25)  
X.XXX±0.005 (X.XX±0.13)
- Pin Tolerance: ±0.002 (±0.05)

### Application Notes

#### Derating Curve





Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

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