

EC4SAW SERIES 5-6 WATT WIDE INPUT DC-DC CONVERTERS

FEATURE

- * 5-6W Isolated Output
- * Compact SIP-8 Package
- * Efficiency to 89%
- * 4:1 Input Range
- * Regulated Outputs
- * Remote On/Off Control
- * 1500VDC Isolation
- * Continuous Short Circuit Protection



| MODEL | INPUT | OUTPUT | OUTPUT CURRENT | | INPUT CURRENT | | %EFF. | | CAPACITOR |
|---------------|-----------|---------|----------------|---------|---------------|-----------|-------|-----|-----------|
| NUMBER | VOLTAGE | VOLTAGE | MIN. | MAX. | NO LOAD | FULL LOAD | (3) | (2) | LOAD MAX. |
| EC4SAW-24S33N | 9-36 VDC | 3.3 VDC | 0 mA | 1500 mA | 4 mA | 310 mA | 82 | 82 | 4700uF |
| EC4SAW-24S05N | 9-36 VDC | 5 VDC | 0 mA | 1200 mA | 4 mA | 298 mA | 86 | 86 | 2200uF |
| EC4SAW-24S12N | 9-36 VDC | 12 VDC | 0 mA | 500 mA | 5 mA | 288 mA | 88 | 88 | 1100uF |
| EC4SAW-24S15N | 9-36 VDC | 15 VDC | 0 mA | 400 mA | 5 mA | 288 mA | 89 | 88 | 470uF |
| EC4SAW-48S33N | 18-75 VDC | 3.3 VDC | 0 mA | 1500 mA | 3 mA | 155 mA | 82 | 82 | 4700uF |
| EC4SAW-48S05N | 18-75 VDC | 5 VDC | 0 mA | 1200 mA | 3 mA | 150 mA | 85 | 85 | 2200uF |
| EC4SAW-48S12N | 18-75 VDC | 12 VDC | 0 mA | 500 mA | 3 mA | 145 mA | 88 | 89 | 1100uF |
| EC4SAW-48S15N | 18-75 VDC | 15 VDC | 0 mA | 400 mA | 3 mA | 145 mA | 89 | 88 | 470uF |

NOTE:

- 1. Nominal Input Voltage 24 or 48 VDC
- 2. Measured at Nominal Input Voltage
- 3. Measured at 12VDC for 24Vin, 24VDC for 48Vin

SPECIFICATIONS

All Specifications Typical At Nominal Line, Full Load, and 25°C Unless Otherwise Noted

INPUT SPECIFICATIONS:

| Input Voltage Range | 24V 9-36V | | |
|--|--------------------------|--|--|
| put ronage name | 48V 18-75V | | |
| Input Surge Voltage (100 ms max.) | | | |
| mpat darge voltage (100 ms max.) | 48V 100VDC max. | | |
| | | | |
| Input Filter | Capacitive | | |
| Remote on/off control: | | | |
| Module On | . Open or high impedance | | |
| Module Off | 2mA to 4mA | | |
| Module Off (input idle current) | 2.5mA max. | | |
| OUTPUT SPECIFICATIONS: | | | |
| Voltage Assurage | 11 F0/ may | | |
| Voltage Accuracy | ±1.5% max. | | |
| Transient Response: 25% Step Load Change | | | |
| Recovery Time < 2500 | | | |

GENERAL SPECIFICATIONS:

| Efficiency | See Table |
|--|--|
| Isolation Voltage | 1500VDC min. |
| Isolation Resistance | 10 ⁹ ohm min. |
| Isolation Capacitance | 50pF max. |
| Switching Frequency | 580KHz typ. |
| Operating Ambient Temperature | 40°C to +85°C |
| De-rating, Above $61^{\circ}C$ $3.3V/5V$. | Linearly to Zero power at 105 $^{\circ}\mathrm{C}$ |
| De-rating, Above 65°C 12V/15V | Linearly to Zero power at 105°C |
| Case Temperature (note3) | 105℃ max. |
| Cooling | Natural Convection |
| Storage Temperature | 55°C to +125°C |
| Humidity | 95% RH max. Non condensing |
| MTBF MIL-STD-217F, GB, 25℃, F | Full Load T.B.D. hrs |
| Dimensions 0.86x0.36 | 6x0.44 inches(21.8x9.2x11.1 mm) |
| Case Material | Non-Conductive Black Plastic |
| Weight | 4.8g |

NOTE:

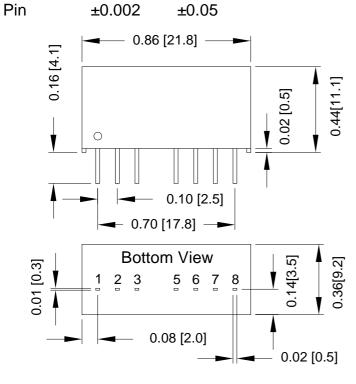
- 1. Measured from high line to low line.
- 2. Measured from full load to no load.
- 3. Maximum case temperature under any operating condition should not be exceeded 105 $^{\circ}\! C$.

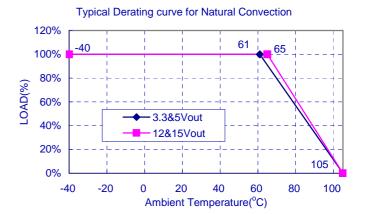
CASE SA DIMENSIONS:

All Dimensions In Inches(mm)

Tolerances: Inches millimeters

X.XX±0.02 X.X±0.5





| PII | PIN CONNECTION | | | | |
|-----|----------------|--|--|--|--|
| Pin | Single | | | | |
| 1 | -V Input | | | | |
| 2 | +V Input | | | | |
| 3 | On/Off | | | | |
| 5 | NC | | | | |
| 6 | +V Output | | | | |
| 7 | -V Output | | | | |
| 8 | NC | | | | |

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