

AVE450/500 Series

50 Volts; 450/500 Watts

Data Sheet

Total Power: 450/500 Watts
Input Voltage: 36 - 75 V
of Outputs: Single

SPECIAL FEATURES

- 2:1 Wide input range
- Extra wide trim range 25 - 57 V for 50 Vo
- Optimised for high power density, small space applications
- Low ripple and noise
- Fixed switching frequency
- Super high efficiency
- High capacitive load capability
- Basic insulation system
- Aluminium substrate design

SAFETY

- UL, cUL: UL/CSA62368
- TUV/CE: IEC/EN62368



Electrical Specifications

| Input | |
|----------------------------|-------------------------------|
| Input range | 36 - 75 Vdc |
| Efficiency | 95% |
| Output | |
| Voltage | 50 V \pm 1% |
| Current | 9 A (AVE450) 10 A (AVE500) |
| Line regulation | \pm 0.5% |
| Load regulation | \pm 0.5% |
| Noise/ripple | 120 mV |
| Overvoltage protection | Hiccup |
| Overtemperature protection | Auto-restart |
| Switching frequency | 280 kHz |
| Temperature co-efficient | \pm 0.02/ $^{\circ}$ C |
| Isolation | |
| I/O isolation | 2250 Vdc min. |

Environmental Specifications

| | |
|-------------------------------------|---------------------------------------|
| Operating ambient temperature range | -40 $^{\circ}$ C to +85 $^{\circ}$ C |
| Storage temperature | -55 $^{\circ}$ C to +125 $^{\circ}$ C |
| Humidity | 5% to 95% (non-condensing) |
| MTBF | 1.5 Million hours |
| RoHS compliant | 6/6 |

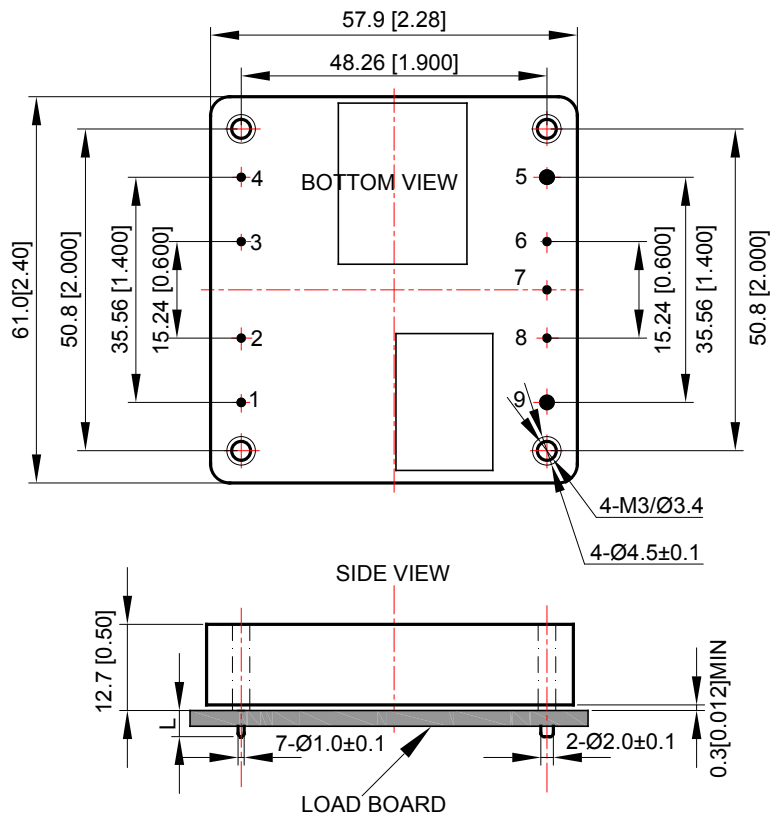
Ordering Information

| Model number | Input voltage | Output voltage | Power |
|------------------|---------------|----------------|-------|
| AVE450-48S50-6L | 36 - 75 Vin | 50 V @ 9 A | 450 W |
| AVE450-48S50P-6L | 36 - 75 Vin | 50 V @ 9 A | 450 W |
| AVE500-48S50-6L | 36 - 75 Vin | 50 V @ 10 A | 500 W |
| AVE500-48S50P-6L | 36 - 75 Vin | 50 V @ 10 A | 500 W |

Standard version is negative enable

- 6 = 3.8 mm pin length
- L = RoHS 6/6 compliance
- M = Thread hole fixture
- P = Positive remote control

Mechanical Drawings



UNIT: mm[inch]

BOTTOM VIEW: pin on upside

TOLERANCE: X.Xmm±0.5mm[X.XX in.±0.02in.]

X.XXmm±0.25mm[X.XXX in.±0.01in.]

Pin Length Option

| Device code suffix | L |
|--------------------|-----------------|
| -4 | 4.8 mm ± 0.5 mm |
| -6 | 3.8 mm ± 0.5 mm |
| -8 | 2.8 mm ± 0.5 mm |
| None | 5.8 mm ± 0.5 mm |

Pin Designations

| Pin No. | Name | Function |
|---------|-----------|-------------------------|
| 1 | V_{in+} | Positive input voltage |
| 2 | CNT | Remote ON/OFF control |
| 3 | Case | Case |
| 4 | V_{in-} | Negative input voltage |
| 5 | V_{o-} | Negative output voltage |
| 6 | S- | Negative remote sense |
| 7 | Trim | Output voltage trim |
| 8 | S+ | Positive remote sense |
| 9 | V_{o+} | Positive output voltage |

Notes:

1. All specifications are subject to change without notice. Mechanical drawings are for reference only.
2. Warranty: 2 years
3. Label and logo appearance may vary from what is shown on mechanical drawings.

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