

AVE300 Series

198 Watts

Data Sheet

Total Power: 198 Watts
Input Voltage: 36 - 75 V
of Outputs: Single

SPECIAL FEATURES

- 2:1 Wide input range
- Optimised for high 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: UL60950
- TUV/CE: IEC/EN60950



Electrical Specifications

| Input | |
|------------------------------|--------------------------------------------------------------------|
| Input range: | 36 - 75 VDC |
| Efficiency ² : | 92% |
| Output | |
| Voltage tolerance: | +/-1% |
| Line regulation: | 5 mV |
| Load regulation: | 10 mV |
| Noise/ripple: | 1.2 Vo, 1.5 Vo, 1.8 Vo = 75 mV 2.5 Vo = 100 mV, 3.3 Vo = 150 mV |
| Over voltage protection: | Hiccup: Auto-restart |
| Over temperature protection: | Auto-restart |
| Switching frequency: | 220 kHz - 280 kHz |
| Temperature coefficient: | ±0.02/°C |
| Isolation | |
| I/O isolation: | 1500 VDC min. |

Environmental Specifications

| | |
|--------------------------------------|----------------------------|
| Operating ambient temperature range: | -40 °C to +85 °C |
| Storage temperature: | -55 °C to +125 °C |
| Humidity: | 5% to 95% (non-condensing) |
| MTBF: | 2 Million hours |
| RoHS Compliant | |

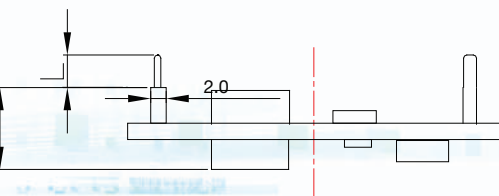
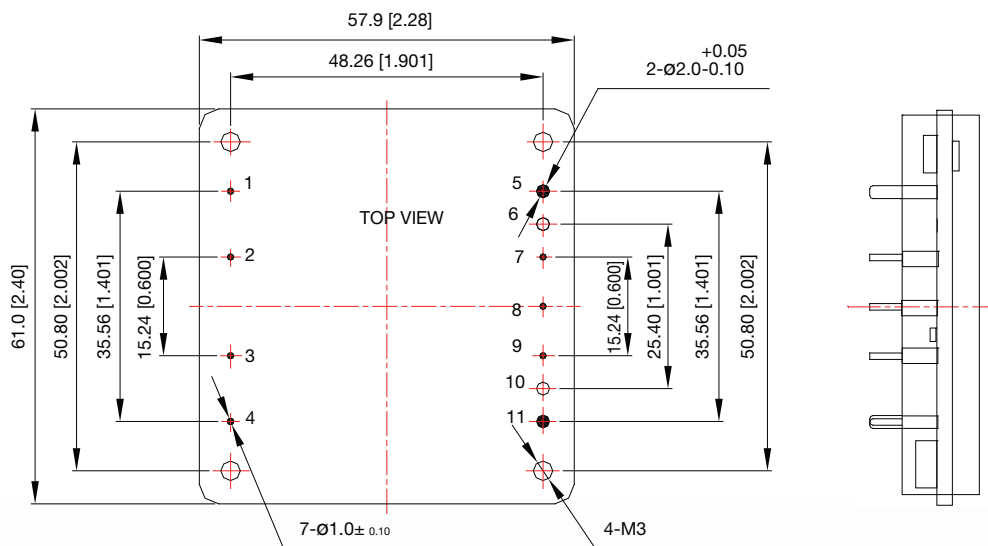
Ordering Information

| Model number | Input voltage | Output voltage | Power |
|-------------------|---------------|----------------|-------|
| AVE300-48S1V2-4 | 36 - 75 Vin | 1.2 V @ 60 A | 72 W |
| AVE300-48S1V2B-4 | 36 - 75 Vin | 1.2 V @ 60 A | 72 W |
| AVE300-48S1V2P-4 | 36 - 75 Vin | 1.2 V @ 60 A | 72 W |
| AVE300-48S1V2PB-4 | 36 - 75 Vin | 1.2 V @ 60 A | 72 W |
| AVE300-48S1V5B-4 | 36 - 75 Vin | 1.5 V @ 60 A | 90 W |
| AVE300-48S1V8B-4 | 36 - 75 Vin | 1.8 V @ 60 A | 108 W |
| AVE300-48S2V5-4 | 36 - 75 Vin | 2.5 V @ 60 A | 150 W |
| AVE300-48S2V5B-4 | 36 - 75 Vin | 2.5 V @ 60 A | 150 W |
| AVE300-48S2V5P-4 | 36 - 75 Vin | 2.5 V @ 60 A | 150 W |
| AVE300-48S2V5PB-4 | 36 - 75 Vin | 2.5 V @ 60 A | 150 W |
| AVE300-48S3V3B-4 | 36 - 75 Vin | 3.3 V @ 60 A | 198 W |
| AVE300-48S3V3B-6 | 36 - 75 Vin | 3.3 V @ 60 A | 198 W |

- Standard version is negative enable
- "-6" = 3.8 mm pin length
- "-4" = 4.8 mm pin length
- "-L" = RoHS6 compliance
- "-P" = Positive enable
- "-B" = Baseplate

Mechanical Drawings

With no base plate:



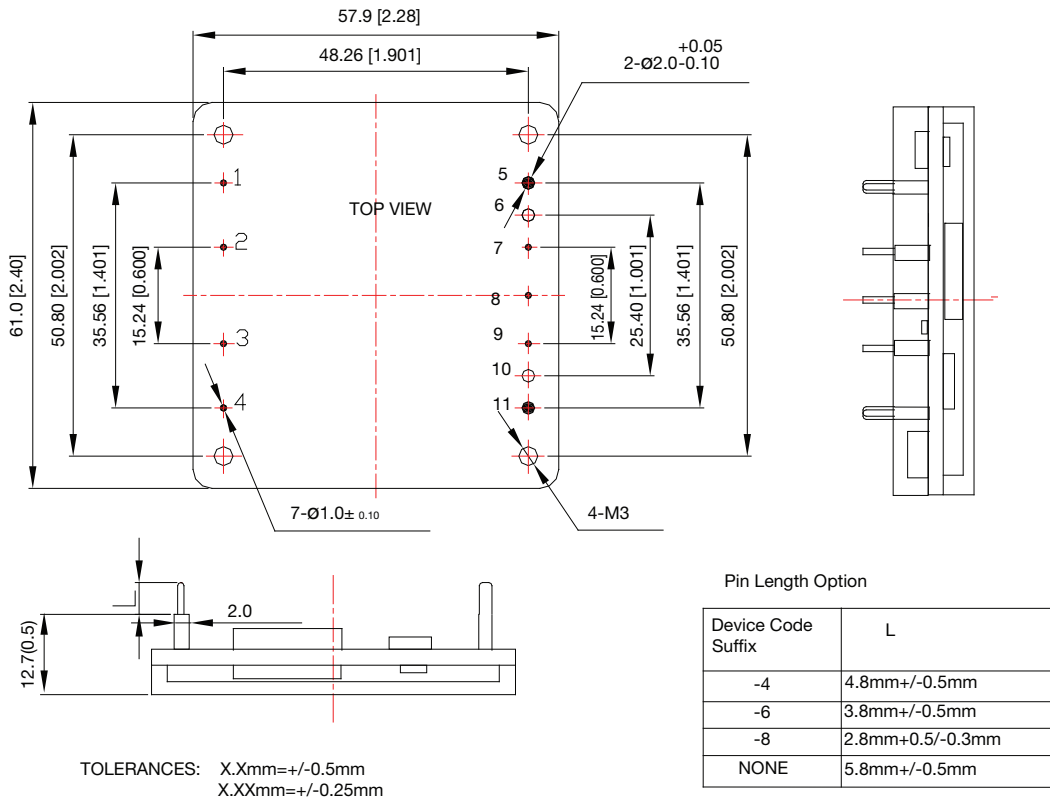
TOLERANCES: X.Xmm=+/-0.5mm
X.XXmm=+/-0.25mm

Pin Length Option

| Device Code Suffix | L |
|--------------------|------------------|
| -4 | 4.8mm+/-0.5mm |
| -6 | 3.8mm+/-0.5mm |
| -8 | 2.8mm+0.5/-0.3mm |
| NONE | 5.8mm+/-0.5mm |

Mechanical Drawings

With base plate:



Pin Designations

| Pin No. | Function |
|---------|----------|
| P1 | Vin(+) |
| P2 | CNT |
| P3 | NC |
| P4 | Vi(-) |
| P5 | Vo(+) |
| P6 | NC |
| P7 | +Sense |
| P8 | Trim |
| P9 | -Sense |
| P10 | NC |
| P11 | Vo(-) |

Notes: Un-dimensioned components are for visual reference only.

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