

## AVO100 Series

100 Watts

### Data Sheet

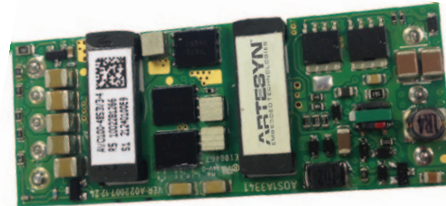
**Total Power:** 100 Watts  
**Input Voltage:** 36 - 75 V  
**# of Outputs:** Single

### SPECIAL FEATURES

- 2:1 Wide input range
- Optimised for high density, small space applications
- Low ripple and noise
- Fixed switching frequency
- High efficiency
- High capacitive load capability
- Basic insulation system
- Pre-bias start-up capability
- Open-frame structure
- Output over current protection

### SAFETY

- UL, cUL: UL60950
- TUV/CE: IEC/EN60950



### Electrical Specifications

| Input                        |   |
|------------------------------|---|
| Input range:                 | 36 - 75 VDC   |
| Efficiency <sup>2</sup> :    | 92.8% @ 5V  |
| Output                       |   |
| Voltage tolerance:           | +/-1.5%   |
| Line regulation:             | 3.3V: 0.3%; Others: 0.1%                              |
| Load regulation:             | 3.3V: 0.6%; 5V: 0.2%; Others: 0.1%                    |
| Noise/ripple:                | 3.3 Vo: 3.3V: 60mV; 5V: 90mV;<br>5.0 Vo: Others: 75mV |
| Over voltage protection:     | Auto-restart  |
| Over temperature protection: |   |
| Switching frequency:         | 3.3V, 5V: 310KHz; Others: 210KHz                      |
| Temperature coefficient:     | ±0.02/°C  |
| Isolation                    |   |
| I/O isolation:               | 5V: 2250VDC; Others: 1500VDC                          |

### Environmental Specifications

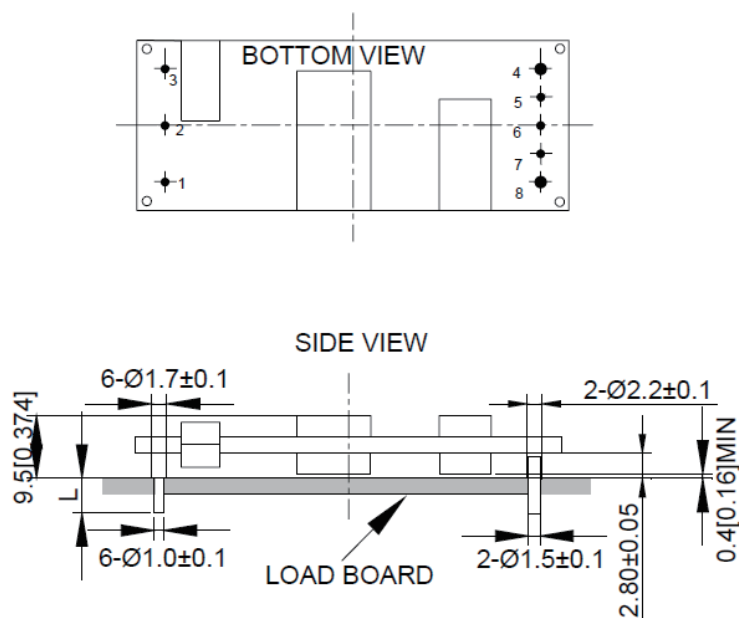
|                                      |                            |
|--------------------------------------|----------------------------|
| Operating ambient temperature range: | -40°C to +85°C             |
| Storage temperature:                 | -55°C to +125°C            |
| Humidity:                            | 5% to 95% (non-condensing) |
| MTBF:                                | 2.5 Million hours          |
| RoHS Compliant                       |                            |

### Ordering Information

| Model number        | Input voltage | Output voltage | Power |
|---------------------|---------------|----------------|-------|
| AVO100-48S1V2-6L    | 36 - 75 Vin   | 1.2V @ 50A     | 60W   |
| AVO100-48S1V2B-6L   | 36 - 75 Vin   | 1.2V @ 50A     | 60W   |
| AVO100B-48S1V5-6L   | 36 - 75 Vin   | 1.5V @ 40A     | 60W   |
| AVO100B-48S1V5B-6L  | 36 - 75 Vin   | 1.5V @ 40A     | 60W   |
| AVO100B-48S1V5P-6L  | 36 - 75 Vin   | 1.5V @ 40A     | 60W   |
| AVO100B-48S1V5PB-6L | 36 - 75 Vin   | 1.5V @ 40A     | 60W   |
| AVO100-48S1V8-6L    | 36 - 75 Vin   | 1.8V @ 40A     | 72W   |
| AVO100-48S1V8B-6L   | 36 - 75 Vin   | 1.8V @ 40A     | 72W   |
| AVO100-48S1V8P-6L   | 36 - 75 Vin   | 1.8V @ 40A     | 72W   |
| AVO100-48S1V8PB-6L  | 36 - 75 Vin   | 1.8V @ 40A     | 72W   |
| AVO100-48S2V5-6L    | 36 - 75 Vin   | 2.5V @ 35A     | 87.5W |
| AVO100-48S2V5B-6L   | 36 - 75 Vin   | 2.5V @ 35A     | 87.5W |
| AVO100-48S2V5P-6L   | 36 - 75 Vin   | 2.5V @ 35A     | 87.5W |
| AVO100-48S2V5PB-6L  | 36 - 75 Vin   | 2.5V @ 35A     | 87.5W |
| AVO100B-48S3V3-6L   | 36 - 75 Vin   | 3.3V @ 30A     | 99W   |
| AVO100B-48S3V3SL    | 36 - 75 Vin   | 3.3V @ 30A     | 99W   |
| AVO100C-48S3V3B-4L  | 36 - 75 Vin   | 3.3V @ 30A     | 99W   |
| AVO100C-48S3V3PB-4L | 36 - 75 Vin   | 3.3V @ 30A     | 99W   |
| AVO100-48S05-6L     | 36 - 75 Vin   | 5V @ 20A       | 100W  |
| AVO100-48S05B-6L    | 36 - 75 Vin   | 5V @ 20A       | 100W  |
| AVO100-48S05P-6L    | 36 - 75 Vin   | 5V @ 20A       | 100W  |
| AVO100-48S05PB-6L   | 36 - 75 Vin   | 5V @ 20A       | 100W  |
| AVO100-48S05SL      | 36 - 75 Vin   | 5V @ 20A       | 100W  |

- Standard version is negative enable
- "-6" = 3.8mm pin length
- "-4" = 4.8mm pin length
- "-P" = Positive enable
- "-S" = Surface mount, tray package
- "-L" = Rohs6 compliance
- "-B" = Baseplate

Mechanical Drawings



UNIT: mm[inch]                      BOTTOM VIEW: pin on upside  
 TOLERANCE: X.Xmm±0.5mm[X.X in.±0.02in.]  
 X.XXmm±0.25mm[X.XX in.±0.01in.]

Pin Assignments

| Pin # | Function |
|-------|----------|
| 1     | +V in    |
| 2     | Enable   |
| 3     | -V in    |
| 4     | -V out   |
| 5     | -Sense   |
| 6     | Trim     |
| 7     | +Sense   |
| 8     | +V out   |

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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