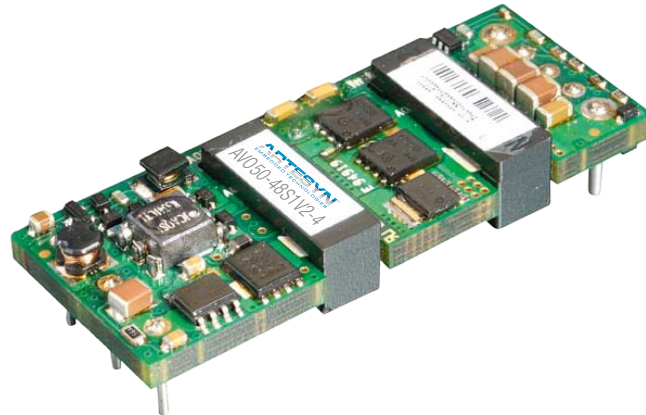


## AV050 Series

50 Watts

### Data Sheet

**Total Power:** 50 Watts  
**Input Voltage:** 36 - 75V  
**# 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

### SAFETY

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

### Electrical Specifications

| Input                        |   |
|------------------------------|---|
| Input range:                 | 36 - 75 VDC   |
| Efficiency:                  | 91% @ 3.3V, 5V and 12V  |
| Output                       |   |
| Maximum power:               | +/-1% to +/-1.6%  |
| Line regulation:             | 5V: 4mV; 12V: 9mV; Others: 1mV                                |
| Load regulation:             | 5V and 12V: 5mV; Others: 1mV                                  |
| Noise/ripple:                | 1.2V, 2.5V, 3.3V: 50mV;<br>1.5V, 5V, 12V: 55mV;<br>1.8V: 45mV |
| Over voltage protection:     | Auto-restart  |
| Over temperature protection: |   |
| Switching frequency:         | 310KHz  |
| 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:                                | 2.5 Million hours          |
| RoHS Compliant                       |                            |

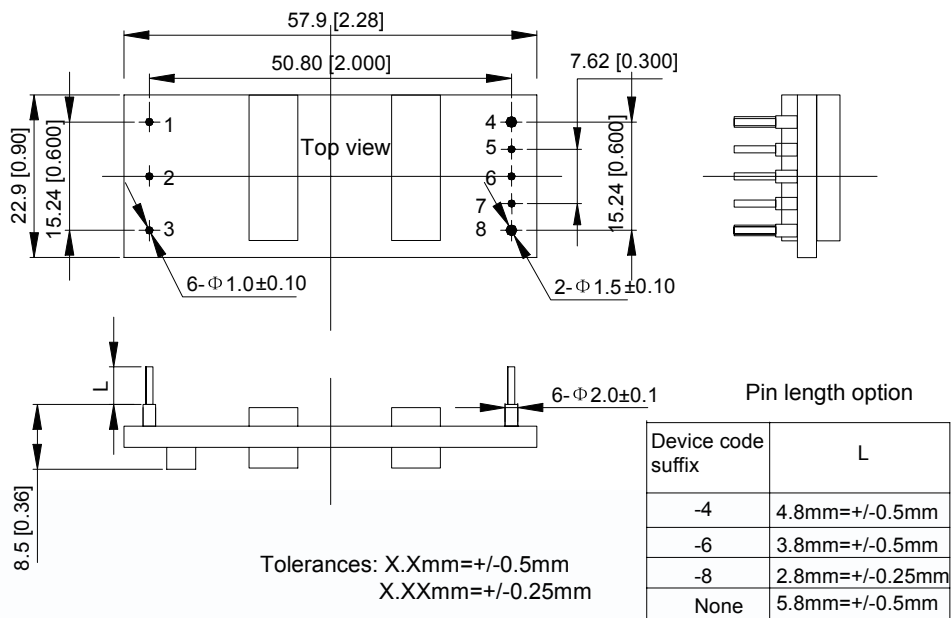
### Ordering Information

| Model number      | Input voltage | Output voltage | Power |
|-------------------|---------------|----------------|-------|
| AVO50-48S1V2-4    | 36 - 75Vin    | 1.2V @ 20A     | 24W   |
| AVO50-48S1V2P-4   | 36 - 75Vin    | 1.2V @ 20A     | 24W   |
| AVO50-48S1V5-4    | 36 - 75Vin    | 1.5V @ 20A     | 30W   |
| AVO50-48S1V5P-4   | 36 - 75Vin    | 1.5V @ 20A     | 30W   |
| AVO50-48S1V8-4    | 36 - 75Vin    | 1.8V @ 20A     | 36W   |
| AVO50-48S1V8P-4   | 36 - 75Vin    | 1.8V @ 20A     | 36W   |
| AVO50-48S2V5-4    | 36 - 75Vin    | 2.5V @ 20A     | 50W   |
| AVO50-48S2V5P-4   | 36 - 75Vin    | 2.5V @ 20A     | 50W   |
| AVO50C-48S3V3-6L  | 36 - 75Vin    | 3.3V@ 15A      | 49.5W |
| AVO50C-48S3V3P-6L | 36 - 75Vin    | 3.3V@ 15A      | 49.5W |
| AVO50-48S05-4     | 36 - 75Vin    | 5V @ 10A       | 50W   |
| AVO50-48S12-6L    | 36 - 75Vin    | 12V @ 4.2A     | 50W   |
| AVO50-48S12P-4    | 36 - 75Vin    | 12V @ 4.2A     | 50W   |

Notes:

- Standard version is negative enable
- "-6" = 3.8mm pin length
- "-4" = 4.8mm pin length
- "-P" = Positive enable

### Mechanical Drawings



Notes:

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

## Pin Assignments

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

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