

ARTESYN

AVD200-48S12 SERIES

200 Watt 16TH Brick DC-DC Converter



Advanced Energy's Artesyn AVD200-48S12 is a single output DC/DC converter with standard sixteenth-brick outline and pin configuration. It delivers up to 17A output current with 12V output voltage. Above 93.9% ultra-high peak efficiency and excellent thermal performance makes it an ideal choice to supply power in telecom and datacom applications.

AT A GLANCE

Total Power:

200 Watt
(12 V @ 17 A)

Input Voltage:

36 - 75 V

Single Output:

12 V nom

SPECIAL FEATURES

- Delivering up to 17A output
- Ultra-high peak efficiency 93.9%
- Wide input range: 36 V ~ 75 V
- Fully regulated output voltage
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- Remote control function
- Input under voltage lockout
- Output over current protection
- Output over voltage protection
- Over temperature protection
- ROHS 3.0
- UL94 V-0 materials
- Two year warranty (consult factory for extended terms)

SAFETY

- IEC/EN/UL/CSA 62368-1
- UL/TUV
- UL94, V-0
- CE Marking

ELECTRICAL SPECIFICATIONS

| Input | |
|---------------------------------|----------------------------|
| Input range | 36 - 75 Vdc |
| Efficiency (60% load condition) | 93.9% |
| Output | |
| Rated Output | 12 Vdc @ 17 A |
| Factory Set Voltage | 11.76V~12.24 V |
| Line regulation | 0.5% |
| Load regulation | 0.5% |
| Noise/ripple | 280 mV |
| Temperature coefficient | ± 0.02/°C |
| Over current protection | Hiccup |
| Over voltage protection | Hiccup |
| Over temperature protection | Auto-restart |
| Switching frequency | 200 kHz |
| Isolation | |
| I/O isolation | 2250 Vdc (input to output) |

ENVIRONMENTAL SPECIFICATIONS

| | |
|-----------------------|--|
| Operating temperature | -40 °C to + 85 °C (baseplate operating temperature up to 100 °C) |
| Storage temperature | -55 °C to + 125 °C |
| MTBF | 8 million hours Telcordia, SR332, Method 1, Case 1 |

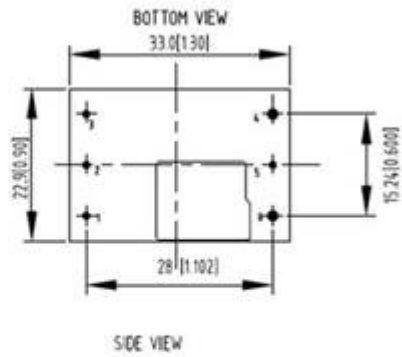
ORDERING INFORMATION

| Standard | Output Voltage | Structure | pin | Package |
|--------------------|----------------|------------|------------------|-----------|
| AVD200-48S12B-7TL | 12 Vdc | Baseplate | PIP through hole | Tape reel |
| AVD200-48S12PB-7TL | 12 Vdc | Baseplate | PIP through hole | Tape reel |
| AVD200-48S12TL | 12 Vdc | Open-frame | Bullet pin SMT | Tape reel |
| AVD200-48S12-6L | 12 Vdc | Open-frame | Through hole | Tray |
| AVD200-48S12P-6L | 12 Vdc | Open-frame | Through hole | Tray |
| AVD200-48S12B-6L | 12 Vdc | Baseplate | Through hole | Tray |
| AVD200-48S12PB-6L | 12 Vdc | Baseplate | Through hole | Tray |

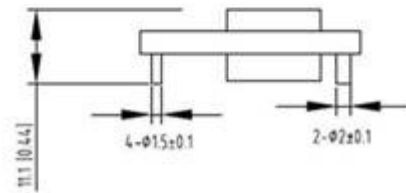
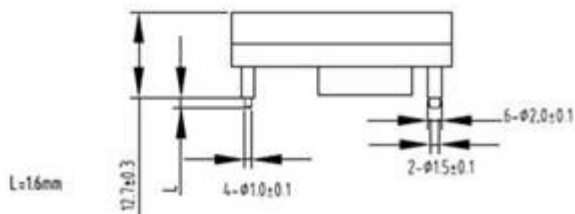
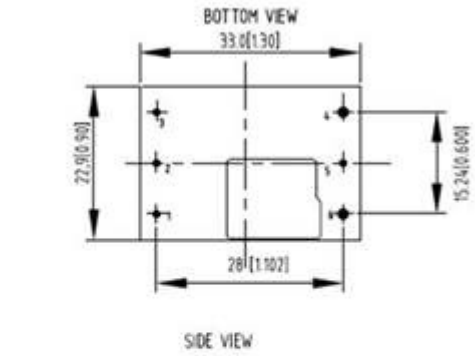
- Standard version is negative enable
- "-6" = 3.8 mm pin length
- "-7" = 1.6mm, Pin Length
- "-L" = RoHS 3.0 compliance
- "-P" = Positive enable

MECHANICAL DRAWING

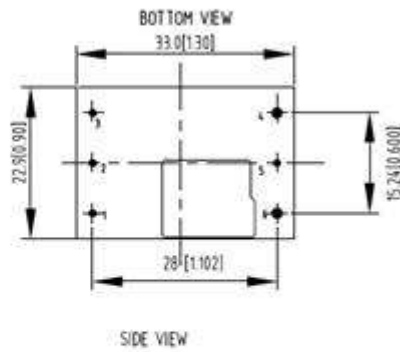
AVD200-48S12B-7TL



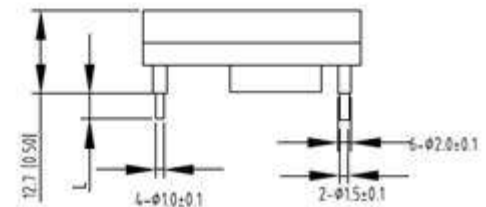
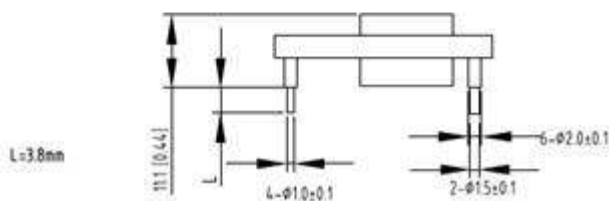
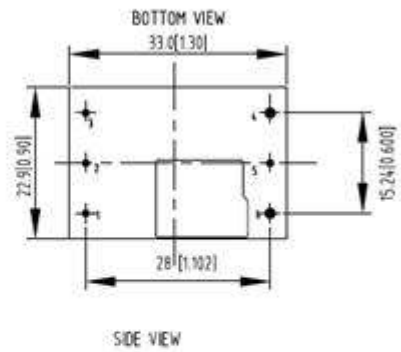
AVD200-48S12TL



AVD200-48S12-6L



AVD200-48S12B-6L



UNIT: mm (inch)
 L: 1.60mm±0.25mm for AVD200-48S12(PB)-7TL; 3.80mm±0.25mm for AVD200-48S12(PB)-6L.
 TOLERANCE: X.X mm±0.5mm [X.XX in.± 0.02in.]
 X.XX mm±0.25mm[X.XXX in.±0.01in.]

PIN LENGTH OPTIONS

| Device code suffix | L |
|--------------------|------------------|
| -4 | 4.8 mm ± 0.25 mm |
| -6 | 3.8 mm ± 0.25 mm |
| -8 | 2.8 mm ± 0.25 mm |
| -7 | 1.6 mm ± 0.25 mm |
| None | 5.8 mm ± 0.25 mm |

PIN DESIGNATIONS

| Pin No | Name | Function |
|--------|---------------|-------------------------|
| 1 | Vin+ | Positive input voltage |
| 2 | Remote On/Off | Remote control |
| 3 | Vin- | Negative input voltage |
| 4 | Vo- | Negative output voltage |
| 5 | Trim | Output voltage trim |
| 6 | Vo+ | Positive output voltage |



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ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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