

## AVD100 Series

100 - 120 Watts

### Data Sheet

**Total Power:** 100 - 120 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
- Pre-bias start-up capability
- Basic insulation system
- Through-hole or SMT termination
- Openframe structure with Baseplate option
- Output over current protection

### SAFETY

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



### Electrical Specifications

| Input                                                |                                           |
|------------------------------------------------------|-------------------------------------------|
| Input range                                          | 36 - 75 Vdc                               |
| Efficiency                                           | 5 V: 92.5% @ full load; 93.5% @ half load |
| Output                                               |                                           |
| Voltage tolerance                                    | ±1.5%                                     |
| Line regulation                                      | 0.2%                                      |
| Load regulation                                      | Single output: 0.5%                       |
| Noise/ripple                                         | 120 mV                                    |
| Overvoltage protection<br>Overtemperature protection | Auto-restart                              |
| Switching frequency                                  | 250 KHz                                   |
| Temperature co-efficient                             | ±0.02 /°C                                 |
| Isolation                                            |                                           |
| I/O isolation                                        | 1500 Vdc min.                             |

### 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 |
|------------------|-------------------------|----------------|-------|
| AVD100-48S05-6L  | 36 - 75 V <sub>in</sub> | 5 V @ 20 A     | 100 W |
| AVD100-48S05B-6L | 36 - 75 V <sub>in</sub> | 5 V @ 20 A     | 100 W |
| AVD100-48S05TL   | 36 - 75 V <sub>in</sub> | 5 V @ 20 A     | 100 W |
| AVD120-48S12-6L  | 36 - 75 V <sub>in</sub> | 12 V @ 10 A    | 120 W |
| AVD120-48S12B-6L | 36 - 75 V <sub>in</sub> | 12 V @ 10 A    | 120 W |
| AVD120-48S12TL   | 36 - 75 V <sub>in</sub> | 12 V @ 10 A    | 120 W |

Notes:

Standard version is negative enable

"T" = Surface mount, reel tape package

"-6" = 3.8 mm pin length

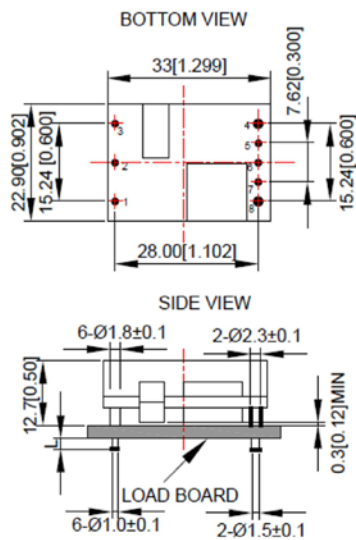
"L" = RoHS 10 compliance

"B" = Baseplate version

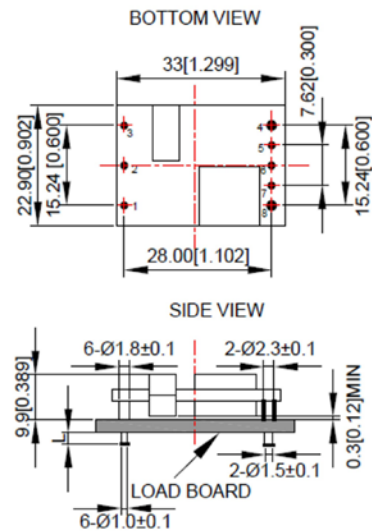
"P" = Positive enable

## Mechanical Drawings

### Baseplate option



### Open frame option



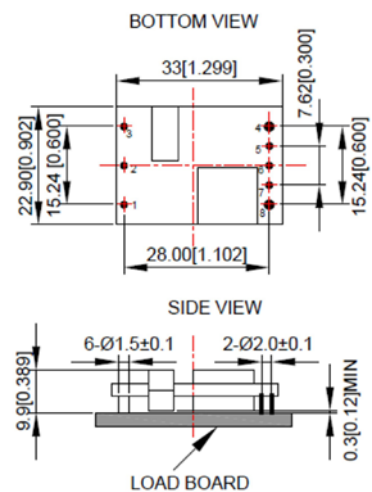
UNIT: mm[inch]

BOTTOM VIEW: pin on upside

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

X.XXmm±0.25mm[X.XXX in.±0.01in.]

### SMT option



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.

## Pin Assignments

| Pin # | Function      |
|-------|---------------|
| 1     | +V in         |
| 2     | Remote On/Off |
| 3     | -V in         |
| 4     | -V out        |
| 5     | - Sense       |
| 6     | Trim          |
| 7     | +Sense        |
| 8     | +V out        |

## WORLDWIDE OFFICES

### Americas

2900 S.Diablo Way  
Tempe, AZ 85282  
USA  
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### Europe (UK)

Waterfront Business Park  
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