

# **AVD100 Series**

100 - 120 Watts

#### **Data Sheet**

**Total Power:** 100 - 120 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
- 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: UL60950TUV/CE: IEC/EN60950





| Electrical Specifications                           |  |  |
|---|--|--|
| Input   |  |  |
| Input range   | 36 - 75 VDC                              |  |
| Efficiency  | 5V: 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                                   |  |
| Over voltage protection Over temperature protection | Auto-restart                             |  |
| Switching frequency                                 | 250 KHz                                  |  |
| Temperature coefficient                             | ±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 Vin   | 5 V @ 20 A     | 100 W |
| AVD100-48S05B-6L     | 36 - 75 Vin   | 5 V @ 20 A     | 100 W |
| AVD100-48S05TL       | 36 - 75 Vin   | 5 V @ 20 A     | 100 W |
| AVD120-48S12-6L      | 36 - 75 Vin   | 12 V @ 10 A    | 120 W |
| AVD120-48S12B-6L     | 36 - 75 Vin   | 12 V @ 10 A    | 120 W |
| AVD120-48S12TL       | 36 - 75 Vin   | 12 V @ 10 A    | 120 W |

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#### Notes:

Standard version is negative enable

"-6" = 3.8 mm pin length

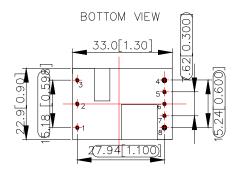
"B" = Baseplate version

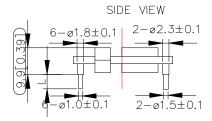
"T" = Surface mount, reel tape package

"L" = RoHS 6 compliance

"P" = Positive enable

# **Mechanical Drawings**





 $\begin{array}{ll} \mbox{UNIT:} & \mbox{mm}[\mbox{inch}] = 3.80 \pm 0.25 \mbox{mm} \\ \mbox{TOLERANCE:} & \mbox{X.XMm} \pm 0.5 \mbox{mm}[\mbox{X.XX} & \mbox{in.} \pm 0.02 \mbox{in.}] \\ & \mbox{X.XXMm} \pm 0.25 \mbox{mm}[\mbox{X.XXX} & \mbox{in.} \pm 0.01 \mbox{in.}] \end{array}$ 

### 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        |  |

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AVD100 Series-DS 03Apr2015