

## AVD85 Series

85 Watts

### Data Sheet

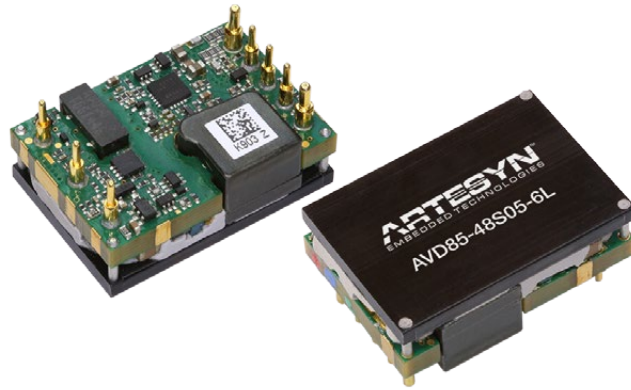
**Total Power:** 85 Watts  
**Input Voltage:** 36 - 75V  
**# of Outputs:** Single

### 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
- Two year warranty

### SAFETY

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



### Electrical Specifications

Input	
Input range	36 - 75 Vdc
Efficiency	91.5% @ 3.3 V; 93.5% @ 5 V; 92.5% @ 12 V
Output	
Output voltage	3.3 V, 25 A, 91.5% efficiency 5 V, 17 A, 91% efficiency 12 V, 7 A, 92% efficiency
Output voltage adjust	80% -110% of Vout Nom
Voltage tolerance	+/-1.5%
Line regulation	0.2%
Load regulation	Single output: 0.5%
Noise/ripple	3.3 Vo: 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.

### 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 Million hours
RoHS Compliant	

### Pin Assignments

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

### Ordering Information

Model number	Input voltage	Output voltage	Power
AVD85-48S3V3-6L	36 - 75 Vin	3.3 V @ 25 A	82.5 W
AVD85-48S3V3TL	36 - 75 Vin	3.3 V @ 25 A	82.5 W
AVD85-48S3V3B-6L	36 - 75 Vin	3.3 V @ 25 A	82.5 W
AVD85-48S05-6L	36 - 75 Vin	5 V @ 17 A	85 W
AVD85-48S05B-6L	36 - 75 Vin	5 V @ 17 A	85 W
AVD85-48S05TL	36 - 75 Vin	5 V @ 17 A	85 W
AVD85-48S12TL	36 - 75 Vin	12 V @ 7 A	84 W
AVD85-48S12-6L	36 - 75 Vin	12 V @ 7 A	84 W
AVD85-48S12B-6L	36 - 75 Vin	12 V @ 7 A	84 W

Notes:

Standard version is negative enable

-6 = 3.8 mm pin length

B = Baseplate version

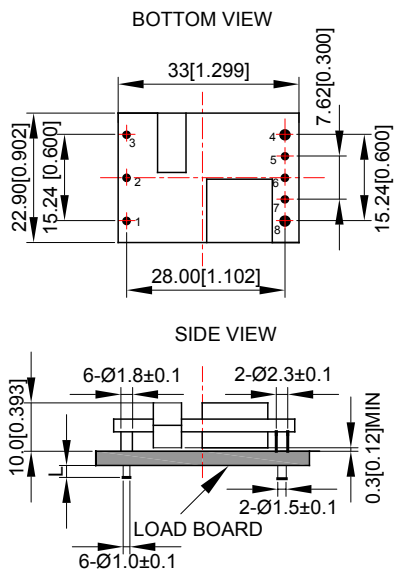
T = Surface mount, reel tape package

L = RoHS 6 compliance

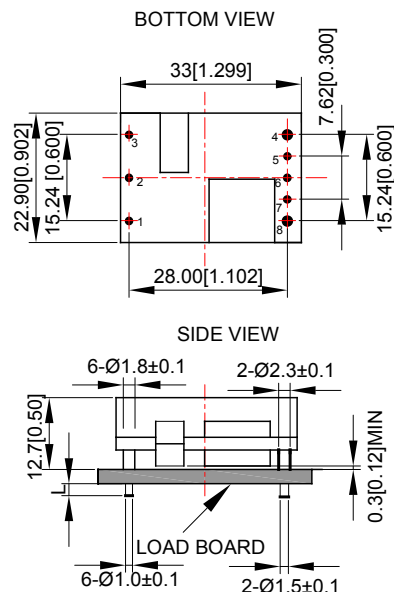
P = Positive enable

Mechanical Drawings

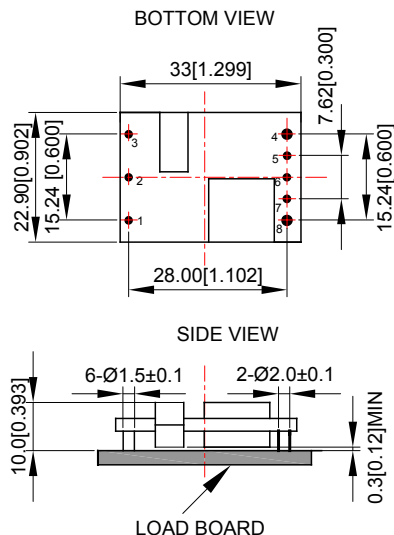
AVD85



AVD85/120-B



TL (Surface Mount)



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.]

Notes:

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

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