

AVD50 Series

50 Watts

Data Sheet

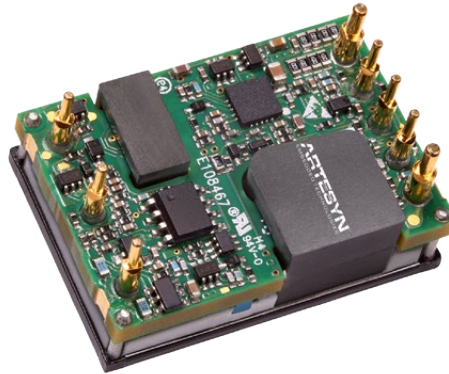
Total Power: 50 Watts
Input Voltage: 36 - 75V
of Outputs: Single

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
- Pre-bias start-up capability
- Basic insulation system
- Through-hole or SMT termination
- Openframe structure
- Two year warranty

SAFETY

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



Electrical Specifications

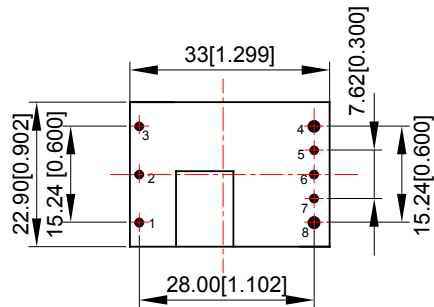
Input	
Input range	36 - 75 Vdc
Efficiency	90.5%
Output	
Maximum power	±2.0% @ 5 V; +/-1.5% @ 3.3 V
Line regulation	0.5%
Load regulation	Single output: 0.5%
Noise/ripple	3.3 Vo: 70 mV 5.0 Vo: 50 mV
Over voltage protection Over temperature protection	Auto-restart
Switching frequency	3.3 V: 420 KHz, 5 V: 250 KHz
Temperature co-efficient	±0.02 /°C
Isolation	
I/O isolation	1500 Vdc min.

Environmental Specifications

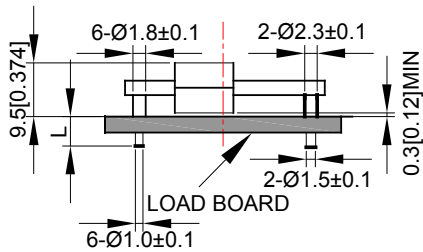
Operating ambient temperature range	-40 °C to +85 °C
Storage temperature	-55 °C to +125 °C
Humidity	5% to 95% (non-condensing)
MTBF	2 Million hours
RoHS Compliant	

Mechanical Drawings

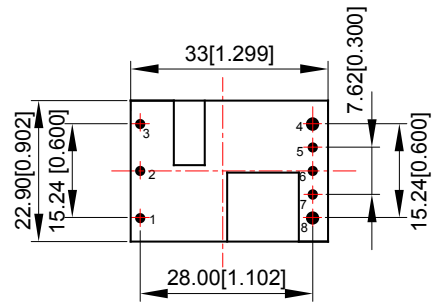
AVD50B BOTTOM VIEW



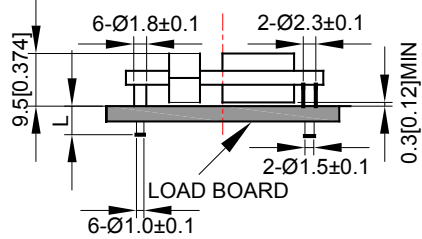
SIDE VIEW



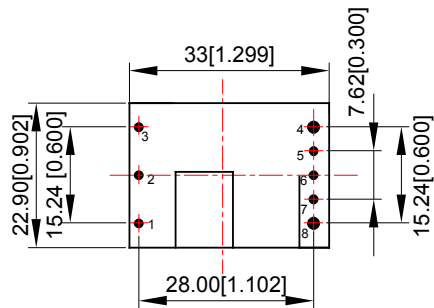
AVD50 BOTTOM VIEW



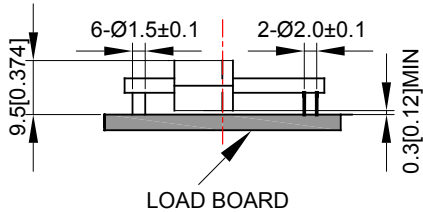
SIDE VIEW



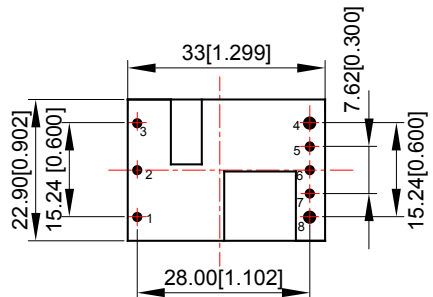
TL (Surface Mount) BOTTOM VIEW



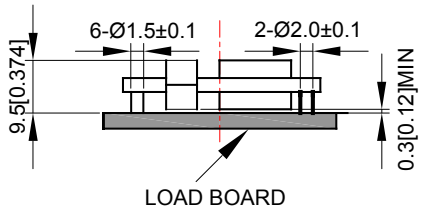
SIDE VIEW



TL (Surface Mount) BOTTOM VIEW



SIDE VIEW



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.

Ordering Information

Model number	Input voltage	Output voltage	Power
AVD50B-48S3V3TL	36 - 75 Vin	3.3 V @ 15 A	49.5 W
AVD50B-48S3V3-6L	36 - 75 Vin	3.3 V @ 15 A	49.5 W
AVD50-48S05-6L	36 - 75 Vin	5 V @ 10 A	50 W
AVD50-48S05P-6L	36 - 75 Vin	5 V @ 10 A	50 W
AVD50-48S05SL	36 - 75 Vin	5 V @ 10 A	50 W

Notes:

Standard version is negative enable

-6 = 3.8mm pin length

-T = Surface mount, reel tape package

-S = Surface mount, tray package

-L = RoHS 6 compliance

-P = Positive enable

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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AVD50 Series-DS 17Oct2016