

AVO200 Series

200 Watt 1/8th Brick DC/DC Converter

Data Sheet

Total Power: 200 W
(12 V @ 16.7 A)
(5 V @ 40 A)
Input voltage: 36 - 75 Vdc
Single output: 12 V, 5 V

SPECIAL FEATURES

- 200 W continuous power
- Ultra high efficiency up to 94.5%
- Telecom DC input range
- Base-plate optimised for contact cooling
- Open frame optimised for air-cooling
- Low ripple and noise
- Fixed switching frequency
- High capacitive load capability
- Pre-bias start-up capability
- Through hole and surface mount termination option
- High reliability
- RoHS-6 compliant
- UL94 V-0 materials

SAFETY

- EN60950
- CSA
- CE

WARRANTY

- 2 Years (Consult factory for extended Terms)



Electrical Specifications

Input

Input voltage	36 - 75 Vdc
Input Surge	100 V / 100 mSec
Efficiency	12 V at 100% load is 94% 5 V at 100% load is 94.5%
I/O insulation I/O isolation	Basic insulation, 1500 Vdc

Output

Output Voltage	12 V nominal 5 V nominal
Output current maximum	16.7 A for 12 V version 40 A for 5 V version
Noise & ripple	12 V is 70 mV pk-pk max 5 V is 120 mV pk-pk max

Over Temperature protection	110 degC baseplate 120 degC hot-spot
-Baseplate -Open frame	

Over voltage protection Method / OVP operation	Auto restart /130% Vout
---	-------------------------

Over current protection Method / OCP operation	Hiccup / 150% Iout
---	--------------------

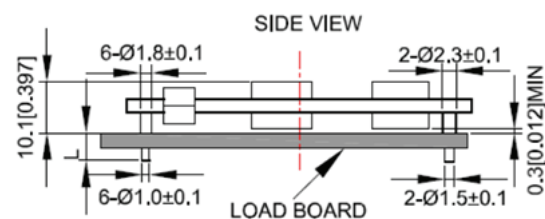
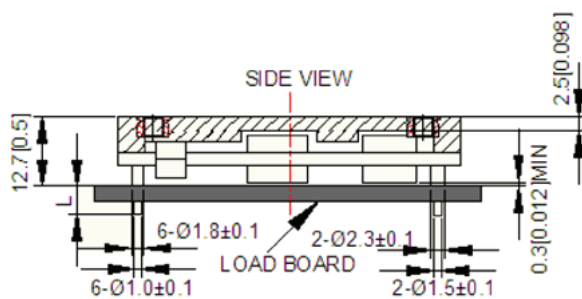
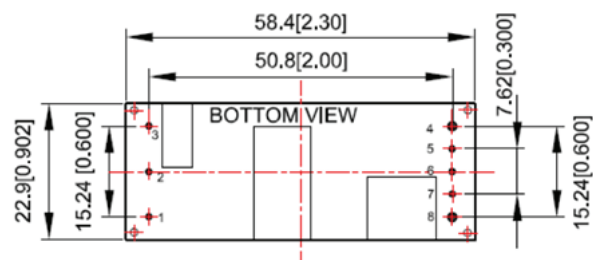
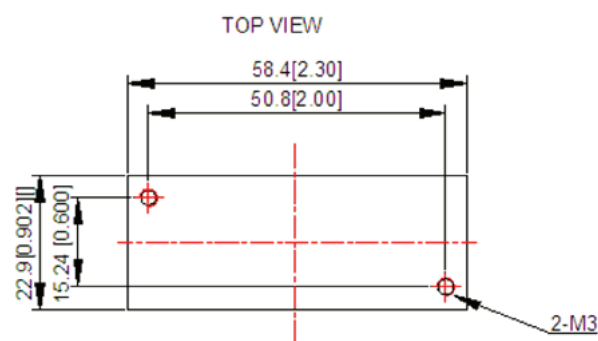
Control

Enable	TTL compatible (negative logic)
Trim function	80% to 110% Vout
Remote sense	Sense connections provided
Switching Frequency	150 Khz

Ordering Information

Input voltage	Output voltage	Output current	Efficiency	Model Number
36-75 Vdc	12 Vdc	16.7 A	94%	AVO200-48S12-6L
36-75 Vdc	12 Vdc	16.7 A	94%	AVO200-48S12B-6L
36-75 Vdc	5 Vdc	40 A	94.5%	AVO200-48S05-6L
36-75 Vdc	5 Vdc	40 A	94.5%	AVO200-48S05B-6L

Mechanical Drawings



UNIT: mm[inch]

BOTTOM VIEW: pin on upside

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

X.XXmm±0.25mm[X.XX in.±0.01in.]

Pin Length Option

Device code suffix	L
-4	4.8 mm = +/- 0.5 mm
-6	3.8 mm = +/- 0.5 mm
-8	2.8 mm = +/- 0.25 mm
None	5.8 mm = +/- 0.5 mm

Environmental Specifications

Storage temperature:	-40 °C to +105 °C
Ambient operating temp:	-40 °C to +85 °C
Baseplate operating temp:	-40 °C to +100 ° (no power derating)
MTBF:	1 Million hours target

Pin Designations (AVO200)

Pin No.	Name	Function
1	V_{in+}	Positive input voltage
2	Remote ON/OFF	Remote control
3	V_{in-}	Negative input voltage
4	V_{o-}	Negative output voltage
5	S-	Negative remote sense
6	Trim	Output voltage trim
7	S+	Positive remote sense
8	V_{o+}	Positive output voltage

WORLDWIDE OFFICES

Americas

2900 S.Diablo Way
Tempe, AZ 85282
USA
+1 888 412 7832

Europe (UK)

Waterfront Business Park
Merry Hill, Dudley
West Midlands, DY5 1LX
United Kingdom
+44 (0) 1384 842 211

Asia (HK)

14/F, Lu Plaza
2 Wing Yip Street
Kwun Tong, Kowloon
Hong Kong
+852 2176 3333

ARTESYN[™]
EMBEDDED TECHNOLOGIES

www.artesyn.com

While every precaution has been taken to ensure accuracy and completeness in this literature, Artesyn Embedded Technologies assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions. Artesyn Embedded Technologies, Artesyn and the Artesyn Embedded Technologies logo are trademarks and service marks of Artesyn Embedded Technologies, Inc. All other names and logos referred to are trade names, trademarks, or registered trademarks of their respective owners.
© 2015 Artesyn Embedded Technologies, Inc.

For more information: www.artesyn.com/power
For support: productsupport.ep@artesyn.com

AVO200 Series-DS 01-22-15