

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 -Baseplate -Open frame	110 degC baseplate 120 degC hot-spot
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Over voltage protection Method / OVP operation	Auto restart /130% Vout
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Over current protection Method / OCP operation	Hiccup / 150% Iout
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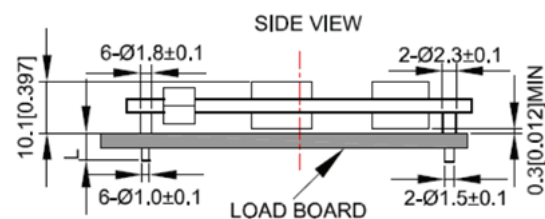
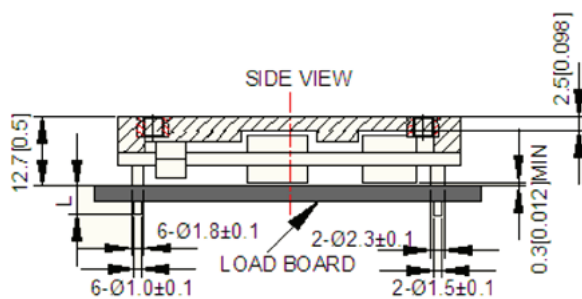
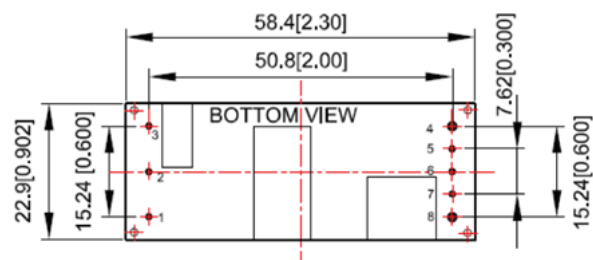
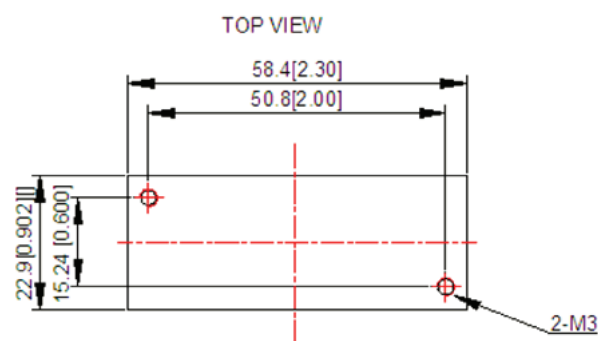
Control

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

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