ARTESYN AVO100-48S28B-6L

100 Watts



Advanced Energy's Artesyn AVO100-48S28 series isolated DC-DC converter is designed specifically to provide the main 28 Vdc supply for RF power amplifiers in small-cell, low power telecommunications applications.

DATA SHEET

Total Power:

100 Watts

Input Voltage:

36 - 75 V

# of Outputs:

Single

SPECIAL FEATURES

- Delivers up to 3.57 A output current
- Ultra-high efficiency 92% typ. at full load
- Excellent thermal performance
- No minimum load requirement
- Basic isolation
- High power density
- Low output noise
- Reflow soldering enabled
- RoHS 6 compliant

SAFETY

- TUV/CE 62368-1
- UL/cUL 60950-1

RoHS 6/6 COMPLIANT

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ELECTRICAL SPECIFICATIONS

Input specification	
Input range	36 Vdc to 75 Vdc
Input surge	100 V for 100 mSec
Efficiency	92%
Control specification	
Enable	TTL compatible positive or negative enable
Output specification	
Output voltage	28 Vdc
Trim range	-64% - +116%
Output current	3.57 A
Ripple and noise	30 mV pk-pk nom 200 mV max. pk-pk
Regulation (total error band)	+/-2% Vout
Over current protection	6.4 A max. Typ
Over voltage protection	130% Vout nominal
Over temp protection	120 deg °C
Switching frequency	Fixed to 280 kHz
Isolation voltage	1500 Vdc
Transient response	130 mV deviation, 100 mSec recovery. 25%-50%-25% load 0.1A/uSec
UVLO Turn-on UVLO Turn-off	34 Vdc Typical 32 Vdc Typical

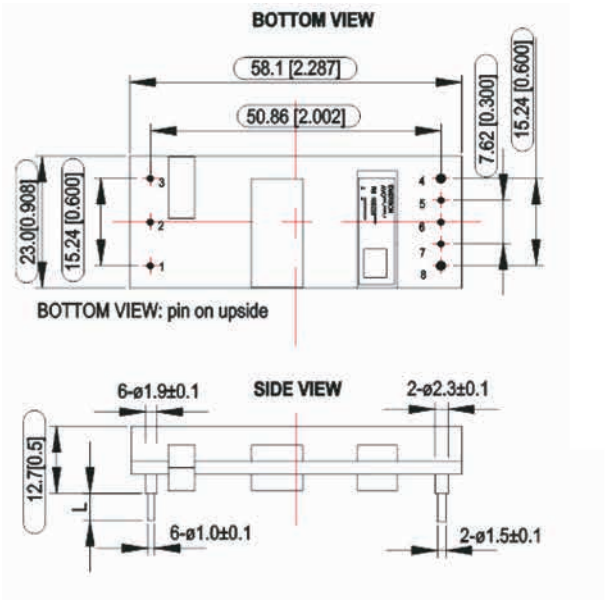
ENVIRONMENTAL SPECIFICATIONS

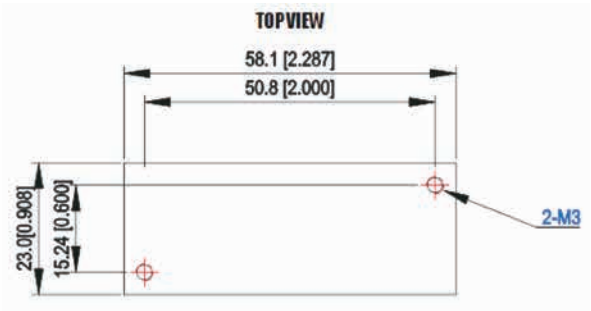
Operating ambient temperature range:	-40 °C to +85 °C
Storage temperature:	-55 °C to +125 °C
Humidity:	5% to 95% (non-condensing)
MTBF:	1.5 Million hours
RoHS Compliant	RoHS 6 compliant

ORDERING INFORMATION

Model number	Description
AVO100-48S28P-6L	3.8 mm pin length; positive on/off logic; open frame; R6 compliant
AVO100-48S28-6L	3.8 mm pin length; negative on/off logic; open frame; R6 compliant
AVO100-48S28BP-6L	3.8mm pin length; positive on/off logic; baseplate; R6 compliant
AVO100-48S28B-6L	3.8mm pin length; negative on/off logic; baseplate; R6 compliant

MECHANICAL DRAWINGS

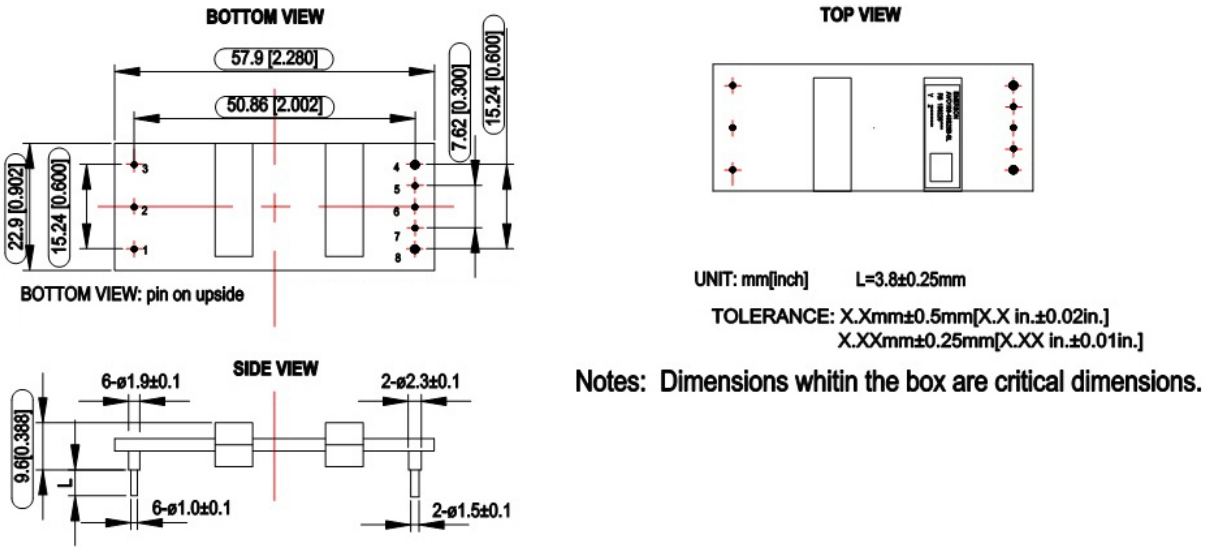




PIN LENGTH OPTION

Device code suffix	L
-4	4.8 mm ± 0.25 mm
-6	3.8 mm ± 0.25 mm
-8	2.8 mm ± 0.25 mm
None	5.8 mm ± 0.25 mm

MECHANICAL DRAWINGS



PIN DESIGNATIONS (AVO100-48S28B-6L)

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

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.

ABOUT ADVANCED ENERGY

Advanced Energy (AE) has devoted more than three decades to perfecting power for its global customers. AE designs and manufactures highly engineered, precision power conversion, measurement and control solutions for mission-critical applications and processes.

Our products enable customer innovation in complex applications for a wide range of industries including semiconductor equipment, industrial, manufacturing, telecommunications, data center computing, and medical. With deep applications know-how and responsive service and support across the globe, we build collaborative partnerships to meet rapid technological developments, propel growth for our customers, and innovate the future of power.

PRECISION | POWER | PERFORMANCE

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