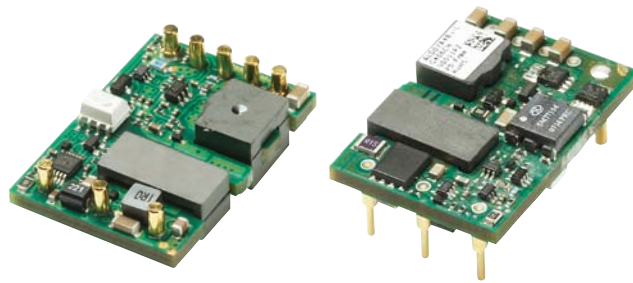


## ALD15 Series

### 15 Amps

**Total Power:** 35 Watts  
**Input Voltage:** 48V  
**# of Outputs:** Single



### Special Features

- High Efficiency
- -40 °C to +85 °C ambient air operation
- 1.30" x 0.90" x 0.35" TH or SMT package
- High capacitive load limit on start-up
- Industry standard feature sets: UVLO, OVP, OCP, OTP, on/off enable, remote sense, output trim
- Basic insulation
- Regulation to zero load
- Fixed frequency switching
- EU directive 2002/95/EC compliant for RoHS

### Safety

- **UL, cUL:** 60950-1
- **TUV:** EN60950-1

## Electrical Specifications

Input	
Input range:	36 to 75 Vdc
Input surge:	100 V / 100 ms
Efficiency:	90.5% @ 12 V
Output	
Line regulation:	± 0.1% V <sub>O</sub> (typical)
Load regulation:	± 0.1% V <sub>O</sub> (typical)
Noise/ripple <sup>1</sup> :	40 mVp-p (typical)
Remote sense:	Up to 10% of V <sub>O</sub>
Transient response:	3% V <sub>O</sub> (typical) deviation 50% to 75% load change 80 μs setting time (typical)
Overshoot protection:	125% V <sub>O</sub> typical (autorecovery)
Overcurrent protection:	115% I <sub>O</sub> typical (autorecovery)
Overtemperature protection:	115 °C average PCB temperature (autorecovery)
Switching frequency:	Fixed frequency
Isolation voltage:	1500 Vdc minimum (2000 Vdc ALD10F48N)
Control	
Voltage adjust:	90 to 110% V <sub>O</sub>
Enable:	TTL compatible

## Environmental Specifications

Ambient air operating temperature range:	-40 °C to +85 °C
Storage temperature:	-40 °C to +125 °C
MTBF:	1 million hours

## Ordering Information

Input Voltage	Output Voltage	Output Current	Efficiency <sup>2</sup>	Model Number
36 - 75 V	12.0 V	2.75 A	90.5%	ALD03B48(N)-(L)/(6L)/(SL)
36 - 75 V	5.0 V	7.00 A	91%	ALD07A48(N)-(L)/(6L)/(SL)
36 - 75 V	3.3 V	10.00 A	90%	ALD10F48(N)-(L)/(6L)/(SL)
36 - 75 V	2.5 V	11.00 A	89%	ALD11G48(N)-(L)/(6L)/(SL)
36 - 75 V	1.8 V	13.00 A	87%	ALD13Y48(N)-(L)/(6L)/(SL)
36 - 75 V	1.5 V	15.00 A	85%	ALD15M48(N)-(L)/(6L)/(SL)
36 - 75 V	1.2 V	15.00 A	84%	ALD15K48(N)-(L)/(6L)/(SL)

### Notes:

Efficiency values taken at nominal input full load condition, 25 °C ambient temperature.

### Options

“N” = Designates Negative Logic Enable (default is Positive Enable with no suffix “N” required)

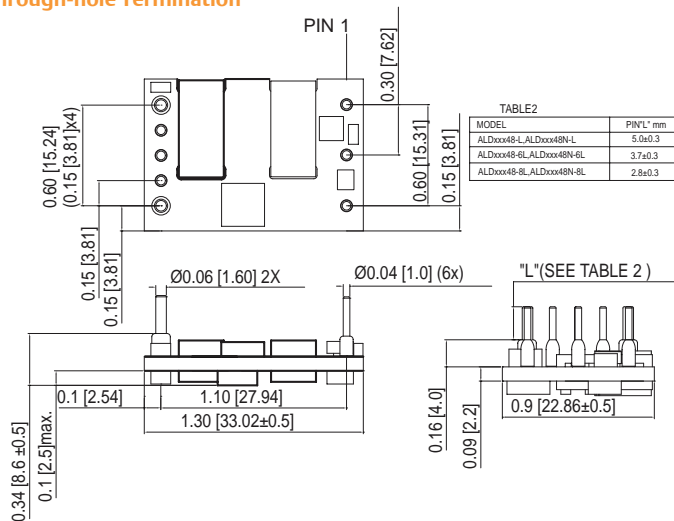
“L” = RoHS compliant

“-6L” = 3.7 mm nominal pin length (default is 5 mm nominal pin length with no suffix “-6” required), RoHS compliant

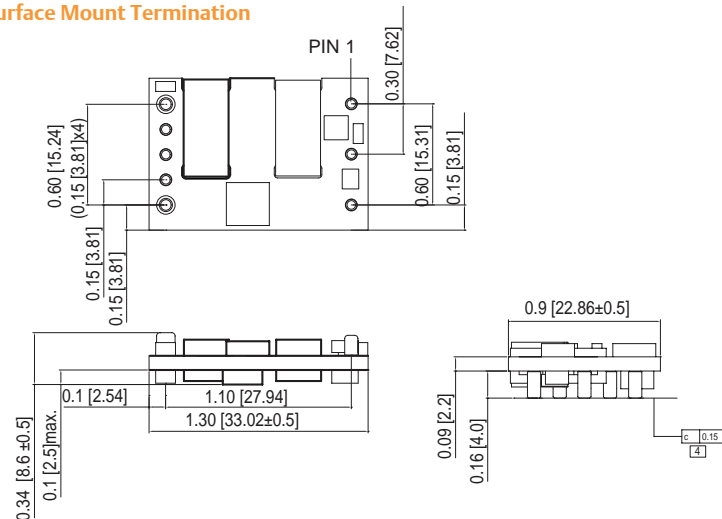
“-SL” = Surface Mount Termination (default is thru hole termination with no suffix “-S” required) RoHS compliant. STRL designates Taped and Reeled option for SMT

## Mechanical Drawings

### Through-hole Termination



### Surface Mount Termination



## Pin Assignments

### Single Output

- +Vin
- Enable
- Vin
- Vout
- Sense
- Trim
- +Sense
- +Vout

### Notes:

- 20 mHz bandwidth. External 10  $\mu$ F tant. capacitor in parallel with 0.1  $\mu$ F ceramic capacitor placed across + Vout and -Vout; 33  $\mu$ F e-cap or equivalent placed across +Vin and -Vin.
- Efficiency measurements taken at full load, nominal line and  $T_A = 25^\circ\text{C}$
- All specifications are typical at nominal line, full load and  $T_A = 25^\circ\text{C}$  unless otherwise noted.
- Mechanical drawings are for reference only. Dimensions are in inches [mm]. Mechanical tolerance  $\pm 0.020 [\pm 0.50]$
- Technical Reference Notes should be consulted for detailed information when available.
- All specifications subject to change without notice.
- Warranty 2 years.
- The through-hole terminated modules are intended for wave soldering process.

Mechanical Drawings

Recommended PAD/ Hole Pattern

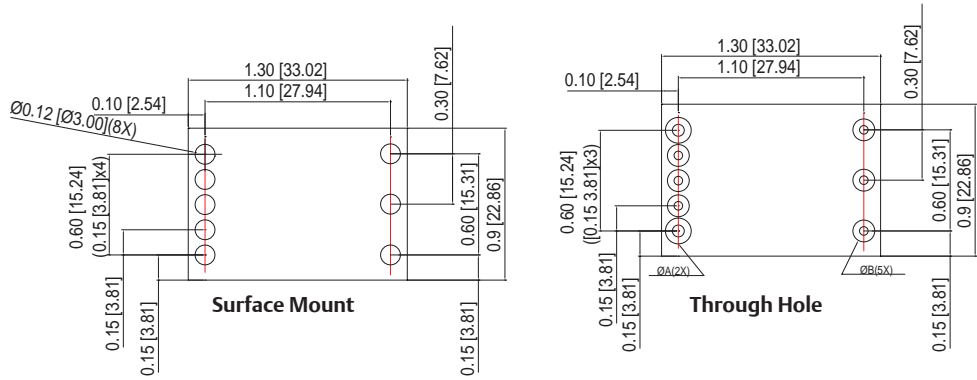
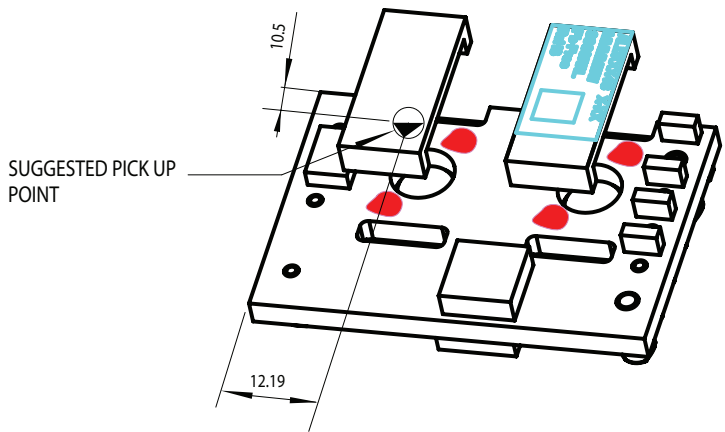


TABLE 1

HOLE & PAD DIAMETER FOR CUSTOMER (RECOMMENDED)		
	HOLE DIAMETER (Ød)	PAD DIAMETER (ØD)
ØA	Ø1.9	Ø2.9
ØB	Ø1.3	Ø2.3

Recommended Pick-up Point



Americas

5810 Van Allen Way  
Carlsbad, CA 92008  
USA  
Telephone: +1 760 930 4600  
Facsimile: +1 760 930 0698

Europe (UK)

Waterfront Business Park  
Merry Hill, Dudley  
West Midlands, DY5 1LX  
United Kingdom  
Telephone: +44 (0) 1384 842 211  
Facsimile: +44 (0) 1384 843 355

Asia (HK)

14/F, Lu Plaza  
2 Wing Yip Street  
Kwun Tong, Kowloon  
Hong Kong  
Telephone: +852 2176 3333  
Facsimile: +852 2176 3888

For global contact, visit:

[www.Emerson.com/EmbeddedPower](http://www.Emerson.com/EmbeddedPower)  
[techsupport.embeddedpower@emerson.com](mailto:techsupport.embeddedpower@emerson.com)

While every precaution has been taken to ensure accuracy and completeness in this literature, Emerson Network Power assumes no responsibility, and disclaims all liability for damages resulting from use of this information or for any errors or omissions.

Emerson Network Power.

The global leader in enabling business-critical continuity.

- AC Power
- Connectivity
- DC Power
- Embedded Computing
- Embedded Power**
- Monitoring
- Outside Plant
- Power Switching & Controls
- Precision Cooling
- Racks & Integrated Cabinets
- Services
- Surge Protection

EmersonNetworkPower.com

Emerson Network Power and the Emerson Network Power logo are trademarks and service marks of Emerson Electric Co. ©2011 Emerson Electric Co.



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



#### Как с нами связаться

**Телефон:** 8 (812) 309 58 32 (многоканальный)

**Факс:** 8 (812) 320-02-42

**Электронная почта:** [org@eplast1.ru](mailto:org@eplast1.ru)

**Адрес:** 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.