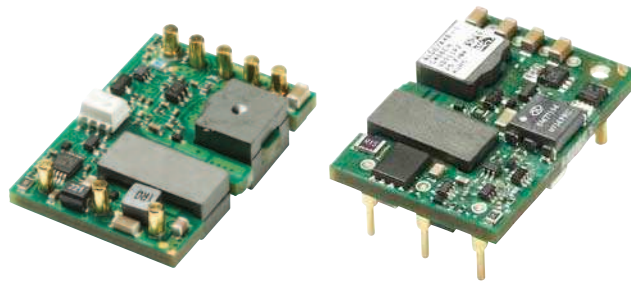


ALD15 Series

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 _O (typical)
Load regulation:	± 0.1% V _O (typical)
Noise/ripple ¹ :	40 mVp-p (typical)
Remote sense:	Up to 10% of V _O
Transient response:	3% V _O (typical) deviation 50% to 75% load change 80 μs setting time (typical)
Oversvoltage protection:	125% V _O typical (autorecovery)
Overcurrent protection:	115% I _O 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 _O
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 ²	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)

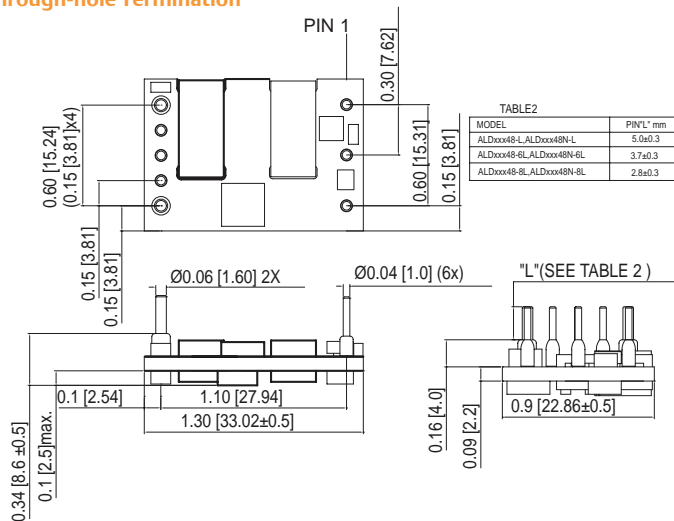
“L” = RoHS compliant

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

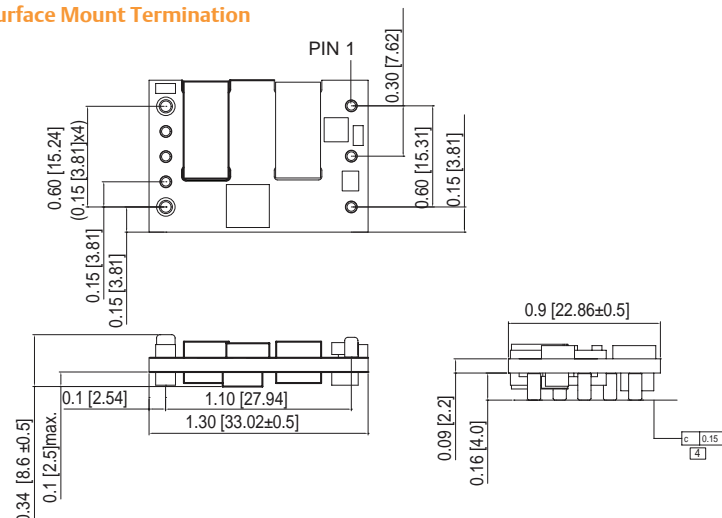
“-SL” = Surface Mount Termination (default is thru hole termination with no suffix “-S” required) RoHS compliant. STRL designates Taped and Reeled option for SMT

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 µF tant capacitor in parallel with 0.1µF ceramic capacitor placed across + Vout and -Vout; 33 µF e-cap or equivalent placed across +Vin and -Vin.
- Efficiency measurements taken at full load, nominal line and T_A = 25 °C
- All specifications are typical at nominal line, full load and T_A = 25 °C unless otherwise noted.
- Mechanical drawings are for reference only. Dimensions are in inches [mm]. Mechanical tolerance ± 0.020 [± 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

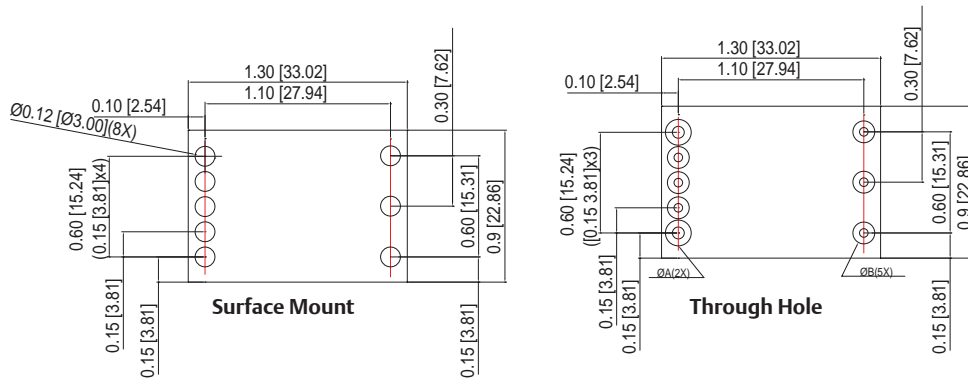
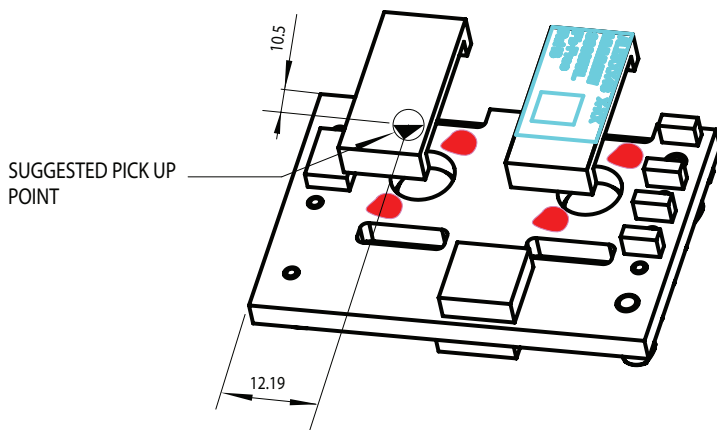


TABLE 1

HOLE & PAD DIAMETER FOR CUSTOMER (RECOMMENDED)		
	HOLE DIAMETER ($\varnothing d$)	PAD DIAMETER ($\varnothing D$)
$\varnothing A$	$\varnothing 1.9$	$\varnothing 2.9$
$\varnothing B$	$\varnothing 1.3$	$\varnothing 2.3$

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
techsupport.embeddedpower@emerson.com

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