FEATURES

- Single Output
- RoHS Compliant
- 1 Watt Output Power
- 1000VDC I/O Isolation
- Industry Standard Pin-out
- Output Regulation < 1.5%
- Internal SMT Construction
- No External Component Required
- Ultra Miniature 7 Pin SIP Package

RoHS

DESCRIPTION

The LANE-C series consists of 1 Watt miniature, isolated, and regulated dc/dc converters. These units have input operation at 5, 12, 15, and 24VDC, and outputs of 5, 9, 12, 12.75, and 15VDC. This series is specifically designed for use with flash PROM devices providing the required stability at programming voltages. A control pin is provided to reduce the output voltage to a low 1.2VDC, to program flash PROMs.

SPECIFICATIONS: *LANE-C Series*

All specifications apply @ 25°C ambient unless otherwise noted

INPUT SPECIFICATIONS

Input Voltage Ranges
- 5VDC nominal Input Voltage ..... 4.5 - 5.5VDC
- 12VDC nominal input voltage ..... 10.8 - 13.2VDC
- 15VDC nominal input voltage ..... 13.5 - 16.5VDC
- 24VDC nominal input voltage ..... 21.6 - 26.4VDC

Input Voltage Tolerance ..... ±5%

Input Filtering ..... Capacitor

OUTPUT SPECIFICATIONS

Output Voltage ..... see table

Voltage Tolerance ..... ±5% (nom. Line, 100% load)

Output Current ..... see table

Output Power ..... 1 Watt max.

Line Regulation (HL - LL) ..... 1% of Vin

Load Regulation (10% to 100% FL) ..... 1.5% of Vin

Ripple/Noise (20 MHz BW) 60mVp-p

Transient Response Setting Time (50% load step change) ..... 350µs typ.

PROTECTION SPECIFICATIONS

Short Circuit Protection ..... continuous

GENERAL SPECIFICATIONS

Efficiency ..... see table

Switching Frequency ..... 100KHz typ.

Isolation Voltage (Input to Output) 1000VDC

Isolation Resistance ..... 1000MΩ min. @ 500VDC

ENVIRONMENTAL SPECIFICATIONS

Operating Temperature ..... -40°C ~ +85°C

Storage Temperature ..... -40°C ~ +100°C

Humidity (non-condensing) 95%

Cooling ..... Free air convection

MTBF (MIL-HDBK-217F @ 25°C) ..... 2,000,000 Hours

PHYSICAL SPECIFICATIONS

Dimensions (L x W x H)
- 5, 12, & 15V input models ..... 0.77 x 0.24 x 0.37 in (19.5 x 6 x 10 mm)
- 24V input models ..... 0.77 x 0.28 x 0.37 in (19.5 x 7.1 x 10 mm)

Weight
- 5, 12, & 15V input models 2.1g (0.07oz)
- 24V input models 2.7g (0.1oz)

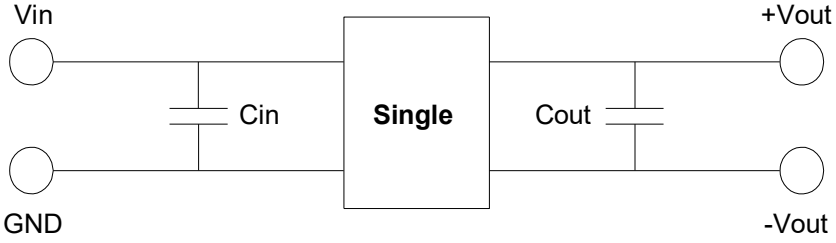
Case Material ..... DAP

Due to advances in technology, specifications subject to change without notice

MODEL SELECTION TABLE

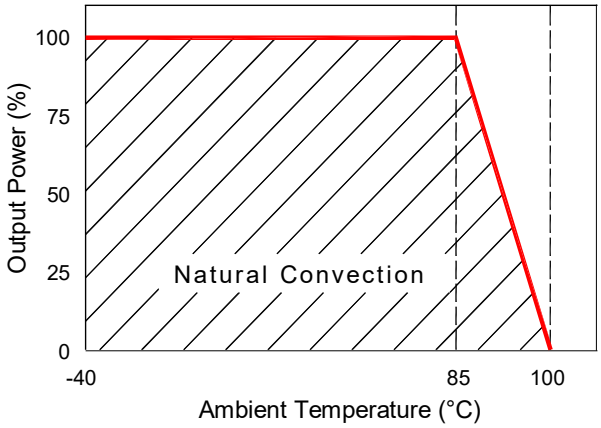
Model Number	Input Voltage	Output Voltage	Output Current	Efficiency (Typ.)	Output Power
LANE505RC	5 VDC (4.5 - 5.5 VDC)	5 VDC	100mA	45%	0.5W
LANE509RC		9 VDC	100mA	55%	0.9W
LANE512RC		12 VDC	83mA	55%	1W
LANE512.75RC		12.75 VDC	78mA	-	1W
LANE515RC		15 VDC	67mA	60%	1W
LANE1205RC	12 VDC (10.8 - 13.2 VDC)	5 VDC	100mA	45%	0.5W
LANE1209RC		9 VDC	100mA	55%	0.9W
LANE1212RC		12 VDC	83mA	55%	1W
LANE1212.75RC		12.75 VDC	78mA	-	1W
LANE1215RC		15 VDC	67mA	60%	1W
LANE1505RC	15 VDC (13.5 - 16.5 VDC)	5 VDC	100mA	45%	0.5W
LANE1509RC		9 VDC	100mA	55%	0.9W
LANE1512RC		12 VDC	83mA	55%	1W
LANE1512.75RC		12.75 VDC	78mA	-	1W
LANE1515RC		15 VDC	67mA	60%	1W
LANE2405RC	24 VDC (21.6 - 26.4 VDC)	5 VDC	100mA	45%	0.5W
LANE2409RC		9 VDC	100mA	55%	0.9W
LANE2412RC		12 VDC	83mA	55%	1W
LANE2412.75RC		12.75 VDC	78mA	-	1W
LANE2415RC		15 VDC	67mA	60%	1W

RECOMMENDED TEST CIRCUIT

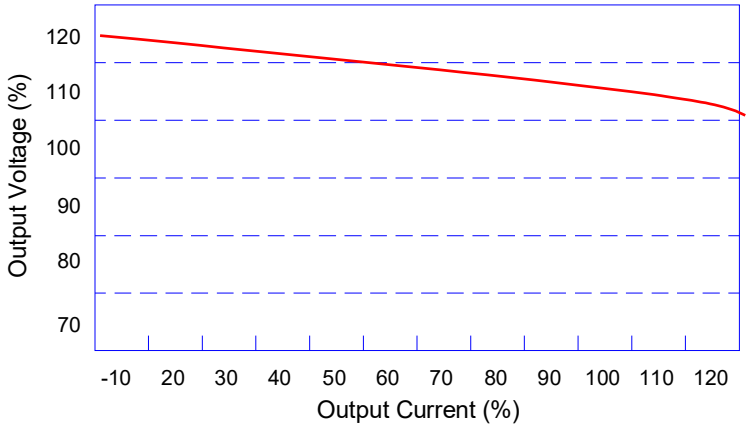


5V:	Cin 4.7µF, 25V	5V:	Cout 10µF, 25V
9V:	Cin 4.7µF, 25V	9V:	Cout 4.7µF, 25V
12V:	Cin 2.2µF, 25V	12V:	Cout 2.2µF, 25V
15V:	Cin 1µF, 50V	15V:	Cout 1µF, 50V

DERATING CURVE



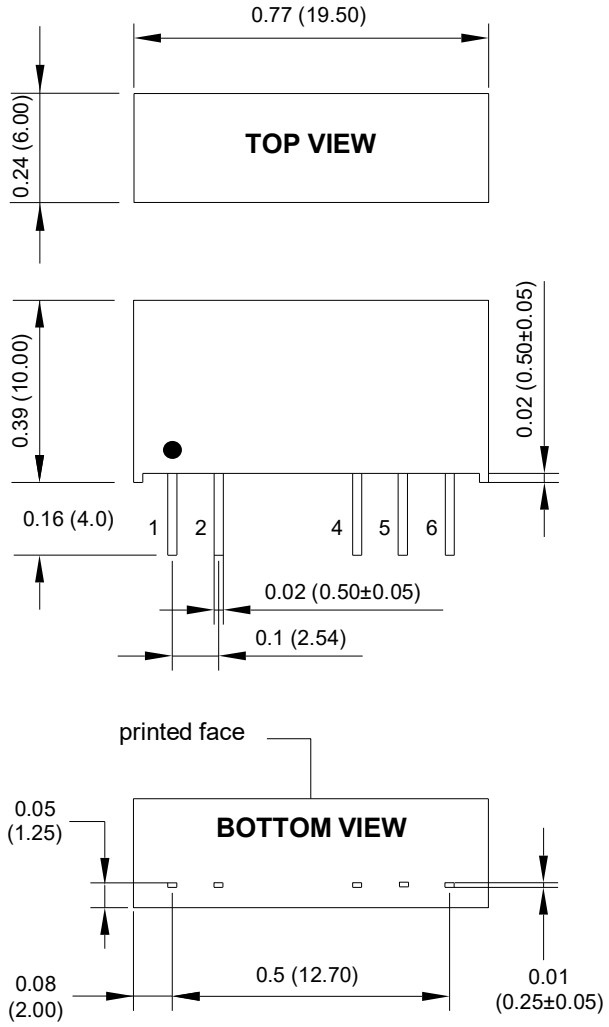
TOLERANCE ENVELOPE GRAPH



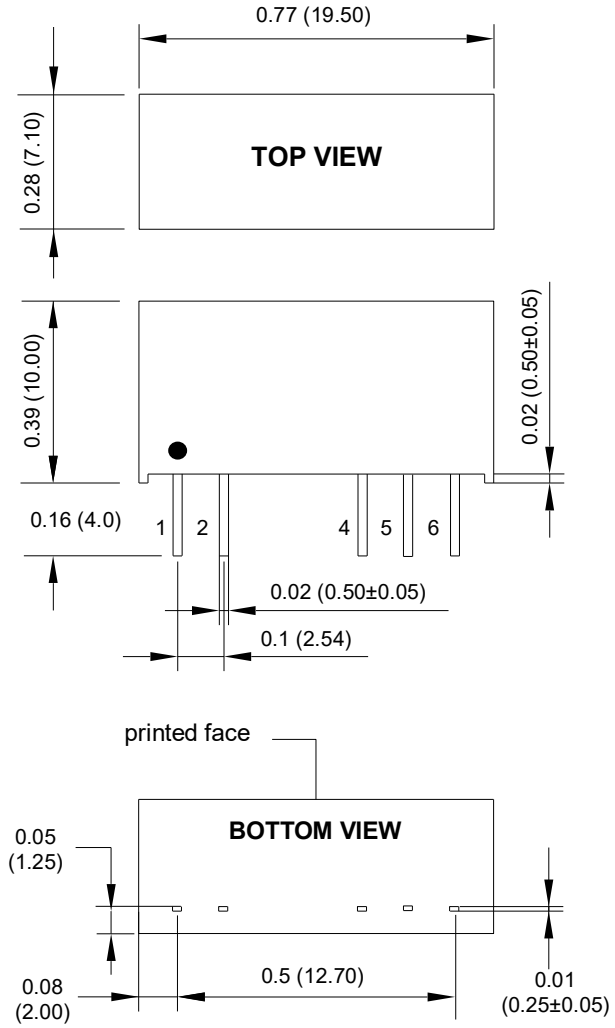
MECHANICAL DRAWING

Unit: inches (mm)

5, 12, & 15V INPUT MODELS



24V INPUT MODELS



PIN CONNECTIONS	
PIN	**SINGLE**
1	+Vin
2	-Vin
4	-Vout
5	CTRL
6	+Vout

COMPANY INFORMATION

Wall Industries, Inc. has created custom and modified units for over 50 years. Our in-house research and development engineers will provide a solution that exceeds your performance requirements on-time and on budget. Our ISO9001: 2015 certification is just one example of our commitment to producing a high quality, well-documented product for our customers.

Our past projects demonstrate our commitment to you, our customer. Wall Industries, Inc. has a reputation for working closely with its customers to ensure each solution meets or exceeds form, fit and function requirements. We will continue to provide ongoing support for your project above and beyond the design and production phases. Give us a call today to discuss your future projects.

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